

## RESEARCH RESOURCES

# DRUG SUPPLY PROGRAM CATALOG

29<sup>TH</sup> EDITION

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CHEMISTRY AND PHARMACEUTICS BRANCH

DIVISION OF THERAPEUTICS AND MEDICAL CONSEQUENCES

NATIONAL INSTITUTE ON DRUG ABUSE

NATIONAL INSTITUTES OF HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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ROCKVILLE, MARYLAND 20852



On the cover: CPK rendering of mitragynine.

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## A. INTRODUCTION

**The National Institute on Drug Abuse (NIDA) Drug Supply Program (DSP)** is administered by the Chemistry and Pharmaceuticals Branch, Division of Therapeutics and Medical Consequences. As part of its mission to lead the nation in bringing the power of science to bear on drug abuse and addiction, NIDA provides researchers with chemicals and research probes that are either unavailable, difficult to obtain, or very expensive to purchase. In addition, this program also provides analytical services of experimental samples used in research.

**Drugs and Research Compounds.** The NIDA DSP provides a variety of research chemicals and controlled substances for research purposes to all investigators working in the area of drug abuse, addiction, and related disciplines. The availability of controlled substances is regulated by the United States Drug Enforcement Administration (DEA), Department of Justice under the Controlled Substances Act (CSA), and Psychotropic Convention. These substances include hallucinogens, stimulants, sedatives and hypnotics, narcotics, designer drugs, cannabinoids, marijuana, and other miscellaneous categories of drugs. The NIDA DSP maintains an inventory of such drugs and other chemical substances. In addition, continuous efforts are made to synthesize new compounds and add them to the inventory. The stability and purity of all such compounds are monitored and maintained.

**Marijuana and Marijuana Cigarettes.** Marijuana is grown, harvested, processed and analyzed for delta-9-THC and other cannabinoids, stored under controlled conditions to preserve its purity and stability, and distributed for approved research purposes. This substance is subject to control under Schedule I of the CSA (21 U.S.C. 801 et seq.), the most restrictive of the five federally-regulated classes of controlled substances. Persons who wish to conduct research using marijuana for purposes other than research, such as forensic analytical standards, or any other law enforcement purposes must first obtain a special DEA registration under the CSA and then submit a request to NIDA along with required documents for consideration. It should be noted that priority for supply is given to researchers conducting federally-funded studies.

**Nicotine Research Cigarettes.** The NIDA DSP also houses a variety of nicotine research cigarettes (NRC) with specific characteristics for nicotine content and yield, tar, menthol, and ventilation (NOT-DA-13-002). As with other research chemicals or controlled substances supplied by the DSP, NRCs can be provided to investigators working in the area of drug abuse, addiction, or related disciplines at no cost. At this time, NRCs are of limited supply and priority is given to federally-funded grantees including

those working on areas related to the tobacco regulatory science authority of the NIDA Drug Supply Program and the United States Food & Drug Administration Center for Tobacco Products (FDA/CTP). A separate administrative review by the FDA/CTP, in collaboration with NIDA, is required for those working on projects within the FDA/CTP priority areas.

In order to obtain controlled substances, other research chemicals, marijuana, or marijuana and nicotine research cigarettes, research investigators are required to submit their requests along with necessary documents to the NIDA DSP for consideration. Applicants (domestic and foreign) without an NIH grant should note that their research protocol will require additional scientific review. Furthermore, research investigators who are not funded by NIH and plan to use marijuana or marijuana cigarettes in human research should be aware that their research protocol is subject to additional review as required by the US Department of Health and Human Services, Public Health Services. If marijuana is to be used for purposes other than human research, the request is forwarded to NIDA's Office of the Director for review and recommendation.

Foreign applicants must provide necessary documentation to demonstrate that they are allowed to import controlled substances, research chemicals, or marijuana cigarettes into their respective countries.

Approved research investigators are provided with pure drugs, compounds, or marijuana cigarettes along with their respective analytical data sheets.



## B. NIDA DRUG SUPPLY PROGRAM (DSP) ORDERING GUIDELINES

To obtain research chemicals and controlled substances from the NIDA DSP, research investigators should prepare and submit a Request Package consisting of the following items for consideration:

1. A cover letter including:
  - a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
    - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express (FedEx) (*i.e.* street address, Building name or number, room number, city and state) - This address should coincide with the address on the DEA order form.
    - For radio-labeled drugs or chemical substances, indicate the address at which the shipment can be made . In case the shipping address is different from the researcher's address, a current copy of the radioactive material license must be submitted.
  - b. If applicable, provide the NIH grant number, project title, and name and contact information of NIH Program Officer. If a non-grantee, no information on program Officer and grant number is required.
  - c. Name and quantity of compounds or other materials being requested, The total radioactivity (preferred unit of measurement, mg per vial, etc.)
    - If multiple studies/tasks are planned, combine projected needs into a single request rather than placing several separate requests in a short time interval. The request should generally be limited to four items or drugs/compounds per request to avoid delay.
    - Avoid drug abbreviations, and include specifications such as (+), (-), (*dl*), base, or salt. You may consult the NIDA DSP Catalog for such information.
2. The Research Investigator's *curriculum vitae* (if not a funded grantee)
3. A detailed research protocol clearly indicating:
  - a. The specific aims and goals of proposed study (preferably the study abstract)
  - b. The number of experiments and experimental subjects
  - c. The dosage or concentration of drugs

- Calculate required amount of drugs or chemical substances for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.
- d. Justification for quantity of compounds/drugs, or other substances in request requested.  
If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief description of progress along with references to resulting publications, if any.
- 4. A statement or commitment that NIDA will be acknowledged in research publications resulting from the use of supplies received from the NIDA Drug Supply Program.
- 5. A completed DEA Order Form-222 for Schedule I-II controlled substances.
  - a. DEA Form-222 is not necessary for drugs in Schedules III-V, but a valid registration for the appropriate schedule is required.
  - b. Under the third column of DEA Form-222 (Size of Package), list quantities as bulk weight. Radio-labeled compounds must be listed by weight and NOT by units of activity.
- 6. A copy of current DEA registration, Form DEA-223 for controlled substances.
  - a. It is the Research Investigator's responsibility to keep his/her registration current and to verify the drug code for requested drug.
  - b. Investigators who request a Schedule I drug and/or Etorphine HCl or Diprenorphine must provide DEA documentation under which the requested drug is covered under their current DEA registration.
  - c. Avoid drug abbreviations, and include specifications such as (+), (-), (dl), base, or salt, as appropriate.
- 7. A copy of a Nuclear Regulatory Commission license for radioactive compounds.  
For more information, you may visit the Nuclear Regulatory Commission licensing website.
- 8. Research projects involving human subjects (Clinical research)
  - a. Investigational New Drug (IND) number and a copy of approved IND letter from the FDA. For more information, please visit the FDA IND Application website.
  - b. A copy of your Institutional Review Board (IRB) approval letter

- c. A copy of your Data Safety and Monitoring Plan
  - d. Proof of registration with clinicaltrials.gov (NCT #)
  - e. A copy of the study consent form(s)
9. For basic (non-human) research projects.  
A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised (if applicable). For more information, please visit the Animal Care & Use Committee Animal Study Proposal website.
10. For ongoing research projects (This includes research previously supported by the NIH prior to request)
- a. Reference information<sup>1</sup>pertaining the previous protocol / FDA approval to the previous protocol
  - b. A brief description of progress (500 words or less)
  - c. A list of relevant publications.
11. Billing Information for Shipping (if applicable):
- a. US investigators should provide their FedEx account number to bill shipping charges,
  - b. International requests for controlled compounds should provide their United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges. For non-controlled compounds the investigator should provide their FedEx account number.
12. Foreign research investigators must submit an Import Permit (preferably in English) issued by an appropriate agency of their government for internationally-controlled drug substances.
- a. The name of the supplier on the import permit must be listed as follows:
    - Research Triangle Institute
    - E. Institute Dr., Hermann Bldg.
    - Room 106
    - Research Triangle Park, NC 27709
  - b. The import permit should be accompanied by a signed statement from the investigator to the effect that the drug will be used solely for the purpose of re-

search and will not be re-exported. The import permit must contain a clear address and individual name to which the requested drug is to be delivered (not a post box number). Shipment should be indicated on the import permit as Air Freight to this individual. Specify the appropriate port for customs clearance purposes and provide the name and address of the Customs Clearance Agent, if one is used.

- c. Please obtain the longest possible expiration date on import permits.
- d. Foreign investigators requesting drugs or other substances that are not very stable should be certain to make advance arrangements that would allow these drugs or other substances to be released to them expeditiously. This is particularly relevant when dealing with radioactive materials with high specific activity (>1.0 Ci/mmol). These compounds are shipped as solutions in ice and will not stay cold for more than 48 hours; they must be retrieved and put in cold storage immediately to prevent decomposition.
- e. Foreign investigators should also be aware that compounds are shipped with a listed value for insurance purposes. Since this may cause problems with customs officials, investigators should determine in advance what steps should be taken to avoid these complications. Often an official statement that the compounds are for research only and have no commercial value is sufficient.

**Failure to comply with aforesaid guidelines may delay the processing of your request.**

### **ADDITIONAL NOTES:**

1. ETORPHINE AND DIPRENORPHINE - Request for either of these two compounds should be made on separate order forms when ordering additional compounds at the same time. Etorphine hydrochloride and diprenorphine (free base or hydrochloride) are Schedule II drugs, however etorphine free base is a Schedule I drug. Therefore, etorphine free base should be ordered using DEA Form-222 as is appropriate for all Schedule I drugs.
2. CARFENTANIL, ETORPHINE AND DIPRENORPHINE – The DEA registration of a research investigator requesting these compounds must show the proper registration for such compounds.
3. For more information on the Drug Enforcement Administration registration forms including Form 222 and Form 223, please see: <http://www.deadiversion.usdoj.gov/drugreg/index.html>.

4. For more information about the FDA Investigational New Drug Application, please see: <http://www.fda.gov/Drugs/DevelopmentApprovalProcess/HowDrugsareDevelopedandApproved/ApprovalApplications/InvestigationalNewDrugINDApplication/default.htm>.
5. For more information on the Nuclear Regulatory Commission License, please see: <http://www.nrc.gov/about-nrc/regulatory/licensing.html>. Foreign applicants are required to submit additional documentation, including an import permit from the country into which the drug(s) are being shipped.

### **CONTACT INFORMATION:**

All requests or questions should be addressed to:

**Richard Kline, Ph.D.**

phone: (301) 827-5243

email: [rkline@nida.nih.gov](mailto:rkline@nida.nih.gov)

**Robert Walsh**

Phone: (301) 443-9825

email: [bob.walsh@nih.gov](mailto:bob.walsh@nih.gov)

**Kevin Gormley**

Drug Supply Specialist

phone: (301) 435-0264

email: [kgormley@nida.nih.gov](mailto:kgormley@nida.nih.gov)

Division of Therapeutics and Medical Consequences (DTMC)

Chemistry and Pharmaceutics Branch (CPB)

National Institute on Drug Abuse, NIH

6001 Executive Boulevard, Room 4119

Rockville, MD 20852

Fax: (301) 443-2599

Phone: (301) 827-5243

## C. DRUG REQUEST CHECKLIST

1. A **cover letter** including the name and quantities of compounds or drugs being requested, grant number, and name, phone number and e-mail address of your program officer (for an NIH/NIDA grantee), your shipping address, e-mail address, phone and fax numbers.
2. A **recommendation letter** from your program officer in support of your request.
3. A **research protocol**, including justification for the requested quantity of compounds or drugs being requested.
4. A **DEA Form 222** (for controlled substances).
5. A copy of your current **DEA registration** (for controlled substances).
6. An **approved FDA letter** and **IND number** (for a clinical study).
7. A copy of an **NRC license** for radioactive compounds.
8. A **curriculum vitae** of the principal investigator, if applicable.
9. A **statement of commitment** that NIDA will be acknowledged in publications.

## D. SAMPLE DEA ORDER FORM 222

(THIS IS A SAMPLE OF A CORRECTLY COMPLETED DEA 222 FORM. PLEASE NOTE THAT ALL ENTRIES SHOULD BE IN THE APPROPRIATE COLUMNS.)

<b>See Reverse of PURCHASER'S Copy for Instructions</b>		No order form may be issued for Schedule I and II substances unless a completed application form has been received, (21 CFR 1305.04).		<b>OMB APPROVAL No. 1117-0010</b>		
TO: (Name of Supplier) Research Triangle Institute			STREET ADDRESS 3040 East Cornwallis Road, Hermann Bldg., Room 106			
CITY and STATE RTP, NC 27709-2194		DATE MM/DD/YY	<b>TO BE FILLED IN BY SUPPLIER</b>			
<b>TO BE FILLED IN BY PURCHASER</b>			SUPPLIER'S DEA REGISTRATION No.			
LINE No.	No. of Packages	Size of Package	Name of Item	National Drug Code	Packages Shipped	Date Shipped
1	X	X	X			
2						
3						
4						
5						
6						
7						
8						
9						
10						
1 <b>LAST LINE COMPLETED (MUST BE 10 OR LESS)</b>			SIGNATURE OF PURCHASER OR ATTORNEY OR AGENT			
Date Issued DD/MM/YY	DEA Registration No. XXXXXXXXXX	Name and Address of Registrant XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXX				
Schedules XXXXXXXXXX	No. of this Order Form XXXXXXXXXX					
Registered as a XXXXXXX						

DEA Form - 222

U.S. OFFICIAL ORDER FORMS - SCHEDULES I & II  
DRUG ENFORCEMENT ADMINISTRATION

SUPPLIER'S Copy 1

3636221

## E. SUPPLY AND ANALYSIS OF STANDARD SOLUTIONS OF $\Delta^9$ -THC

In discussions with investigators working in the area of quantitative analysis of  $\Delta^9$ -THC, the question on the availability of its standard has repeatedly arisen. Because of the difficulties associated with accurately weighing exact quantity of non-crystalline  $\Delta^9$ -THC, NIDA provided the following  $\Delta^9$ -THC and its standard in solution form upon special request to research investigators in past and it still continues to do so:

1. Small quantity of two stock solutions of  $\Delta^9$ -THC, 5 mg/ml in ethanol, and 0.5 mg/ml in ethanol, and  $\Delta^9$ -THC 0.70 mg/ml and androst-4-ene-3,17-dione in ethanol. The latter material is an internal standard for GC analysis. This steroid can also be provided in solid form to researchers who want to perform their own GC analyses. Note that both of these stock solutions are analyzed for exact composition and analytical data are provided with the shipment
2. As a final check, NIDA can provide the analysis of your stock solution using standardized procedure. At least 1.0 mL of stock solution should be provided with approximate concentration. If the concentration is greater than 50  $\mu$ g/mL  $\Delta^9$ -THC, a standard GLC or HPLC analysis is performed using a steroid internal standard. For concentrations lower than this, GC/MS technique is used.

For further information, contact:

Richard Kline, Ph.D.  
Phone: (301) 827-5243  
email:  
rkline@nida.nih.gov

Robert Walsh  
Phone: (301) 443-9825  
email:  
bob.walsh@nih.gov

Kevin Gormley (RTI)  
Phone: (301) 435-0264  
email:  
kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852



## F. ALTERNATIVE SOURCES FOR PEPTIDES

Recognizing a need in the research community for peptides, NIDA has included many peptides in the list of compounds provided to researchers through the NIDA Drug Supply Program. There are, however, a number of commercial suppliers that have many compounds of interest which are currently unavailable from the NIDA program. The addresses and phone numbers of some of these suppliers are:

PolyPeptide Laboratories San Diego  
9395 Cabot Drive  
San Diego, CA 82126  
(800) 338-4965

Pierce Biotechnology  
P.O. Box 117  
Rockford, IL 61105  
(800) 874-3723

Bachem Americas, Inc.  
3132 Kashiwa Street  
Torrance, CA 90505  
(888) 422-2436

Sigma Chemical Co.  
P.O. Box 14508  
St. Louis, MO 63178  
(800) 325-3010

NIDA is always receptive to suggestions for new peptides that are of interest to the scientific community. These suggestions should be in writing accompanied by the structure of the peptide as well as any names by which it is known. These suggestions should be forwarded to:

Richard Kline, Ph.D.  
Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852  
email: [rkline@nida.nih.gov](mailto:rkline@nida.nih.gov)  
Fax: (301) 443-2599  
Phone: (301) 827-5243

## **G. INSTRUCTIONS FOR ANALYTICAL SERVICES**

NIDA facilitates drug abuse research by providing analytical services to research investigators who do not have necessary analytical facilities in their own laboratories. Priority is given to those investigators who are funded by NIDA.

Experimental samples (such as tissue, plasma, urine, and saliva) are analyzed in a NIDA contract laboratory for determining the concentration of drugs of abuse and their metabolites or precursors. The result of analyses is sent to research investigator with a copy to NIDA program official.

Request for analytical services should be submitted to the NIDA Drug Supply Program official with the following information for consideration and approval:

1. Number and title of your funded NIDA research grant
2. Name and contact information of your program official
3. In case of no grant, a brief research protocol
4. Number and name of drug(s) or drug metabolite(s) for analysis
5. Nature and origin of matrix such as rat/mouse/or human serum, plasma, urine, tissue, or saliva
6. Minimum expected concentrations of each drug/metabolites, and
7. Any other information that could be useful for analysis
8. A commitment to acknowledge NIDA in research publications resulting from this service. Once a research paper is published, a reprint or reference must be provided to NIDA drug supply program official.

After request approval, researcher will be contacted to submit experimental samples with shipping instructions to the following NIDA contract laboratory:

**David E. Moody, Ph.D.**

Center for Human Toxicology

University of Utah

30 South 2000 East

(for regular mail) Room 105

(for courier) Room 3956

Salt Lake City, UT 84112

Phone: (801) 581-5117; Fax: (801) 581-5034

E-Mail: [david.Moody@utah.edu](mailto:david.Moody@utah.edu)

**NOTE:** It is recommended that the research investigator obtain authorization prior to conducting any experiments so they can consult with the analytical laboratory about sample preparation and appropriate analyses.

Request for analysis should be submitted to:

Richard Kline, Ph.D.  
Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852  
email: rkline@nida.nih.gov  
Fax: (301) 443-2599  
Phone: (301) 827-5243

## **H. X-RAY DIFFRACTION ANALYSIS OF COMPOUNDS**

The purpose of this service is to provide definitive three-dimensional structural coordinates of compounds in support of drug abuse research. X-Ray diffraction analysis is performed on two types of compounds. The first type consists of non-peptide drugs, their analogs, related probes or potential analytical therapeutics including substances related to cocaine, phencyclidine, cannabinoids, opiates, and others. The second type consists of opioids and related peptides (CCK related, FMRF related, and alpha MSH-related fragments, etc.).

X-ray diffraction results provide full characterization of a compound even when the empirical formula of the molecule is not known beforehand. It is only the analytical method that can clearly define the absolute configuration of a molecule. An X-ray diffraction experiment requires only one good single crystal ideally about 0.1 x 0.2 x 0.2 mm (~0.1 mg of starting material). Note that single crystals may contain solvent so the best results are often obtained when samples are shipped in their mother liquor. If the submitted sample does not contain suitable single crystals then a minimum of 10 mg of sample is required for crystallization experiments. For these non-crystalline compounds information about stability and solubility should be provided with the sample. In present day research environment growing good single crystal is often the slowest step in the process since the use of high speed computers and state of the art data collection systems have reduced the time needed to complete a single structure study from several weeks to a few days.

For all samples indicate: 1 – if absolute or relative conformation is required as part of the analysis; 2 – the chirality of any known centers; 3 – provide a diagram of the expected structure including a preferred numbering scheme if applicable.

To request X-ray diffraction analysis of compounds, research investigators should provide the following information for consideration:

### **REQUEST FOR X-RAY DIFFRACTION ANALYSIS**

Name of Investigator: \_\_\_\_\_

Institution: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone & Fax Numbers: \_\_\_\_\_

NIH/NIDA Grant Title: \_\_\_\_\_

NIH/NIDA Grant Number: \_\_\_\_\_

Name of Your Program Officer (NIH/NIDA): \_\_\_\_\_

Type of compound: \_\_\_\_\_

Empirical Formula: \_\_\_\_\_

Anticipated Structure/comments/suggestions:

\_\_\_\_\_  
\_\_\_\_\_

Signature of Principal Investigator: \_\_\_\_\_

Provide a recommendation letter from your Program Officer in support of your request. If not a NIDA grantee, provide a research protocol of your study for review signifying the relevance of your study with the NIDA research programs. The priority will be given to research investigators who are funded by the NIDA. A commitment to recognize NIDA must be provided. Once a paper is published, a copy, reprint, or publication reference must be submitted to NIDA program official.

**Note: An incomplete application may not be considered.**

The signed request (or electronic version) for analysis should be submitted to the following for approval before submitting your sample to the Center for Crystallographic Studies, Laboratory for Structure of Matter, Naval Research Laboratory, 4555 Overlook Ave. S.W., Washington, D.C. 20375-5000:

Richard Kline, Ph.D.  
Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852  
email: [rkline@nida.nih.gov](mailto:rkline@nida.nih.gov)  
Fax: (301) 443-2599  
Phone: (301) 827-5243

## **I. Nicotine Research Cigarettes Drug Supply Program**

The NIDA DSP now provides a variety of nicotine research cigarettes (NRC) to research investigators. For more information on the Notice of Availability, please see <http://grants.nih.gov/grants/guide/notice-files/NOT-DA-14-004.html>.

### **Nicotine Research Cigarette Drug Supply Program Application Process**

To obtain NRCs from the National Institute of Drug Abuse Drug Supply Program, all research investigators will need to prepare a Request Package.

#### **Stepwise Procedure (Basic Non-Human Research)**

1. A Request Package for NRC is submitted to the NIDA Drug Supply Program.
2. Once all request package materials are received, the NIDA Drug Supply Program Director reviews request package for completeness.
3. Materials are reviewed by NIH and assigned to a Program Officer.
  - For non-Grantees, the Program Officer refers to an external Scientific Expert Committee for further review.
4. Once reviewed, the Program Officer provides a recommendation to the NIDA Drug Supply Director for approval.
5. Once approved, if there is adequate inventory of nicotine research cigarettes, the NIDA Drug Supply Director issues shipment authorization.

#### **Stepwise Procedure (Clinical Research with Human subjects)**

1. A Request Package for NRC is submitted to the NIDA Drug Supply Program.
2. Once all request package materials are received, the NIDA Drug Supply Program Director for consideration.
3. Materials are reviewed by NIH and assigned to a Program Officer
  - For non-Grantees, the Program Officer refers to FDA and the Scientific Expert Committee for further review.
4. Once reviewed, the Program Officer provides a recommendation to the NIDA Drug Supply Director for approval.
5. Once approved, and there is adequate inventory of nicotine research cigarettes, the NIDA Drug Supply Director issues shipment authorization.

## **FAQs for the Investigational Tobacco Product (ITP) application**

For researchers, in order for the Nicotine Research Cigarette (NRC) order to be deemed complete by the NIDA Drug Supply Program (DSP) Director, an Investigational Tobacco Product (ITP) application needs to be completed and forward to the FDA for approval. Below are helpful notes which will further your application to approval status. **Please be consistent and as specific as possible throughout your ITP application.** If not, applications may be considered inappropriate and delayed until corrected.

- Include actual date of previously submitted ITPs for cross-reference.

Reference the actual Tobacco Product Master File (TPMF) code name for the requested nicotine research cigarette (NRC) (e.g., NRC 300, RN).

- As specifically as possible, provide the specific grant number, grant title (where appropriate), project and/or protocol number and title, and PI for the study.
- Please provide the study sponsor. Note the distinction between “sponsor” and “investigator”: sponsors are typically considered to be the awarded institution (for NIH grants) to which the funding will be designated. Investigators are the primary research contact who conducts the research at that particular institution.
- Please be sure that the title of SPECTRUM cigarettes should be in all caps and consistent throughout your ITP application.

**All inquiries and requests for the Investigational Tobacco Product application should be forwarded to the:**

Center for Tobacco Products  
Food and Drug Administration  
Document Control Center, Room 020J  
9200 Corporate Boulevard Rockville, MD 20850  
(301) 796-0456

**Point of Contact. All other requests or questions should be addressed to:**

Richard Kline, Ph.D.  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852  
email: rkline@nida.nih.gov  
Fax: (301) 443-2599  
Phone: (301) 827-5243

## **J. Ordering Guidelines for Nicotine Research Cigarettes (NRCs)**

To obtain NRCs from the NIDA DSP, all research investigators will need to prepare a NRC Request Package. A Request Package should include the following items:

1. A cover letter including:

- a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
  - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express (FedEx) (i.e., street address, building name or number, room number, city and state),
- b. If applicable, NIH grant number of project and name and contact information of project's NIDA/NIH Program Officer. If a non-NIH grantee, no information on Program Officer and grant number is required.
- c. Type and quantity of NRCs being requested,
  - If multiple studies/tasks are planned, combine projected needs into a single order rather than placing several separate requests in a short time interval. The request should generally be limited to four items or drugs/compounds per order to avoid delay.

2. The Research Investigator's curriculum vitae (CV).

3. A detailed research protocol clearly indicating:

- a. The specific aims and goals of proposed study (preferably the study abstract)
- b. Number of experiments and experimental subjects
- c. Number and type of NRCs (NOT-DA-14-004), including respective Tobacco Product Master File (TPMF) codes,
  - Calculate required amount of NRCs for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.
- d. Justification for the quantity needed. If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief statement of progress along with references to resulting publications.
- e. A timeline indicating approximately when and what quantities of NRC shipments are needed over the duration of the protocol.



- f. Statement of commitment that NIDA will be acknowledged in research publications using the NIDA-supplied cigarettes.
4. For Clinical Research Projects Involving Human Subjects
    - a. Investigational Tobacco Product (ITP) application information including: A copy of FDA letter (Advice/Information Request) in response to your ITP application. (NOTE: Suggested guidelines for submitting an Investigational Tobacco Product Application (ITPA) to FDA/CTP are given separately. For more information, please visit [here](#).
    - b. A copy of your Institutional Review Board (IRB) approval letter
    - c. A copy of your Data Safety and Monitoring Plan
    - d. Proof of registration with [clinicaltrials.gov](#) (NCT #)
    - e. A copy of the study consent form(s)
  5. For Basic (Non-human) Research Projects
    - A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised. For more information, please visit the [Animal Care & Use Committee Animal Study Proposal website](#).
  6. For Ongoing Research Projects (This includes research previously supported by the NIH prior to NRC request)
    - a. Reference information pertaining the previous protocol / FDA approval to the previous protocol (if applicable).
    - b. A brief statement of progress (500 words or less)
    - c. A list of any relevant publications.
  7. Billing Information for Shipping Costs (if applicable):
    - a. US investigators should provide their FedEx account number to bill shipping charges,
    - b. International requests should provide United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges or FedEx account number as appropriated for the import of NRCs.

**Contact Information:**

All requests/questions should be sent to: [NIDANRCSupply@mail.nih.gov](mailto:NIDANRCSupply@mail.nih.gov).

**Please specify materials requested in the subject line.**

**Address correspondence to:**

Richard Kline, Ph.D.  
Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852  
email: [rkline@nida.nih.gov](mailto:rkline@nida.nih.gov)  
Fax: (301) 443-2599  
Phone: (301) 827-5243

## K. Ordering Guidelines for Marijuana and Marijuana Cigarettes

To obtain marijuana and marijuana cigarettes from the NIDA DSP, all research investigators will need to prepare a Marijuana Cigarette Request Package. A Request Package should include the following items:

1. A cover letter including:

- a. Name, phone number and e-mail address of Research Investigator (and consignee, if applicable),
  - Provide a current and complete address that would allow shipment by a suitable carrier such as Federal Express(FedEx) (i.e. street address, building name or number, room number, city and state) - This address should coincide with the address on the DEA order form.
  - If requestor's address is outside the US, please provide all necessary documentation to verify whether particular compound requested is permitted in his/her country for importation.
- b. If applicable, NIH grant number of project and name and contact information of project's NIDA/NIH Program Officer (if applicable).

If a non-grantee, no information regarding the Program Officer and grant number is required.

- c. Name(s) and quantity of compounds or other substances being requested,
  - If multiple studies/tasks are planned, combine projected needs into a single order rather than placing several separate requests in a short time interval.

The request should generally be limited to no more than four items per order to avoid delay.

2. The Research Investigator's curriculum vitae (CV).

3. A detailed research protocol clearly indicating:

- a. The specific aims and goals of proposed study (preferably the study abstract),
- b. The number of experiments and experimental subjects,
- c. The strength or concentration of marijuana or marijuana cigarettes,
  - Calculate required amount of marijuana cigarettes for your project and submit your request well in advance of your planned experiments or tasks, or 6-8 weeks prior to depletion of stock on hand for ongoing studies/tasks.
- d. Justification for the quantity of marijuana or marijuana cigarettes requested.

If the request is related to a previously submitted protocol, provide a reference to this protocol and a brief statement of progress along with references to resulting publications.

4. Statement of commitment that NIDA will be acknowledged in research publications using the NIDA Drug Supply Program.

5. A completed [DEA Order Form-222](#).

- Under the third column of DEA Form-222 (Size of Package), list quantities as bulk weight.
6. A copy of current DEA registration, [Form DEA-223](#) for a controlled substance.
- It is the Research Investigator's responsibility to keep his/her registration current and verify the drug code for the requested materials.
7. For clinical research projects involving human subjects
1. Investigational New Drug (IND) number and a copy of approved IND letter from the FDA. For more information, please visit the [FDA IND Application website](#).
  2. A copy of your Institutional Review Board (IRB) approval letter
  3. A copy of your Data Safety and Monitoring Plan
  4. Proof of registration with [clinicaltrials.gov](#) (NCT #)
  5. A copy of the study consent form(s)
8. For basic (non-human) research projects
- A copy of the document demonstrating that the research is approved by the Animal Care & Use Committee and that adequate care in conducting animal research will be exercised (if applicable).
- For more information, please visit the [Animal Care & Use Committee Animal Study Proposal website](#).
9. For ongoing research projects (This includes research previously supported by the NIH prior to request)
- a. Reference information pertaining to the previous protocol.
  - b. A brief statement of progress (500 words or less)
  - c. A list of any relevant publications.
10. Billing Information for Shipping Costs:
1. US investigators should provide a FedEx account number for shipping charges,
  2. International requests for marijuana and marijuana cigarettes should provide their United Parcel Service (UPS) Supply Chain Solutions account number to bill shipping charges.
11. For Foreign Investigators, please submit the Import Permit (preferably in English) issued by an appropriate agency of your government. The name of the supplier on the import permit must be listed as follows:

Research Triangle Institute  
E. Institute Dr., Hermann Bldg.  
Room 106  
Research Triangle Park, NC 27709

- The import permit should be accompanied by a signed statement from the investigator to the effect that the materials will be used solely for the purpose of research and will not be re-exported. The import permit must contain a clear address and individual name to which the requested material is to be delivered (not a post office box number). Shipment should be indicated on the import permit as Air Freight to this individual. Specify the appropriate port for customs clearance purposes and provide the name and address of the Customs Clearance Agent, if one is used.
- Please obtain the longest possible expiration date on import permits.
- Foreign investigators should also be aware that the material is shipped with a listed value (for insurance purposes). Since this can cause problems with customs officials, investigators should determine in advance what steps should be taken to avoid these complications. Often an official statement that the materials are for research only and have no commercial value is sufficient.

**Failure to comply with these guidelines may delay the processing of your request.**

**Contact Information:**

**Richard Kline, Ph.D.**

phone: (301) 827-5243

email: rkline@nida.nih.gov

**Robert Walsh**

Phone: (301) 443-9825

email: bob.walsh@nih.gov

**Kevin Gormley**

Drug Supply Specialist

phone: (301) 435-0264

email: kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)

Chemistry and Pharmaceutics Branch (CPB)

National Institute on Drug Abuse, NIH

6001 Executive Boulevard, Room 4119

Rockville, MD 20852

## **L. IMPORTANT ADDRESSES, TELEPHONE & FAX NUMBERS**

### **NATIONAL INSTITUTE ON DRUG ABUSE**

Richard Kline, Ph.D.

Phone: (301) 827-5243

email:

rkline@nida.nih.gov

Robert Walsh

Phone: (301) 443-9825

email:

bob.walsh@nih.gov

Kevin Gormley (RTI)

Phone: (301) 435-0264

email:

kgormley@nida.nih.gov

Division of Therapeutics and Medical Consequences (DTMC)  
Chemistry and Pharmaceutics Branch (CPB)  
National Institute on Drug Abuse, NIH  
6001 Executive Boulevard, Room 4119  
Rockville, MD 20852

### **DRUG ENFORCEMENT ADMINISTRATION (DEA)**

Office of Diversion Control Online: <http://www.deadiversion.usdoj.gov/>

Drug Enforcement Administration

Office of Diversion Control

8701 Morrissette Drive

Springfield, Virginia 22152

Phone: (800) 882-9539

### **FOOD AND DRUG ADMINISTRATION (FDA)**

U.S. Food & Drug Administration

Department of Health & Human Services

10903 New Hampshire Avenue

Silver Spring, Maryland 20993

Phone: (888) 463-6332

Website: <http://www.fda.gov>

## M. AVAILABLE DRUGS, COMPOUNDS, & DOSAGE FORMS



**Disclaimer:** All compound descriptions in this catalog are provided for the purpose of general information only and are not intended to address specific issues or to be a complete or definitive source of such information. Nothing herein is to be considered as a warranty, expressed or otherwise. Users of any the materials provided by NIDA are obligated to understand the proper and safe research applications and to comply with the applicable federal, state, and local laws and regulations. The substances described in this catalog are suitable for basic research only and, unless otherwise indicated, are **not** for human use.



## Compounds recently added to the NDSP Inventory:

Catalog number	Compound	Page
1100-013	4-Fluoroamphetamine hydrochloride	147
2223-001	Suvorexant	170
7032-001	MAB-CHMINACA; ADB-CHMINACA	34
7033-001	5F-AMB; 5F-MMB-PINACA; 5F-AMB-PINACA	34
7034-001	(S)-5F-MDMB-PINACA	34
7034-002	(R)-5F-MDMB-PINACA	34
7042-001	AMB-CHMINACA; MMB-CHMINACA; MA-CHMINACA	35
7221-001	NM 2201	35
7405-007	MDPR hydrochloride	154
7405-008	MDAL hydrochloride	154
7541-002	Ethylone HCl	150
7542-002	Dibutylone hydrochloride	150
9041-033	[3-carbonyl- <sup>14</sup> C]Cocaine	159, 186
NOCD-149	α-PHP hydrochloride	151
NOCD-150	α-PPP hydrochloride	151
NOCD-151	QUCHIC	38
NOCD-152	1,4-Dibenzylpiperazine dihydrochloride; DBZP	156
NOCD-153	m-Chlorophenylpiperazine hydrochloride; mCPP	170
NOCD-154	TFMPP dihydrochloride	170
NOCD-155	FUB-PB-22; QUFUBIC	38
NOCD-156	3,4-MDPBP hydrochloride	151
NOCD-157	α-PVT hydrochloride	151
NOCD-158	5-APB hydrochloride	148
NOCD-159	W-18	100
NOCD-160	Methocinnamox	112
NOCD-161	Nemonapride	169
NOCD-162	[ <sup>3</sup> H]Nemonapride	169, 183
NOCD-163	Mitragynine	85
NOCD-164	7-Hydroxymitragynine	85
NOCD-168	[ <sup>3</sup> H]Mitragynine	85, 183
NOCD-169	GNC Hapten	172
NOCD-170	Volinanserin; MDL 100907	171



★ = custom synthesis

**Cannabinoids: Allosteric Modulators**

Catalog number : NOCD-133

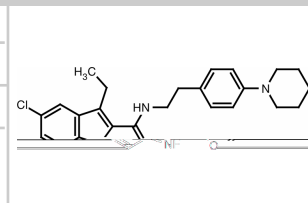
CASRN : 868273-06-7

Name : ORG 27569

Mol. formula : C<sub>24</sub>H<sub>28</sub>ClNO<sub>3</sub>

FW : 409.95

DEA schedule : 0

Notes : CB<sub>1</sub> receptor positive allosteric modulator.References : Price et al (2005) Allosteric modulation of the Cannabinoid CB1 receptor. *Mol.Pharmacol.* 68 1484. PMID: 16113085.**Cannabinoids: Cannabichromene Class**

Catalog number : 7360-007

CASRN : 20675-51-8

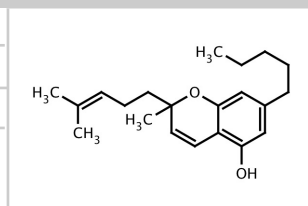
Name : Cannabichromene

Mol. formula : C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>

FW : 314.46

DEA schedule : 1

Notes : Non-psychoactive constituent of cannabis.

References : Turner, CE; Elsohly, MA *J Clin Pharmacol* 1981, 21, 283S-291S.

Catalog number : 7360-008

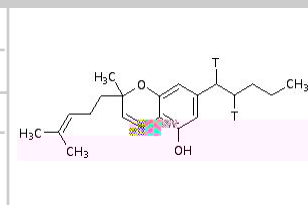
CASRN : 20675-51-8 (parent) ★

Name : [1',2'-<sup>3</sup>H<sub>2</sub>]CannabichromeneMol. formula : C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>

FW : 314.46

DEA schedule : 1

Notes : Non-psychoactive constituent of cannabis (tritium-labeled).

References : *Instrumental Data for Drug Analysis*, 2nd Ed., 1996, Volume 1, p304.**Cannabinoids: Cannabicyclohexanol Class**

Catalog number : 7297-001

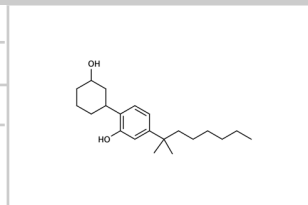
CASRN : 114753-51-4

Name : rac-CP-47,497

Mol. formula : C<sub>21</sub>H<sub>34</sub>O<sub>2</sub>

FW : 318.50

DEA schedule : 0

References : Melvin, L. S., Johnson, M. R., Harbert, C. A., Milne, G. M., & Weissman, A. (1984). A cannabinoid derived prototypical analgesic. *Journal of medicinal chemistry*, 27(1), 67-71.

Catalog number : 7298-001

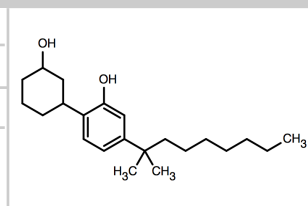
CASRN : 70434-92-3

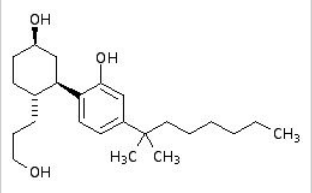
Name : Cannabicyclohexanol; rac-CP-47,497 C8 homolog

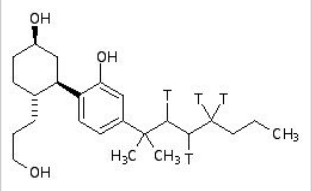
Mol. formula : C<sub>22</sub>H<sub>36</sub>O<sub>2</sub>

FW : 332.52

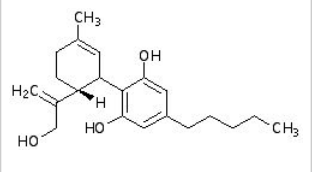
DEA schedule : 1

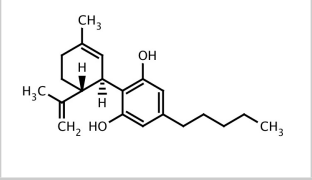
References : Compton DR, Johnson MR, Melvin LS, Martin BR, *J Pharm Exp Ther*, 1992, 260(1), 201-209.

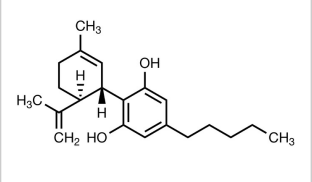
<b>Catalog number :</b> NOCD-091	<b>CASRN :</b> 83002-04-4
<b>Name :</b> (-)-CP 55,940	
<b>Mol. formula :</b> C <sub>24</sub> H <sub>40</sub> O <sub>3</sub>	<b>FW :</b> 376.58 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>High-affinity cannabinoid CB1 and CB2 receptor agonist</i>	
<b>References :</b> Melvin, LS; <i>et al. J Med Chem</i> <b>1984</b> , 27, 67-71.	
	

<b>Catalog number :</b> NOCD-092	<b>CASRN :</b> 119095-48-6
<b>Name :</b> [2,3,4,4- <sup>3</sup> H <sub>4</sub> ]-(-)-CP 55,940	
<b>Mol. formula :</b> C <sub>24</sub> H <sub>40</sub> O <sub>3</sub>	<b>FW :</b> 376.58 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>High affinity CB1 and CB2 receptor radioligand (tritium-labeled).</i>	
	

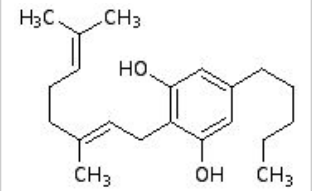
**Cannabinoids: Cannabidiol Class**

<b>Catalog number :</b> 7360-022	
<b>Name :</b> 10-Hydroxycannabidiol	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	<b>FW :</b> 330.46 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>Cannabidiol metabolite.</i>	
<b>References :</b> Lander, N; <i>et al. J Chem Soc., Perkin Trans 1</i> <b>1976</b> , 8-16.	
	

<b>Catalog number :</b> 7372-002	<b>CASRN :</b> 13956-29-1
<b>Name :</b> (-)- <i>trans</i> -Cannabidiol	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 314.46 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>CB<sub>1</sub> and CB<sub>2</sub> receptor antagonist</i>	
<b>References :</b> Petitet, F; <i>et al. Life Sci</i> <b>1998</b> , 63, PL1-6. Costa, B; <i>et al. Br J Pharmacol</i> <b>2004</b> , 143, 247-50. Thomas, A; <i>et al. Br J Pharmacol</i> <b>2007</b> , 150, 613-23.	
	

<b>Catalog number :</b> 7372-003	<b>CASRN :</b> 74219-29-7
<b>Name :</b> (+)- <i>trans</i> -Cannabidiol	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 314.46 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>CB<sub>1</sub> and CB<sub>2</sub> receptor antagonist</i>	
<b>References :</b> Petitet, F; <i>et al. Life Sci</i> <b>1998</b> , 63, PL1-6. Costa, B; <i>et al. Br J Pharmacol</i> <b>2004</b> , 143, 247-50. Thomas, A; <i>et al. Br J Pharmacol</i> <b>2007</b> , 150, 613-23.	
	

**Cannabinoids: Cannabigerol Class**

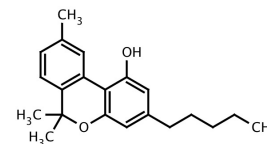
<b>Catalog number :</b> 7360-010	<b>CASRN :</b> 25654-31-3
<b>Name :</b> Cannabigerol	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>32</sub> O <sub>2</sub>	<b>FW :</b> 316.48 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>Analgesic; anti-inflammatory</i>	
<b>References :</b> Williamson, EM; Evans, FJ <i>Drugs</i> <b>2000</b> , 60, 1303-14.	
	

**Cannabinoids: Cannabinol Class**

Catalog number : 7360-013

CASRN : 21-35-7

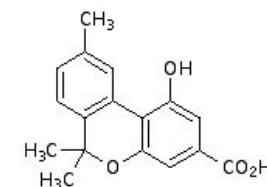
Name : Cannabinol; CBN

Mol. formula :  $C_{21}H_{26}O_2$  FW : 310.43 DEA schedule : 1Notes : *Inactive constituent of cannabis.*References : Mahadevan, A; *et al. J Med Chem* 2000, 43, 3778-85.

Catalog number : 7360-020

CASRN : 60788-14-9

Name : 1',2',3',4',5'-Pentanorcannabinol-3-carboxylic acid

Mol. formula :  $C_{17}H_{16}O_4$  FW : 284.31 DEA schedule : 1

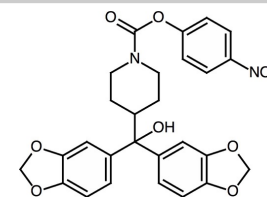
Catalog number : 7360-023

Name : [1',2'- $^3H_2$ ]CannabinolMol. formula :  $C_{21}H_{26}O_2$  FW : 310.43 DEA schedule : 1**Cannabinoids: Enzyme Inhibitors**

Catalog number : NOCD-037

CASRN : 1101854-58-3

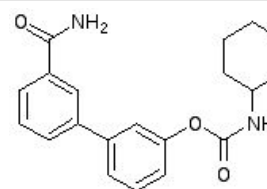
Name : JZL184

Mol. formula :  $C_{27}H_{24}N_2O_9$  FW : 520.49 DEA schedule : 0Notes : *Potent and selective inhibitor of monoacylglycerol lipase (MAGL).*References : Long, JZ; *et al. Nat Chem Biol* 2009, 5, 37-44.

Catalog number : NOCD-098

CASRN : 546141-08-6

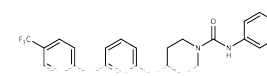
Name : Cyclohexylcarbamic Acid 3'-carbamoylbiphenyl-3-yl ester; URB 597

Mol. formula :  $C_{20}H_{22}N_2O_3$  FW : 338.41 DEA schedule : 0Notes : *Fatty acid amide hydrolase (FAAH) inhibitor.*References : Cravatt BF; *et al. Nature* 1996, 384, 83.  
Kathuria S; *et al. Nat Med* 2003, 9, 76.

Catalog number : NOCD-124

CASRN : 1196109-52-0

Name : PF-3845

Mol. formula :  $C_{24}H_{23}F_3N_4O_2$  FW : 456.47 DEA schedule : 0Notes : *Selective fatty acid amide hydrolase (FAAH) inhibitor.*References : Ramesh D, Ross GR, Schlosburg JE, Owens RA, Abdullah RA, Kinsey SG, Long JZ, Nomura DK, Sim-Selley LJ, Cravatt BF, Akbarali HI, Lichtman AH, *J Pharmacol Exp Ther* 2011, 339(1), 173-85.

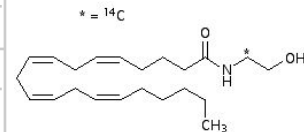
**Cannabinoids: Fatty Acid Derivatives (Anandamides)**

Catalog number : NOCD-007

Name : Arachidonyl[1-<sup>14</sup>C]ethanolamideMol. formula : C<sub>23</sub>H<sub>37</sub>NO<sub>2</sub>

FW : 361.56

DEA schedule : 0

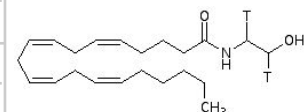


Catalog number : NOCD-008

Name : Arachidonyl[1,2-<sup>3</sup>H]ethanolamide; Tritiated AnandamideMol. formula : C<sub>22</sub>H<sub>37</sub>NO<sub>2</sub>

FW : 347.54

DEA schedule : 0



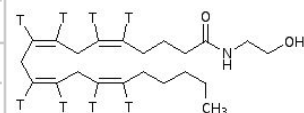
Catalog number : NOCD-078

Name : Tritium-labeled Arachidonylethanolamide; Tritiated Anandamide

Mol. formula : C<sub>22</sub>H<sub>37</sub>NO<sub>2</sub>

FW : 347.54

DEA schedule : 0

Notes : *Cannabinoid CB1 and CB2 receptor radioligand.*

Catalog number : NOCD-080

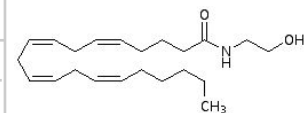
CASRN : 94421-68-8

Name : Arachidonylethanolamide; Anandamide

Mol. formula : C<sub>22</sub>H<sub>37</sub>NO<sub>2</sub>

FW : 347.54

DEA schedule : 0

Notes : *Cannabinoid CB1 and CB2 receptor agonist.*References : Devane, WA; *et al. Science* **1992**, *258*, 1946-9.**Cannabinoids: Fatty Acid Derivatives (Arachidonyl amides)**

Catalog number : NOCD-096

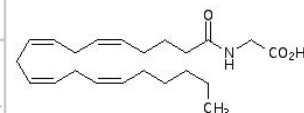
CASRN : 179113-91-8

Name : N-Arachidonylglycine; NAGly

Mol. formula : C<sub>22</sub>H<sub>35</sub>NO<sub>3</sub>

FW : 361

DEA schedule : 0

Notes : *Endogenous anandamide-like compound with analgesic properties (although it lacks CB1 receptor and anandamide transporter affinity).*References : Sheskin, T; *et al. J Med Chem* **1997**, *40*, 659-67.  
Huang, SM; *et al. J Biol Chem* **2001**, *276*, 42639-44.

Catalog number : NOCD-097

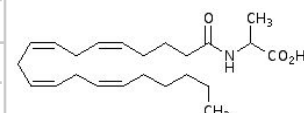
CASRN : 401941-73-9

Name : N-Arachidonyl-L-alanine

Mol. formula : C<sub>23</sub>H<sub>37</sub>NO<sub>3</sub>

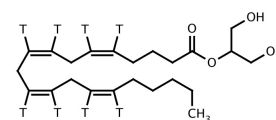
FW : 375

DEA schedule : 0

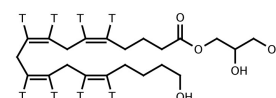


**Cannabinoids: Fatty Acid Derivatives (Arachidonyl esters)**

Catalog number : NOCD-018

Name : [<sup>3</sup>H]-2-Arachidonylglycerol; [<sup>3</sup>H]-2-AGMol. formula : C<sub>23</sub>H<sub>38</sub>O<sub>4</sub> FW : 378.55 DEA schedule : 0Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*References : Stella, N; Schweitzer, P; Piomelli, D *Nature* **1997**, *388*, 773-8.

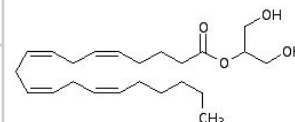
Catalog number : NOCD-035

Name : Tritium-labeled 1-Arachidonylglycerol; [<sup>3</sup>H]-1-AGMol. formula : C<sub>23</sub>H<sub>38</sub>O<sub>4</sub> FW : 378.55 DEA schedule : 0Notes : *Cannabinoid CB1 receptor agonist (tritium-labeled).*References : Stella, N; Schweitzer, P; Piomelli D *Nature* **1997**, *388*, 773-8.

Catalog number : NOCD-089

CASRN : 53847-30-6

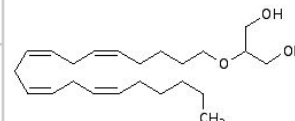
Name : 2-Arachidonylglycerol; 2-AG

Mol. formula : C<sub>23</sub>H<sub>38</sub>O<sub>4</sub> FW : 378.5 DEA schedule : 0Notes : *Cannabinoid CB1 receptor agonist.*References : Stella, N; Schweitzer P; Piomelli D *Nature* **1997**, *388*, 773-8.

Catalog number : NOCD-095

CASRN : 222723-55-9

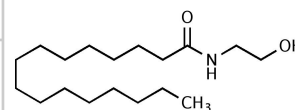
Name : Noladin

Mol. formula : C<sub>23</sub>H<sub>40</sub>O<sub>3</sub> FW : 364.57 DEA schedule : 0Notes : *Cannabinoid CB1 receptor agonist*References : Hanus, L; *et al. Proc Natl Acad Sci USA* **2001**, *98*, 3662-5.**Cannabinoids: Fatty Acid Derivatives (Palmitoyl amides)**

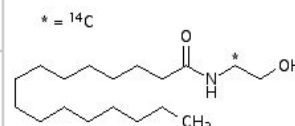
Catalog number : NOCD-002

CASRN : 544-31-0

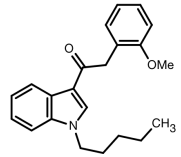
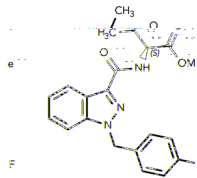

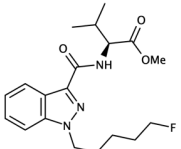
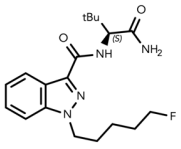
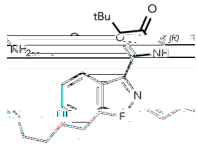
Name : Palmitoyl ethanolamide; Palmidrol

Mol. formula : C<sub>18</sub>H<sub>37</sub>NO<sub>2</sub> FW : 299.49 DEA schedule : 0Notes : *Cannabinoid CB2 receptor agonist.*References : Hanus, L; *et al. J Med Chem* **1993**, *36*, 3032-4.

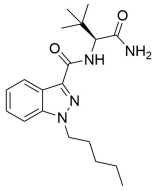
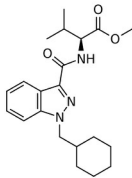
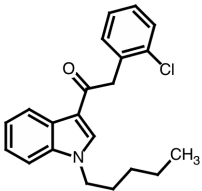
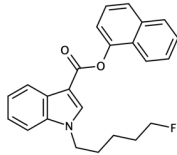
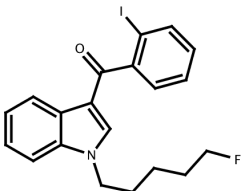
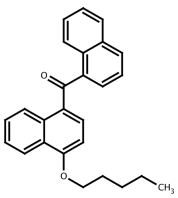
Catalog number : NOCD-005

Name : Palmitoyl[1-<sup>14</sup>C]ethanolamideMol. formula : C<sub>18</sub>H<sub>37</sub>NO<sub>2</sub> FW : 299.49 DEA schedule : 0Notes : *Cannabinoid CB2 receptor agonist (carbon-labeled).*

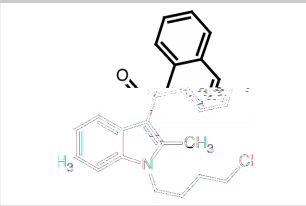
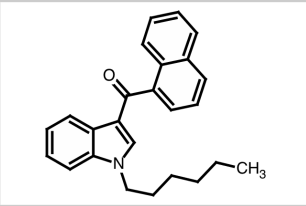
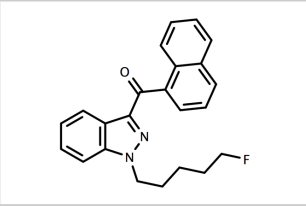
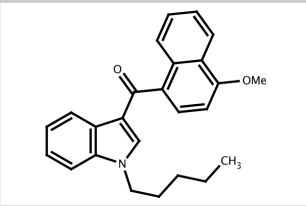
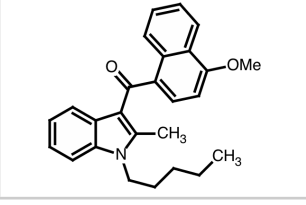
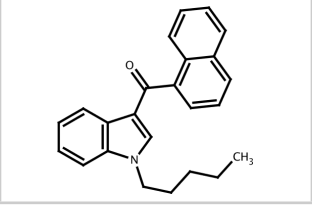
**Cannabinoids: Indole Analogs & Related Compounds**

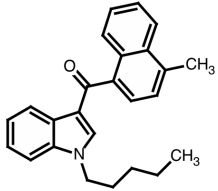
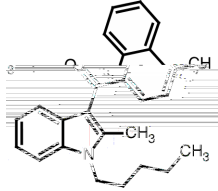
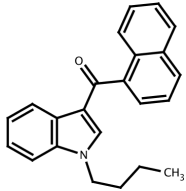
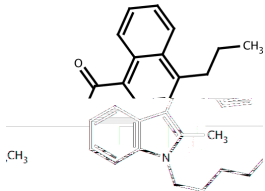
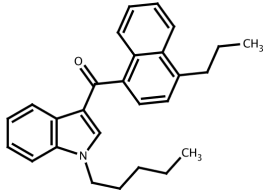
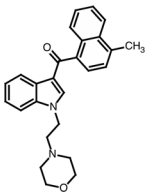
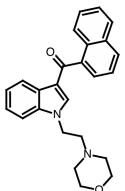
<b>Catalog number :</b> 6250-001	<b>CASRN :</b> 864445-43-2
<b>Name :</b> JWH-250	
<b>Mol. formula :</b> C <sub>22</sub> H <sub>25</sub> NO <sub>2</sub>	<b>FW :</b> 335.44 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>	
<b>References :</b> Huffman JW, Szklennik PV, Almond A, Bushell K, Selley DE, He H, Cassidy MP, Wiley JL, <i>et al.</i> , <i>Bioorg Med Chem Letters</i> , <b>2005</b> , <i>15</i> (18), 4110-4113.	
	
<b>Catalog number :</b> 7021-001	<b>CASRN :</b> 1971007-92-7
<b>Name :</b> AMB-FUBINACA	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>22</sub> FN <sub>3</sub> O <sub>3</sub>	<b>FW :</b> 383.42 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>CB<sub>1</sub> receptor agonist (natural amino acid stereochemistry)</i>	
<b>References :</b> Banister SD; <i>et al.</i> , <i>ACS Chem Neurosci</i> <b>2016</b> , <i>7</i> (9), 1241-1254.	
	
<b>Catalog number :</b> 7032-001	<b>CASRN :</b> 1863065-92-2
<b>Name :</b> MAB-CHMINACA; ADB-CHMINACA	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> N <sub>4</sub> O <sub>2</sub>	<b>FW :</b> 370.49 <b>DEA schedule :</b> 1
<b>References :</b> Wurita A, Hasegawa K, Minakata K, <i>et al.</i> <i>Forensic Toxicology</i> . <b>2015</b> ; <i>33</i> (2): 213-220.	
	
<b>Catalog number :</b> 7033-001	<b>CASRN :</b> 1801552-03-3
<b>Name :</b> 5F-AMB; 5F-MMB-PINACA; 5F-AMB-PINACA	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>26</sub> FN <sub>3</sub> O <sub>3</sub>	<b>FW :</b> 363.430 <b>DEA schedule :</b> 1
<b>References :</b> Uchiyama N, <i>et al.</i> , <i>Forensic Toxicology</i> , <b>2014</b> , <i>32</i> (2), 266-281.	
	
<b>Catalog number :</b> 7034-001	<b>CASRN :</b> 1971007-89-2
<b>Name :</b> (S)-5F-MDMB-PINACA	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> FN <sub>3</sub> O <sub>3</sub>	<b>FW :</b> 377.46 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>CB<sub>1</sub> receptor agonist (natural amino acid stereochemistry)</i>	
<b>References :</b> Banister, SD; <i>et al.</i> , <i>Pharmacology of Valinate and tert-Leucinate Synthetic Cannabinoids...</i> , <i>ACS Chem Neurosci</i> <b>2016</b> , <i>7</i> (9), 1241-1254.	
	
<b>Catalog number :</b> 7034-002	<b>CASRN :</b> 1838134-16-9
<b>Name :</b> (R)-5F-MDMB-PINACA	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> FN <sub>3</sub> O <sub>3</sub>	<b>FW :</b> 377.46 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>CB<sub>1</sub> receptor agonist (unnatural amino acid stereochemistry)</i>	
<b>References :</b> Banister, SD; <i>et al.</i> , <i>Pharmacology of Valinate and tert-Leucinate Synthetic Cannabinoids...</i> , <i>ACS Chem Neurosci</i> <b>2016</b> , <i>7</i> (9), 1241-1254.	
	



<b>Catalog number :</b> 7035-001		<b>CASRN :</b> 1633766-73-0	
<b>Name :</b> ADB-PINACA			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>28</sub> N <sub>4</sub> O <sub>2</sub>		<b>FW :</b> 344.46 <b>DEA schedule :</b> 1	
			
<b>Catalog number :</b> 7042-001		<b>CASRN :</b> 1971007-95-0	
<b>Name :</b> AMB-CHMINACA; MMB-CHMINACA; MA-CHMINACA			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 384.516 <b>DEA schedule :</b> 1	
<b>References :</b> Banister SD, <i>et al.</i> , <i>ACS Chemical Neuroscience</i> , <b>2016</b> , 7(9), 1241-54.			
			
<b>Catalog number :</b> 7203-001		<b>CASRN :</b> 864445-54-5	
<b>Name :</b> JWH-203			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>22</sub> ClNO		<b>FW :</b> 339.86 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>			
<b>References :</b> Huffman JW, Szklennik PV, Almond A, Bushell K, Selley DE, He H, Cassidy MP, Wiley JL, <i>et al.</i> , <i>Bioorg Med Chem Letters</i> , <b>2005</b> , 15(18), 4110-4113.			
			
<b>Catalog number :</b> 7221-001		<b>CASRN :</b> 2042201-16-9	
<b>Name :</b> NM 2201			
<b>Mol. formula :</b> C <sub>24</sub> H <sub>22</sub> FNO <sub>2</sub>		<b>FW :</b> 375.44 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Cannabinoid CB1R (Ki 1 nM) and CB2R (Ki 2.6 nM) agonist.</i>			
<b>References :</b> Kaneko S, <i>Forensic Tox</i> , <b>2017</b> , 35(2), 244-51.			
			
<b>Catalog number :</b> 7694-001		<b>CASRN :</b> 335161-03-0	
<b>Name :</b> AM-694			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>19</sub> FINO		<b>FW :</b> 435.27 <b>DEA schedule :</b> 1	
<b>References :</b> Logan BK, Reinhold LE, Xu A, Diamond FX, <i>J Forensic Sci</i> , <b>2012</b> , 57(5), 1168-1180.			
			
<b>Catalog number :</b> NOCD-036		<b>CASRN :</b> 432047-72-8	
<b>Name :</b> Naphthalen-1-yl-(4-pentylloxynaphthalen-1-yl)methanone			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>24</sub> O <sub>2</sub>		<b>FW :</b> 368.47 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Orally bioavailable human CB1/CB2 dual agonist with antihyperalgesic properties and limited CNS penetration.</i>			
<b>References :</b> Dziadulewicz, EK; <i>et al. J Med Chem</i> <b>2007</b> , 50, 3851-6.			
			

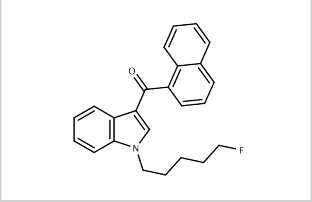
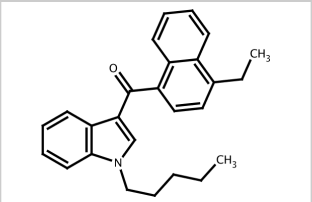
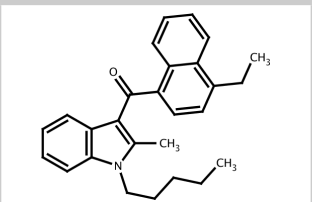
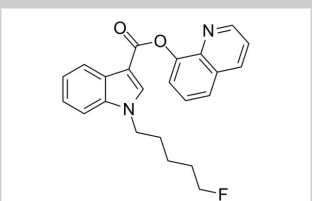
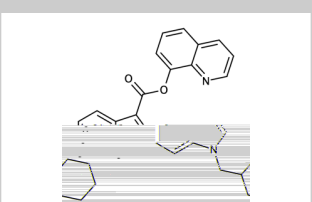
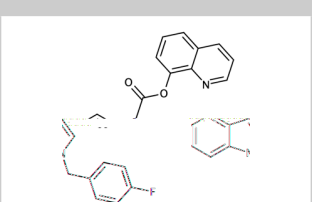
**Cannabinoids: Indole, Alkylnaphthoyl Class**

<b>Catalog number :</b> 7007-001	<b>CASRN :</b> 155471-10-6
<b>Name :</b> JWH-007	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>25</sub> NO	<b>FW :</b> 355.47 <b>DEA schedule :</b> 1
<b>References :</b> Huffman JW, Dong D, <i>Bioorg Med Chem Letters</i> , <b>1994</b> , 4(4), 563-566.	
	
<b>Catalog number :</b> 7019-001	<b>CASRN :</b> 209414-08-4
<b>Name :</b> JWH-019	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>25</sub> NO	<b>FW :</b> 355.47 <b>DEA schedule :</b> 1
<b>References :</b> Poso A, Huffman JW, <i>Br J Pharm</i> , <b>2008</b> , 153(2), 335-346.	
	
<b>Catalog number :</b> 7024-001	<b>CASRN :</b> 1801552-01-1
<b>Name :</b> THJ-2201	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>21</sub> FN <sub>2</sub> O	<b>FW :</b> 360.43 <b>DEA schedule :</b> 1
<b>Notes :</b> Potent synthetic cannabinoid receptor agonist. CNS CB1 receptor Ki = 1.0 nM and peripheral CB2 receptor Ki = 2.6 nM.	
<b>References :</b> Gatch MB, Forster MJ. Δ(9)-Tetrahydrocannabinol-like effects of novel synthetic cannabinoids in mice and rats. <i>Psychopharmacology (Berl)</i> . 2016 May;233(10):1901-10.	
	
<b>Catalog number :</b> 7081-001	<b>CASRN :</b> 210179-46-7
<b>Name :</b> JWH-081	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>25</sub> NO <sub>2</sub>	<b>FW :</b> 371.47 <b>DEA schedule :</b> 1
<b>Notes :</b> Non-selective CB <sub>1</sub> /CB <sub>2</sub> cannabinoid receptor agonist.	
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, et al., <i>Bioorg Med Chem</i> , <b>2005</b> , 13(1), 89-112.	
	
<b>Catalog number :</b> 7098-001	<b>CASRN :</b> 316189-74-9
<b>Name :</b> JWH-098	
<b>Mol. formula :</b> C <sub>26</sub> H <sub>27</sub> NO <sub>2</sub>	<b>FW :</b> 385.50 <b>DEA schedule :</b> 1
<b>References :</b> Huffman JW, Zengin G, Wu MJ, Lu J, Hynd G, Bushell K, Thompson ALS, Bushell S, Tartal C, Hurst DP, Reggio PH, Selley DE, Cassidy MP, Wiley JL, Martin BR, <i>Bioorg Med Chem</i> , <b>2005</b> , 13, 89-112.	
	
<b>Catalog number :</b> 7118-001	<b>CASRN :</b> 209414-07-3
<b>Name :</b> JWH-018	
<b>Mol. formula :</b> C <sub>24</sub> H <sub>23</sub> NO	<b>FW :</b> 341.45 <b>DEA schedule :</b> 1
<b>Notes :</b> Non-selective CB <sub>1</sub> /CB <sub>2</sub> cannabinoid receptor agonist.	
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, et al., <i>Bioorg Med Chem</i> , <b>2005</b> , 13(1), 89-112.	
	

<b>Catalog number :</b> 7122-001	<b>CASRN :</b> 619294-47-2		
<b>Name :</b> JWH-122			
<b>Mol. formula :</b> C <sub>25</sub> H <sub>25</sub> NO	<b>FW :</b> 355.47		<b>DEA schedule :</b> 1
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.			
<b>Catalog number :</b> 7149-001	<b>CASRN :</b> 548461-82-1		
<b>Name :</b> JWH-149			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>27</sub> NO	<b>FW :</b> 369.50		<b>DEA schedule :</b> 1
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.			
<b>Catalog number :</b> 7173-001	<b>CASRN :</b> 208987-48-8		
<b>Name :</b> JWH-073			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>21</sub> NO	<b>FW :</b> 327.42		<b>DEA schedule :</b> 1
<b>Notes :</b> Non-selective CB <sub>1</sub> /CB <sub>2</sub> cannabinoid receptor agonist.			
<b>References :</b> Wiley, JL; <i>et al.</i> , <i>J Pharmacol Exp Ther</i> 1998, 285, 995-1004.			
<b>Catalog number :</b> 7181-001	<b>CASRN :</b> 824960-03-4		
<b>Name :</b> JWH-181			
<b>Mol. formula :</b> C <sub>28</sub> H <sub>31</sub> NO	<b>FW :</b> 397.55		<b>DEA schedule :</b> 1
<b>Notes :</b> Non-selective CB <sub>1</sub> /CB <sub>2</sub> cannabinoid receptor agonist.			
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.			
<b>Catalog number :</b> 7182-001	<b>CASRN :</b> 824960-02-3		
<b>Name :</b> JWH-182			
<b>Mol. formula :</b> C <sub>27</sub> H <sub>29</sub> NO	<b>FW :</b> 383.53		<b>DEA schedule :</b> 1
<b>Notes :</b> Non-selective CB <sub>1</sub> /CB <sub>2</sub> cannabinoid receptor agonist.			
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.			
<b>Catalog number :</b> 7193-001	<b>CASRN :</b> 133438-58-1		
<b>Name :</b> JWH-193			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>26</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 398.50		<b>DEA schedule :</b> 1
<b>References :</b> Huffman JW, Padgett LW, <i>Curr Med Chem</i> , 2005, 12, 1395-1411.			
<b>Catalog number :</b> 7200-001	<b>CASRN :</b> 103610-04-4		
<b>Name :</b> JWH-200; WIN 55,225			
<b>Mol. formula :</b> C <sub>24</sub> H <sub>25</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 384.47		<b>DEA schedule :</b> 1
<b>References :</b> Dutta AK, Ryan W, Thomas BF, Singer M, Compton DR, Martin BR, Razdan RK, <i>Bioorg Med Chem</i> , 1997, 5(8), 1591-1600.			

## 2 – Cannabinoids

★ = custom synthesis

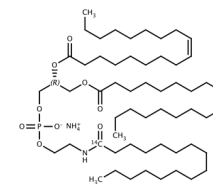
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<b>Name :</b> AM-2201		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>22</sub> FNO	<b>FW :</b> 359.44 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>		
<b>References :</b> Makriyannis, A; Deng H, Cannabimimetic Indole Derivatives, US Patent 7,241,799 B2 (2007).		
<b>Catalog number :</b> 7210-001		<b>CASRN :</b> 824959-81-1
<b>Name :</b> JWH-210		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>27</sub> NO	<b>FW :</b> 369.51 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>		
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.		
<b>Catalog number :</b> 7213-001		<b>CASRN :</b> 824959-83-3
<b>Name :</b> JWH-213		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>29</sub> NO	<b>FW :</b> 383.53 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>		
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.		
<b>Catalog number :</b> 7225-001		<b>CASRN :</b> 1400742-41-7
<b>Name :</b> 5-Fluoro-PB-22		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>21</sub> FN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 376.43 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Non-selective CB<sub>1</sub>/CB<sub>2</sub> cannabinoid receptor agonist.</i>		
<b>References :</b> Huffman J, Zengin G, Wu M, Lu J, Hynd G, Bushell K, Thompson A, Bushell S, <i>et al.</i> , <i>Bioorg Med Chem</i> , 2005, 13(1), 89-112.		
<b>Catalog number :</b> NOCD-151	<b>new</b>	<b>CASRN :</b> 1400742-42-8
<b>Name :</b> QUCHIC		
<b>Mol. formula :</b> C <sub>25</sub> H <sub>24</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 384.48 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Cannabimimetic quinolinyl carboxylate.</i>		
<b>References :</b> Uchiyama N, <i>et al.</i> , <i>Forensic Toxicol.</i> , 2013, 31, 223-240.		
<b>Catalog number :</b> NOCD-155	<b>new</b>	<b>CASRN :</b> 1800098-36-5
<b>Name :</b> FUB-PB-22; QUFUBIC		
<b>Mol. formula :</b> C <sub>25</sub> H <sub>17</sub> FN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 396.42 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Cannabimimetic quinolinyl carboxylate.</i>		
<b>References :</b> Nahoko U, <i>et al.</i> , <i>Forensic Toxicology</i> , 2015, 33(2), 244-259.		

**Cannabinoids: Precursors, Biosynthetic**

Catalog number : NOCD-000

Name : N-[1-<sup>14</sup>C]-Palmitoyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium saltMol. formula : C<sub>57</sub>H<sub>111</sub>N<sub>2</sub>O<sub>9</sub>P FW : 999.47 DEA schedule : 0

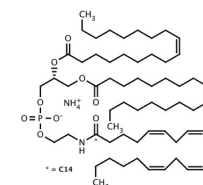
Notes : Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).

References : Morishita J; *et al. J Neurochem* 2005, 94, 753-62.

Catalog number : NOCD-009

Name : N-[1-<sup>14</sup>C]-Arachidonyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium saltMol. formula : C<sub>61</sub>H<sub>111</sub>N<sub>2</sub>O<sub>9</sub>P FW : 1047.52 DEA schedule : 0

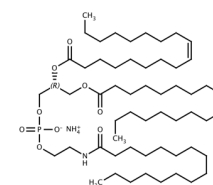
Notes : Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).

References : Morishita, J; *et al. J Neurochem* 2005, 94, 753-62.

Catalog number : NOCD-066

Name : N-Palmitoyl-1,2-dioleoyl-*sn*-glycero-3-phosphoethanolamine ammonium saltMol. formula : C<sub>57</sub>H<sub>111</sub>N<sub>2</sub>O<sub>9</sub>P FW : 999.47 DEA schedule : 0

Notes : Putative biosynthetic precursor of endogenous cannabinoids.

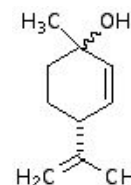
References : Morishita, J; *et al. J Neurochem* 2005, 94, 753-62.**Cannabinoids: Precursors, Synthetic**

Catalog number : NOCD-093

CASRN : 52154-82-2

Name : *p*-Mentha-2,8-dien-1-olMol. formula : C<sub>10</sub>H<sub>16</sub>O FW : 152.2 DEA schedule : 0

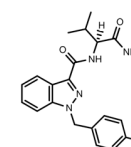
Notes : Cannabinoid synthetic precursor

References : Razdan RK; Dalzell HC; Handrick GR *J Am Chem Soc* 1974, 96, 5860-5865.**Cannabinoids: Pyrazole Class**

Catalog number : 7012-001

CASRN : 1185282-01-2

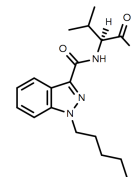
Name : AB-FUBINACA

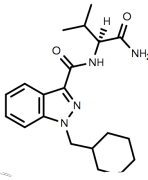
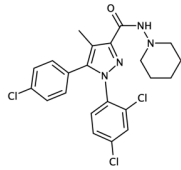
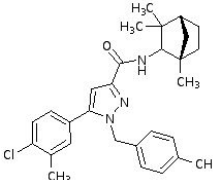
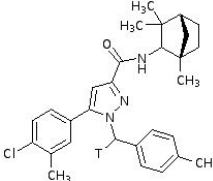
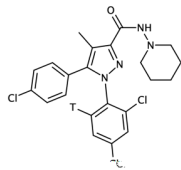
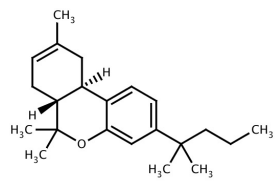
Mol. formula : C<sub>20</sub>H<sub>21</sub>N<sub>4</sub>O<sub>2</sub> FW : 368.41 DEA schedule : 1Notes : CB<sub>1</sub> receptor agonist.References : Uchiyama, N., Matsuda, S., Wakana, D., *et al., Forensic Toxicol.*, 2012, 31(1), 93-100.

Catalog number : 7023-001

CASRN : 1445752-09-9

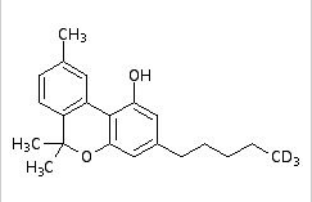
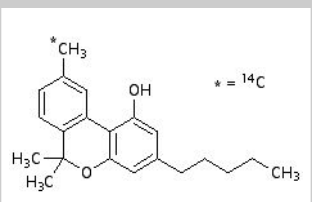
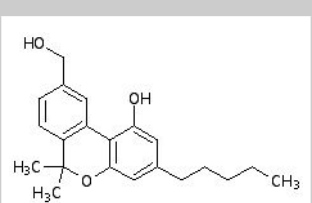
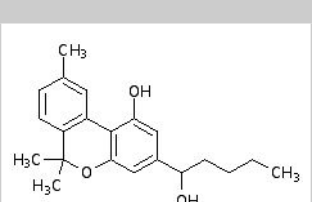
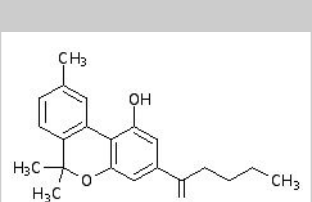
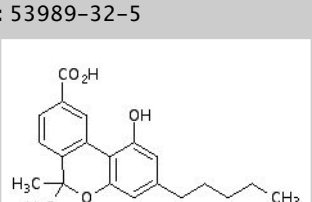
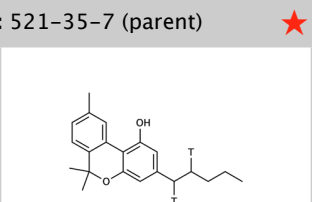
Name : AB-PINACA

Mol. formula : C<sub>18</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub> FW : 330.43 DEA schedule : 1Notes : Potent CB<sub>1</sub> receptor agonist (K<sub>i</sub> = 2.87 nM, EC<sub>50</sub> = 1.2 nM) and CB<sub>2</sub> receptor agonist (K<sub>i</sub> = 0.88 nM, EC<sub>50</sub> = 2.5 nM). Fully substitutes forReferences : Uchiyama, N., Matsuda, S., Wakana, D., *et al., Forensic Toxicol.*, 2012, 31(1), 93-100.

<b>Catalog number :</b> 7031-001	<b>CASRN :</b> 1185887-21-1	
<b>Name :</b> AB-CHMINACA		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> N <sub>4</sub> O <sub>2</sub>		<b>FW :</b> 356.47 <b>DEA schedule :</b> 1
<b>Notes :</b> Potent CB <sub>1</sub> receptor agonist (K <sub>i</sub> = 0.78 nM) and CB <sub>2</sub> receptor agonist (K <sub>i</sub> = 0.45 nM).		
<b>References :</b> Uchiyama, N., Matsuda, S., Wakana, D., et al., <i>Forensic Toxicol.</i> , 2012, 31(1), 93-100.		
<b>Catalog number :</b> NOCD-082		
<b>Name :</b> SR141716		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>21</sub> Cl <sub>3</sub> N <sub>4</sub> O		<b>FW :</b> 463.78 <b>DEA schedule :</b> 0
<b>Notes :</b> Cannabinoid CB <sub>1</sub> receptor ligand		
<b>References :</b> Seltzman, H; et al. <i>J Chem Soc, Chem Commun</i> 1995, 1549-1550.		
<b>Catalog number :</b> NOCD-085	<b>CASRN :</b> 192703-06-3	
<b>Name :</b> SR144528		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>34</sub> ClN <sub>3</sub> O		<b>FW :</b> 476.05 <b>DEA schedule :</b> 0
<b>Notes :</b> Cannabinoid CB <sub>2</sub> receptor antagonist		
<b>References :</b> Portier, M; et al. <i>J Pharmacol Exp Ther</i> 1999, 288, 582-9. Rinaldi-Carmona, M; et al. <i>J Pharmacol Exp Ther</i> 1998, 284, 644-50.		
<b>Catalog number :</b> NOCD-086	<b>CASRN :</b> 475471-24-0    ★	
<b>Name :</b> Tritium-labeled SR144528		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>34</sub> N <sub>3</sub> OCl		<b>FW :</b> 478.05 <b>DEA schedule :</b> 0
<b>Notes :</b> Cannabinoid CB <sub>2</sub> receptor radioligand (tritium-labeled).		
<b>References :</b> Portier, M; et al. <i>J Pharmacol Exp Ther</i> 1999, 288, 582-9. Rinaldi-Carmona, M; et al. <i>J Pharmacol Exp Ther</i> 1998, 284, 644-50.		
<b>Catalog number :</b> NOCD-101	<b>CASRN :</b> 170937-38-9	
<b>Name :</b> [ <sup>3</sup> H]SR141716A		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>21</sub> Cl <sub>3</sub> N <sub>4</sub> O		<b>FW :</b> 465.80 <b>DEA schedule :</b> 0
<b>Notes :</b> Cannabinoid CB <sub>1</sub> receptor radioligand (tritium-labeled).		
<b>References :</b> Seltzman, H; et al. <i>J Chem Soc, Chem Commun</i> 1995, 1549-1550.		
<b>Cannabinoids: Tetrahydrocannabinol Class</b>		
<b>Catalog number :</b> 7133-001	<b>CASRN :</b> 259869-55-1	
<b>Name :</b> JWH-133		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>32</sub> O		<b>FW :</b> 312.49 <b>DEA schedule :</b> 1
<b>Notes :</b> Selective CB <sub>2</sub> receptor agonist.		
<b>References :</b> Huffman, JW; et al., <i>Bioorganic &amp; Medicinal Chemistry</i> 1999, 7, 2905-2914.		

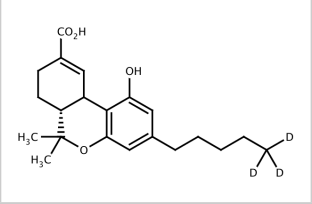
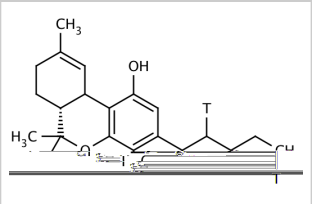
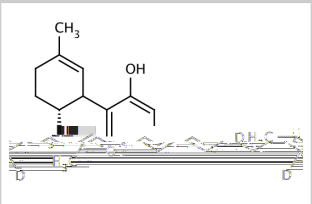
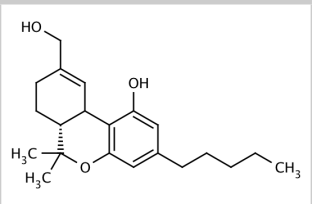
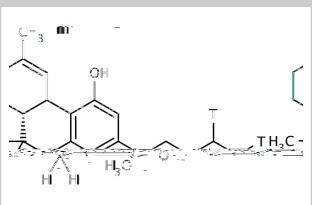
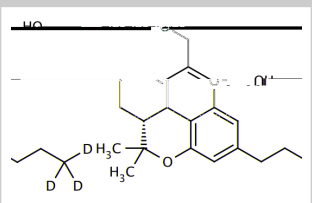
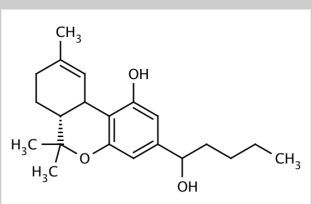
## 2 - Cannabinoids

★ = custom synthesis

<b>Catalog number :</b> 7360-014		
<b>Name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]Cannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> O <sub>2</sub>	<b>FW :</b> 310.43 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Inactive constituent of cannabis (deuterium-labeled).</i>		
<b>Catalog number :</b> 7360-015		
<b>Name :</b> [11- <sup>14</sup> C]Cannabinol		
<b>Mol. formula :</b> C <sub>2014</sub> CH <sub>26</sub> O <sub>2</sub>	<b>FW :</b> 310.43 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Inactive constituent of cannabis (carbon-labeled).</i>		
<b>Catalog number :</b> 7360-016		
<b>Name :</b> 11-Hydroxycannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> O <sub>3</sub>	<b>FW :</b> 326.43 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7360-017		
<b>Name :</b> 1'-Hydroxycannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> O <sub>3</sub>	<b>FW :</b> 326.43 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7360-018		
<b>Name :</b> 1'-Oxocannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>24</sub> O <sub>3</sub>	<b>FW :</b> 324.41 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7360-019		<b>CASRN :</b> 53989-32-5
<b>Name :</b> 9-Carboxy-11-norcannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>24</sub> O <sub>4</sub>	<b>FW :</b> 340.41 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7360-021		<b>CASRN :</b> 521-35-7 (parent) ★
<b>Name :</b> [1',2'- <sup>3</sup> H <sub>2</sub> ]Cannabinol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> O <sub>2</sub>	<b>FW :</b> 310.43 <b>DEA schedule :</b> 1	

2 – Cannabinoids

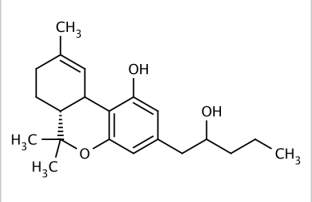

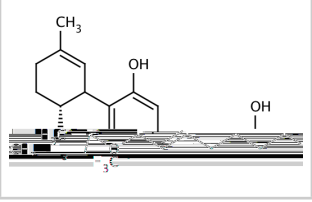
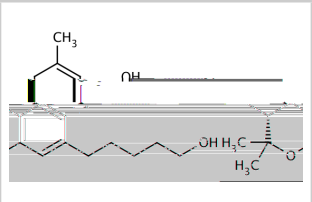
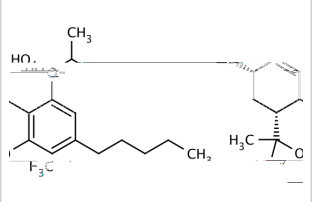
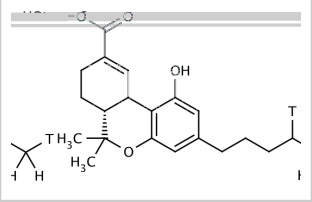
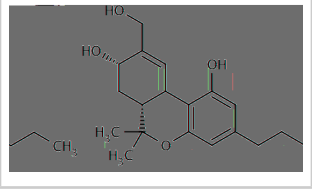
★ = custom synthesis

Catalog number : 7370-003		CASRN : 113269-48-0	
Name : [5'- <sup>2</sup> H <sub>3</sub> ]9-Carboxy-11-nor-Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	FW : 347.46	DEA schedule : 1	
Notes : Urinary metabolite of THC (deuterium-labeled).			
Catalog number : 7370-004		★	
Name : [1',2'- <sup>3</sup> H <sub>2</sub> ]Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48	DEA schedule : 1	
Notes : Hallucinogen; psychotropic; analgesic (tritium-labeled).			
Catalog number : 7370-005		CASRN : 81586-39-2	
Name : Deuterium-labeled Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 317	DEA schedule : 1	
Notes : Hallucinogen; psychotropic; analgesic (deuterium-labeled).			
Catalog number : 7370-008		CASRN : 36557-05-08	
Name : 11-Hydroxy-Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	FW : 330.47	DEA schedule : 1	
Catalog number : 7370-009		★	
Name : [4',5'- <sup>3</sup> H]Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48	DEA schedule : 1	
Catalog number : 7370-010		CASRN : 130410-26-3	
Name : [5'- <sup>2</sup> H <sub>3</sub> ]-11-Hydroxy-Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	FW : 333	DEA schedule : 1	
Catalog number : 7370-011			
Name : 1'-Hydroxy-Δ <sup>9</sup> -THC (Isomer B)			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	FW : 330.46	DEA schedule : 1	



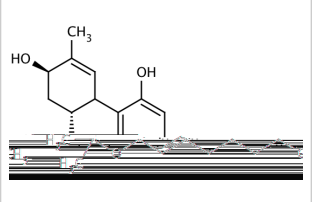
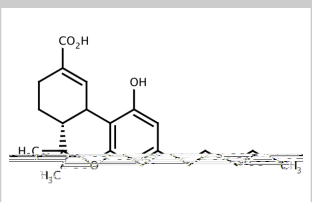
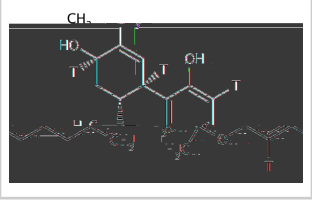
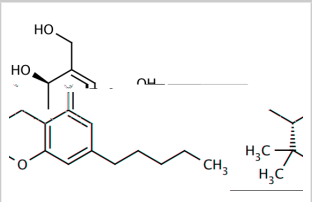
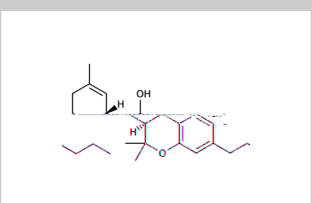
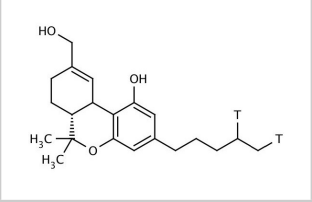
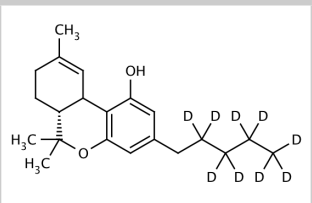
## 2 - Cannabinoids

★ = custom synthesis

<b>Catalog number :</b> 7370-012		
<b>Name :</b> 2'-Hydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{30}O_3$	<b>FW :</b> 330.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-013		
<b>Name :</b> 3'-Hydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{30}O_3$	<b>FW :</b> 330.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-014		
<b>Name :</b> 4'-Hydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{30}O_3$	<b>FW :</b> 330.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-015		
<b>Name :</b> 5'-Hydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{30}O_3$	<b>FW :</b> 330.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-016		
<b>Name :</b> 8 $\alpha$ -Hydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{30}O_3$	<b>FW :</b> 330.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-017		
<b>Name :</b> [4',5'- $^3H_2$ ]9-Carboxy-11-nor- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}H_{28}O_4$	<b>FW :</b> 348.46	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Urinary metabolite of THC (tritium-labeled).</i>		
		
<b>Catalog number :</b> 7370-018		
<b>CASRN :</b> 36913-21-0		
<b>Name :</b> 8 $\alpha$ ,11-Dihydroxy- $\Delta^9$ -THC		
<b>Mol. formula :</b> $C_{21}O_{30}O_4$	<b>FW :</b> 346.47	<b>DEA schedule :</b> 1
		

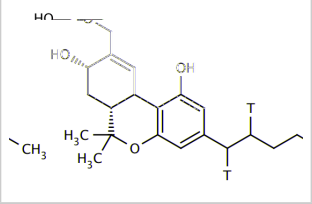
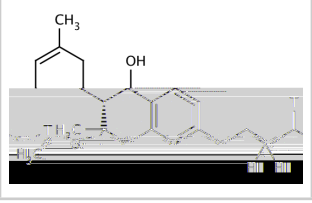
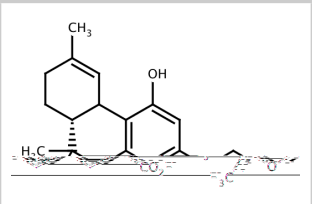
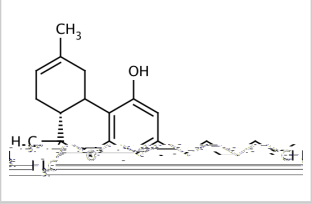
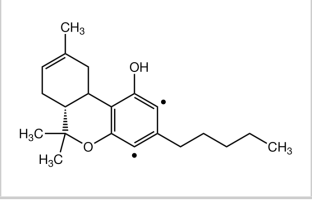
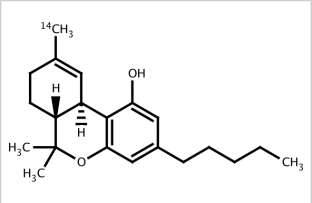
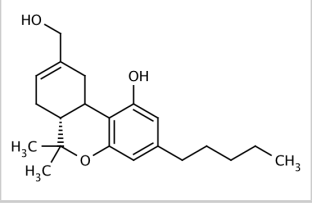
## 2 – Cannabinoids

★ = custom synthesis

<b>Catalog number :</b> 7370-019	<b>CASRN :</b> 34984-78-6	
<b>Name :</b> 8β-Hydroxy-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	<b>FW :</b> 330	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-020	<b>CASRN :</b> 56354-06-4	
<b>Name :</b> 9-Carboxy-11-nor-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	<b>FW :</b> 344	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Urinary metabolite of THC</i>		
		
<b>Catalog number :</b> 7370-021	★	
<b>Name :</b> [2,4,8,10a- <sup>3</sup> H <sub>4</sub> ]-8β-Hydroxy-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	<b>FW :</b> 338.49	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-022	<b>CASRN :</b> 57030-51-0	
<b>Name :</b> 8β,11-Dihydroxy-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>4</sub>	<b>FW :</b> 346.47	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-023	<b>CASRN :</b> 1972-08-3	
<b>Name :</b> (+)-Δ <sup>9</sup> -Tetrahydrocannabinol; (+)-THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 314.46	<b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 9209.		
		
<b>Catalog number :</b> 7370-024	<b>CASRN :</b> 58545-42-9	
<b>Name :</b> [4',5'- <sup>3</sup> H <sub>2</sub> ]-11-Hydroxy-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 318.48	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-025		
<b>Name :</b> [2',2',3',3',4',4',5',5',5'- <sup>2</sup> H <sub>9</sub> ]-Δ <sup>9</sup> -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 323.52	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Hallucinogen; psychotropic; analgesic (deuterium-labeled).</i>		
		

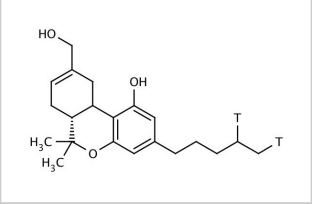
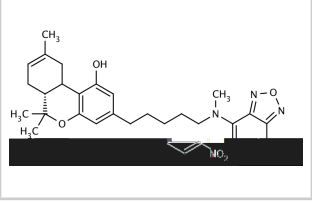
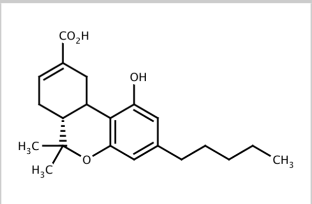
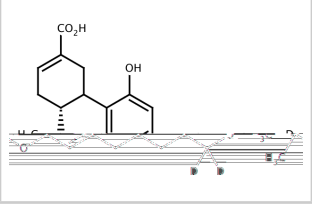
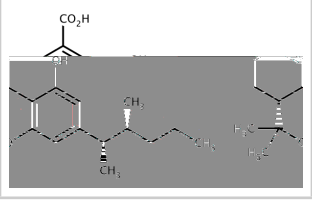
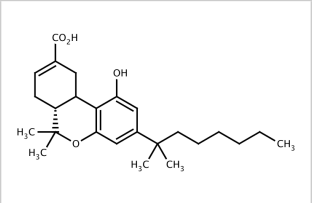
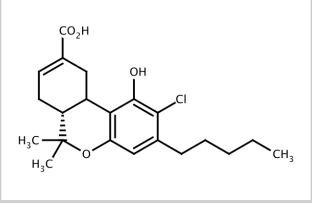
## 2 - Cannabinoids

★ = custom synthesis

Catalog number : 7370-026		★
Name : [1',2'- <sup>3</sup> H <sub>2</sub> ]-8α,11-Dihydroxy-Δ <sup>9</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>4</sub>	FW : 350.48	DEA schedule : 1
		
Catalog number : 7370-027		★
Name : [4',5'- <sup>3</sup> H <sub>2</sub> ]Δ <sup>8</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48	DEA schedule : 1
Notes : <i>Hallucinogen; psychotropic; analgesic (tritium-labeled).</i>		
		
Catalog number : 7370-028		
Name : 2'-Carboxy-3',4',5'-trior-Δ <sup>9</sup> -THC		
Mol. formula : C <sub>19</sub> H <sub>24</sub> O <sub>4</sub>	FW : 316.39	DEA schedule : 1
		
Catalog number : 7370-030		CASRN : 5957-75-5
Name : (-)-trans-Δ <sup>8</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 314.46	DEA schedule : 1
		
Catalog number : 7370-032		
Name : [2,4- <sup>14</sup> C]Δ <sup>8</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.45	DEA schedule : 1
Notes : <i>Hallucinogen; psychotropic; analgesic (carbon-labeled).</i>		
		
Catalog number : 7370-033		
Name : [11- <sup>14</sup> C]Δ <sup>9</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 316.45	DEA schedule : 1
Notes : <i>Hallucinogen; psychotropic; analgesic (carbon-labeled).</i>		
		
Catalog number : 7370-034		CASRN : 28646-40-4
Name : 11-Hydroxy-Δ <sup>8</sup> -THC		
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	FW : 330.46	DEA schedule : 1
		

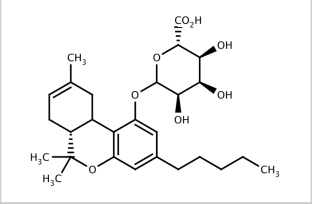
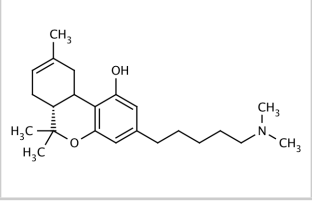
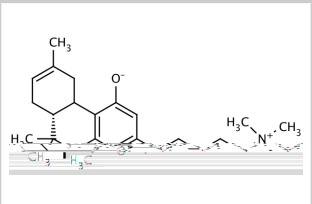
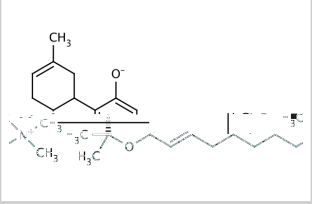
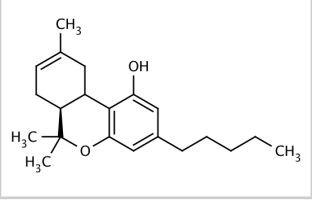
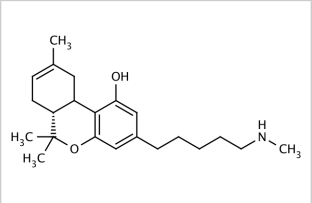
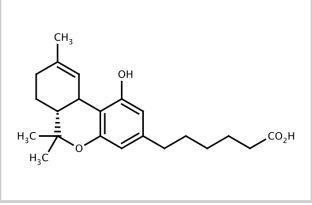
## 2 - Cannabinoids

★ = custom synthesis

<b>Catalog number :</b> 7370-035	<b>CASRN :</b> n/a	★
<b>Name :</b> [4',5'- <sup>3</sup> H <sub>2</sub> ]-11-Hydroxy- $\Delta^8$ -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 318.48	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-036		
<b>Name :</b> 5'-N-Methyl-N-4-(7-nitrobenzofurazano)amino- $\Delta^8$ -THC		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>34</sub> N <sub>4</sub> O <sub>5</sub>	<b>FW :</b> 506.59	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-037	<b>CASRN :</b> 39690-06-7	
<b>Name :</b> 9-Carboxy-11-nor- $\Delta^8$ -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	<b>FW :</b> 344	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-038		
<b>Name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]-11-nor- $\Delta^8$ -THC-9-carboxylic acid		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	<b>FW :</b> 347.46	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-040	<b>CASRN :</b> 199388-13-1	
<b>Name :</b> (6aR,10aR)-3-[(1S,2R)-1,2-Dimethylheptyl]-6a,7,10,10a-tetrahydro-6,6,9-trimethyl-6H-dibenzo[b,d]pyran-1-ol		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> O <sub>4</sub>	<b>FW :</b> 372.50	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7370-042	<b>CASRN :</b> 137945-48-3	
<b>Name :</b> Ajulemic acid; IP-751		
<b>Mol. formula :</b> C <sub>25</sub> H <sub>36</sub> O <sub>4</sub>	<b>FW :</b> 400.55	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Non-psychoactive cannabinoid.</i>		
<b>References :</b> Burstein, S <i>AAPS J</i> 2005, 7, E143-8. Wiley, JL <i>IDrugs</i> 2005, 8, 1002-11.		
		
<b>Catalog number :</b> 7370-048		
<b>Name :</b> 9-Carboxy-11-nor-(2 or 4)-chloro- $\Delta^8$ -THC		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> ClO <sub>4</sub>	<b>FW :</b> 378.89	<b>DEA schedule :</b> 1
		

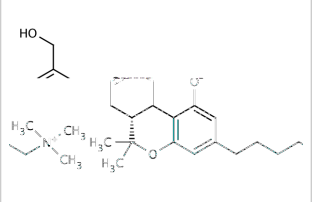
## 2 - Cannabinoids

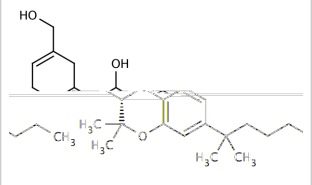
★ = custom synthesis

Catalog number : 7370-049		CASRN : 62667-60-1	
Name : $\Delta^8$ -THC-O-glucuronide			
Mol. formula : $C_{27}H_{38}O_8$	FW : 490.6	DEA schedule : 1	
Catalog number : 7370-050			
Name : 5'-Dimethylamino- $\Delta^8$ -THC			
Mol. formula : $C_{23}H_{35}NO_2$	FW : 357.53	DEA schedule : 1	
Catalog number : 7370-051			
Name : 5'-Trimethylammonium- $\Delta^8$ -THC phenolate			
Mol. formula : $C_{24}H_{37}NO_2$	FW : 371.56	DEA schedule : 1	
Catalog number : 7370-052			
Name : [ $^3H_3$ ]-5'-Trimethylammonium- $\Delta^8$ -THC phenolate			
Mol. formula : $C_{24}H_{37}NO_2$	FW : 371.56	DEA schedule : 1	
Catalog number : 7370-053		CASRN : 81586-39-2	
Name : (+)- $\Delta^8$ -THC			
Mol. formula : $C_{21}H_{30}O_2$	FW : 314.46	DEA schedule : 1	
Catalog number : 7370-054			
Name : 5'-Methylamino- $\Delta^8$ -THC			
Mol. formula : $C_{22}H_{32}NO_2$	FW : 342.49	DEA schedule : 1	
Catalog number : 7370-055			
Name : 5'-Carboxy- $\Delta^9$ -THC			
Mol. formula : $C_{22}H_{30}O_4$	FW : 358.47	DEA schedule : 1	

## 2 – Cannabinoids

★ = custom synthesis

Catalog number : 7370-056		CASRN : n/a	
Name : 5'-Trimethylammonium-11-hydroxy- $\Delta^8$ -THC phenolate			
Mol. formula : $C_{24}H_{37}NO_3$	FW : 388.56	DEA schedule : 1	
			

Catalog number : 7370-057		CASRN : 112830-95-2	
Name : HU 210			
Mol. formula : $C_{25}H_{38}O_3$	FW : 386.57	DEA schedule : 1	
References : Ottani, A; Giuliani, D <i>CNS Drug Rev</i> 2001, 7, 131-45.			
			

### Cannabinoids (dosage form): Stock Solutions

Catalog number : 7360-009		CASRN : 21366-63-2	
Name : Cannabicyclol ampuls (1.0 mg/mL in absolute ethanol)			
Mol. formula : $C_{21}H_{30}O_2$	FW : 314.46	DEA schedule : 1	
Notes : Non-psychoactive constituent of cannabis. Photodegradation product of cannabichromene.			
References : Burstein, S; Hunter, SA; Renzulli, LJ <i>Pharmacol Exp Ther</i> 1985, 235, 87-91.			
Dosage Form			

Catalog number : 7370-001			
Name : $\Delta^9$ -THC ampuls (various concentrations in 95% ethanol)			
DEA schedule : 1			
Dosage Form			

★ = custom synthesis

**Dissociatives: Dexoxadrol Class**

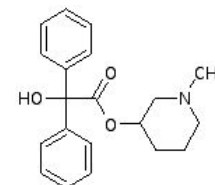
Catalog number : 7484-001

Name : N-Methyl-3-piperidylbenzilate hydrochloride

Mol. formula :  $C_{20}H_{24}ClNO_3$ 

FW : 361.86

DEA schedule : 1



Catalog number : NOCD-068

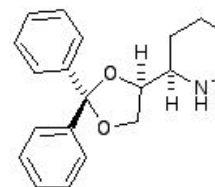
CASRN : 631-06-1

Name :  $\alpha$ -(+)-Dexoxadrol hydrochlorideMol. formula :  $C_{20}H_{24}ClNO_2$ 

FW : 345.87

DEA schedule : 0

References : Thurkauf, A; *et al. J Med Chem* **1988**, *31*, 2257-63.  
Sax, M; Wunsch, B *Curr Top Med Chem* **2006**, *6*, 723-32.



Catalog number : NOCD-069

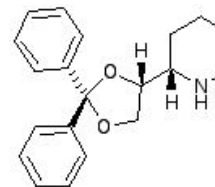
CASRN : 4792-18-1

Name :  $\alpha$ -(-)-Levoxadrol hydrochlorideMol. formula :  $C_{20}H_{24}ClNO_2$ 

FW : 345.87

DEA schedule : 0

References : Thurkauf, A; *et al. J Med Chem* **1988**, *31*, 2257-63.  
Sax, M; Wunsch, B *Curr Top Med Chem* **2006**, *6*, 723-32.

**Dissociatives: Phencyclidine Class**

Catalog number : 7455-001

CASRN : 2201-15-2

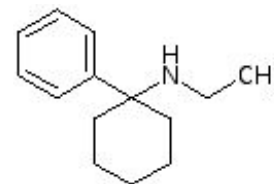
Name : N-Ethyl-1-phenylcyclohexylamine hydrochloride; PCD hydrochloride

Mol. formula :  $C_{14}H_{22}ClN$ 

FW : 239.79

DEA schedule : 1

References : Brine, GA; *et al. J Heterocyclic Chem* **1979**, *16*, 1425.  
Brady, KT; Balster, RL; Meltzer, LT; Schwertz, D *Pharmacol Biochem Behav* **1980**, *12*, 67-71.



Catalog number : 7455-002

CASRN : 2201-17-4

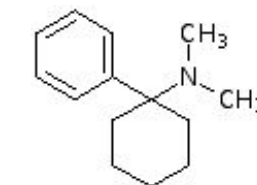
Name : N,N-Dimethyl-1-phenylcyclohexylamine hydrochloride

Mol. formula :  $C_{14}H_{22}ClN$ 

FW : 239.82

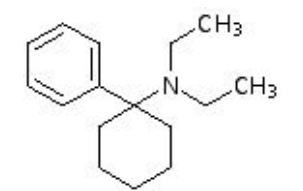
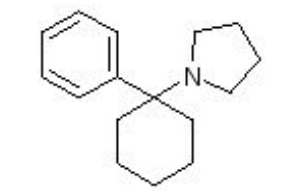
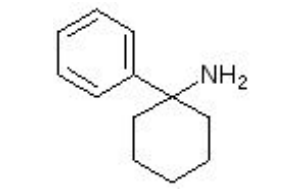
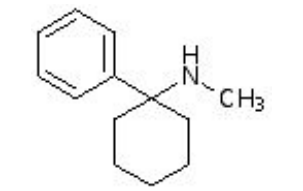
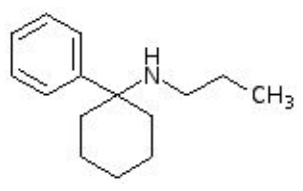
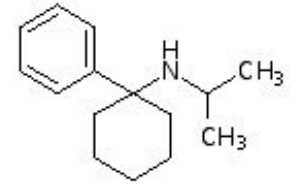
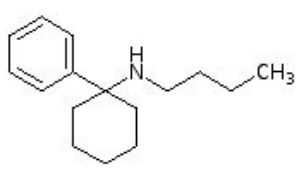
DEA schedule : 1

Notes : Current designer drug?

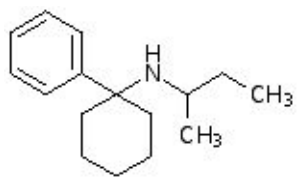
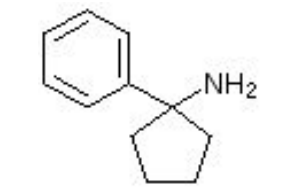
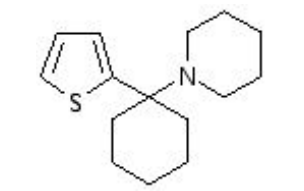
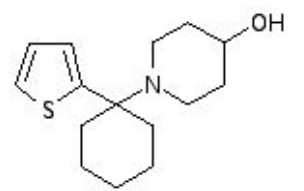
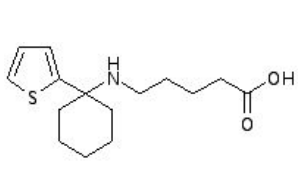
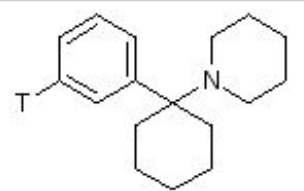
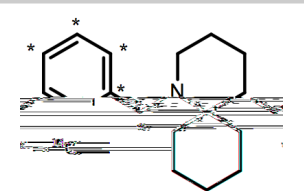
References : Brine, GA; *et al. J Heterocyclic Chem* **1979**, *16*, 1425.

## 3 – Dissociatives

★ = custom synthesis

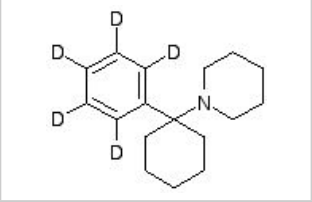
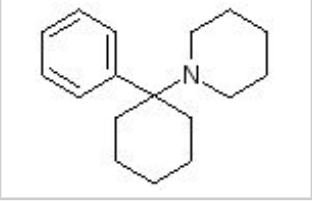
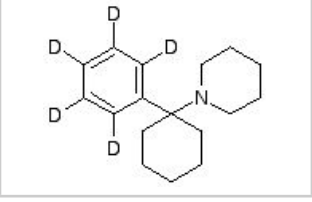
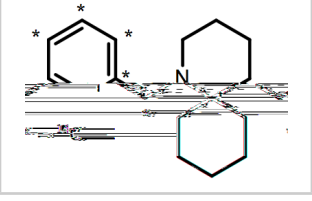
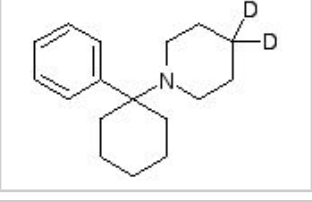
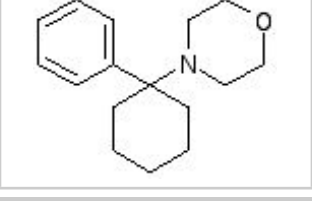
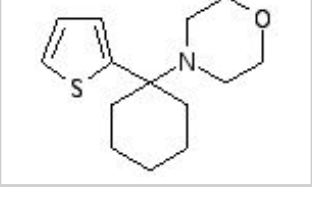
<b>Catalog number :</b> 7455-003	<b>CASRN :</b> 2201-19-6
<b>Name :</b> N,N-Diethyl-1-phenylcyclohexylamine hydrochloride; PCDE hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>26</sub> ClN	<b>FW :</b> 267.84 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.	
<b>Catalog number :</b> 7458-001	<b>CASRN :</b> 2201-39-0
<b>Name :</b> 1-(1-Phenylcyclohexyl)pyrrolidine hydrochloride; PCPy; Rolicyclidine	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> ClN	<b>FW :</b> 265.83 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425. Budd, RD <i>N Engl J Med</i> <b>1980</b> , <i>303</i> , 588.	
<b>Catalog number :</b> 7460-001	<b>CASRN :</b> 1934-71-0
<b>Name :</b> 1-Phenylcyclohexylamine hydrochloride; PCA hydrochloride	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>18</sub> ClN	<b>FW :</b> 211.74 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425. Blake, PA; Yamaguchi, S; Thurkauf, A; Rogawski, MA <i>Epilepsia</i> <b>1992</b> , <i>33</i> , 188-94.	
<b>Catalog number :</b> 7460-002	<b>CASRN :</b> 2201-16-3
<b>Name :</b> N-Methyl-1-phenylcyclohexylamine hydrochloride	
<b>Mol. formula :</b> C <sub>13</sub> H <sub>20</sub> ClN	<b>FW :</b> 225.76 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.	
<b>Catalog number :</b> 7460-003	<b>CASRN :</b> 18949-81-0
<b>Name :</b> N-Propyl-1-phenylcyclohexylamine hydrochloride	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>24</sub> ClN	<b>FW :</b> 253.82 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.	
<b>Catalog number :</b> 7460-004	
<b>Name :</b> N-(i-Propyl)-1-phenylcyclohexylamine hydrochloride	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>24</sub> ClN	<b>FW :</b> 253.82 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.	
<b>Catalog number :</b> 7460-005	
<b>Name :</b> N-Butyl-1-phenylcyclohexylamine hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>26</sub> ClN	<b>FW :</b> 267.85 <b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.	

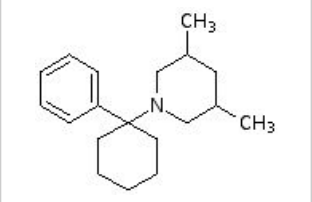
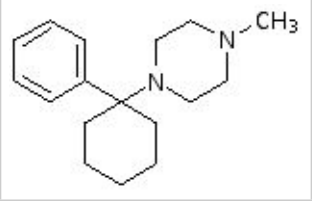
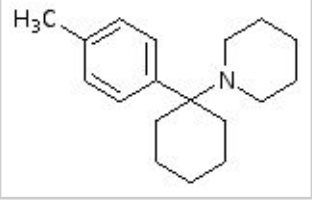
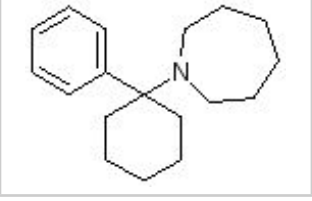
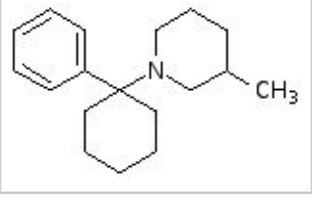
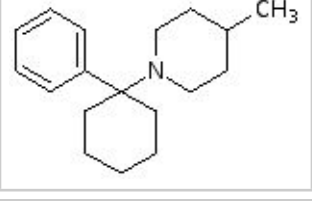
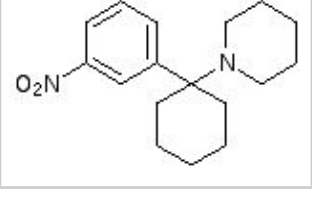


<b>Catalog number :</b> 7460-006		
<b>Name :</b> N-( <i>s</i> -Butyl)-1-phenylcyclohexylamine hydrochloride		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>26</sub> ClN	<b>FW :</b> 267.85	<b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425.		
<b>Catalog number :</b> 7460-012		<b>CASRN :</b> 17380-74-4
<b>Name :</b> 1-Phenylcyclopentylamine hydrochloride; PPA hydrochloride		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClN	<b>FW :</b> 197.71	<b>DEA schedule :</b> 1
<b>References :</b> Blake, PA; Yamaguchi, S; Thurkauf, A; Rogawski, MA <i>Epilepsia</i> <b>1992</b> , <i>33</i> , 188-94.		
<b>Catalog number :</b> 7470-001		<b>CASRN :</b> 1867-65-8
<b>Name :</b> 1-[1-(2-Thienyl)cyclohexyl]piperidine hydrochloride; TCP hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>24</sub> ClNS	<b>FW :</b> 285.88	<b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 1425. Vignon, J; <i>et al. Brain Res</i> <b>1983</b> , <i>280</i> , 194-7.		
<b>Catalog number :</b> 7470-002		
<b>Name :</b> 1-[1-(2-Thienyl)cyclohexyl]-4-hydroxypiperidine		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>23</sub> NOS	<b>FW :</b> 265.42	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7470-003		
<b>Name :</b> 5-[N-[1'-(2-Thienyl)cyclohexyl]amino]pentanoic acid hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>24</sub> ClNO <sub>2</sub> S	<b>FW :</b> 317.88	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 7471-001		★
<b>Name :</b> [Phenyl-3- <sup>3</sup> H(n)]Phencyclidine; [Phenyl-3- <sup>3</sup> H(n)]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 245.40	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 7471-002		
<b>Name :</b> [ <sup>14</sup> C]Phencyclidine HBr; [ <sup>14</sup> C]PCP		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> BrN	<b>FW :</b> 523.53	<b>DEA schedule :</b> 2
		

## 3 – Dissociatives

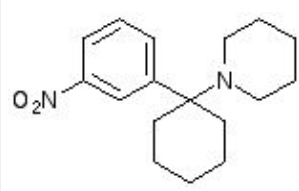
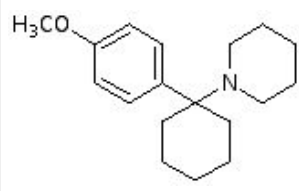
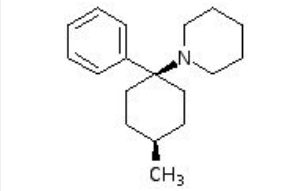
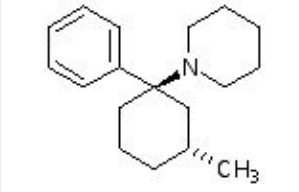
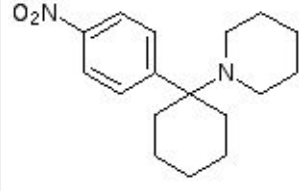
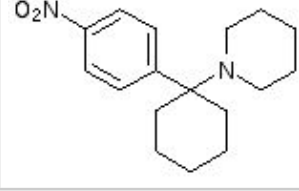
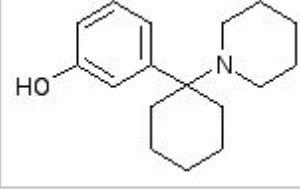
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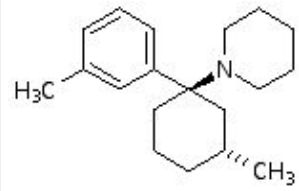
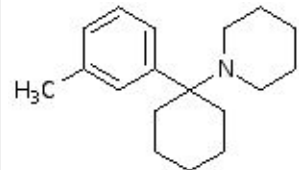
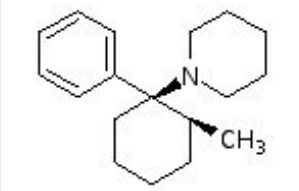
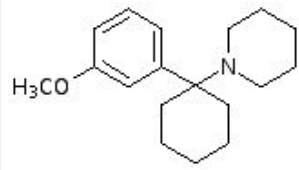
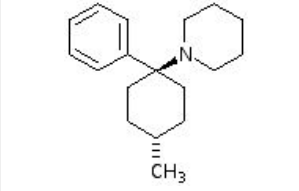
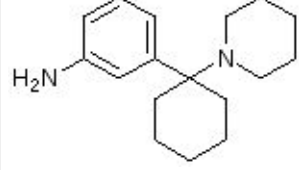
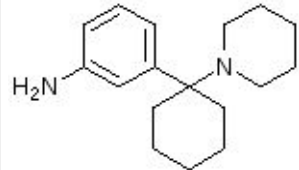
<b>Catalog number :</b> 7471-003		
<b>Name :</b> [Phenyl-2,3,4,5,6- <sup>2</sup> H <sub>5</sub> ]Phencyclidine; [Phenyl-2,3,4,5,6- <sup>2</sup> H <sub>5</sub> ]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 248.42 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-004		<b>CASRN :</b> 956-90-1
<b>Name :</b> Phencyclidine hydrochloride; PCP HCl		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClN	<b>FW :</b> 284.36 <b>DEA schedule :</b> 2	
<b>Notes :</b> CNS depressant; anesthetic, psychostimulant		
<b>References :</b> Merck Index, 14th ed., Monograph 7219.		
<b>Catalog number :</b> 7471-006		
<b>Name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]Phencyclidine hydrochloride; [Phenyl- <sup>2</sup> H <sub>5</sub> ]PCP HCl		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClN	<b>FW :</b> 284.89 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-007		
<b>Name :</b> [Phenyl-U- <sup>14</sup> C]-1-(1-Phenylcyclohexyl)Piperidine; [Phenyl-U- <sup>14</sup> C]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 245.39 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-008		
<b>Name :</b> [Piperidino-4,4- <sup>2</sup> H <sub>2</sub> ]Phencyclidine hydrochloride; [Piperidino-4,4- <sup>2</sup> H <sub>2</sub> ]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClN	<b>FW :</b> 281.86 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-010		<b>CASRN :</b> 2201-40-3
<b>Name :</b> 1-(1-Phenylcyclohexyl)morpholine hydrochloride; PCM hydrochloride		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> ClNO	<b>FW :</b> 281.83 <b>DEA schedule :</b> 1	
<b>References :</b> Brine, GA; et al. <i>J Heterocyclic Chem</i> 1979, 16, 1425.		
<b>Catalog number :</b> 7471-013		
<b>Name :</b> 1-[1-(2-Thienyl)cyclohexyl]morpholine hydrochloride		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>22</sub> ClNOS	<b>FW :</b> 287.85 <b>DEA schedule :</b> 1	
<b>References :</b> Brine, GA; et al. <i>J Heterocyclic Chem</i> 1979, 16, 1425.		

<b>Catalog number :</b> 7471-019		
<b>Name :</b> 1-(1-Phenylcyclohexyl)-3,5-dimethylpiperidine hydrochloride		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>30</sub> ClN	<b>FW :</b> 307.91	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-021		
<b>Name :</b> 1-(1-Phenylcyclohexyl)-N'-methylpiperazine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> N <sub>2</sub>	<b>FW :</b> 258.41	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-022		
<b>Name :</b> 1-[1-(p-Tolyl)cyclohexyl]piperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-023		
<b>Name :</b> 1-(1-Phenylcyclohexyl)hexamethyleimine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-024		<b>CASRN :</b> 2201-41-4
<b>Name :</b> (±)-1-(1-Phenylcyclohexyl)-3-methylpiperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
<b>References :</b> Berry, SC; <i>et al. Eur J Pharmacol</i> <b>1983</b> , <i>96</i> , 261-7.		
<b>Catalog number :</b> 7471-025		<b>CASRN :</b> 1934-50-5
<b>Name :</b> 1-(1-Phenylcyclohexyl)-4-methylpiperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-026		<b>CASRN :</b> 70227-29-1
<b>Name :</b> 1-[1-(m-Nitrophenyl)cyclohexyl]piperidine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>24</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 288.38	<b>DEA schedule :</b> 1
<b>References :</b> Ramoa, AS; Albuquerque EX <i>FEBS Lett</i> <b>1988</b> , <i>235</i> , 156-62.		

## 3 – Dissociatives

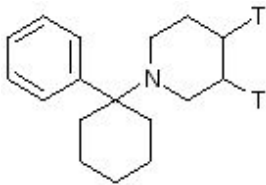
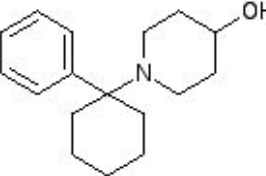
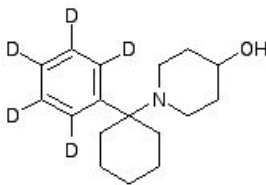
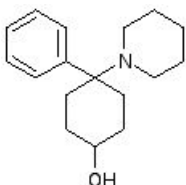
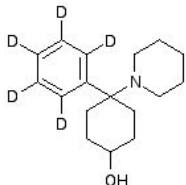
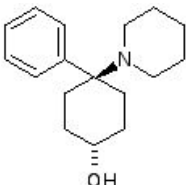
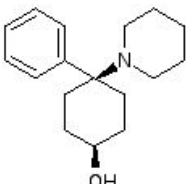
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<b>Catalog number :</b> 7471-027			
<b>Name :</b> 1-[1-( <i>m</i> -Nitrophenyl)cyclohexyl]piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> ClN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 324.85	<b>DEA schedule :</b> 1	
<b>References :</b> Ramoa, AS; Albuquerque EX <i>FEBS Lett</i> <b>1988</b> , 235, 156-62.			
<b>Catalog number :</b> 7471-028			
<b>Name :</b> 1-[1-( <i>p</i> -Methoxyphenyl)cyclohexyl]piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClNO	<b>FW :</b> 309.88	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-029			
<b>Name :</b> <i>trans</i> -1-(1-Phenyl-4-methylcyclohexyl)piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-030			
<b>Name :</b> (±)- <i>cis</i> -(1-Phenyl-3-methylcyclohexyl)piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-031			
<b>Name :</b> 1-[1-( <i>p</i> -Nitrophenyl)cyclohexyl]piperidine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>24</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 288.38	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-032			
<b>Name :</b> 1-[1-( <i>p</i> -Nitrophenyl)cyclohexyl]piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> ClN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 324.85	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-033			<b>CASRN :</b> 79787-43-2
<b>Name :</b> 1-[1-( <i>m</i> -Hydroxyphenyl)cyclohexyl]piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClNO	<b>FW :</b> 295.85	<b>DEA schedule :</b> 1	
<b>References :</b> Itzhak, Y; Kalir A; Sarne Y <i>Eur J Pharmacol</i> <b>1981</b> , 73, 229-33.			

<b>Catalog number :</b> 7471-034		
<b>Name :</b> (±)- <i>cis</i> -1-[1-( <i>m</i> -Tolyl)-3-methylcyclohexyl]piperidine hydrochloride		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>30</sub> ClN	<b>FW :</b> 307.91	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-035		
<b>Name :</b> 1-[1-( <i>m</i> -Tolyl)cyclohexyl]piperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-036		<b>CASRN :</b> 59397-29-4
<b>Name :</b> (±)- <i>trans</i> -1-(1-Phenyl-2-methylcyclohexyl)piperidine hydrochloride; 1-PMCPP		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
<b>References :</b> Iorio, MA; <i>et al. J Med Chem</i> 1991, 34, 2615-23.		
<b>Catalog number :</b> 7471-039		
<b>Name :</b> 1-[1-( <i>m</i> -Methoxyphenyl)cyclohexyl]piperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClNO	<b>FW :</b> 309.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-040		<b>CASRN :</b> 21602-54-0
<b>Name :</b> <i>cis</i> -1-(1-Phenyl-4-methylcyclohexyl)piperidine hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> ClN	<b>FW :</b> 293.88	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-041		
<b>Name :</b> 1-[1-( <i>m</i> -Aminophenyl)cyclohexyl]piperidine lactate		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>32</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 348.48	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-042		
<b>Name :</b> 1-[1-( <i>m</i> -Aminophenyl)cyclohexyl]piperidine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> N <sub>2</sub>	<b>FW :</b> 258.39	<b>DEA schedule :</b> 1
		

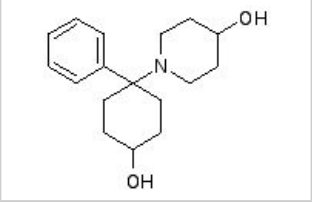
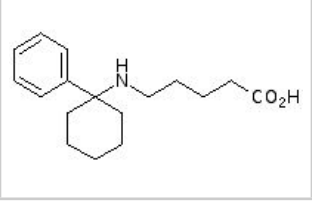
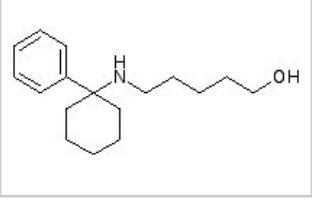
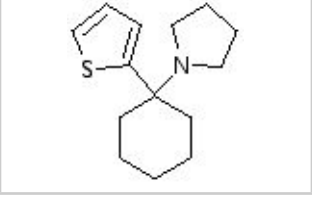
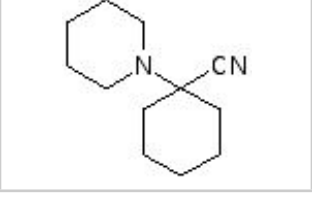
## 3 - Dissociatives

★ = custom synthesis

<b>Catalog number :</b> 7471-043			★
<b>Name :</b> [3',4'- <sup>3</sup> H]Phencyclidine; [3,4- <sup>3</sup> H]PCP			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 247.4	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-081			
<b>Name :</b> 1-(1-Phenylcyclohexyl)-4-hydroxypiperidine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 259.40	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-082			
<b>Name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]-1-(1-(1-Phenylcyclohexyl)-4-hydroxypiperidine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 264.43	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-083		<b>CASRN :</b> 60756-83-4	
<b>Name :</b> 1-(1-Phenyl-4-hydroxycyclohexyl)piperidine ( <i>cis/trans</i> )			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 259.35	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1981</b> , <i>24</i> , 1047-51. Martin, BR; Vincek WC; Balster RL <i>Subst Alcohol Actions Misuse</i> <b>1981</b> , <i>2</i> , 143-7.			
<b>Catalog number :</b> 7471-084			
<b>Name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]-1-(1-(1-Phenyl-4-hydroxycyclohexyl)piperidine ( <i>cis/trans</i> )			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 264.43	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-085			
<b>Name :</b> <i>cis</i> -1-(1-Phenyl-4-hydroxycyclohexyl)piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClNO	<b>FW :</b> 295.87	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1981</b> , <i>24</i> , 1047-51.			
<b>Catalog number :</b> 7471-086			
<b>Name :</b> <i>trans</i> -1-(1-Phenyl-4-hydroxycyclohexyl)piperidine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClNO	<b>FW :</b> 295.87	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1981</b> , <i>24</i> , 1047-51.			

## 3 – Dissociatives

★ = custom synthesis

<b>Catalog number :</b> 7471-087		
<b>Name :</b> 4-(4'-Hydroxypiperidino)-4-phenylcyclohexanol ( <i>cis/trans</i> )	<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO <sub>2</sub> <b>FW :</b> 275.40 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-088		
<b>Name :</b> 5-[N-(1'-Phenylcyclohexyl)amino]pentanoic acid hydrochloride	<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClNO <sub>2</sub> <b>FW :</b> 311.86 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 7471-089		
<b>Name :</b> N-(5-Hydroxypentyl)-1-phenylcyclohexylamine hydrochloride	<b>Mol. formula :</b> C <sub>17</sub> H <sub>28</sub> ClNO <b>FW :</b> 297.87 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 7473-015		
<b>Name :</b> 1-[1-(2-Thienyl)cyclohexyl]pyrrolidine hydrochloride	<b>Mol. formula :</b> C <sub>14</sub> H <sub>22</sub> ClNS <b>FW :</b> 271.86 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 8603-001		
<b>Name :</b> 1-Piperidinocyclohexanecarbonitrile	<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> N <sub>2</sub> <b>FW :</b> 192.31 <b>DEA schedule :</b> 1	





★ = custom synthesis

**Hallucinogens: Amphetamine Class**

Catalog number : 7390-001

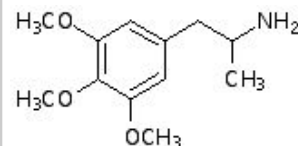
CASRN : 5688-80-2

Name : (±)-3,4,5-Trimethoxyamphetamine hydrochloride; TMA

Mol. formula : C<sub>12</sub>H<sub>20</sub>ClNO<sub>3</sub>

FW : 261.47

DEA schedule : 1



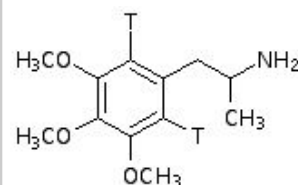
Catalog number : 7390-002

★

Name : (±)-[2,6-<sup>3</sup>H<sub>2</sub>(n)]-3,4,5-Trimethoxyamphetamine hydrochlorideMol. formula : C<sub>12</sub>H<sub>20</sub>ClNO<sub>3</sub>

FW : 265.76

DEA schedule : 1



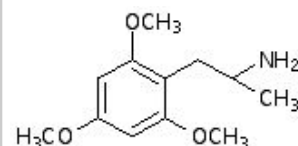
Catalog number : 7390-003

Name : (±)-2,4,6-Trimethoxyamphetamine hydrochloride

Mol. formula : C<sub>12</sub>H<sub>20</sub>ClNO<sub>3</sub>

FW : 261.47

DEA schedule : 1



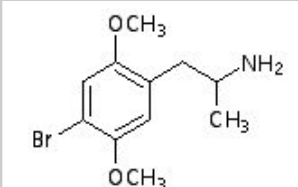
Catalog number : 7391-001

Name : (±)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (±)-DOB

Mol. formula : C<sub>11</sub>H<sub>17</sub>BrClNO<sub>2</sub>

FW : 310.62

DEA schedule : 1



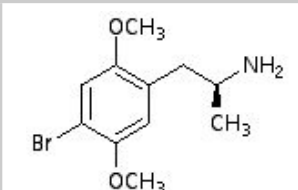
Catalog number : 7391-002

Name : (+)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (+)-DOB

Mol. formula : C<sub>11</sub>H<sub>17</sub>BrClNO<sub>2</sub>

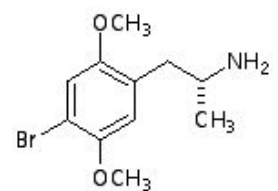
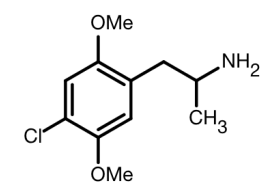
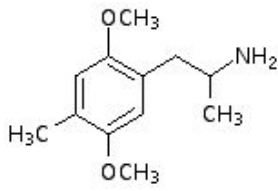
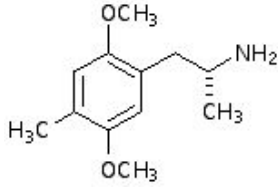
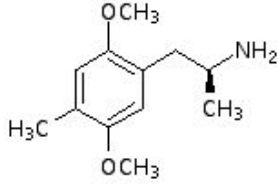
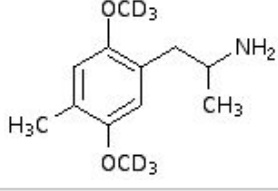
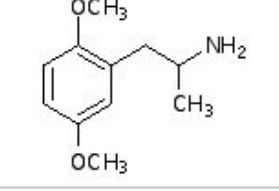
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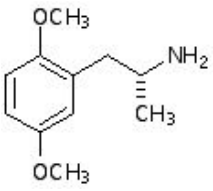
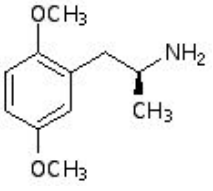
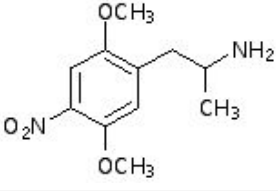
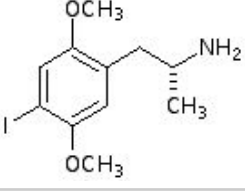
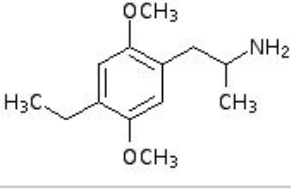
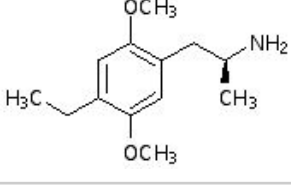
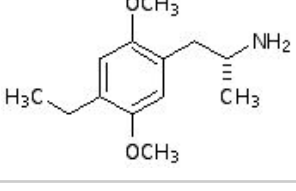
DEA schedule : 1



## 4 - Hallucinogens

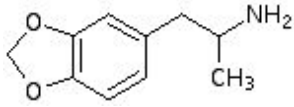
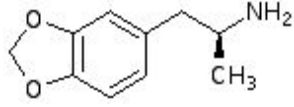
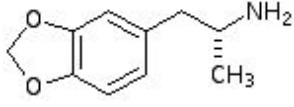
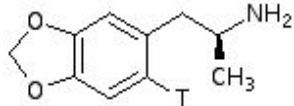
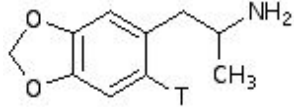
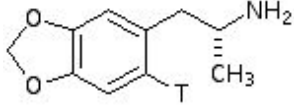
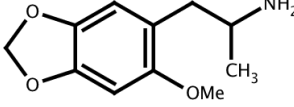
★ = custom synthesis

<b>Catalog number :</b> 7391-003		
<b>Name :</b> (-)-4-Bromo-2,5-dimethoxyamphetamine hydrochloride; (-)-DOB		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>17</sub> BrClNO <sub>2</sub>	<b>FW :</b> 310.62 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7391-004		<b>CASRN :</b> 123431-31-2
<b>Name :</b> (±)-4-Chloro-2,5-dimethoxyamphetamine hydrochloride; (±)-DOC		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub> • HCl	<b>FW :</b> 266.166 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7395-001		<b>CASRN :</b> 15588-95-1
<b>Name :</b> (±)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (±)-DOM		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 245.75 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7395-002		<b>CASRN :</b> 15588-95-1
<b>Name :</b> (-)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (-)-DOM		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 245.75 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7395-003		
<b>Name :</b> (+)-2,5-Dimethoxy-4-methylamphetamine hydrochloride; (+)-DOM		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 245.75 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7395-004		
<b>Name :</b> [OC <sup>2</sup> H <sub>3</sub> ]-2,5-Dimethoxy-4-methylamphetamine HCl; [OC <sup>2</sup> H <sub>3</sub> ]DOM		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 251.78 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7396-001		
<b>Name :</b> (±)-2,5-Dimethoxyamphetamine hydrochloride; (±)-DMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO <sub>2</sub>	<b>FW :</b> 231.72 <b>DEA schedule :</b> 1	

<b>Catalog number :</b> 7396-002		
<b>Name :</b> (-)-2,5-Dimethoxyamphetamine hydrochloride; (-)-DMA	<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO <sub>2</sub> <b>FW :</b> 231.72 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7396-003		
<b>Name :</b> (+)-2,5-Dimethoxyamphetamine hydrochloride; (+)-DMA	<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO <sub>2</sub> <b>FW :</b> 231.72 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7396-009		
<b>Name :</b> (±)-2,5-Dimethoxy-4-nitroamphetamine hydrochloride	<b>Mol. formula :</b> C <sub>11</sub> H <sub>17</sub> ClN <sub>2</sub> O <sub>4</sub> <b>FW :</b> 276.75 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 7396-011		
<b>Name :</b> (-)-2,5-Dimethoxy-4-iodoamphetamine hydrochloride	<b>Mol. formula :</b> C <sub>11</sub> H <sub>17</sub> ClINO <sub>2</sub> <b>FW :</b> 357.62 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 7399-004		
<b>Name :</b> (±)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (±)-DOET	<b>Mol. formula :</b> C <sub>13</sub> H <sub>22</sub> ClNO <sub>2</sub> <b>FW :</b> 259.78 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7399-005		
<b>Name :</b> (+)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (+)-DOET	<b>Mol. formula :</b> C <sub>13</sub> H <sub>22</sub> ClNO <sub>2</sub> <b>FW :</b> 259.78 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7399-007		
<b>Name :</b> (-)-2,5-Dimethoxy-4-ethylamphetamine hydrochloride; (-)-DOET	<b>Mol. formula :</b> C <sub>13</sub> H <sub>22</sub> ClNO <sub>2</sub> <b>FW :</b> 259.78 <b>DEA schedule :</b> 1	

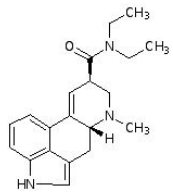
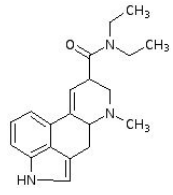
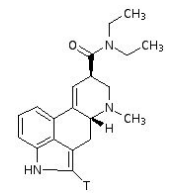
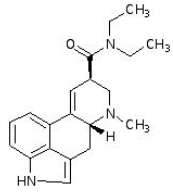
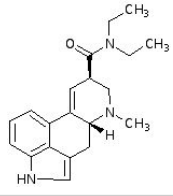
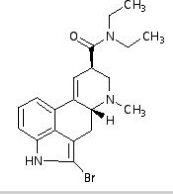
## 4 - Hallucinogens

★ = custom synthesis

<b>Catalog number :</b> 7400-001		<b>CASRN :</b> 6292-91-7		
<b>Name :</b> (±)-3,4-Methylenedioxyamphetamine hydrochloride; MDA HCl				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 215.68	<b>DEA schedule :</b> 1		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5765.				
<b>Catalog number :</b> 7400-002		<b>CASRN :</b> 64057-70-1		
<b>Name :</b> (+)-3,4-Methylenedioxyamphetamine hydrochloride; (+)-MDA HCl				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 215.68	<b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7400-003		<b>CASRN :</b> 61614-60-6		
<b>Name :</b> (-)-3,4-Methylenedioxyamphetamine hydrochloride; (-)-MDA HCl				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 215.68	<b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7400-004				★
<b>Name :</b> (+)-[6'- <sup>3</sup> H(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[6'- <sup>3</sup> H(n)]MDA				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 215.68	<b>DEA schedule :</b> 1		
<b>Notes :</b> <i>Hallucinogen (tritium-labeled).</i>				
<b>Catalog number :</b> 7400-005				
<b>Name :</b> [6- <sup>3</sup> H <sub>2</sub> (n)]-3,4-Methylenedioxyamphetamine hydrochloride; [6- <sup>3</sup> H <sub>2</sub> (n)]MDA				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 217.68	<b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7400-006		<b>CASRN :</b> 6292-91-7		★
<b>Name :</b> (-)-[6'- <sup>3</sup> H <sub>2</sub> (n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (-)-[6'- <sup>3</sup> H <sub>2</sub> (n)]MDA				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub>	<b>FW :</b> 217.68	<b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7401-001				
<b>Name :</b> (±)-2-Methoxy-4,5-methylenedioxyamphetamine hydrochloride				
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>3</sub>	<b>FW :</b> 245.71	<b>DEA schedule :</b> 1		

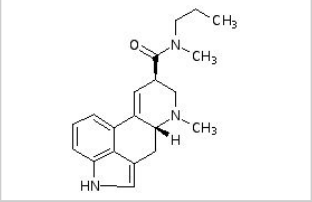
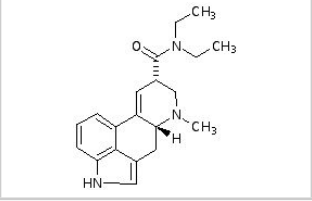
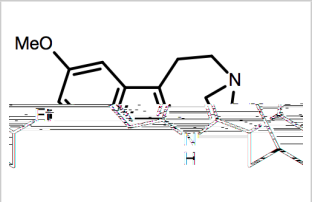
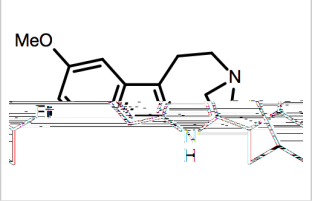
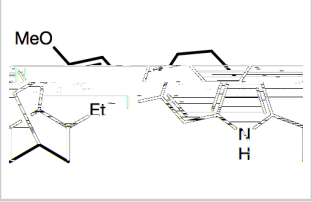
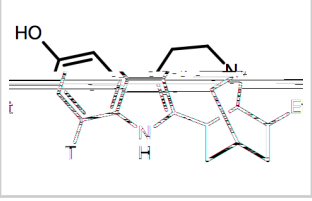
<b>Catalog number :</b> 7401-002		
<b>Name :</b> [2',6'- <sup>3</sup> H(n)]-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride; [2,6- <sup>3</sup> H(n)]MMDA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>3</sub>	<b>FW :</b> 249.72 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7401-003		
<b>Name :</b> (±)-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>3</sub>	<b>FW :</b> 245.71 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7402-001		<b>CASRN :</b> 4764-17-4
<b>Name :</b> (±)-N-Hydroxy-3,4-methylenedioxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>3</sub>	<b>FW :</b> 231.68 <b>DEA schedule :</b> 1	
<b>Notes :</b> CNS stimulant		
<b>Catalog number :</b> 7402-002		<b>CASRN :</b> 145284-65-7
<b>Name :</b> (±)-6-Hydroxy-3,4-methylenedioxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>3</sub>	<b>FW :</b> 238.89 <b>DEA schedule :</b> 1	
<b>Notes :</b> CNS stimulant		
<b>Catalog number :</b> 7411-001		<b>CASRN :</b> 3706-26-1
<b>Name :</b> (±)-4-Methoxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClNO	<b>FW :</b> 201.70 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7411-010		<b>CASRN :</b> 17862-85-0
<b>Name :</b> (±)-3-Methoxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClNO	<b>FW :</b> 201.70 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7411-011		<b>CASRN :</b> 15402-84-3
<b>Name :</b> (±)-2-Methoxyamphetamine hydrochloride; NDMP		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClNO	<b>FW :</b> 201.70 <b>DEA schedule :</b> 1	

**Hallucinogens: Ergot alkaloids**

<b>Catalog number :</b> 7315-004	<b>CASRN :</b> 17676-08-3	
<b>Name :</b> (+)-Lysergic acid diethylamide (+)-tartrate (2:1); (+)-LSD (+)-tartrate		
<b>Mol. formula :</b> (C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O) <sub>2</sub>		<b>FW :</b> 796.93 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5634.		
<b>Catalog number :</b> 7315-006	<b>CASRN :</b> 51064-36-9	
<b>Name :</b> (±)-Lysergic acid diethylamide; (±)-LSD		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O		<b>FW :</b> 323.42 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5634.		
<b>Catalog number :</b> 7315-007	<b>CASRN :</b> 377756-22-4	★
<b>Name :</b> [2- <sup>3</sup> H]-(+)-Lysergic acid diethylamide; (+)-[3H]-LSD		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O		<b>FW :</b> 323.42 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5634.		
<b>Catalog number :</b> 7315-008	<b>CASRN :</b> 50-37-3	
<b>Name :</b> (+)-Lysergic acid diethylamide; (+)-LSD		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O		<b>FW :</b> 323.42 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5634.		
<b>Catalog number :</b> 7315-009	<b>CASRN :</b> 24656-41-5	
<b>Name :</b> (+)-Lysergic acid diethylamide hydrogen maleate		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O		<b>FW :</b> 439.49 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5634.		
<b>Catalog number :</b> 7315-010	<b>CASRN :</b> 4004-43-7	
<b>Name :</b> (+)-2-Bromo-LSD (+)-hydrogen tartrate; BOL-148		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> BrN <sub>3</sub> O		<b>FW :</b> 552.44 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>Serotonin antagonist without the hallucinogenic activity of LSD</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 1423.		

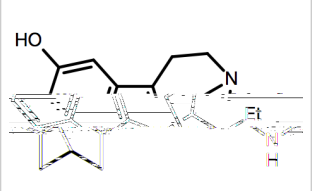
## 4 - Hallucinogens

★ = custom synthesis

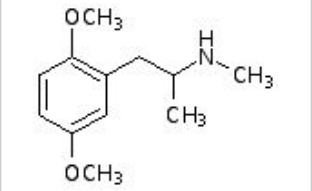
<b>Catalog number :</b> 7315-013	<b>CASRN :</b> 101692-69-7	
<b>Name :</b> (+)-Lysergic acid methyl- <i>n</i> -propylamide tartrate; LAMPA		
<b>Mol. formula :</b> (C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O) <sub>2</sub>	<b>FW :</b> 796.33	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7315-014	<b>CASRN :</b> 2126-78-5	
<b>Name :</b> (+)-Isolysergic acid diethylamide		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O	<b>FW :</b> 323.20	<b>DEA schedule :</b> 1
		
<b>Hallucinogens: Ibogaine Class</b>		
<b>Catalog number :</b> 7260-001	<b>CASRN :</b> 36415-61-9	
<b>Name :</b> Ibogaine hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>27</sub> ClN <sub>2</sub> O	<b>FW :</b> 346.89	<b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 4875.		
<b>Catalog number :</b> 7260-002	<b>CASRN :</b> 146560-35-2 ★	
<b>Name :</b> Tritium-labeled Ibogaine; [12- <sup>3</sup> H]Ibogaine		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> N <sub>2</sub> O	<b>FW :</b> 312.44	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Hallucinogen (tritium-labeled).</i>		
<b>Catalog number :</b> 7260-003		
<b>Name :</b> 11-Iodoibogaine		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> IN <sub>2</sub> O	<b>FW :</b> 436.33	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7260-005	<b>CASRN :</b> 146560-35-2 ★	
<b>Name :</b> [12- <sup>3</sup> H]-Noribogaine		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>24</sub> N <sub>2</sub> O	<b>FW :</b> 296.41	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Ibogaine-like effect without tremors (tritium-labeled).</i>		

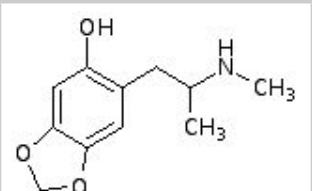
## 4 – Hallucinogens

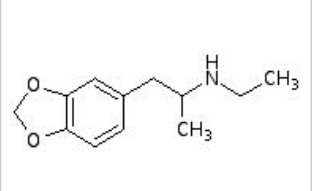
★ = custom synthesis

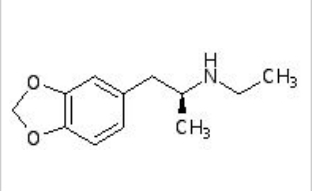
Catalog number : 7260-006		CASRN : 481-88-9	
Name : Noribogaine			
Mol. formula : $C_{19}H_{24}N_2O$	FW : 292.42	DEA schedule : 0	
Notes : <i>Ibogaine-like effect without tremors</i>			
References : Glick, SD; Pearl, SM; Cai, J; Maisonneuve, IM <i>Brain Res</i> <b>1996</b> , <i>713</i> , 294-7.			

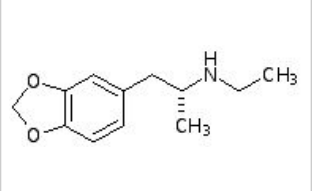
### Hallucinogens: Methamphetamine Class

Catalog number : 7395-005			
Name : (±)-2,5-Dimethoxymethamphetamine hydrochloride			
Mol. formula : $C_{12}H_{20}ClNO_2$	FW : 245.75	DEA schedule : 1	

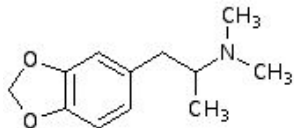
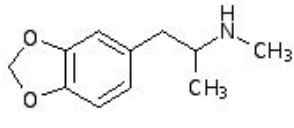
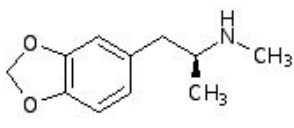
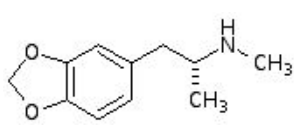
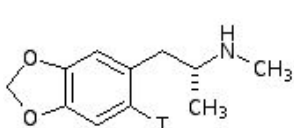
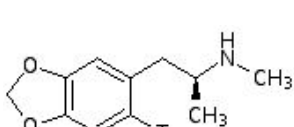
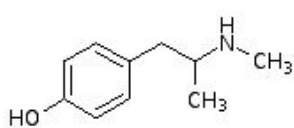
Catalog number : 7401-004			
Name : (±)-6-Hydroxy-3,4-methylenedioxyamphetamine fumarate			
Mol. formula : $C_{26}H_{34}N_2O_{10}$	FW : 534.56	DEA schedule : 1	

Catalog number : 7404-001		CASRN : 82801-81-8	
Name : (±)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride			
Mol. formula : $C_{12}H_{18}ClNO_2$	FW : 243.73	DEA schedule : 1	
Notes : <i>CNS stimulant</i>			

Catalog number : 7404-002		CASRN : 82801-81-8	
Name : (+)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride			
Mol. formula : $C_{12}H_{18}ClNO_2$	FW : 243.73	DEA schedule : 1	
Notes : <i>CNS stimulant</i>			

Catalog number : 7404-003		CASRN : 82801-81-8	
Name : (-)-N-Ethyl-3,4-methylenedioxyamphetamine hydrochloride			
Mol. formula : $C_{12}H_{18}ClNO_2$	FW : 243.73	DEA schedule : 1	
Notes : <i>CNS stimulant</i>			



<b>Catalog number :</b> 7404-004		
<b>Name :</b> (±)-N,N-Dimethyl-3,4-methylenedioxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>18</sub> ClNO <sub>2</sub>	<b>FW :</b> 243.73	<b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant		
<b>Catalog number :</b> 7405-001		<b>CASRN :</b> 64057-70-1
<b>Name :</b> (±)-3,4-Methylenedioxyamphetamine hydrochloride; MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 229.71	<b>DEA schedule :</b> 1
<b>References :</b> Merck Index, 14th ed., Monograph 5767.		
<b>Catalog number :</b> 7405-002		<b>CASRN :</b> 69558-32-3
<b>Name :</b> (+)-3,4-Methylenedioxyamphetamine hydrochloride; (+)-MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 229.71	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7405-003		<b>CASRN :</b> 69558-31-2
<b>Name :</b> (-)-3,4-Methylenedioxyamphetamine hydrochloride; (-)-MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 229.71	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7405-005		<b>CASRN :</b> 4764-17-4 ★
<b>Name :</b> (-)-[6'- <sup>3</sup> H(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (-)-[ <sup>3</sup> H]MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 231.71	<b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; hallucinogen (tritium-labeled).		
<b>Catalog number :</b> 7405-006		
<b>Name :</b> (+)-[6'- <sup>3</sup> H(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[ <sup>3</sup> H]MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 231.71	<b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; hallucinogen (tritium-labeled).		
<b>Catalog number :</b> 7411-012		<b>CASRN :</b> 370-14-9
<b>Name :</b> (±)-4-Hydroxymethamphetamine hydrochloride; Pholedrine		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClNO	<b>FW :</b> 201.70	<b>DEA schedule :</b> 2
<b>References :</b> Merck Index, 14th ed., Monograph 4810.		

**Hallucinogens: Phenethylamine Class**

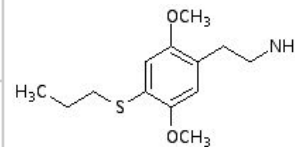
Catalog number : 7348-001

CASRN : 207740-26-9

Name : 2,5-Dimethoxy-4-*n*-propylthio-β-phenethylamine hydrochloride;  
2C-T-7Mol. formula : C<sub>13</sub>H<sub>22</sub>ClNO<sub>2</sub>S

FW : 291.84

DEA schedule : 1

References : Fantegrossi, WE; *et al. Psychopharmacology (Berl)* 2005, 181, 496-503.

Catalog number : 7381-001

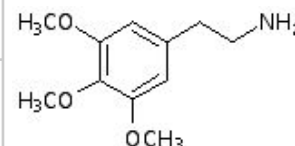
CASRN : 832-92-8

Name : Mescaline hydrochloride

Mol. formula : C<sub>11</sub>H<sub>18</sub>ClNO<sub>3</sub>

FW : 247.72

DEA schedule : 1

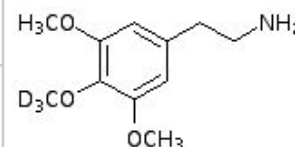
References : *Merck Index*, 14th ed., Monograph 5905.

Catalog number : 7381-002

Name : [4'-OC<sup>2</sup>H<sub>3</sub>]Mescaline hydrochlorideMol. formula : C<sub>11</sub>H<sub>18</sub>ClNO<sub>3</sub>

FW : 247.72

DEA schedule : 1



Catalog number : 7381-010

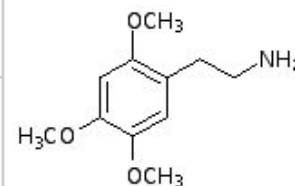
CASRN : 15394-83-9

Name : 2,4,5-Trimethoxy-β-phenethylamine hydrochloride

Mol. formula : C<sub>11</sub>H<sub>18</sub>ClNO<sub>3</sub>

FW : 247.72

DEA schedule : 1



Catalog number : 7381-011

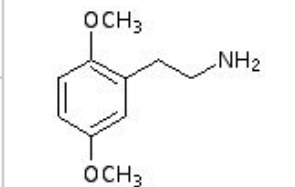
CASRN : 3166-74-3

Name : 2,5-Dimethoxy-β-phenethylamine hydrochloride

Mol. formula : C<sub>10</sub>H<sub>16</sub>ClNO<sub>2</sub>

FW : 217.70

DEA schedule : 0



Catalog number : 7385-001

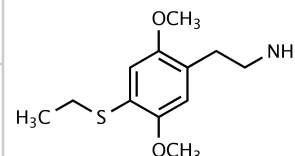
CASRN : 207740-24-7 (base)

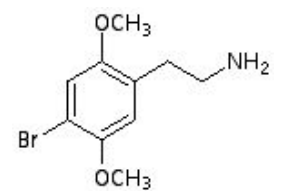
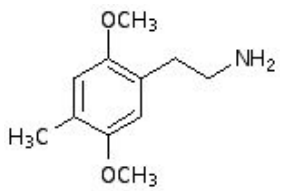
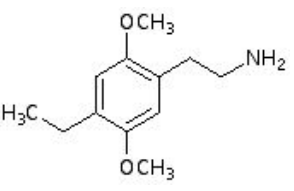
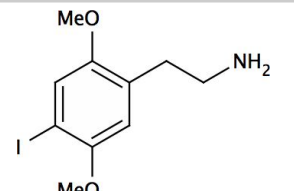
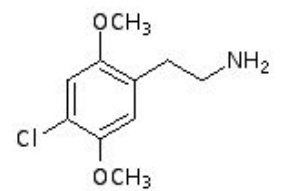
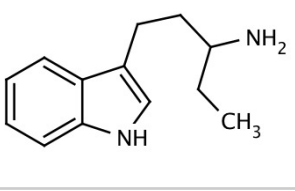
Name : 2,5-Dimethoxy-4-ethylthio-β-phenethylamine hydrochloride; 2C-T-2

Mol. formula : C<sub>12</sub>H<sub>20</sub>ClNO<sub>2</sub>S

FW : 277.81

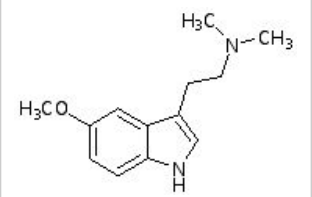
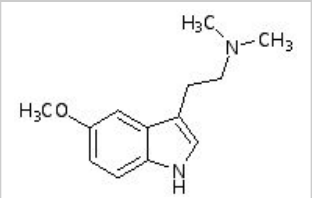
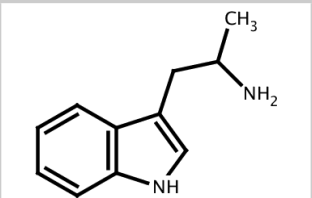
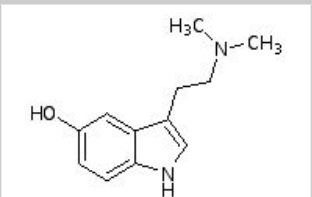
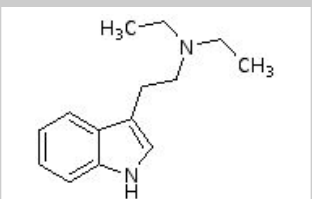
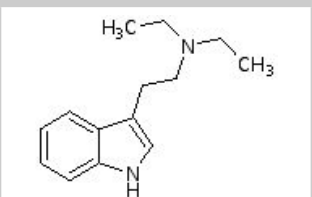
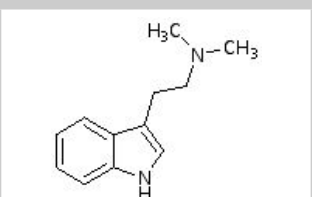
DEA schedule : 0

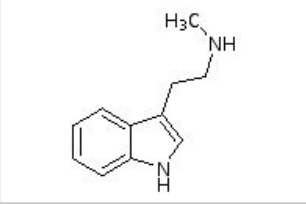
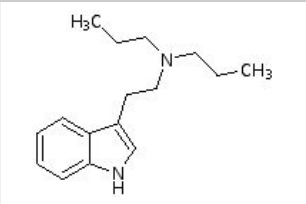
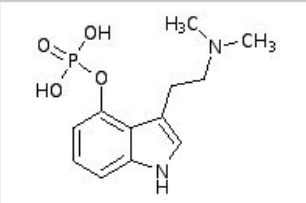
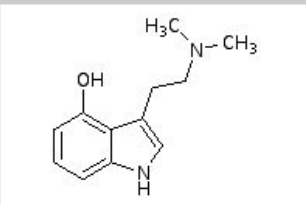
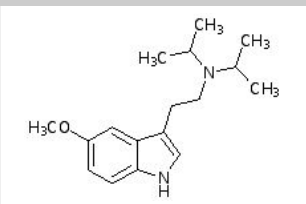
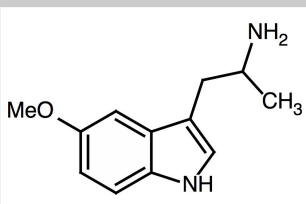
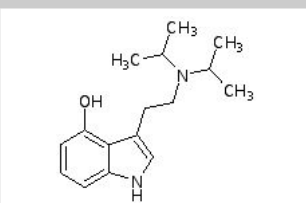
References : Fantegrossi, WE; *et al. Psychopharmacology (Berl)* 2005, 181, 496-503.

<b>Catalog number :</b> 7392-012	<b>CASRN :</b> 56281-37-9	
<b>Name :</b> 4-Bromo-2,5-dimethoxy-β-phenethylamine hydrochloride; 2C-B		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> BrClNO <sub>2</sub>		<b>FW :</b> 296.59 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 1908.		
<b>Catalog number :</b> 7508-001	<b>CASRN :</b> 25505-65-1	
<b>Name :</b> 2,5-Dimethoxy-4-methyl-β-phenethylamine hydrochloride; 2C-D		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO <sub>2</sub>		<b>FW :</b> 231.72 <b>DEA schedule :</b> 0
<b>References :</b> Jacob, P., 3rd; Shulgin AT <i>NIDA Res Monogr</i> 1994, 146, 74-91.		
<b>Catalog number :</b> 7509-001	<b>CASRN :</b> 71539-34-9	
<b>Name :</b> 2,5-Dimethoxy-4-ethyl-β-phenethylamine hydrochloride; 2C-E		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>		<b>FW :</b> 245.75 <b>DEA schedule :</b> 0
<b>References :</b> Jacob, P., 3rd; Shulgin AT <i>NIDA Res Monogr</i> 1994, 146, 74-91.		
<b>Catalog number :</b> 7518-001	<b>CASRN :</b> 69587-11-7 (base)	
<b>Name :</b> 2,5-Dimethoxy-4-iodo-β-phenethylamine hydrochloride; 2C-I		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> ClINO <sub>2</sub>		<b>FW :</b> 343.59 <b>DEA schedule :</b> 1
<b>References :</b> Jacob, P., 3rd; Shulgin AT <i>NIDA Res Monogr</i> 1994, 146, 74-91.		
<b>Catalog number :</b> 7519-001	<b>CASRN :</b> 88441-14-9	
<b>Name :</b> 4-Chloro-2,5-dimethoxy-β-phenethylamine hydrochloride; 2C-C		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> Cl <sub>2</sub> NO <sub>2</sub>		<b>FW :</b> 252.14 <b>DEA schedule :</b> 0
<b>References :</b> Jacob, P., 3rd; Shulgin AT <i>NIDA Res Monogr</i> 1994, 146, 74-91.		
<b>Hallucinogens: Tryptamine Class</b>		
<b>Catalog number :</b> 7249-001	<b>CASRN :</b> 2235-90-7	
<b>Name :</b> α-Ethyltryptamine acetate; AET		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 248.33 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 13th ed., Monograph 3924.		

## 4 – Hallucinogens

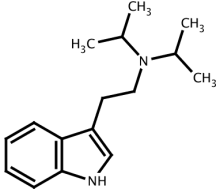
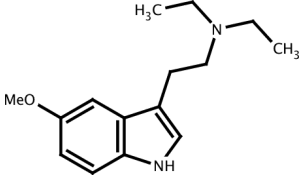
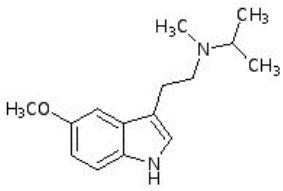
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<b>Catalog number :</b> 7431-001	<b>CASRN :</b> 1019-45-0
<b>Name :</b> 5-Methoxy-N,N-dimethyltryptamine (base); 5-MeO-DMT	
<b>Mol. formula :</b> C <sub>13</sub> H <sub>18</sub> N <sub>2</sub> O	
<b>Catalog number :</b> 7431-002	<b>CASRN :</b> 1019-45-0
<b>Name :</b> 5-Methoxy-N,N-dimethyltryptamine fumarate; 5-MeO-DMT fumarate	
<b>Mol. formula :</b> C <sub>30</sub> H <sub>40</sub> N <sub>4</sub> O <sub>6</sub>	
<b>Catalog number :</b> 7432-001	<b>CASRN :</b> 299-26-3
<b>Name :</b> α-Methyltryptamine; AMT	
<b>Mol. formula :</b> C <sub>11</sub> H <sub>14</sub> N <sub>2</sub>	
<b>Catalog number :</b> 7433-001	<b>CASRN :</b> 487-93-4
<b>Name :</b> Bufotenine (base); 5-Hydroxy-N,N-dimethyltryptamine; 5-OH-DMT	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>16</sub> N <sub>2</sub> O	
<b>References :</b> Emanuele, E; et al., <i>Neuro Endocrinol Lett</i> <b>2010</b> , <i>31</i> , 117-21.	
<b>Catalog number :</b> 7434-001	<b>CASRN :</b> 20671-78-7
<b>Name :</b> N,N-Diethyltryptamine fumarate; DET fumarate	
<b>Mol. formula :</b> C <sub>18</sub> H <sub>24</sub> N <sub>2</sub> O <sub>4</sub>	
<b>References :</b> Heinze, WJ; Schlemmer, RF; Tyler, CB; Davis, JM <i>Biol Psychiatry</i> <b>1983</b> , <i>18</i> , 829-36.	
<b>Catalog number :</b> 7434-002	<b>CASRN :</b> 61-51-8
<b>Name :</b> N,N-Diethyltryptamine (base); DET	
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> N <sub>2</sub>	
<b>References :</b> Heinze, WJ; Schlemmer, RF, Jr; Tyler, CB; Davis JM <i>Biol Psychiatry</i> <b>1983</b> , <i>18</i> , 829-36.	
<b>Catalog number :</b> 7435-001	<b>CASRN :</b> 69321-46-6
<b>Name :</b> N,N-Dimethyltryptamine fumarate; DMT fumarate	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub>	
<b>References :</b> Barker, SA; Monti, JA; Christian, ST <i>Int Rev Neurobiol</i> <b>1981</b> , <i>22</i> , 83-110.	

<b>Catalog number :</b> 7435-002	<b>CASRN :</b> 61-49-4
<b>Name :</b> N-Methyltryptamine fumarate	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 290.31 <b>DEA schedule :</b> 0
	
<b>Catalog number :</b> 7436-001	<b>CASRN :</b> 7558-73-8
<b>Name :</b> N,N-Dipropyltryptamine hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>25</sub> ClN <sub>2</sub>	<b>FW :</b> 280.84 <b>DEA schedule :</b> 0
	
<b>Catalog number :</b> 7437-001	<b>CASRN :</b> 520-52-5
<b>Name :</b> Psilocybin	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>17</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 284.25 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 7926.	
<b>Catalog number :</b> 7438-001	<b>CASRN :</b> 520-53-6
<b>Name :</b> Psilocin	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>16</sub> N <sub>2</sub> O	<b>FW :</b> 204.27 <b>DEA schedule :</b> 1
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 7925.	
<b>Catalog number :</b> 7439-001	<b>CASRN :</b> 4021-34-5
<b>Name :</b> 5-Methoxy-N,N-diisopropyltryptamine hydrochloride; 5-MeO-DiPT; FOXY	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>27</sub> ClN <sub>2</sub> O	<b>FW :</b> 310.87 <b>DEA schedule :</b> 1
<b>References :</b> Shulgin, AT; Carter MF <i>Commun Psychopharmacol</i> <b>1980</b> , 4, 363-9.	
<b>Catalog number :</b> 7506-001	<b>CASRN :</b> 1137-04-8
<b>Name :</b> 5-Methoxy-α-methyltryptamine; 5-MeO-AMT	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>16</sub> N <sub>2</sub> O	<b>FW :</b> 204.27 <b>DEA schedule :</b> 0
<b>References :</b> Jacob, P; Shulgin AT <i>NIDA Res Monogr</i> <b>1994</b> , 146, 74-91.	
<b>Catalog number :</b> 7516-000	<b>CASRN :</b> 63065-90-7
<b>Name :</b> 4-Hydroxy-N,N-diisopropyltryptamine hydrochloride; 4-OH-DiPT	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>25</sub> ClN <sub>2</sub> O	<b>FW :</b> 296.84 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Psilocybin analog.</i>	
<b>References :</b> Pichini, S; et al., <i>J Pharm Biomed Analysis</i> <b>2008</b> , 47, 335-342.	

## 4 - Hallucinogens

★ = custom synthesis

<b>Catalog number :</b> 7522-000		<b>CASRN :</b> 14780-24-6	
<b>Name :</b> N,N-Diisopropyltryptamine hydrochloride, DiPT			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> N <sub>2</sub>	<b>FW :</b> 244.38	<b>DEA schedule :</b> 1	
<b>References :</b> Fumiko N, Ryouich N, Kanak S, Hisashi K, <i>Eur J Pharmacol</i> , 2007, 559 (2-3), 132-137.			
			
<b>Catalog number :</b> 7525-000		<b>CASRN :</b> 96096-54-7	
<b>Name :</b> 5-Methoxy-N,N-diethyltryptamine, 5-MeO-DET			
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O	<b>FW :</b> 246.35	<b>DEA schedule :</b> 1	
			
<b>Catalog number :</b> NOCD-001		<b>CASRN :</b> 96096-54-7	
<b>Name :</b> 5-Methoxy-N-isopropyl-N-methyltryptamine hydrochloride; 5-MeO-MiPT			
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O • HCl	<b>FW :</b> 282.81	<b>DEA schedule :</b> 1	
<b>References :</b> Repke, DB; Grotjahn DB; Shulgin AT, <i>J Med Chem</i> 1985, 28, 892-6; Nagai, F; <i>et al.</i> , <i>Eur J Pharmacol</i> 2007, 559(2-3), 132-137.			
			

★ = custom synthesis

**Nicotinics: Anabaseine Class**

Catalog number : NICT-011

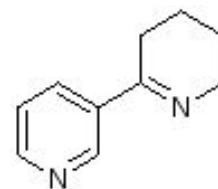
CASRN : 3471-05-4

Name : Anabaseine dihydrochloride

Mol. formula : C<sub>10</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>

FW : 233.14

DEA schedule : 0

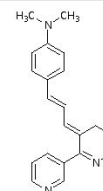
Notes : Nicotinic  $\alpha 7$  receptor agonist.References : Wheeler, JW; *et al. Science* **1981**, *211*, 1051-1052.  
Kem WR; Mahnir VM; Papke RL; Lingle CJ *J Pharmacol Exp Ther* **1997**, *283*, 979-92.

Catalog number : NICT-012

Name : (E,E)-3-(4'-Dimethylaminocinnamylidene)anabaseine dihydrochloride;  
DMACMol. formula : C<sub>21</sub>H<sub>25</sub>Cl<sub>2</sub>N<sub>3</sub>

FW : 390.36

DEA schedule : 0

Notes : Selective  $\alpha 7$  nicotinic acetylcholine receptor agonist.References : de Fiebre, C; *et al. Mol Pharmacol* **1995**, *47*, 164-171.**Nicotinics: Epibatidine Class**

Catalog number : NICT-001

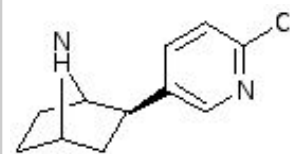
Name : (±)-Epibatidine hydrochloride

Mol. formula : C<sub>11</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>

FW : 245.15

DEA schedule : 0

Notes : Potent nicotinic receptor agonist and non-opioid analgesic.

References : Sullivan, JP; *et al. J Pharmacol Exp Ther* **1994**, *271*, 624-31.

Catalog number : NICT-002

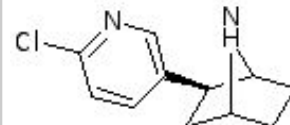
CASRN : 152378-30-8

Name : (-)-Epibatidine hydrochloride

Mol. formula : C<sub>11</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>

FW : 245.15

DEA schedule : 0

References : Qian C; Li T; Shen TY; Libertine-Garahan L; Eckman J; Biftu T; Ip S *Eur J Pharmacol* **1993**, *250*, R13-4.  
Badio B; Daly JW *Mol Pharmacol* **1994**, *45*, 563-9.

Catalog number : NICT-003

CASRN : 140111-52-0

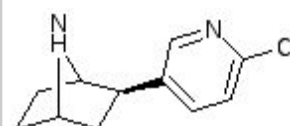
Name : (+)-Epibatidine hydrochloride

Mol. formula : C<sub>11</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>

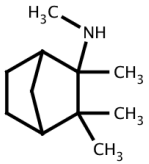
FW : 245.15

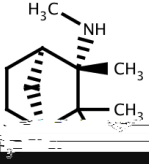
DEA schedule : 0

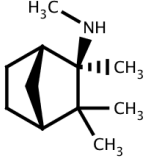
Notes : Epibatidine natural isomer.

References : Qian C; Li T; Shen TY; Libertine-Garahan L; Eckman J; Biftu T; Ip S *Eur J Pharmacol* **1993**, *250*, R13-4.  
Badio B; Daly JW *Mol Pharmacol* **1994**, *45*, 563-9.

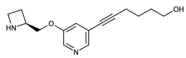
**Nicotincs: Mecamylamine Class**

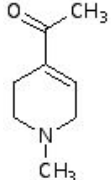
<b>Catalog number :</b> NICT-004	<b>CASRN :</b> 826-39-1	
<b>Name :</b> (±)-Mecamylamine HCl		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>22</sub> ClN		<b>FW :</b> 203.75 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Non-competitive nicotinic acetylcholine receptor antagonist.</i>		
<b>References :</b> Sanberg, PR; <i>et al. Int J Neurosci</i> <b>2001</b> , <i>109</i> , 81-90.		

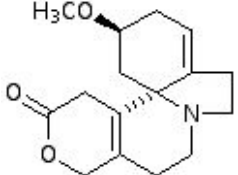
<b>Catalog number :</b> NICT-018	<b>CASRN :</b> 107596-30-5	
<b>Name :</b> (+)-(-S)-Mecamylamine HCl		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>22</sub> ClN		<b>FW :</b> 203.75 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Non-competitive nicotinic acetylcholine receptor antagonist.</i>		
<b>References :</b> Stone, CA; <i>et al., J. Med. Chem.</i> , <b>34</b> , 1003 (1991).		

<b>Catalog number :</b> NOCD-123	<b>CASRN :</b> 107596-31-6	
<b>Name :</b> (-)-(-R)-Mecamylamine HCl		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>22</sub> ClN		<b>FW :</b> 203.75 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Non-competitive nicotinic acetylcholine receptor antagonist.</i>		
<b>References :</b> Suchocki, JA, <i>Journal of Medicinal Chemistry</i> <b>1991</b> , <i>34</i> (3), 1003-10. Schoenenberger, B, <i>Helvetica Chimica Acta</i> <b>1986</b> , <i>69</i> (2), 283-7.		

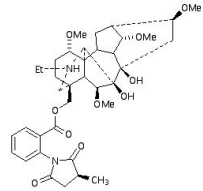
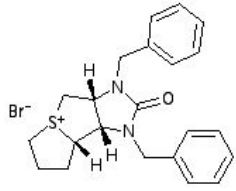
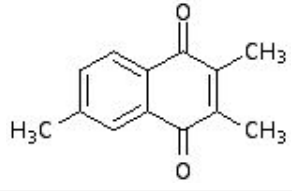
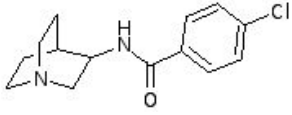
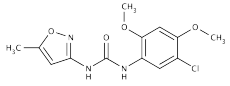
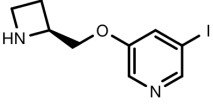
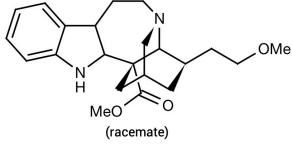
**Nicotincs: Miscellaneous**

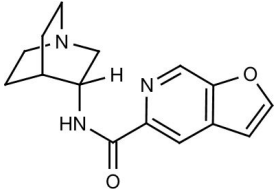
<b>Catalog number :</b> MEDD-031	<b>CASRN :</b> 820231-95-6	
<b>Name :</b> Sazetidine hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> ClN <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 333.26 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective α<sub>4</sub>β<sub>2</sub> nicotinic receptor agonist.</i>		
<b>References :</b> Xiao, et al., <i>Mol Pharmacol</i> , <b>2006</b> , <i>70</i> , 1454. Zwart, et al., <i>Mol Pharmacol</i> , <b>2008</b> , <i>73</i> 1843.		

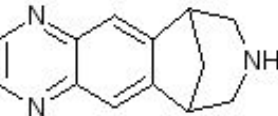
<b>Catalog number :</b> NICT-005	<b>CASRN :</b> 100752-88-3	
<b>Name :</b> Isoarecolone hydrochloride		
<b>Mol. formula :</b> C <sub>8</sub> H <sub>14</sub> ClNO		<b>FW :</b> 175.66 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nicotinic receptor agonist.</i>		
<b>References :</b> Mirza, NR; <i>et al. Eur J Pharmacol</i> <b>1996</b> , <i>295</i> , 207-10. Shoaib, M <i>Psychopharmacology (Berl)</i> <b>2006</b> , <i>188</i> , 252-7.		

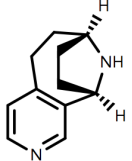
<b>Catalog number :</b> NICT-006	<b>CASRN :</b> 29734-68-7	
<b>Name :</b> Dihydro-β-erythroidine hydrobromide		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>22</sub> BrNO <sub>3</sub>		<b>FW :</b> 356.26 <b>DEA schedule :</b> 0
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 3175.		

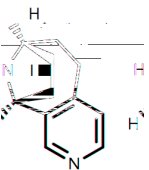


<b>Catalog number :</b> NICT-007	<b>CASRN :</b> 21019-30-7	
<b>Name :</b> Methyllycaconitine citrate; MLA		
<b>Mol. formula :</b> C <sub>43</sub> H <sub>58</sub> N <sub>2</sub> O <sub>17</sub>		<b>FW :</b> 928.98 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nicotinic receptor antagonist.</i>		
<b>References :</b> Ward, JM; <i>et al. FEBS Lett</i> <b>1990</b> , <i>270</i> , 45-8. Alkondon, M; <i>et al. Mol Pharmacol</i> <b>1992</b> , <i>41</i> , 802-8.		
<b>Catalog number :</b> NICT-013		
<b>Name :</b> Trimethaphan bromide		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>25</sub> BrN <sub>2</sub> O <sub>5</sub>		<b>FW :</b> 445.43 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nicotinic antagonist; antihypertensive.</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 9707.		
<b>Catalog number :</b> NICT-014		
<b>Name :</b> 2,3,6-Trimethyl-1,4-naphthoquinone		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>12</sub> O <sub>2</sub>		<b>FW :</b> 200.24 <b>DEA schedule :</b> 0
<b>Catalog number :</b> NICT-016	<b>CASRN :</b> 123464-89-1	
<b>Name :</b> PNU-282987		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>10</sub> Cl <sub>2</sub> N <sub>2</sub> O		<b>FW :</b> 310.21 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective α7 nicotinic acetylcholine receptor agonist.</i>		
<b>References :</b> Hajos, M; <i>et al. J Pharmacol Exp Ther</i> <b>2005</b> , <i>312</i> , 1213-22.		
<b>Catalog number :</b> NICT-017	<b>CASRN :</b> 501925-31-1	
<b>Name :</b> PNU-120596		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>14</sub> ClN <sub>3</sub> O <sub>4</sub>		<b>FW :</b> 311.72
<b>Notes :</b> <i>Positive allosteric modulator of the α7 neuronal nicotinic acetylcholine receptor.</i>		
<b>References :</b> Hurst, RS; <i>et al. J Neurosci</i> <b>2005</b> , <i>25</i> , 4396-405.		
<b>Catalog number :</b> NICT-019	<b>CASRN :</b> 1217837-17-6	
<b>Name :</b> 5-I-A85380		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>11</sub> IN <sub>2</sub> O • 2 HCl		<b>FW :</b> 363.02 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>α4β2-selective nAChR ligand</i>		
<b>References :</b> Koren, <i>et al., J Med Chem</i> <b>1998</b> , <i>41</i> , 3690. Muhkin, <i>et al., Mol Pharmacol</i> <b>2000</b> , <i>57</i> , 642.		
<b>Catalog number :</b> NOCD-012	<b>CASRN :</b> 188125-42-0	
<b>Name :</b> (±)-18-Methoxycoronaridine; (±)-18-MC		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>30</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 370.49 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective α3β4 nicotinic antagonist.</i>		
<b>References :</b> Glick, SD; <i>et al. Brain Res</i> <b>1996</b> , <i>719</i> , 29-35.		

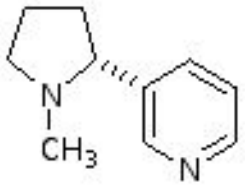
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<b>Name :</b> PHA-543613	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>19</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub>	<b>FW :</b> 344.24 <b>DEA schedule :</b> 0
<b>Notes :</b> $\alpha 7$ nicotinic acetylcholine receptor agonist	
<b>References :</b> Wishka, DG; <i>et al. J Med Chem</i> 2006, 49, 4425-36.	
	

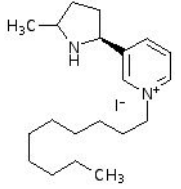
<b>Catalog number :</b> NOCD-046	<b>CASRN :</b> 249296-44-4
<b>Name :</b> Varenicline dihydrochloride	
<b>Mol. formula :</b> C <sub>13</sub> H <sub>15</sub> Cl <sub>2</sub> N <sub>3</sub>	<b>FW :</b> 288.685 <b>DEA schedule :</b> 0
<b>Notes :</b> $\alpha 4\beta 2$ nicotinic receptor partial agonist.	
<b>References :</b> Coe, JW; <i>et al. J Med Chem</i> 2005, 48, 3474-7.	
	

<b>Catalog number :</b> NOCD-122	<b>CASRN :</b> 895518-76-0
<b>Name :</b> (-)-PHT dihydrochloride	
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> Cl <sub>2</sub> N <sub>2</sub>	<b>FW :</b> 247.17 <b>DEA schedule :</b> 0
<b>Notes :</b> Conformationally rigid nicotine analog.	
<b>References :</b> Kanne, DB, <i>et al., J. Am. Chem. Soc.</i> 1986, 108, 7864. Carroll FI, <i>et al., J. Med. Chem.</i> 2006, 49, 3244.	
	

<b>Catalog number :</b> NOCD-142	<b>CASRN :</b> 895518-77-1
<b>Name :</b> (+)-PHT dihydrochloride	
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> Cl <sub>2</sub> N <sub>2</sub>	<b>FW :</b> 247.17 <b>DEA schedule :</b> 0
<b>Notes :</b> Conformationally rigid nicotine analog.	
<b>References :</b> Kanne, DB, <i>et al., J. Am. Chem. Soc.</i> 1986, 108, 7864. Carroll FI, <i>et al., J. Med. Chem.</i> 2006, 49, 3244.	
	

**Nicotinics: Nicotine Class**

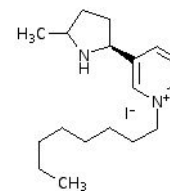
<b>Catalog number :</b> NICT-008	<b>CASRN :</b> 163804-20-4
<b>Name :</b> (+)-Nicotine (+)-di- <i>p</i> -toluoyl- <i>D</i> -tartrate	
<b>Mol. formula :</b> C <sub>30</sub> H <sub>32</sub> N <sub>2</sub> O <sub>8</sub>	<b>FW :</b> 548.58 <b>DEA schedule :</b> 0
	

<b>Catalog number :</b> NICT-009	
<b>Name :</b> (-)-N-Decylnicotinium iodide (-)-di- <i>p</i> -toluoyl- <i>L</i> -tartrate; NDNI	
<b>Mol. formula :</b> C <sub>40</sub> H <sub>53</sub> I N <sub>2</sub> O <sub>8</sub>	<b>FW :</b> 816.77 <b>DEA schedule :</b> 0
	

Catalog number : NICT-010

Name : (-)-N-Octylnicotinium iodide (-)-di-*p*-toluoyl-L-tartrate; NONIMol. formula :  $C_{38}H_{49}IN_2O_8$ 

FW : 788.72    DEA schedule : 0

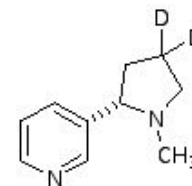


Catalog number : NICT-015

CASRN : 121949-85-7

Name : (-)-Nicotine-4,4-d<sub>2</sub> (-)-di-*p*-toluoyl-L-tartrateMol. formula :  $C_{30}H_{32}N_2O_8$ 

FW : 550.60    DEA schedule : 0

References : Jacob, PJ *Labelled Comp Radiopharm* 1988, 25, 1117-28.

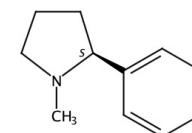
Catalog number : NICT-020

CASRN : 65-31-6

Name : (-)-Nicotine ditartrate

Mol. formula :  $C_{18}H_{26}N_2O_{12}$ 

FW : 462.41    DEA schedule : 0





★ = custom synthesis

**Opioids: Benzodiazole Class**

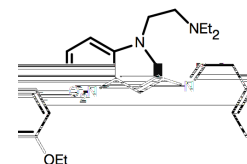
Catalog number : 9624-001

CASRN : 911-65-9

Name : Etonitazene hydrochloride

Mol. formula :  $C_{22}H_{29}ClN_4O_3$ 

FW : 432.95    DEA schedule : 1

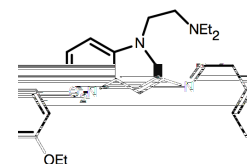
Notes : *Narcotic analgesic; potent  $\mu$  opiate receptor agonist*References : *Merck Index*, 14th ed., Monograph 3883.

Catalog number : 9624-002

Name : Etonitazene

Mol. formula :  $C_{22}H_{28}N_4O_3$ 

FW : 396.48    DEA schedule : 1

Notes : *Narcotic analgesic; potent  $\mu$  opiate receptor agonist*References : *Merck Index*, 14th ed., Monograph 3883.

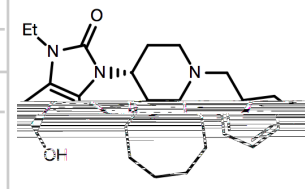
Catalog number : NOCD-057

CASRN : 361343-48-8

Name : (+)-J-113397

Mol. formula :  $C_{24}H_{38}ClN_3O_2$ 

FW : 454.05    DEA schedule : 0

Notes : *Nociceptin/orphanin FQ (NOP) receptor antagonist.*References : Kawamoto H; *et al. Tetrahedron* **2001**, *57*, 981-986.  
Kawamoto H; *et al. J Med Chem* **1999**, *42*, 5061-3.**Opioids: Caged**

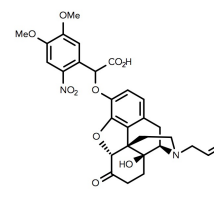
Catalog number : 9652-071

CASRN : n/a

Name : CNV-NLX

Mol. formula :  $C_{29}H_{30}N_2O_{10}$ 

FW : 566.56    DEA schedule : 0

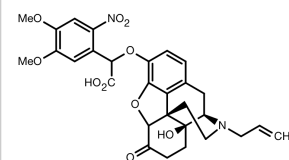
Notes : *Photoactivatable opioid antagonist.*References : M. R. Banghart, J. T. Williams, R. C. Shah, L. D. Lavis, B. L. Sabatini, *Mol Pharmacol.* **84**, 687-695 (2013); M. R. Bruchas, B. L. Roth, *Trends in Pharmacological Sciences.* **37**, 279-289 (2016).

Catalog number : MPSP-120

Name : (Carboxynitroveratryl)naloxone; CNV-NLX

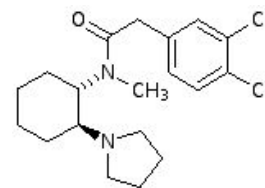
Mol. formula :  $C_{29}H_{30}N_2O_{10}$ 

FW : 566.47    DEA schedule : 0

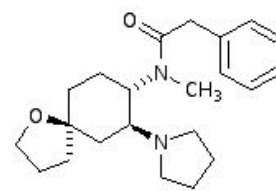
Notes : *Photoactivatable analog of naloxone.*References : Banghart, MR; *et al., Mol Pharmacol* **2013**, *84*, 687-95.

**Opioids: Cyclohexyldiamine Class**

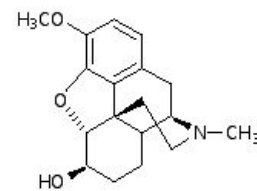
Catalog number : NOCD-064		CASRN : 67198-13-4
Name : U50,488H		
Mol. formula : $C_{20}H_{30}Cl_2N_2O_4S$	FW : 465.44	DEA schedule : 0
Notes : <i>Kappa</i> -opioid receptor agonist.		
References : Vonvoigtlander, PF; <i>et al. J Pharmacol Exp Ther</i> <b>1983</b> , <i>224</i> , 7-12. Negus, SS; <i>et al. J Pharmacol Exp Ther</i> <b>1997</b> , <i>282</i> , 44-55. Taylor, CC; <i>et al. J Pharmacol Exp Ther</i> <b>1997</b> , <i>280</i> , 416-21.		



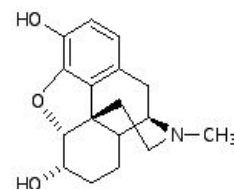
Catalog number : NOCD-065		CASRN : 96744-75-1
Name : U69,593		
Mol. formula : $C_{22}H_{32}N_2O_2$	FW : 356.51	DEA schedule : 0
Notes : Selective <i>κ</i> -opioid agonist.		
References : Lahti, RA; <i>et al. Eur J Pharmacol</i> <b>1985</b> , <i>109</i> , 281-4. Puig-Ramos, A; <i>et al. Behav Neurosci</i> <b>2008</b> , <i>122</i> , 151-60.		

**Opioids: Dihydromorphine Class**

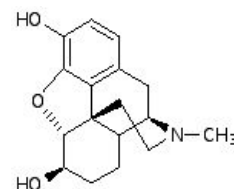
Catalog number : 9120-002		
Name : Dihydroisocodeine		
Mol. formula : $C_{18}H_{23}NO_3$	FW : 301.39	DEA schedule : 2
References : <i>Merck Index</i> , 14th ed., Monograph 3176.		



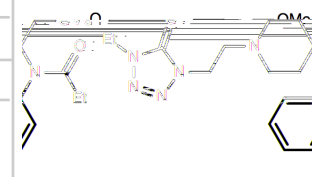
Catalog number : 9145-001		CASRN : 509-60-4
Name : Dihydromorphine		
Mol. formula : $C_{17}H_{21}NO_3$	FW : 287.36	DEA schedule : 1
References : <i>Merck Index</i> , 14th ed., Monograph 3177.		

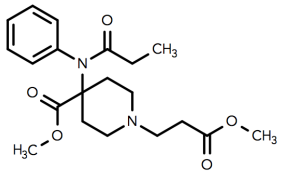
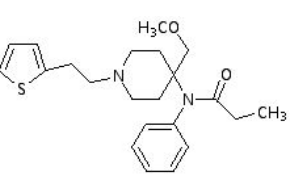
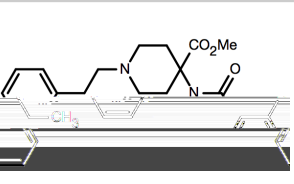
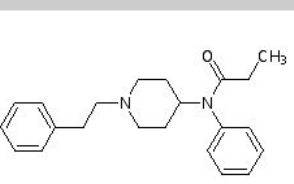
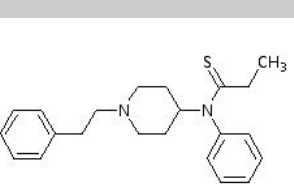
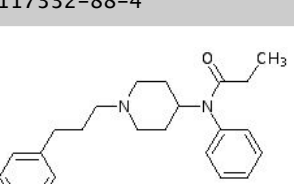
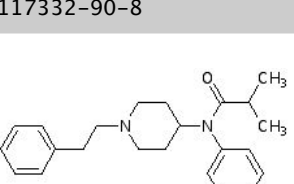


Catalog number : 9145-002		
Name : Dihydroisomorphine		
Mol. formula : $C_{17}H_{21}NO_3$	FW : 287.36	DEA schedule : 1

**Opioids: Fentanyl Class**

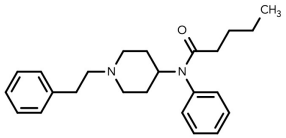
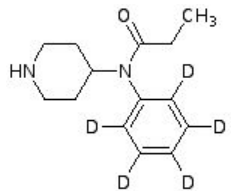
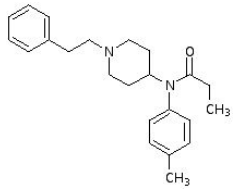
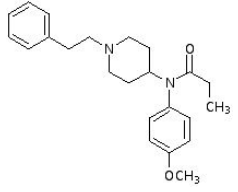
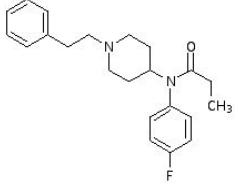
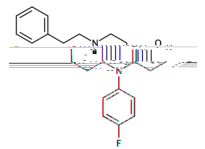
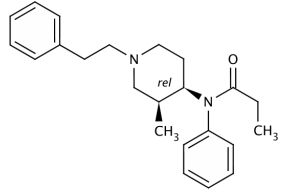
Catalog number : 9737-001		CASRN : 69049-06-5
Name : Alfentanil hydrochloride		
Mol. formula : $C_{21}H_{33}ClN_6O_3$	FW : 452.98	DEA schedule : 2
Notes : Analgesic, <i>μ</i> -Opioid agonist		
References : <i>Merck Index</i> , 14th ed., Monograph 236.		



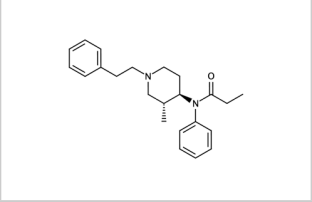
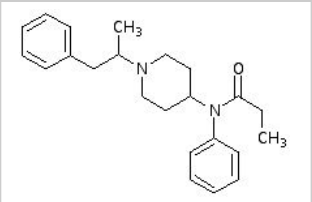
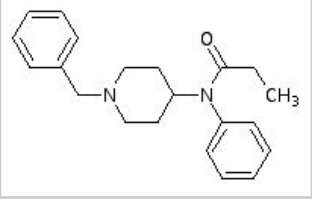
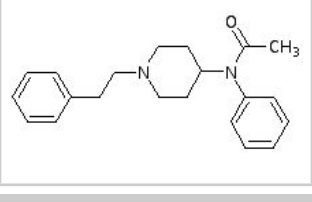
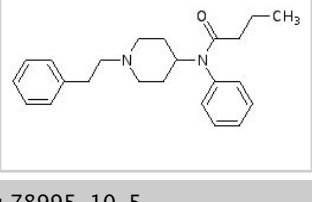
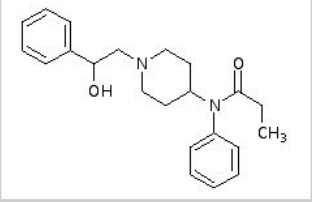
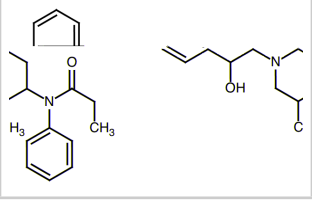
<b>Catalog number :</b> 9739-001	<b>CASRN :</b> 132539-07-2
<b>Name :</b> Remifentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>29</sub> ClN <sub>2</sub> O <sub>5</sub>	<b>FW :</b> 412.91 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Short-acting fentanyl analog.</i>	
<b>References :</b> Malaquin, S., <i>et al.</i> , <i>Tet Letters</i> (2010) 51, 2983.	
<b>Catalog number :</b> 9740-001	<b>CASRN :</b> 60561-17-3
<b>Name :</b> Sufentanyl citrate	
<b>Mol. formula :</b> C <sub>28</sub> H <sub>38</sub> N <sub>2</sub> O <sub>9</sub> S	<b>FW :</b> 578.67 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Analgesic, μ-Opioid agonist</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 8887. Brine, GA; <i>et al. J Heterocyclic Chem</i> 1989, 26, 677.	
<b>Catalog number :</b> 9743-001	<b>CASRN :</b> 59708-52-0 (parent)
<b>Name :</b> Carfentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>24</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 430.98 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Analgesic, μ-Opioid agonist.</i> <i>(See Notes 1 &amp; 2 in Section B before ordering.)</i>	
<b>Catalog number :</b> 9801-001	<b>CASRN :</b> 1443-54-5
<b>Name :</b> Fentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> ClN <sub>2</sub> O	<b>FW :</b> 372.92 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Analgesic, μ-Opioid agonist</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 4001. Brine, GA; <i>et al. J Heterocyclic Chem</i> 1989, 26, 677.	
<b>Catalog number :</b> 9801-002	<b>CASRN :</b> 117332-87-3
<b>Name :</b> N-[1-(2-Phenylethyl)-4-piperidyl]-N-phenylthiopropanamide hydrochloride	
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> ClN <sub>2</sub> S	<b>FW :</b> 389.01 <b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> 1989, 26, 677.	
<b>Catalog number :</b> 9801-003	<b>CASRN :</b> 117332-88-4
<b>Name :</b> N-[1-(3-Phenylpropyl)-4-piperidyl]-N-phenylpropanamide hydrochloride	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O	<b>FW :</b> 386.96 <b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> 1989, 26, 677.	
<b>Catalog number :</b> 9801-006	<b>CASRN :</b> 117332-90-8
<b>Name :</b> Isopropylfentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O	<b>FW :</b> 386.96 <b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> 1989, 26, 677.	

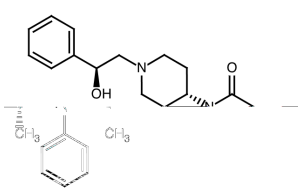
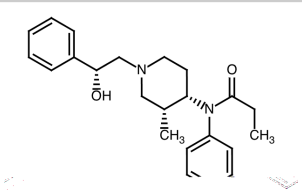
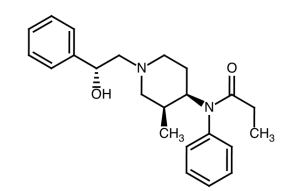
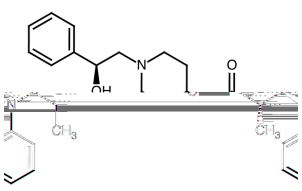
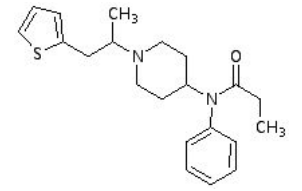
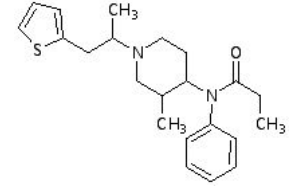
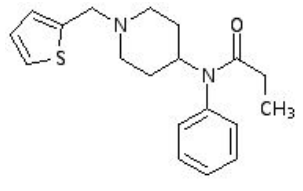
## 6 - Opioids

★ = custom synthesis

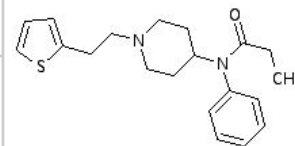
<b>Catalog number :</b> 9801-007	<b>CASRN :</b> 117332-91-9	
<b>Name :</b> Valerylfentanyl hydrochloride		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>33</sub> ClN <sub>2</sub> O		<b>FW :</b> 400.99 <b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; et al. <i>J Heterocyclic Chem</i> <b>1989</b> , 26, 677.		
<b>Catalog number :</b> 9801-008	<b>CASRN :</b> 1211527-23-9	
<b>Name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]N-4-Piperidyl-N-phenylpropanamide		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O		<b>FW :</b> 237.36 <b>DEA schedule :</b> 2
<b>Notes :</b> Precursor for the synthesis of mass-labeled fentanyl analogs.		
<b>Catalog number :</b> 9801-010	<b>CASRN :</b> 1807-12-1	
<b>Name :</b> p-Tolylfentanyl hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O		<b>FW :</b> 386.97 <b>DEA schedule :</b> 2
<b>Catalog number :</b> 9801-011	<b>CASRN :</b> 23609-41-8	
<b>Name :</b> p-Anisoylfentanyl hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 402.97 <b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; et al. <i>J Heterocyclic Chem</i> <b>1989</b> , 26, 677.		
<b>Catalog number :</b> 9812-001	<b>CASRN :</b> 90736-23-5	
<b>Name :</b> p-Fluorofentanyl hydrochloride		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>28</sub> ClFN <sub>2</sub> O		<b>FW :</b> 390.93 <b>DEA schedule :</b> 1
<b>Catalog number :</b> 9812-011	<b>CASRN :</b> 117332-92-0	
<b>Name :</b> p-Fluorofentanyl HCl		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>27</sub> FN <sub>2</sub> O • HCl		<b>FW :</b> 390.927 <b>DEA schedule :</b> 1
<b>References :</b> Henderson GL, <i>Journal of forensic sciences</i> , <b>1988</b> , 33(2), 569-575.		
<b>Catalog number :</b> 9813-001	<b>CASRN :</b> 42045-86-3	
<b>Name :</b> (±)-cis-3-Methylfentanyl hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O		<b>FW :</b> 386.96 <b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist		
<b>References :</b> Brine, GA; et al. <i>J Heterocyclic Chem</i> <b>1989</b> , 26, 677.		



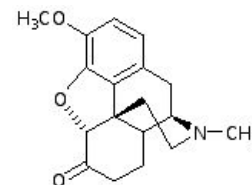
<b>Catalog number :</b> 9813-002		<b>CASRN :</b> 42045-87-4	
<b>Name :</b> (±)- <i>trans</i> -3-Methylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O		<b>FW :</b> 386.96	<b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist			
			
<b>Catalog number :</b> 9814-001		<b>CASRN :</b> 79704-88-4	
<b>Name :</b> α-Methylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O		<b>FW :</b> 386.97	<b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist			
<b>References :</b> Ayres, WA; <i>et al. J Psychoactive Drugs</i> <b>1981</b> , 13, 91-3. Kram, TC; <i>et al. Anal Chem</i> <b>1981</b> , 53, 1379A-1386A. Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677.			
			
<b>Catalog number :</b> 9818-002		<b>CASRN :</b> 1474-02-8	
<b>Name :</b> Benzylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> ClN <sub>2</sub> O		<b>FW :</b> 358.91	<b>DEA schedule :</b> 0
<b>Notes :</b> Pharmacologically inert fentanyl analog.			
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677. <i>Federal Register</i> <b>2010</b> , 75(124), 37300.			
			
<b>Catalog number :</b> 9821-001		<b>CASRN :</b> 117332-89-5	
<b>Name :</b> Acetylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> ClN <sub>2</sub> O		<b>FW :</b> 358.91	<b>DEA schedule :</b> 2
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677.			
			
<b>Catalog number :</b> 9822-001		<b>CASRN :</b> 1443-52-3	
<b>Name :</b> Butyrylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O		<b>FW :</b> 386.97	<b>DEA schedule :</b> 1
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677.			
			
<b>Catalog number :</b> 9830-001		<b>CASRN :</b> 78995-10-5	
<b>Name :</b> β-Hydroxyfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> ClN <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 388.93	<b>DEA schedule :</b> 1
<b>Notes :</b> μ-Opioid agonist			
			
<b>Catalog number :</b> 9831-001		<b>CASRN :</b> 78995-14-9	
<b>Name :</b> (±)- <i>cis</i> -β-Hydroxy-3-methylfentanyl hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 402.97	<b>DEA schedule :</b> 1
<b>Notes :</b> μ-Opioid agonist			
<b>References :</b> Brine, GA; <i>et al. J Med Chem</i> <b>1995</b> , 38, 1547-57.			
			

<b>Catalog number :</b> 9831-002	<b>CASRN :</b> 78995-14-9
<b>Name :</b> (+)-(βS,3R,4S)-β-Hydroxy-3-methylfentanyl hydrochloride; Ohmefentanyl; F 7302	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 402.97 <b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist	
<b>References :</b> Xu, H; Chen J; Chi, ZQ <i>Sci Sin [B]</i> <b>1985</b> , 28, 504-11. Brine, GA; <i>et al. J Med Chem</i> <b>1995</b> , 38, 1547-57.	
<b>Catalog number :</b> 9831-003	<b>CASRN :</b> 155168-97-1
<b>Name :</b> (-)-(βR,3R,4S)-β-Hydroxy-3-methylfentanyl oxalate	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>32</sub> N <sub>2</sub> O <sub>6</sub>	<b>FW :</b> 456.55 <b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Med Chem</i> <b>1995</b> , 38, 1547-57.	
<b>Catalog number :</b> 9831-004	<b>CASRN :</b> 143553-99-5
<b>Name :</b> (-)-(βR,3S,4R)-β-Hydroxy-3-methylfentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 402.97 <b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Med Chem</i> <b>1995</b> , 38, 1547-57.	
<b>Catalog number :</b> 9831-005	<b>CASRN :</b> 155169-00-9
<b>Name :</b> (+)-(βS,3S,4R)-β-Hydroxy-3-methylfentanyl oxalate	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>32</sub> N <sub>2</sub> O <sub>6</sub>	<b>FW :</b> 456.55 <b>DEA schedule :</b> 1
<b>Notes :</b> Analgesic, μ-Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Med Chem</i> <b>1995</b> , 38, 1547-57.	
<b>Catalog number :</b> 9832-001	<b>CASRN :</b> 117332-94-2
<b>Name :</b> α-Methylthiofentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> ClN <sub>2</sub> OS	<b>FW :</b> 392.99 <b>DEA schedule :</b> 1
<b>Notes :</b> μ-Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677.	
<b>Catalog number :</b> 9833-001	<b>CASRN :</b> n/a
<b>Name :</b> 3-Methylthiofentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> ClN <sub>2</sub> OS	<b>FW :</b> 392.99 <b>DEA schedule :</b> 1
<b>Notes :</b> μ-Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677.	
<b>Catalog number :</b> 9834-001	<b>CASRN :</b> 117332-93-1
<b>Name :</b> Thenylfentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>25</sub> ClN <sub>2</sub> OS	<b>FW :</b> 364.94 <b>DEA schedule :</b> 0
<b>Notes :</b> Pharmacologically inert fentanyl analog.	
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , 26, 677. <i>Federal Register</i> <b>2010</b> , 75(124), 37300.	

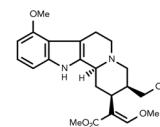
<b>Catalog number :</b> 9835-001	<b>CASRN :</b> 79278-88-9
<b>Name :</b> Thiofentanyl hydrochloride	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>27</sub> ClN <sub>2</sub> OS	<b>FW :</b> 378.97 <b>DEA schedule :</b> 1
<b>Notes :</b> <i>μ</i> -Opioid agonist	
<b>References :</b> Brine, GA; <i>et al. J Heterocyclic Chem</i> <b>1989</b> , <i>26</i> , 677.	

**Opioids: Hydrocodone Class**

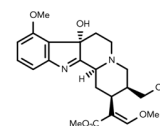
<b>Catalog number :</b> 9193-002	<b>CASRN :</b> 34195-34-1
<b>Name :</b> Dihydrocodeinone tartrate; hydrocodone bitartrate	
<b>Mol. formula :</b> C <sub>22</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 449.46 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Narcotic analgesic; antitussive</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 4785.	

**Opioids: Kratom alkaloid**

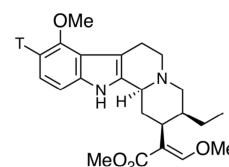
<b>Catalog number :</b> NOCD-163	<b>new</b>	<b>CASRN :</b> 4098-40-2
<b>Name :</b> Mitragynine		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 398.50	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Partial mu-opioid agonist, weak delta- and kappa-opioid antagonist.</i>		
<b>References :</b> Hassan, Z., <i>et al., Neuroscience and Biobehavioral Reviews</i> , <b>2013</b> , <i>37</i> , 138-151. Hemby, S.E., <i>et al., Addiction Biology</i> , <b>2018</b> , DOI: doi:10.1111/adb.12639.		



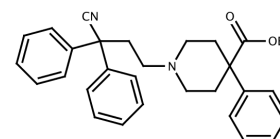
<b>Catalog number :</b> NOCD-164	<b>new</b>	<b>CASRN :</b> 174418-82-7
<b>Name :</b> 7-Hydroxymitragynine		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>5</sub>	<b>FW :</b> 414.50	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Partial mu-opioid agonist (5-fold greater affinity than mitragynine), weak delta- and kappa-opioid antagonist.</i>		
<b>References :</b> Hassan, Z., <i>et al., Neuroscience and Biobehavioral Reviews</i> , <b>2013</b> , <i>37</i> , 138-151. Hemby, S.E., <i>et al., Addiction Biology</i> , <b>2018</b> , DOI: doi:10.1111/adb.12639.		



<b>Catalog number :</b> NOCD-168	<b>new</b>	<b>CASRN :</b> n/a
<b>Name :</b> [ <sup>3</sup> H]Mitragynine		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 398.5	<b>DEA schedule :</b> 0

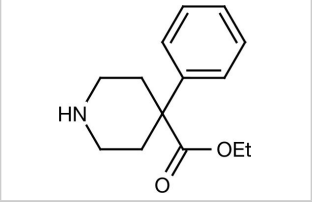
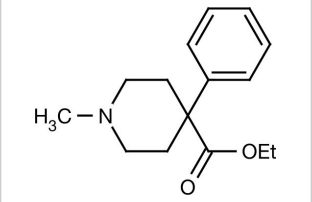
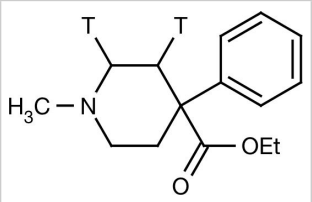
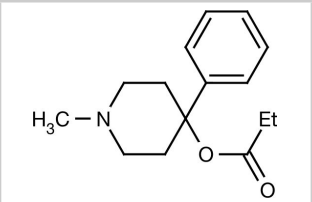
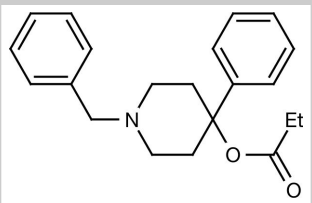
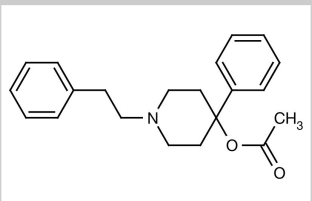
**Opioids: Meperidine Class**

<b>Catalog number :</b> 9170-001	<b>CASRN :</b> 3810-80-8
<b>Name :</b> Diphenoxylate hydrochloride	
<b>Mol. formula :</b> C <sub>30</sub> H <sub>33</sub> ClN <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 489.04 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Antiperistaltic; antidiarrheal</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 3313.	



## 6 – Opioids

★ = custom synthesis

<b>Catalog number :</b> 9230-001	<b>CASRN :</b> 24465-45-0
<b>Name :</b> Normeperidine hydrochloride	
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> ClNO <sub>2</sub>	
<b>Catalog number :</b> 9230-002	<b>CASRN :</b> 50-13-5
<b>Name :</b> Meperidine hydrochloride; Demerol hydrochloride	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> ClNO <sub>2</sub>	
<b>Notes :</b> <i>Narcotic analgesic; sedative; anesthetic</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5849.	
<b>Catalog number :</b> 9230-003	<b>CASRN :</b> 50-13-5 ★
<b>Name :</b> [2,3- <sup>3</sup> H <sub>2</sub> ]Meperidine hydrochloride	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> ClNO <sub>2</sub>	
<b>Catalog number :</b> 9661-001	<b>CASRN :</b> 13147-09-6
<b>Name :</b> 1-Methyl-4-phenyl-4-propionoxypiperidine hydrochloride; Desmethyprodine; MPPP HCl	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> ClNO <sub>2</sub>	
<b>Notes :</b> <i>μ-Opioid agonist; narcotic analgesic</i>	
<b>References :</b> Johannessen, JN; Markey <i>SP Drug Alcohol Depend</i> <b>1984</b> , <i>13</i> , 367-74.	
<b>Catalog number :</b> 9661-002	<b>CASRN :</b> 63916-24-5
<b>Name :</b> 1-Benzyl-4-phenyl-4-propionoxypiperidine hydrochloride	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> ClNO <sub>2</sub>	
<b>Catalog number :</b> 9663-001	<b>CASRN :</b> 94-30-4
<b>Name :</b> 1-(2-Phenylethyl)-4-phenyl-4-acetoxypiperidine hydrochloride; PEPAP HCl	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> ClNO <sub>2</sub>	
<b>References :</b> Pritzker, D; <i>et al. J Clin Psychopharmacol</i> <b>2002</b> , <i>22</i> , 330-2.	

**Opioids: Metazocine Class**

Catalog number : 9240-002

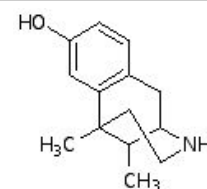
CASRN : 16808-63-2

Name : (±)-Normetazocine

Mol. formula : C<sub>14</sub>H<sub>19</sub>NO

FW : 217.31

DEA schedule : 0



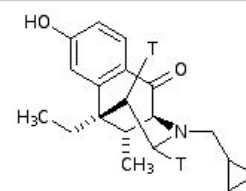
Catalog number : 9240-003

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Name : [11,12-<sup>3</sup>H<sub>2</sub>]-(-)-EthylketazocineMol. formula : C<sub>19</sub>H<sub>25</sub>NO<sub>2</sub>

FW : 303.42

DEA schedule : 1



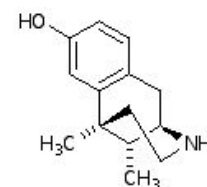
Catalog number : 9240-004

CASRN : 16603-67-1

Name : (-)-*cis*-NormetazocineMol. formula : C<sub>14</sub>H<sub>19</sub>NO

FW : 217.31

DEA schedule : 0

References : Carroll, FI; *et al. J Med Chem* 1992, 35, 2812-8.

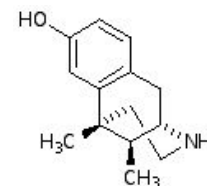
Catalog number : 9240-005

CASRN : 16670-83-0

Name : (+)-*cis*-NormetazocineMol. formula : C<sub>14</sub>H<sub>19</sub>NO

FW : 217.31

DEA schedule : 0

References : Carroll, FI; *et al. J Med Chem* 1992, 35, 2812-8.

Catalog number : 9240-007

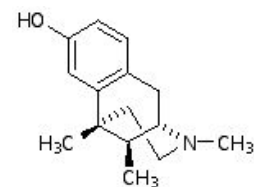
CASRN : 133005-40-0

Name : (+)-Metazocine fumarate

Mol. formula : C<sub>34</sub>H<sub>46</sub>N<sub>2</sub>O<sub>6</sub>

FW : 578.75

DEA schedule : 2

References : Carroll, FI; *et al. J Med Chem* 1992, 35, 2812-8.

Catalog number : 9240-008

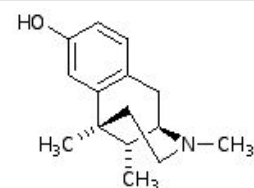
CASRN : 133005-39-7

Name : (-)-Metazocine fumarate

Mol. formula : C<sub>34</sub>H<sub>46</sub>N<sub>2</sub>O<sub>6</sub>

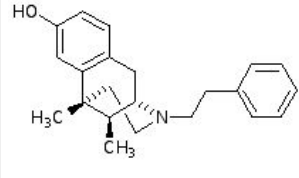
FW : 578.75

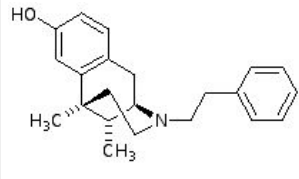
DEA schedule : 2

References : Carroll, FI; *et al. J Med Chem* 1992, 35, 2812-8.

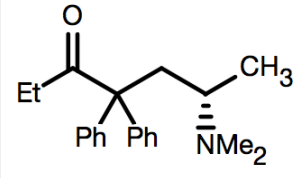
<b>Catalog number :</b> 9240-010		<b>CASRN :</b> 3572-80-3		
<b>Name :</b> (±)-Cyclazocine				
<b>Mol. formula :</b> C <sub>18</sub> H <sub>25</sub> NO	<b>FW :</b> 271.39	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Narcotic antagonist</i>				
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2705. Carroll, FI; <i>et al. J Med Chem</i> <b>1992</b> , <i>35</i> , 2812-8.				
<b>Catalog number :</b> 9240-011		<b>CASRN :</b> 3572-80-3		
<b>Name :</b> (-)-Cyclazocine				
<b>Mol. formula :</b> C <sub>18</sub> H <sub>25</sub> NO	<b>FW :</b> 271.39	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Narcotic antagonist</i>				
<b>Catalog number :</b> 9240-012		<b>CASRN :</b> 3572-80-3		
<b>Name :</b> (+)-Cyclazocine				
<b>Mol. formula :</b> C <sub>18</sub> H <sub>25</sub> NO	<b>FW :</b> 271.39	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Narcotic antagonist</i>				
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1992</b> , <i>35</i> , 2812-8.				
<b>Catalog number :</b> 9240-016		<b>CASRN :</b> 7619-35-4		
<b>Name :</b> (±)-N-Allylnormetazocine hydrochloride; (±)-NANM; (±)-SKF-10,047; Alazocine				
<b>Mol. formula :</b> C <sub>17</sub> H <sub>24</sub> ClNO	<b>FW :</b> 293.85	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Sigma receptor standard ligand.</i>				
<b>Catalog number :</b> 9240-017		<b>CASRN :</b> 133005-41-1		
<b>Name :</b> (+)-N-Allylnormetazocine hydrochloride, (+)-NANM; (+)-SKF-10,047				
<b>Mol. formula :</b> C <sub>17</sub> H <sub>24</sub> ClNO	<b>FW :</b> 293.85	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Sigma receptor standard ligand.</i>				
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1992</b> , <i>35</i> , 2812-8.				
<b>Catalog number :</b> 9240-018		<b>CASRN :</b> 14198-28-8		
<b>Name :</b> (-)-N-Allylnormetazocine hydrochloride, (-)-NANM; (-)-SKF-10,047				
<b>Mol. formula :</b> C <sub>17</sub> H <sub>24</sub> ClNO	<b>FW :</b> 293.85	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Sigma receptor standard ligand.</i>				
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1992</b> , <i>35</i> , 2812-8.				
<b>Catalog number :</b> 9240-019		<b>CASRN :</b> 14198-28-8		
<b>Name :</b> (-)-[17,18- <sup>3</sup> H]N-Allylnormetazocine				
<b>Mol. formula :</b> C <sub>17</sub> H <sub>23</sub> NO	<b>FW :</b> 261.39	<b>DEA schedule :</b> 0		
<b>Notes :</b> <i>Sigma receptor standard ligand.</i>				

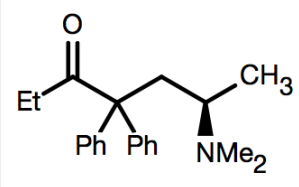
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<b>Name :</b> (±)-Bremazocine hydrochloride		
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<b>Notes :</b> <i>Kappa</i> -opioid receptor standard ligand.		
<b>References :</b> Dortch-Carnes, J; Potter, DE <i>CNS Drug Rev</i> 2005, 11, 195-212.		
<b>Catalog number :</b> 9240-030		
<b>Name :</b> (+)-Bremazocine hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>30</sub> ClNO <sub>2</sub>		<b>FW :</b> 351.92 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Kappa</i> -opioid receptor standard ligand.		
<b>References :</b> Dortch-Carnes, J; Potter, DE <i>CNS Drug Rev</i> 2005, 11, 195-212.		
<b>Catalog number :</b> 9240-031	<b>CASRN :</b> 75684-07-0	
<b>Name :</b> (-)-Bremazocine hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>30</sub> ClNO <sub>2</sub>		<b>FW :</b> 351.92 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Kappa</i> -opioid receptor standard ligand.		
<b>References :</b> Dortch-Carnes, J; Potter, DE <i>CNS Drug Rev</i> 2005, 11, 195-212.		
<b>Catalog number :</b> 9240-040	★	
<b>Name :</b> (+)-[17,18- <sup>3</sup> H <sub>2</sub> ]N-Allylnormetazocine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>23</sub> NO		<b>FW :</b> 261.39 <b>DEA schedule :</b> 0
<b>Notes :</b>		
<b>References :</b>		
<b>Catalog number :</b> 9709-002	<b>CASRN :</b> 124819-26-7	
<b>Name :</b> (+)-Pentazocine succinate		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>33</sub> NO <sub>5</sub>		<b>FW :</b> 403.52 <b>DEA schedule :</b> 4
<b>Notes :</b> <i>Sigma</i> receptor standard ligand.		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 7121. Brogden, RN; Speight, TM; Avery, GS <i>Drugs</i> 1973, 5, 6-91. Carroll, FI; et al. <i>J Med Chem</i> 1992, 35, 2812-8.		
<b>Catalog number :</b> 9709-003	<b>CASRN :</b> 124819-25-6	
<b>Name :</b> (-)-Pentazocine succinate		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>33</sub> NO <sub>5</sub>		<b>FW :</b> 403.52 <b>DEA schedule :</b> 4
<b>Notes :</b> <i>Sigma</i> receptor standard ligand.		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 7121. Brogden, RN; Speight, TM; Avery, GS <i>Drugs</i> 1973, 5, 6-91. Carroll, FI; et al. <i>J Med Chem</i> 1992, 35, 2812-8.		
<b>Catalog number :</b> 9715-001	<b>CASRN :</b> 1239-04-9	
<b>Name :</b> (±)-Phenazocine hydrobromide		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>28</sub> BrNO		<b>FW :</b> 402.39 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Narcotic analgesic, sigma</i> receptor ligand		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 7218.		

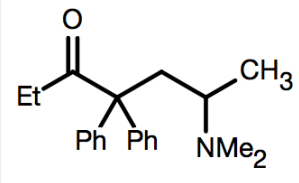
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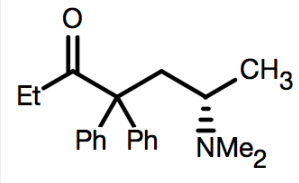
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<b>Mol. formula :</b> C <sub>22</sub> H <sub>28</sub> BrNO	<b>FW :</b> 402.39	<b>DEA schedule :</b> 2
		

**Opioids: Methadone Class**

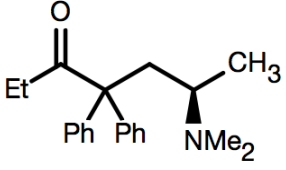
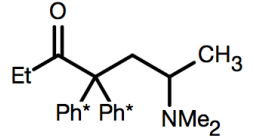
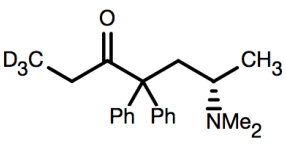
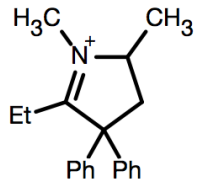
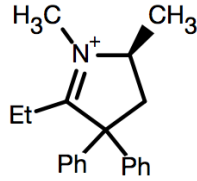
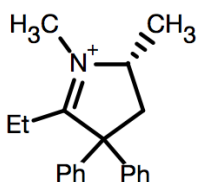
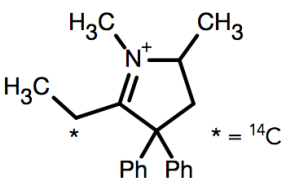
<b>Catalog number :</b> 9250-001		<b>CASRN :</b> 5653-80-5
<b>Name :</b> (+)-(S)-Methadone		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO	<b>FW :</b> 309.46	<b>DEA schedule :</b> 2
		

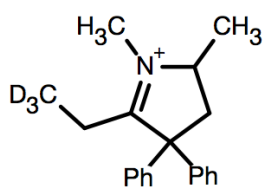
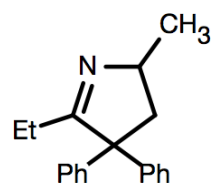
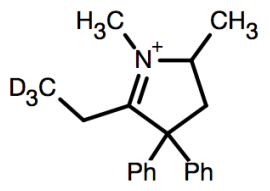
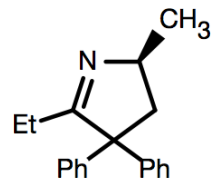
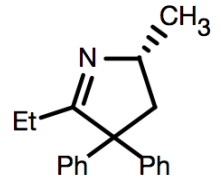
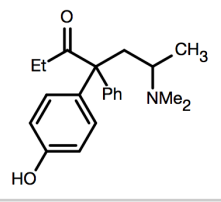
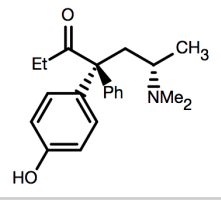
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<b>Name :</b> (-)-(R)-Methadone		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO	<b>FW :</b> 309.46	<b>DEA schedule :</b> 2
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5944.		

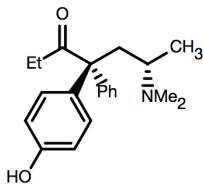
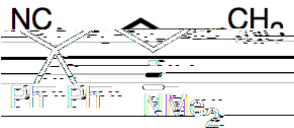
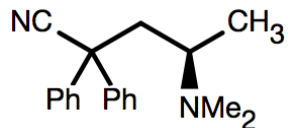
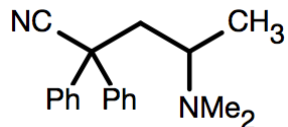
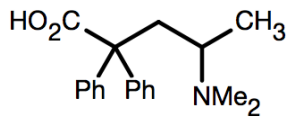
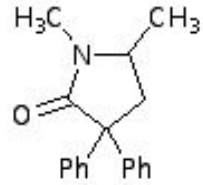
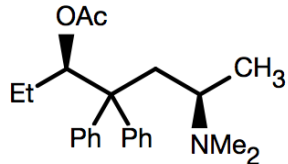
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<b>Name :</b> (±)-Methadone hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO	<b>FW :</b> 345.92	<b>DEA schedule :</b> 2
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5944.		

<b>Catalog number :</b> 9250-004		<b>CASRN :</b> 5653-80-5
<b>Name :</b> (+)-(S)-Methadone hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO	<b>FW :</b> 345.92	<b>DEA schedule :</b> 2
		

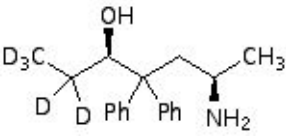
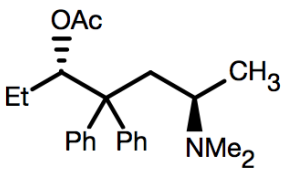
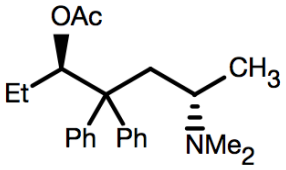
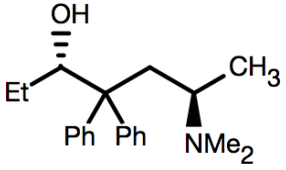
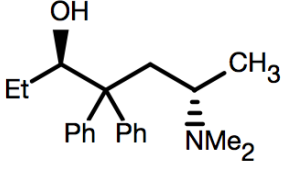
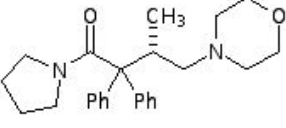
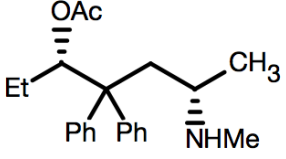


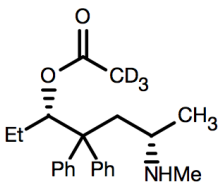
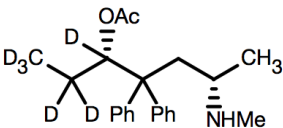
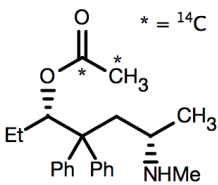
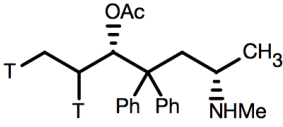
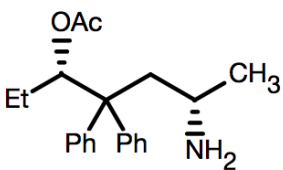
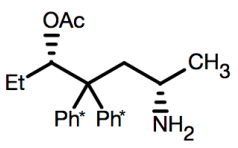
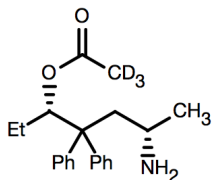
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<b>Name :</b> (-)-((R)-Methadone hydrochloride				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO		<b>FW :</b> 345.92	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9250-006 ★				
<b>Name :</b> (±)-[o,o'- <sup>3</sup> H <sub>2</sub> (n)]Methadone				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO		<b>FW :</b> 313.46	<b>DEA schedule :</b> 2	 Ph* = o-T-phenyl
<b>Catalog number :</b> 9250-011				
<b>Name :</b> (+)-[1,1,1- <sup>2</sup> H <sub>3</sub> ]Methadone hydrochloride				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO		<b>FW :</b> 348.92	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9250-021				
<b>Name :</b> (±)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate				
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub>		<b>FW :</b> 377.86	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-024				
<b>Name :</b> (-)-(S)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate				
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub>		<b>FW :</b> 377.88	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-025				
<b>Name :</b> (+)-(R)-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate				
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub>		<b>FW :</b> 377.88	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-026				
<b>Name :</b> [1'- <sup>14</sup> C]-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate				
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> ClNO <sub>4</sub>		<b>FW :</b> 536.01	<b>DEA schedule :</b> 0	 * = <sup>14</sup> C

<b>Catalog number :</b> 9250-027			
<b>Name :</b> [Ethyl-2',2',2'- <sup>2</sup> H <sub>3</sub> ]-1,5-Dimethyl-3,3-diphenyl-2-ethylpyrrolinium perchlorate	<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> ClNO <sub>4</sub>	<b>FW :</b> 384.91 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-031			
<b>Name :</b> (±)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride	<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClN	<b>FW :</b> 299.85 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-032			
<b>Name :</b> [Ethyl-2',2',2'- <sup>2</sup> H <sub>3</sub> ]-3,3-Diphenyl-2-ethyl-5-methyl-1-pyrroline hydrochloride	<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> ClN	<b>FW :</b> 302.86 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-033			
<b>Name :</b> (-)-(S)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride	<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClN	<b>FW :</b> 299.85 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-034			
<b>Name :</b> (+)-(R)-2-Ethyl-5-methyl-3,3-diphenyl-1-pyrroline hydrochloride	<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClN	<b>FW :</b> 299.85 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9250-060			
<b>Name :</b> (4 <i>RS</i> ,6 <i>RS</i> )- <i>p</i> -Hydroxymethadone hydrochloride	<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.91 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9250-061			
<b>Name :</b> (4 <i>R</i> ,6 <i>S</i> )- <i>p</i> -Hydroxymethadone hydrochloride	<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.91 <b>DEA schedule :</b> 2	

<b>Catalog number :</b> 9250-062		
<b>Name :</b> (4S,6S)- <i>p</i> -Hydroxymethadone hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.91	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9254-001		
<b>Name :</b> (+)-(S)-4-Dimethylamino-2,2-diphenylvaleronitrile		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> N <sub>2</sub>	<b>FW :</b> 278.40	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9254-002		
<b>Name :</b> (-)-(R)-4-Dimethylamino-2,2-diphenylvaleronitrile		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> N <sub>2</sub>	<b>FW :</b> 278.40	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9254-003		
<b>Name :</b> (±)-4-Dimethylamino-2,2-diphenylvaleronitrile		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> N <sub>2</sub>	<b>FW :</b> 278.40	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9254-004		
<b>Name :</b> (±)-4-Dimethylamino-2,2-diphenylvaleric acid		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>23</sub> NO <sub>2</sub>	<b>FW :</b> 297.40	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9254-005		
<b>Name :</b> (±)-1,5-Dimethyl-3,3-diphenyl-2-pyrrolidone		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>19</sub> NO	<b>FW :</b> 265.36	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9603-003		
<b>Name :</b> (+)-α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 1
		

<b>Catalog number :</b> 9605-001			
<b>Name :</b> (-)- $\alpha$ -Methadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> ClNO	<b>FW :</b> 347.93	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9605-002			<b>CASRN :</b> 17199-54-1
<b>Name :</b> (+)- $\alpha$ -Methadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> ClNO	<b>FW :</b> 347.93	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9605-003			★
<b>Name :</b> (-)-[ <i>o,o'</i> - <sup>3</sup> H <sub>2</sub> (n)] $\alpha$ -Methadol hydrochloride			<p>Ph* = <i>o</i>-T-Phenyl</p>
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> NO	<b>FW :</b> 347.93	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9605-010			
<b>Name :</b> [1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ] $\alpha$ -Methadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> ClNO	<b>FW :</b> 347.93	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9605-020			
<b>Name :</b> (-)- $\alpha$ -Normethadol perchlorate			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> ClNO <sub>5</sub>	<b>FW :</b> 397.90	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Org Chem</i> 1976, 41, 3521-4.			
<b>Catalog number :</b> 9605-021			
<b>Name :</b> [1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ] $\alpha$ -Normethadol perchlorate			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> ClNO <sub>5</sub>	<b>FW :</b> 397.90	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Org Chem</i> 1976, 41, 3521-4.			
<b>Catalog number :</b> 9605-030			
<b>Name :</b> (-)- $\alpha$ -N,N-Dinormethadol maleate			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>29</sub> NO <sub>5</sub>	<b>FW :</b> 399.49	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; <i>et al. J Org Chem</i> 1976, 41, 3521-4.			

<b>Catalog number :</b> 9605-031			
<b>Name :</b> [1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ]α-N,N-Dinormethadol maleate			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>25</sub> NO	<b>FW :</b> 399.49	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9607-001			
<b>Name :</b> (-)-β-Acetylmethadol hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9607-002			
<b>Name :</b> (+)-β-Acetylmethadol hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9609-001		<b>CASRN :</b> 17199-55-2	
<b>Name :</b> (-)-β-Methadol			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> NO	<b>FW :</b> 311.47	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9609-002			
<b>Name :</b> (+)-β-Methadol			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> NO	<b>FW :</b> 311.47	<b>DEA schedule :</b> 1	
<b>References :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> 1969, 12, 839-44.			
<b>Catalog number :</b> 9613-001			
<b>Name :</b> Dextromoramide tartrate			
<b>Mol. formula :</b> C <sub>25</sub> H <sub>32</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 542.60	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-001			
<b>Name :</b> (-)-α-Acetylnormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>30</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94	<b>DEA schedule :</b> 1	
<b>References :</b> Carroll, FI; et al. <i>J Org Chem</i> 1976, 41, 3521-4.			

<b>Catalog number :</b> 9633-003			
<b>Name :</b> (-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-Acetylnormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>30</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-004			
<b>Name :</b> (-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetylnormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>22</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-005			
<b>Name :</b> (-)-[Acetyl- <sup>14</sup> C <sub>2</sub> ]α-Acetylnormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>30</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-006			★
<b>Name :</b> (-)-[1,2- <sup>3</sup> H]α-Acetylnormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-010			
<b>Name :</b> (-)-α-Acetyl-N,N-dinormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.92	<b>DEA schedule :</b> 0	
<b>References :</b> Carroll, FI; <i>et al. J Org Chem</i> 1976, 41, 3521-4.			
<b>Catalog number :</b> 9633-011			★
<b>Name :</b> (-)-[o,o'- <sup>3</sup> H <sub>2</sub> (n)]α-Acetyl-N,N-dinormethadol hydrochloride			 <p>Ph* = o-T-phenyl</p>
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9633-012			
<b>Name :</b> (-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.92	<b>DEA schedule :</b> 0	

<b>Catalog number :</b> 9633-014		
<b>Name :</b> (-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.92	<b>DEA schedule :</b> 0
<b>Catalog number :</b> 9633-015		★
<b>Name :</b> (-)-[1,2- <sup>3</sup> H <sub>2</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.9-2	<b>DEA schedule :</b> 0
<b>Catalog number :</b> 9633-040		
<b>Name :</b> (-)-α-N-Acetylnormethadol		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> NO <sub>2</sub>	<b>FW :</b> 339.48	<b>DEA schedule :</b> 1
<b>Catalog number :</b> 9633-050		
<b>Name :</b> (-)-α-N-Acetyl-N,N-dinormethadol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO <sub>2</sub>	<b>FW :</b> 325.45	<b>DEA schedule :</b> 1
<b>References :</b> Carroll, FI; <i>et al. J Org Chem</i> 1976, 41, 3521-4.		
<b>Catalog number :</b> 9648-001		<b>CASRN :</b> 43033-72-3
<b>Name :</b> (-)-α-Acetylmethadol hydrochloride; LAAM hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 2
<b>Catalog number :</b> 9648-010		
<b>Name :</b> (-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>34</sub> ClNO	<b>FW :</b> 389.97	<b>DEA schedule :</b> 2
<b>Catalog number :</b> 9648-011		
<b>Name :</b> (-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-acetylmethadol hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97	<b>DEA schedule :</b> 2

Catalog number : 9648-012			★
Name : (-)-[1,2- <sup>3</sup> H <sub>2</sub> ]α-Acetylmethadol			
Mol. formula : C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	FW : 353.50	DEA schedule : 2	

Catalog number : 9648-013			
Name : (-)-[2- <sup>14</sup> C]-α-Acetylmethadol hydrochloride			
Mol. formula : C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	FW : 353.50	DEA schedule : 2	

Catalog number : 9648-014			
Name : (-)-[Acetyl- <sup>14</sup> C]-α-Acetylmethadol			
Mol. formula : C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	FW : 353.50	DEA schedule : 2	

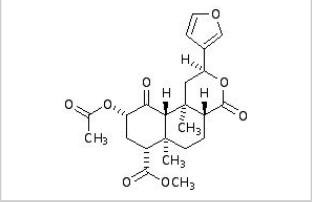
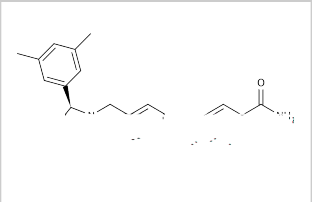
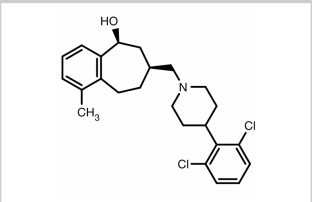
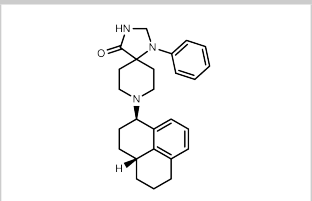
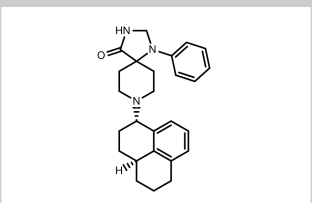
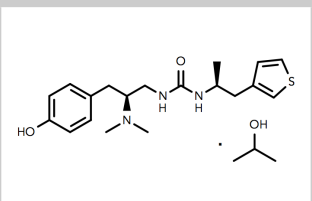
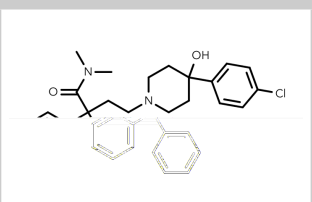
Catalog number : 9648-015			
Name : (-)-[N- <sup>14</sup> CH <sub>3</sub> ]-α-Acetylmethadol hydrochloride			
Mol. formula : C <sub>23</sub> H <sub>31</sub> NO <sub>2</sub>	FW : 353.50	DEA schedule : 2	

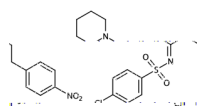
Catalog number : 9648-016			
Name : (-)-[2,2,3- <sup>2</sup> H <sub>3</sub> ]α-Acetylmethadol hydrochloride			
Mol. formula : C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	FW : 353.50	DEA schedule : 2	

### Opioids: Miscellaneous

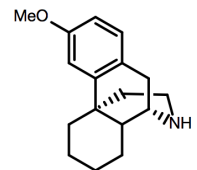
Catalog number : NOCD-055		CASRN : 156727-74-1
Name : SNC 80		
Mol. formula : C <sub>28</sub> H <sub>39</sub> N <sub>3</sub> O <sub>2</sub>	FW : 449.64	DEA schedule : 0
Notes : <i>Highly-selective δ-opioid receptor agonist.</i>		
References : Do Carmo, GP; et al. <i>Eur J Pharmacol</i> 2006, 547, 92-100.		



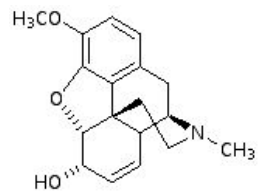
<b>Catalog number :</b> NOCD-099		<b>CASRN :</b> 83729-01-5	
<b>Name :</b> Salvinorin A			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>28</sub> O <sub>8</sub>		<b>FW :</b> 432.47 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Hallucinogen; κ-opioid agonist.</i>			
<b>References :</b> Roth, BL; <i>et al. Proc Natl Acad Sci USA</i> <b>2002</b> , <i>99</i> , 11934-9.			
			
<b>Catalog number :</b> NOCD-107		<b>CASRN :</b> 1174130-61-0	
<b>Name :</b> LY-2456302			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>28</sub> ClFN <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 454.97 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>κ-Opioid antagonist.</i>			
<b>References :</b> Peters, MF; <i>et al., Eur J Pharmacol</i> <b>2011</b> , <i>661</i> , 27-34.			
			
<b>Catalog number :</b> NOCD-134		<b>CASRN :</b> 371980-98-2	
<b>Name :</b> SB-612111 hydrochloride			
<b>Mol. formula :</b> C <sub>24</sub> H <sub>29</sub> Cl <sub>2</sub> NO • HCl		<b>FW :</b> 454.87 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Nociceptin/orphanin FQ (NOP) receptor antagonist.</i>			
<b>References :</b> Zaratin, PF; <i>et al., J Pharmacol Exp Ther</i> <b>2004</b> , <i>308</i> , 454-61.			
			
<b>Catalog number :</b> NOCD-138		<b>CASRN :</b> 309254-79-3	
<b>Name :</b> Ro 64-6198 hydrochloride			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>31</sub> N <sub>3</sub> O • HCl		<b>FW :</b> 438.02 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Potent nociceptin opioid receptor agonist.</i>			
<b>References :</b> Wichmann, J; <i>et al., Eur. J. Med. Chem.</i> <b>2000</b> , <i>35</i> , 839-851.			
			
<b>Catalog number :</b> NOCD-139		<b>CASRN :</b> 309254-79-3	
<b>Name :</b> Ro 64-6198 analog [ (+)-isomer of Ro 64-6198 ]			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>31</sub> N <sub>3</sub> O • HCl		<b>FW :</b> 438.02 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Nociceptin opioid receptor agonist. 32-fold less potent (+)-enantiomer of Ro 64-6198.</i>			
<b>References :</b> Jenck, F; <i>et al., Proc Nat Acad Sci USA</i> <b>2000</b> , <i>97</i> , 4938-4943.			
			
<b>Catalog number :</b> NOCD-145		<b>CASRN :</b> 1997387-43-5	
<b>Name :</b> PZM21			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>35</sub> N <sub>3</sub> O <sub>3</sub> S		<b>FW :</b> 421.60 <b>DEA schedule :</b> 0	
<b>References :</b> Manglik, A; <i>et al., Nature</i> , <b>2016</b> , <i>537</i> , 185.			
			
<b>Catalog number :</b> NOCD-148		<b>CASRN :</b> 34552-83-5	
<b>Name :</b> Loperamide hydrochloride			
<b>Mol. formula :</b> C <sub>29</sub> H <sub>34</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>2</sub>		<b>FW :</b> 513.51 <b>DEA schedule :</b> 0	
			

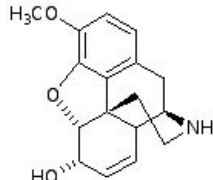
<b>Catalog number :</b> NOCD-159 <span style="background-color: yellow;">new</span>	<b>CASRN :</b> 93101-02-1
<b>Name :</b> W-18	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>20</sub> ClN <sub>3</sub> O <sub>4</sub> S	<b>FW :</b> 421.9 <b>DEA schedule :</b> 0
<b>References :</b> Huang Xi-Ping, <i>et al.</i> , "Fentanyl-related designer drugs W-18 and W-15 lack appreciable opioid activity <i>in vitro</i> and <i>in vivo</i> ," <i>JCI Insight</i> , 2017, 2(22), doi:10.1172/jci.insight.97222.	
	

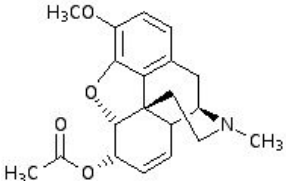
**Opioids: Morphinan Class**

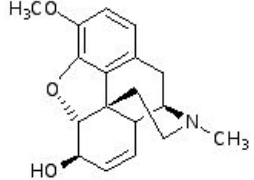
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<b>Name :</b> (+)-3-Methoxymorphinan hydrochloride	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>23</sub> ClNO	<b>FW :</b> 293.84 <b>DEA schedule :</b> 0
	

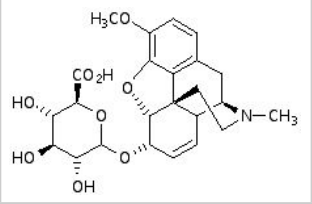
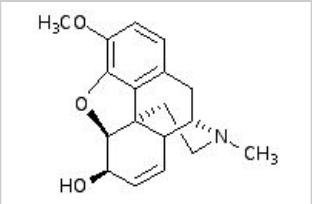
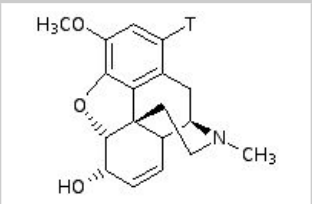
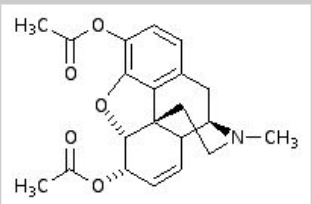
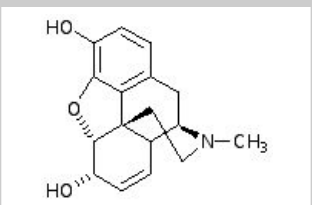
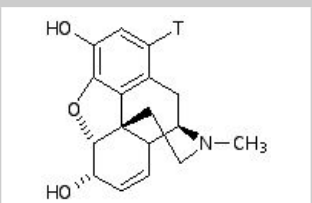
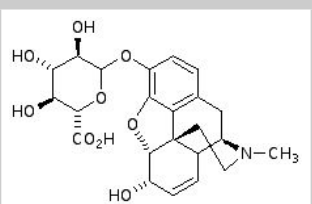
**Opioids: Morphine Class**

<b>Catalog number :</b> 9050-001	<b>CASRN :</b> 1422-07-7
<b>Name :</b> Codeine hydrochloride	
<b>Mol. formula :</b> C <sub>18</sub> H <sub>22</sub> ClNO <sub>3</sub>	<b>FW :</b> 335.84 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Narcotic analgesic; antitussive</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2455.	
	

<b>Catalog number :</b> 9050-002	
<b>Name :</b> Norcodeine hydrochloride	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>20</sub> ClNO <sub>3</sub>	<b>FW :</b> 321.81 <b>DEA schedule :</b> 2
	

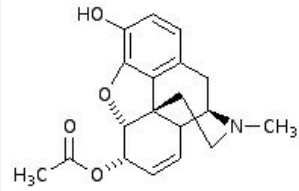
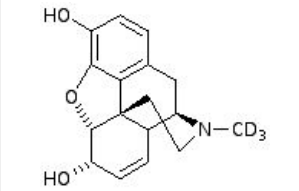
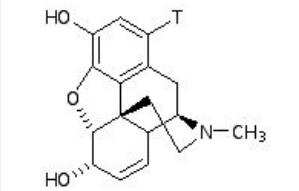
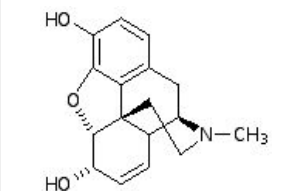
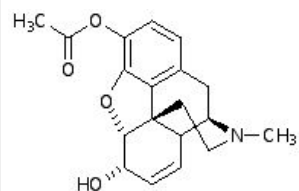
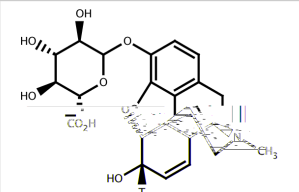
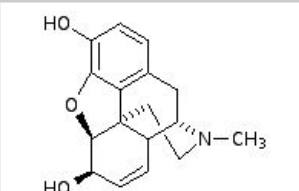
<b>Catalog number :</b> 9050-004	<b>CASRN :</b> 6703-27-1
<b>Name :</b> 6-Acetylcodeine	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO	<b>FW :</b> 341.41 <b>DEA schedule :</b> 2
	

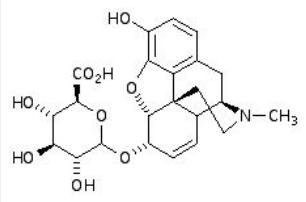
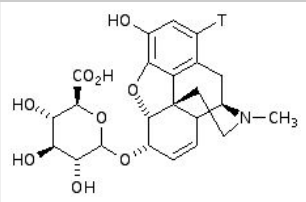
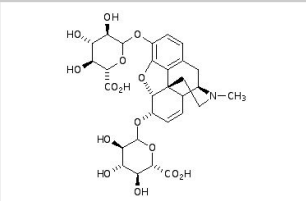
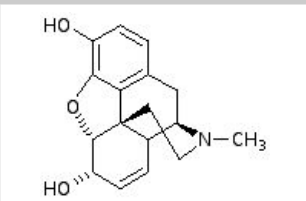
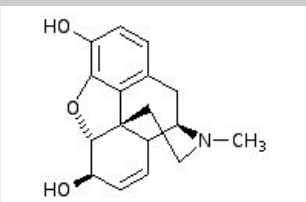
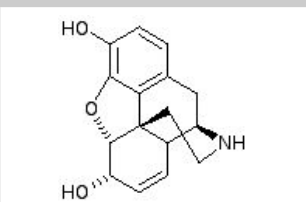
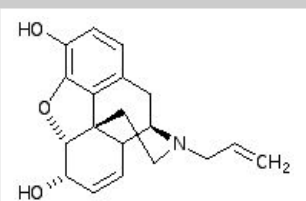
<b>Catalog number :</b> 9050-006	<b>CASRN :</b> 509-64-8
<b>Name :</b> Isocodeine	
<b>Mol. formula :</b> C <sub>18</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 299.35 <b>DEA schedule :</b> 2
	

<b>Catalog number :</b> 9050-009		
<b>Name :</b> Codeine-6-β-D-glucuronide		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>29</sub> NO <sub>9</sub>	<b>FW :</b> 475.50 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9050-010		<b>CASRN :</b> 76-57-3
<b>Name :</b> (+)-Codeine base		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 299.36 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9050-011		★
<b>Name :</b> [1- <sup>3</sup> H]Codeine		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 301.37 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9200-001		<b>CASRN :</b> 1502-95-0
<b>Name :</b> 3,6-Diacetylmorphine hydrochloride; Diamorphine HCl		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>24</sub> ClNO <sub>5</sub>	<b>FW :</b> 405.88 <b>DEA schedule :</b> 1	
<b>Notes :</b> <i>Narcotic analgesic</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2968.		
<b>Catalog number :</b> 9300-001		<b>CASRN :</b> 6211-15-0
<b>Name :</b> (-)-Morphine sulfate pentahydrate		
<b>Mol. formula :</b> C <sub>34</sub> H <sub>40</sub> N <sub>2</sub> O <sub>10</sub> S	<b>FW :</b> 758.83 <b>DEA schedule :</b> 2	
<b>Notes :</b> <i>Narcotic analgesic; prototypic μ opioid receptor agonist; sedative</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6276.		
<b>Catalog number :</b> 9300-002		★
<b>Name :</b> Tritium-labeled Morphine sulfate		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 475.50 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-003		
<b>Name :</b> Morphine-3-β-D-glucuronide		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 461.44 <b>DEA schedule :</b> 2	
<b>References :</b> Berrang, B; <i>et al. Synthetic Communications</i> 1975, 5, 231-236.		

## 6 - Opioids

★ = custom synthesis

<b>Catalog number :</b> 9300-004		
<b>Name :</b> 6-Acetylmorphine		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 327.38 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-005		<b>CASRN :</b> 67293-88-3
<b>Name :</b> [N-C <sup>2</sup> H <sub>3</sub> ]Morphine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 288.36 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-006		<b>CASRN :</b> 80573-75-7
<b>Name :</b> [1- <sup>3</sup> H(n)]Morphine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 287.35 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-007		<b>CASRN :</b> 57-27-2
<b>Name :</b> Morphine base		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 285.33 <b>DEA schedule :</b> 2	
<b>Notes :</b> <i>Narcotic analgesic; antitussive; antiperistaltic</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6276.		
<b>Catalog number :</b> 9300-010		
<b>Name :</b> 3-Acetylmorphine sulfamate		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>24</sub> N <sub>2</sub> O <sub>7</sub> S	<b>FW :</b> 424.47 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-011		★
<b>Name :</b> Morphine-(6- <sup>3</sup> H)-3-glucuronide		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 463.47 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-012		<b>CASRN :</b> 65165-99-3
<b>Name :</b> (+)-Morphine base		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 285.35 <b>DEA schedule :</b> 2	

<b>Catalog number :</b> 9300-013		<b>CASRN :</b> 20290-10-2	
<b>Name :</b> Morphine-6-β-D-glucuronide			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 461.47	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-014		<b>CASRN :</b> 20290-10-2	
<b>Name :</b> [1- <sup>3</sup> H]Morphine-6-glucuronide			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 463.47	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-015		<b>CASRN :</b> 20290-10-2	
<b>Name :</b> Morphine-3,6-di-β-D-glucuronide, monolithium salt			
<b>Mol. formula :</b> C <sub>29</sub> H <sub>34</sub> LiNO <sub>15</sub>	<b>FW :</b> 643.52	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-016		<b>CASRN :</b> 52-26-6	
<b>Name :</b> Morphine hydrochloride monohydrate			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>20</sub> ClNO <sub>3</sub>	<b>FW :</b> 321.81	<b>DEA schedule :</b> 2	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6276.			
<b>Catalog number :</b> 9300-020		<b>CASRN :</b> 143-70-4	
<b>Name :</b> α-Isomorphine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 285.35	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9313-001		<b>CASRN :</b> 3372-02-9	
<b>Name :</b> Normorphine hydrochloride			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>18</sub> ClNO <sub>3</sub>	<b>FW :</b> 307.78	<b>DEA schedule :</b> 1	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6711.			
<b>Catalog number :</b> 9400-001		<b>CASRN :</b> 62-67-9	
<b>Name :</b> Nalorphine hydrochloride			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClNO <sub>3</sub>	<b>FW :</b> 347.84	<b>DEA schedule :</b> 3	
<b>Notes :</b> <i>Narcotic antagonist</i>			
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6361.			

**Opioids: Orvinol Class**

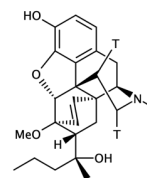
Catalog number : 9056-001

Name : [15,16-<sup>3</sup>H<sub>2</sub>]EtorphineMol. formula : C<sub>25</sub>H<sub>33</sub>NO<sub>4</sub>

FW : 429.58

DEA schedule : 1

Notes : (See Notes 1 &amp; 2 in Section B before ordering.)



Catalog number : 9058-001

CASRN : 14357-78-9

Name : Diprenorphine hydrochloride

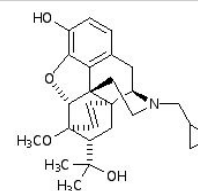
Mol. formula : C<sub>26</sub>H<sub>36</sub>ClNO<sub>4</sub>

FW : 462.04

DEA schedule : 2

Notes : (See Notes 1 &amp; 2 in Section B before ordering.)

References : Merck Index, 14th ed., Monograph 3340.



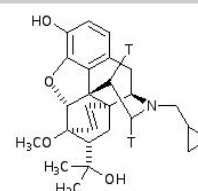
Catalog number : 9058-002

Name : [15,16-<sup>3</sup>H<sub>2</sub>]DiprenorphineMol. formula : C<sub>26</sub>H<sub>36</sub>ClNO<sub>4</sub>

FW : 429.58

DEA schedule : 2

Notes : (See Notes 1 &amp; 2 in Section B before ordering.)



Catalog number : 9058-003

CASRN : 14357-78-9

Name : Diprenorphine

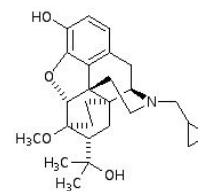
Mol. formula : C<sub>26</sub>H<sub>35</sub>NO<sub>4</sub>

FW : 425.54

DEA schedule : 2

Notes : (See Notes 1 &amp; 2 in Section B before ordering.)

References : Merck Index, 14th ed., Monograph 3340.



Catalog number : 9059-001

CASRN : 14521-96-1

Name : Etorphine hydrochloride

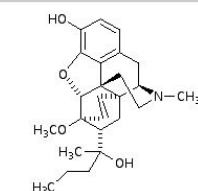
Mol. formula : C<sub>25</sub>H<sub>34</sub>ClNO<sub>4</sub>

FW : 448.01

DEA schedule : 2

Notes : (See Notes 1 &amp; 2 in Section B before ordering.)

References : Merck Index, 14th ed., Monograph 3888.



Catalog number : 9064-001

CASRN : 53152-21-9

Name : Buprenorphine hydrochloride

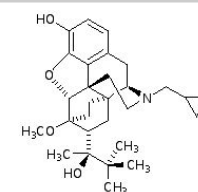
Mol. formula : C<sub>29</sub>H<sub>42</sub>ClNO<sub>4</sub>

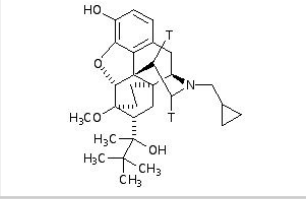
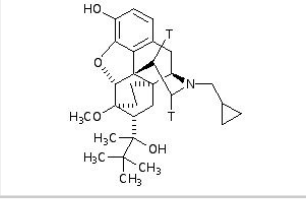
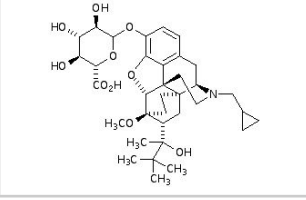
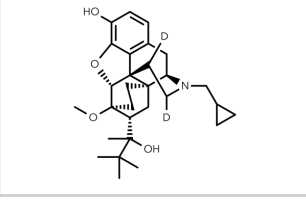
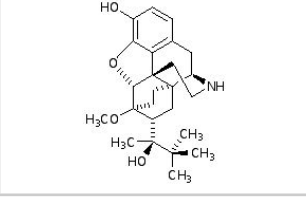
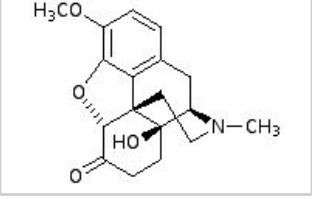
FW : 504.11

DEA schedule : 3

Notes : Narcotic Analgesic

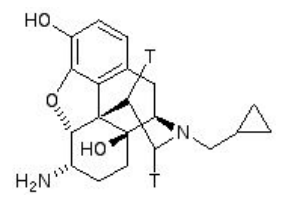
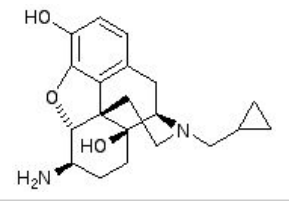
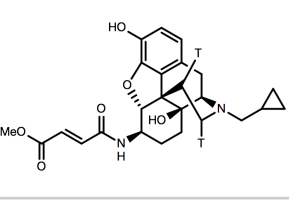
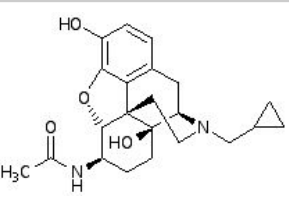
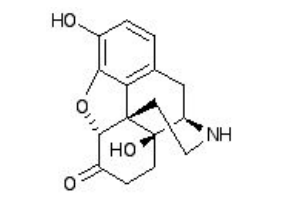
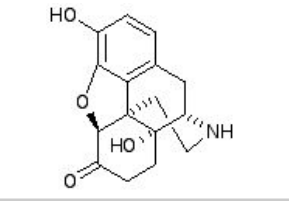
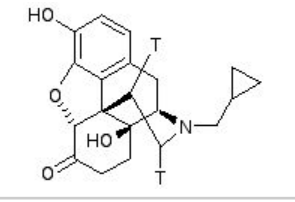
References : Robinson, SE CNS Drug Rev 2002, 8, 377-90.



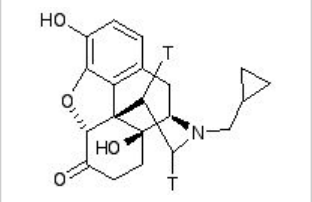
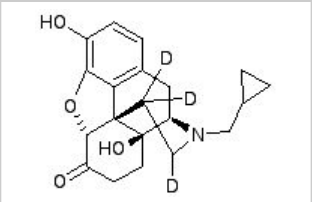
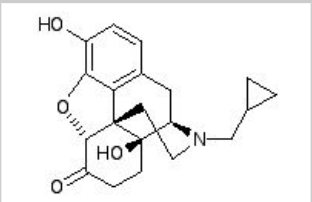
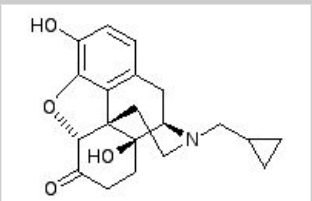
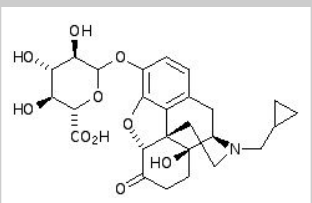
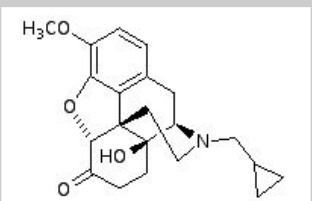
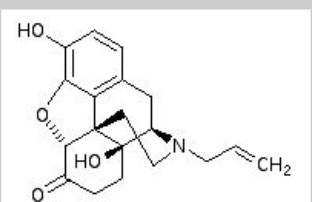
<b>Catalog number :</b> 9064-002	<b>CASRN :</b> 161772-95-8	★
<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Buprenorphine hydrochloride		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>38</sub> ClNO <sub>4</sub>	<b>FW :</b> 508.11	<b>DEA schedule :</b> 5
<b>Notes :</b> <i>Narcotic analgesic (tritium-labeled).</i>		
<b>References :</b> Robinson, SE <i>CNS Drug Rev</i> 2002, 8, 377-90.		
		
<b>Catalog number :</b> 9064-003	<b>CASRN :</b> 161772-95-8	★
<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Buprenorphine		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>41</sub> NO <sub>4</sub>	<b>FW :</b> 508.11	<b>DEA schedule :</b> 3
<b>Notes :</b> <i>Narcotic analgesic (tritium-labeled).</i>		
<b>References :</b> Robinson, SE <i>CNS Drug Rev</i> 2002, 8, 377-90.		
		
<b>Catalog number :</b> 9064-005	<b>CASRN :</b> 101224-22-0	
<b>Name :</b> Buprenorphine-3-β-D-glucuronide		
<b>Mol. formula :</b> C <sub>35</sub> H <sub>49</sub> NO <sub>10</sub>	<b>FW :</b> 654.59	<b>DEA schedule :</b> 5
		
<b>Catalog number :</b> 9064-006	<b>CASRN :</b> 161772-95-8	
<b>Name :</b> [15, 16- <sup>2</sup> H <sub>2</sub> ]Buprenorphine HCl		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>42</sub> ClNO <sub>4</sub>	<b>FW :</b> 504.11	<b>DEA schedule :</b> 3
		
<b>Catalog number :</b> 9333-013	<b>CASRN :</b> 78715-23-8	
<b>Name :</b> Norbuprenorphine base		
<b>Mol. formula :</b> C <sub>25</sub> H <sub>35</sub> NO <sub>4</sub>	<b>FW :</b> 413.55	<b>DEA schedule :</b> 2
<b>Notes :</b> <i>Buprenorphine metabolite.</i>		
<b>References :</b> Robinson, SE <i>CNS Drug Rev</i> 2002, 8, 377-90.		
		
<b>Opioids: Oxymorphone Class</b>		
<b>Catalog number :</b> 9143-002	<b>CASRN :</b> 124-90-3	
<b>Name :</b> Oxycodone hydrochloride; Dihydrohydroxycodone hydrochloride		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 351.84	<b>DEA schedule :</b> 2
<b>Notes :</b> <i>Narcotic analgesic</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6959.		
		

## 6 - Opioids

★ = custom synthesis

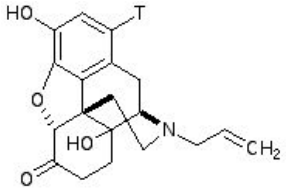
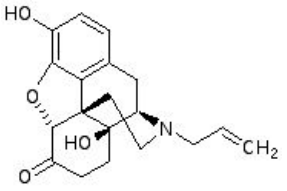
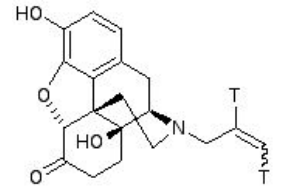
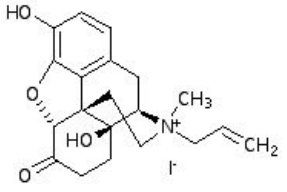
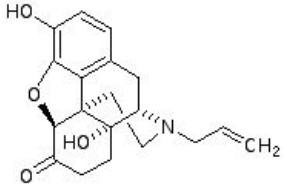
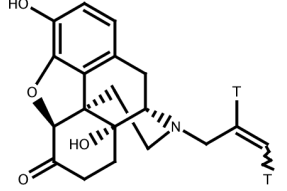
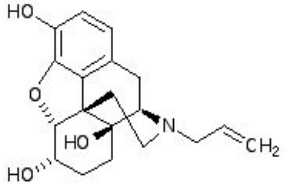
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<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]-6β-Naltrexamine			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 346.45	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9333-010			
<b>Name :</b> 6β-Naltrexamine dihydrochloride			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>28</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 415.36	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9333-012			★
<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]-6β-Funaltrexamine			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>33</sub> ClN <sub>2</sub> O <sub>6</sub>	<b>FW :</b> 458.53	<b>DEA schedule :</b> 2	
<b>Notes :</b> Irreversible μ-opioid receptor antagonist (tritium-labeled).			
<b>References :</b> Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B <i>Farmaco</i> 2001, 56, 191-6.			
<b>Catalog number :</b> 9333-017		<b>CASRN :</b> 360770-17-8	
<b>Name :</b> 6β-Naltrexamide			
<b>Mol. formula :</b> C <sub>22</sub> H <sub>28</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 388.975	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9652-006			
<b>Name :</b> (-)-Noroxymorphone			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>17</sub> NO <sub>4</sub>	<b>FW :</b> 287.30	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9652-007			
<b>Name :</b> (+)-Noroxymorphone; (+)-14-Hydroxydihydronormorphinone			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>17</sub> NO <sub>4</sub>	<b>FW :</b> 287.30	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9652-012			★
<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Naltrexone			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>4</sub>	<b>FW :</b> 345.42	<b>DEA schedule :</b> 0	

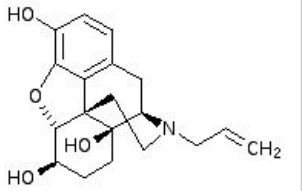
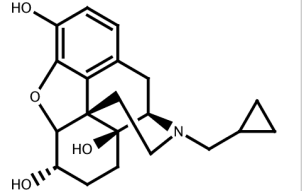
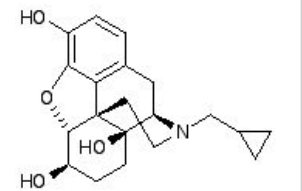
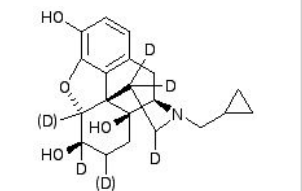
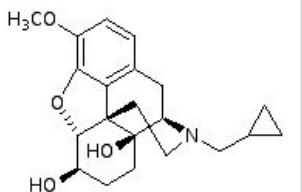
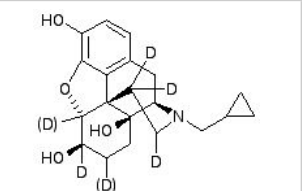
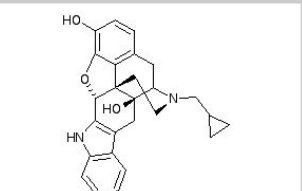


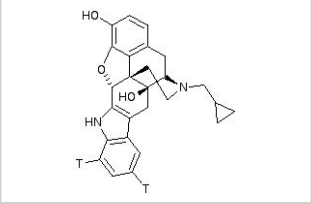
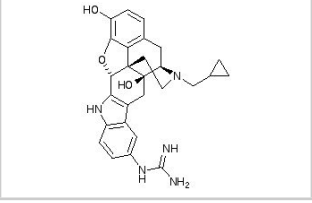
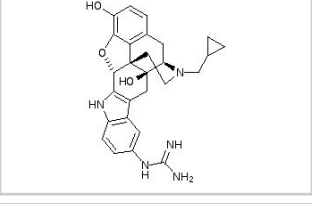
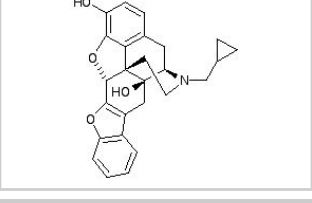
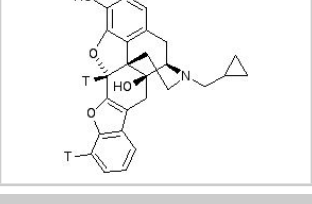
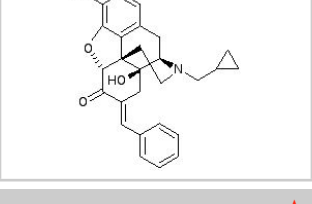
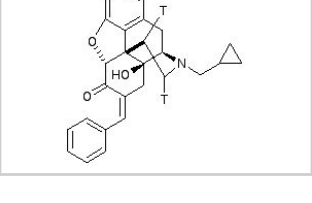
<b>Catalog number :</b> 9652-013		★
<b>Name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Naltrexone hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub>	<b>FW :</b> 381.88	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-014		
<b>Name :</b> [15,15,16- <sup>2</sup> H <sub>3</sub> ]Naltrexone		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>4</sub>	<b>FW :</b> 344.42	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-019		<b>CASRN :</b> 16676-29-2
<b>Name :</b> Naltrexone hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub>	<b>FW :</b> 377.88	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Narcotic antagonist</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6363.		
		
<b>Catalog number :</b> 9652-020		<b>CASRN :</b> 16590-41-3
<b>Name :</b> Naltrexone base		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>4</sub>	<b>FW :</b> 341.42	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Narcotic antagonist</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6363.		
		
<b>Catalog number :</b> 9652-025		
<b>Name :</b> Naltrexone-3-β-D-glucuronide		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>31</sub> NO <sub>10</sub>	<b>FW :</b> 517.53	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-027		
<b>Name :</b> 3-O-Methylnaltrexone		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>25</sub> NO <sub>4</sub>	<b>FW :</b> 355.44	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-030		<b>CASRN :</b> 51481-60-8
<b>Name :</b> Naloxone hydrochloride		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 363.84	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Narcotic antagonist</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6362.		
		

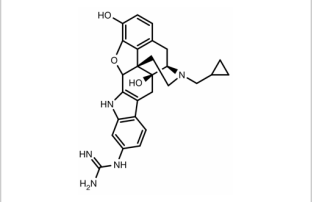
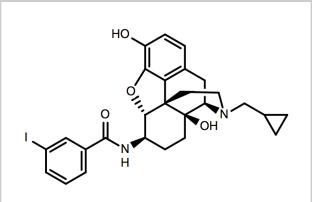
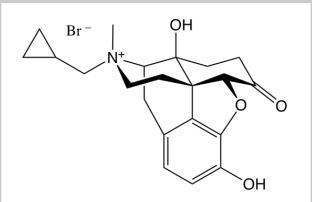
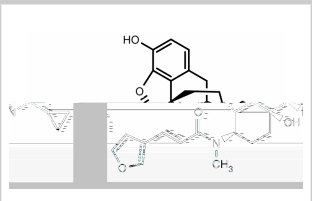
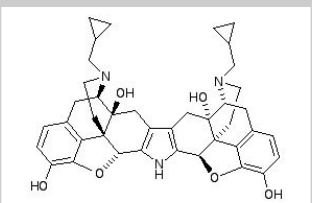
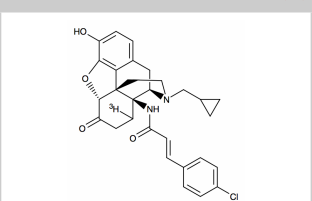
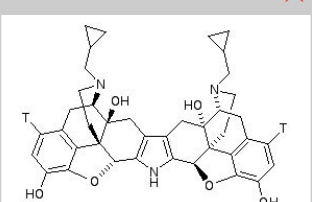
## 6 - Opioids

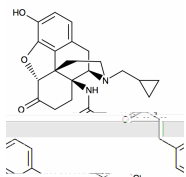
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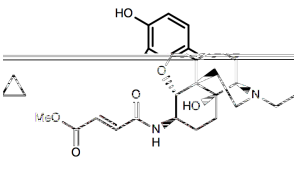
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<b>Name :</b> (-)-[1- <sup>3</sup> H(n)]Naloxone			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 329.38	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-032			
<b>Name :</b> Naloxone pamoate			
<b>Mol. formula :</b> C <sub>61</sub> H <sub>58</sub> N <sub>2</sub> O <sub>14</sub>	<b>FW :</b> 1043.14	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-035			★
<b>Name :</b> (-)-[19,20- <sup>3</sup> H <sub>2</sub> ]Naloxone			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 331.39	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-037			
<b>Name :</b> Naloxone methiodide			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> INO <sub>4</sub>	<b>FW :</b> 469.32	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-038			CASRN : 357-08-4
<b>Name :</b> (+)-Naloxone hydrochloride			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 363.85	<b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Unnatural isomer of naloxone. Selective Toll-like receptor 4 antagonist.</i>			
<b>References :</b> Hutchinson, MR; <i>et al.</i> , <i>Brain Behav Immun</i> <b>2010</b> , <i>24</i> , 83-95.; Watkins, LR; <i>et al.</i> , <i>Trends Pharmacol Sci</i> <b>2009</b> , <i>30</i> , 581-91.			
<b>Catalog number :</b> 9652-039			★
<b>Name :</b> (+)-[19,20- <sup>3</sup> H <sub>2</sub> ]Naloxone			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 331.39	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-040			
<b>Name :</b> 6α-Naloxol hydrochloride			
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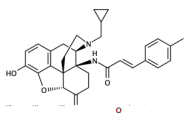
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<b>Name :</b> 6 $\beta$ -Naloxol hydrochloride		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>24</sub> ClNO <sub>4</sub>	<b>FW :</b> 365.86	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-050		
<b>Name :</b> 6 $\alpha$ -Naltrexol hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>4</sub>	<b>FW :</b> 379.89	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Naltrexone metabolite.</i>		
		
<b>Catalog number :</b> 9652-051		<b>CASRN :</b> 49625-89-0
<b>Name :</b> 6 $\beta$ -Naltrexol hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>4</sub>	<b>FW :</b> 393.41	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-052		
<b>Name :</b> [5,6,7,15,15,16- <sup>2</sup> H <sub>6</sub> ]-6 $\beta$ -Naltrexol hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>4</sub>	<b>FW :</b> 385.91	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-055		
<b>Name :</b> 3-O-Methyl-6 $\beta$ -naltrexol		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO <sub>4</sub>	<b>FW :</b> 357.45	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-057		
<b>Name :</b> [5,6,7,15,15,16- <sup>2</sup> H <sub>6</sub> ]-6 $\alpha$ -Naltrexol		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> NO <sub>4</sub>	<b>FW :</b> 349.45	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-060		<b>CASRN :</b> 111469-81-9
<b>Name :</b> Naltrindole hydrochloride; NTI hydrochloride		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>27</sub> ClN <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 450.96	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective <math>\delta</math>-opioid receptor antagonist.</i>		
<b>References :</b> Portoghesi, <i>PS Trends Pharmacol Sci</i> <b>1989</b> , <i>10</i> , 230-5.		
		

<b>Catalog number :</b> 9652-061		★
<b>Name :</b> [5',7'- <sup>3</sup> H <sub>2</sub> ]Naltrindole		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 418.51 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-062		
<b>Name :</b> 5'-GNTI trihydrochloride		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>32</sub> Cl <sub>3</sub> N <sub>5</sub> O <sub>3</sub>	<b>FW :</b> 580.94 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Selective κ-opioid receptor antagonist.</i>		
<b>References :</b> Jones, RM; Portoghese, PS <i>Eur J Pharmacol</i> <b>2000</b> , 396, 49–52.		
<b>Catalog number :</b> 9652-063		<b>CASRN :</b> 219655-56-8
<b>Name :</b> 5'-GNTI dihydrochloride		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>31</sub> Cl <sub>2</sub> N <sub>5</sub> O <sub>3</sub>	<b>FW :</b> 544.48 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Selective κ-opioid receptor antagonist.</i>		
<b>References :</b> Jones, RM; Portoghese, PS <i>Eur J Pharmacol</i> <b>2000</b> , 396, 49–52.		
<b>Catalog number :</b> 9652-064		<b>CASRN :</b> 122517-78-6
<b>Name :</b> Naltriben methanesulfonate; NTB methanesulfonate		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>29</sub> NO <sub>7</sub> S	<b>FW :</b> 511.60 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Selective δ-opioid receptor antagonist.</i>		
<b>References :</b> Sofuoglu, M; Portoghese, PS; Takemori, AE <i>J Pharmacol Exp Ther</i> <b>1991</b> , 257, 676–80.		
<b>Catalog number :</b> 9652-065		★
<b>Name :</b> Tritium-labeled Naltriben		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>25</sub> NO <sub>4</sub>	<b>FW :</b> 419.50 <b>DEA schedule :</b> 0	
<b>Notes :</b> <i>Selective δ-opioid receptor antagonist (tritium-labeled).</i>		
<b>References :</b> Sofuoglu, M; Portoghese, PS; Takemori, AE <i>J Pharmacol Exp Ther</i> <b>1991</b> , 257, 676–80.		
<b>Catalog number :</b> 9652-067		<b>CASRN :</b> 173556-52-0
<b>Name :</b> 7-Benzylidene-7-dehydronaltrexone (BNTX) hydrochloride		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>28</sub> ClNO <sub>4</sub>	<b>FW :</b> 465.97 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9652-068		★
<b>Name :</b> [15,16- <sup>3</sup> H]-7-Benzylidene-7-dehydronaltrexone; [ <sup>3</sup> H]BNTX		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>28</sub> ClNO <sub>4</sub>	<b>FW :</b> 433.52 <b>DEA schedule :</b> 0	

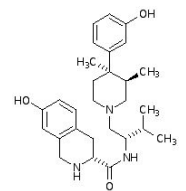
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<b>Name :</b> 6'-GNTI dihydrochloride	
<b>Mol. formula :</b> C <sub>27</sub> H <sub>29</sub> N <sub>5</sub> O <sub>3</sub> • 2HCl	<b>FW :</b> 544.48 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Kappa-opioid receptor agonist that inhibits arrestin recruitment.</i>	
<b>References :</b> Rives, ML; <i>et al., J Biol Chem</i> <b>2012</b> , <i>287</i> , 27050-4.	
	
<b>Catalog number :</b> 9652-070	<b>CASRN :</b> 1314879-44-1
<b>Name :</b> IBNtxA	
<b>Mol. formula :</b> C <sub>27</sub> H <sub>29</sub> IN <sub>2</sub> O <sub>4</sub> • HCl	<b>FW :</b> 608.90 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Kappa opioid receptor agonist.</i>	
<b>References :</b> Majumdar, S; <i>et al., J Med Chem</i> <b>2012</b> , <i>55</i> , 6352-62.	
	
<b>Catalog number :</b> 9652-072	<b>CASRN :</b> 83387-25-1
<b>Name :</b> ( <i>R</i> )-Methylnaltrexone bromide	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> BrNO <sub>4</sub>	<b>FW :</b> 436.34 <b>DEA schedule :</b> 0
	
<b>Catalog number :</b> 9668-001	<b>CASRN :</b> 152658-17-8
<b>Name :</b> Nalfurafine hydrochloride	
<b>Mol. formula :</b> C <sub>28</sub> H <sub>32</sub> N <sub>2</sub> O <sub>5</sub> • HCl	<b>FW :</b> 513.03 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>Kappa opioid receptor agonist.</i>	
<b>References :</b> Kawai, K., <i>et al., Bioorg Med Chem</i> (2008) <i>16</i> , 9188.	
	
<b>Catalog number :</b> NOCD-067	<b>CASRN :</b> 113158-35-3
<b>Name :</b> Norbinaltorphimine dihydrochloride; norBNI	
<b>Mol. formula :</b> C <sub>40</sub> H <sub>45</sub> Cl <sub>2</sub> N <sub>3</sub> O	<b>FW :</b> 734.73 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective kappa-opioid antagonist.</i>	
<b>References :</b> Birch, PJ; <i>et al. Eur J Pharmacol</i> <b>1987</b> , <i>144</i> , 405-8. Portoghese, PS; Lipkowski, AW; Takemori, AE <i>Life Sci</i> <b>1987</b> , <i>40</i> , 1287-92.	
	
<b>Catalog number :</b> NOCD-079	★
<b>Name :</b> Tritium-labeled Clocinnamox	
<b>Mol. formula :</b> C <sub>29</sub> H <sub>29</sub> ClN <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 505.01 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Irreversible mu-opioid receptor antagonist (tritium-labeled).</i>	
<b>References :</b> Comer, SD; <i>et al. J Pharmacol Exp Ther</i> <b>1992</b> , <i>262</i> , 1051-6.	
	
<b>Catalog number :</b> NOCD-084	★
<b>Name :</b> [1,1'- <sup>3</sup> H(n)]Norbinaltorphimine; [ <sup>3</sup> H]norBNI	
<b>Mol. formula :</b> C <sub>40</sub> H <sub>43</sub> N <sub>3</sub> O <sub>6</sub>	<b>FW :</b> 665.80 <b>DEA schedule :</b> 0
<b>References :</b> Birch, PJ; <i>et al. Eur J Pharmacol</i> <b>1987</b> , <i>144</i> , 405-8. Portoghese, PS; Lipkowski, AW; Takemori, AE <i>Life Sci</i> <b>1987</b> , <i>40</i> , 1287-92.	
	

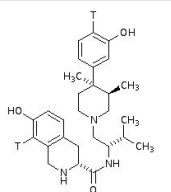
<b>Catalog number :</b> NOCD-100	<b>CASRN :</b> 117332-69-1	
<b>Name :</b> Cloccinamox mesylate		
<b>Mol. formula :</b> C <sub>30</sub> H <sub>33</sub> ClN <sub>2</sub> O <sub>7</sub> S		<b>FW :</b> 601.11 <b>DEA schedule :</b> 0
<b>Notes :</b> Irreversible μ-opioid receptor antagonist.		
<b>References :</b> Comer, SD; <i>et al. J Pharmacol Exp Ther</i> 1992, 262, 1051-6.		

<b>Catalog number :</b> NOCD-141	<b>CASRN :</b> 72786-10-8	
<b>Name :</b> β-Funaltrexamine hydrochloride; β-FNA hydrochloride		
<b>Mol. formula :</b> C <sub>25</sub> H <sub>31</sub> ClN <sub>2</sub> O <sub>6</sub>		<b>FW :</b> 490.99 <b>DEA schedule :</b> 2
<b>Notes :</b> Irreversible binding antagonist for the μ-opioid receptor.		
<b>References :</b> Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B <i>Farmaco</i> 2001, 56, 191-6.		

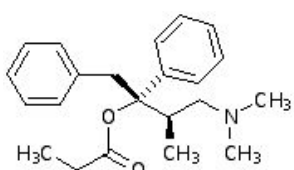
<b>Catalog number :</b> NOCD-160	<b>CASRN :</b> 117339-76-1	
<b>Name :</b> Methocinnamox		
<b>Mol. formula :</b> C <sub>30</sub> H <sub>32</sub> N <sub>2</sub> O <sub>4</sub>		<b>FW :</b> 484.59 <b>DEA schedule :</b> 0
<b>Notes :</b>		
<b>References :</b> Broadbear JH, <i>et al., Pharmacol Exp Ther</i> , 2000, 294(3), 933-40. Maguire DR, <i>et al., J Pharmacol Exp Ther</i> , 2019, 368(1), 88-99.		

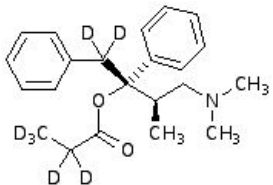
**Opioids: Phenylpiperidine Class**

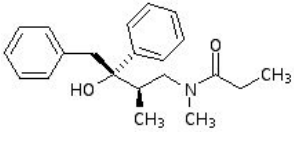
<b>Catalog number :</b> NOCD-056	<b>CASRN :</b> 785835-79-2	
<b>Name :</b> JDtic dihydrochloride		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>41</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>3</sub>		<b>FW :</b> 538.56 <b>DEA schedule :</b> 0
<b>Notes :</b> Selective kappa-opioid antagonist.		
<b>References :</b> Thomas, JB; Atkinson, RN; Rothman, RB; Fix, SE; Mascarella, SW; Vinson, NA; Xu, H; Dersch, CM; Lu, Y; Cantrell, BE; Zimmerman, DM; Carroll, FI <i>J Med Chem</i> 2001, 44, 2687-90.		

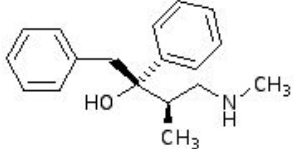
<b>Catalog number :</b> NOCD-059		
<b>Name :</b> [ <sup>3</sup> H]JDtic		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>39</sub> N <sub>3</sub> O <sub>3</sub>		<b>FW :</b> 469.64 <b>DEA schedule :</b> 0
<b>Notes :</b> Selective kappa-opioid antagonist (tritium-labeled).		
<b>References :</b> Thomas, JB; <i>et al. J Med Chem</i> 2001, 44, 2687-90.		

**Opioids: Propoxyphene Class**

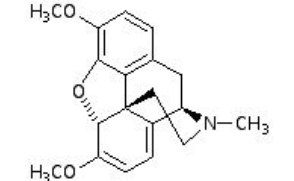
<b>Catalog number :</b> 9273-002		
<b>Name :</b> (+)-α-Propoxyphene hydrochloride; Darvon hydrochloride		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>30</sub> ClNO <sub>2</sub>		<b>FW :</b> 375.94 <b>DEA schedule :</b> 2
<b>Notes :</b> Narcotic analgesic		
<b>References :</b> Miller, RR <i>Am J Hosp Pharm</i> 1977, 34, 413-23. Barkin, RL; Barkin SJ; Barkin DS <i>Am J Ther</i> 2006, 13, 534-42.		

<b>Catalog number :</b> 9273-004	
<b>Name :</b> [ <sup>2</sup> H <sub>7</sub> ]Propoxyphene hydrochloride	
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> NO <sub>2</sub>	<b>FW :</b> 346.51 <b>DEA schedule :</b> 2
	

<b>Catalog number :</b> 9273-010	
<b>Name :</b> (+)-α-N-Propionylnorpropoxyphene	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO <sub>2</sub>	<b>FW :</b> 325.45 <b>DEA schedule :</b> 0
	

<b>Catalog number :</b> 9273-011	
<b>Name :</b> (+)-α-Norpropoxyphene maleate	
<b>Mol. formula :</b> C <sub>25</sub> H <sub>31</sub> NO <sub>6</sub>	<b>FW :</b> 441.53 <b>DEA schedule :</b> 0
	

**Opioids: Thebaine Class**

<b>Catalog number :</b> 9333-002	<b>CASRN :</b> 115-37-7
<b>Name :</b> Thebaine base	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 311.36 <b>DEA schedule :</b> 2
<b>Notes :</b> Opiate; synthetic starting material for many opiate compounds	
<b>References :</b> Merck Index, 14th ed., Monograph 9276.	
	

**Opioids (dosage form): Implantable**

<b>Catalog number :</b> 9250-014	
<b>Name :</b> Methadone HCl implant pellets	
	<b>DEA schedule :</b> 2
Dosage Form	

<b>Catalog number :</b> 9300-008	
<b>Name :</b> Morphine base implant pellets	
	<b>DEA schedule :</b> 2
Dosage Form	

6 - Opioids

★ = custom synthesis

<b>Catalog number :</b> 9300-009	
<b>Name :</b> Placebo for morphine base implant pellets	<b>Dosage Form</b>
<b>DEA schedule :</b> 0	

<b>Catalog number :</b> 9652-022	
<b>Name :</b> Placebo for naltrexone implant pellets	<b>Dosage Form</b>
<b>DEA schedule :</b> 0	



**Peptides: Caged****Catalog number :** MPSP-117**Name :** CNB-Y-LE; CYLE**Sequence :** H-(Carboxynitrobenzyl)Tyr-Gly-Gly-Phe-Leu-OH**Mol. Formula :** C<sub>36</sub>H<sub>42</sub>N<sub>6</sub>O<sub>11</sub>**FW :** 734.76**Note :** *Photoactivatable analog of Leu-enkephalin.***Reference:** Banghart, MR; Sabatini BL, *Neuron* 2012, 73, 249-59.**Catalog number :** MPSP-118**Name :** CNB-Y-DYN8 (CYD8)**Sequence :** H-(Carboxynitrobenzyl)Tyr-Gly-Gly-Phe-Leu- Arg-Arg-Ile-OH**Mol. Formula :** C<sub>54</sub>H<sub>77</sub>N<sub>15</sub>O<sub>14</sub>**FW :** 1159.31**Note :** *Photoactivatable analog of Dynorphin A ( 1-8 ).***Reference:** Banghart, MR; Sabatini BL, *Neuron* 2012, 73, 249-59.**Catalog number :** MPSP-119**Name :** CNV-Y-LE**Sequence :** H-(Carboxynitroveratryl)Tyr-Gly-Gly-Phe-Leu-OH**Mol. Formula :** C<sub>38</sub>H<sub>46</sub>N<sub>6</sub>O<sub>13</sub>**FW :** 794.70**Note :** *Photoactivatable analog of Leu-enkephalin.***Reference:** Russell, AG; et al., *J Org Chem* 2010, 75, 4648-4651.  
Russell, AG; et al., *Photochem Photobiol Sci* 2012, 11, 556-563.**Catalog number :** PEPT-063**Name :** CNV-Y-LE**Sequence :** H-(Carboxynitroveratryl)Tyr-Gly-Gly-Phe-Leu-OH**Mol. Formula :** C<sub>38</sub>H<sub>46</sub>N<sub>6</sub>O<sub>13</sub>**FW :** 794.70**Note :** *Photoactivatable analog of Leu-enkephalin. Solution-phase synthesis.***Reference:** Russell, AG; et al., *J Org Chem* 2010, 75, 4648-4651.  
Russell, AG; et al., *Photochem Photobiol Sci* 2012, 11, 556-563.**Catalog number :** PEPT-064**Name :** CNB-Y-LE; CYLE**Sequence :** H-(Carboxynitrobenzyl)Tyr-Gly-Gly-Phe-Leu-OH**Mol. Formula :** C<sub>36</sub>H<sub>42</sub>N<sub>6</sub>O<sub>11</sub>**FW :** 734.76**Note :** *Photoactivatable analog of Leu-enkephalin. Solution-phase synthesis.***Reference:** Banghart, MR; Sabatini BL, *Neuron* 2012, 73, 249-59.

**Peptides: Cannabinoid-related****Catalog number :** MPSP-090**Name :** Hemopressin**Sequence :** H-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH**Mol. Formula :** C<sub>53</sub>H<sub>77</sub>N<sub>13</sub>O<sub>12</sub>**FW :** 1088.3**Note :** CB<sub>1</sub> cannabinoid receptor inverse agonist. Analgesic.**Reference :** Heimann, AS; et al. *Proc Natl Acad Sci USA* 2007, 104, 20588-93.**Catalog number :** MPSP-091**Name :** [<sup>3</sup>H<sub>4</sub>]Hemopressin**Sequence :** H-[<sup>3</sup>H<sub>2</sub>]Pro-Val-Asn-[<sup>3</sup>H]Phe-Lys-[<sup>3</sup>H]Phe-Leu-Ser-His-OH**Mol. Formula :** C<sub>53</sub>H<sub>77</sub>N<sub>13</sub>O<sub>12</sub>**FW :** 1096.3**Note :** Radiolabeled hemopressin (MPSP-90; PEPT-053).**Catalog number :** MPSP-092**Name :** Tyr<sup>7</sup>-Hemopressin (1-6)**Sequence :** H-Pro-Val-Asn-Phe-Lys-Phe-Tyr-OH**Mol. Formula :** C<sub>47</sub>H<sub>63</sub>N<sub>9</sub>O<sub>10</sub>**FW :** 914.1**Note :** Analog of MPSP-090.**Catalog number :** MPSP-093**Name :** [<sup>3</sup>H<sub>2</sub>]Tyr<sup>7</sup>-Hemopressin (1-6)**Sequence :** H-Pro-Val-Asn-Phe-Lys-Phe-[<sup>3</sup>H<sub>2</sub>]Tyr-OH**Mol. Formula :** C<sub>47</sub>H<sub>61</sub>N<sub>9</sub>O<sub>10</sub>H<sub>2</sub>**FW :** 918.1**Note :** Radioligand for MPSP-092.**Catalog number :** MPSP-094**Name :** DIT<sup>7</sup>-Hemopressin (1-6)**Sequence :** H-Pro-Val-Asn-Phe-Lys-Phe-Tyr(3,5-diiodo)-OH**Mol. Formula :** C<sub>47</sub>H<sub>61</sub>N<sub>9</sub>O<sub>10</sub>I<sub>2</sub>**FW :** 1165.9**Note :** Hemopressin analog (MPSP-90; PEPT-053).**Catalog number :** MPSP-096**Name :** [<sup>3</sup>H<sub>2</sub>]Hemopressin**Sequence :** H-Pro-Val-Asn-[<sup>3</sup>H]Phe-Lys-[<sup>3</sup>H]Phe-Leu-Ser-His-OH**Mol. Formula :** C<sub>53</sub>H<sub>77</sub>N<sub>13</sub>O<sub>12</sub>**FW :** 1092.3**Note :** Radiolabeled hemopressin (MPSP-90; PEPT-053).**Catalog number :** MPSP-097**Name :** [<sup>3</sup>H]Leu<sup>6</sup>-Hemopressin**Sequence :** H-Pro-Val-Asn-[<sup>3</sup>H]Phe-Lys-Leu-Leu-Ser-His-OH**Mol. Formula :** C<sub>50</sub>H<sub>79</sub>N<sub>13</sub>O<sub>12</sub>**FW :** 1056.3**Note :** Radiolabeled Leu<sup>6</sup>-Hemopressin (PEPT-054).

<b>Catalog number :</b> MPSP-098	
<b>Name :</b> ABz-Hemopressin	
<b>Sequence :</b> 2-ABz-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH	
<b>Mol. Formula :</b> C <sub>60</sub> H <sub>82</sub> N <sub>14</sub> O <sub>13</sub>	<b>FW :</b> 1207.1
<b>Note :</b> <i>Hemopressin analog (MPSP-90; PEPT-053).</i>	
<b>Catalog number :</b> MPSP-099	
<b>Name :</b> K <sup>5</sup> -ABz-Hemopressin	
<b>Sequence :</b> H-Pro-Val-Asn-Phe-Lys(2-ABz)-Phe-Leu-Ser-His-OH	
<b>Mol. Formula :</b> C <sub>60</sub> H <sub>82</sub> N <sub>14</sub> O <sub>13</sub>	<b>FW :</b> 1207.1
<b>Note :</b> <i>Hemopressin analog (MPSP-90; PEPT-053).</i>	
<b>Catalog number :</b> MPSP-100	
<b>Name :</b> Asp <sup>3</sup> -Hemopressin	
<b>Sequence :</b> H-Pro-Val-Asp-Phe-Lys-Phe-Leu-Ser-His-OH	
<b>Mol. Formula :</b> C <sub>53</sub> H <sub>76</sub> N <sub>12</sub> O <sub>13</sub>	<b>FW :</b> 1089.3
<b>Note :</b> <i>Hemopressin analog (MPSP-90; PEPT-053).</i>	
<b>Catalog number :</b> MPSP-101	
<b>Name :</b> D-His <sup>9</sup> -Hemopressin	
<b>Sequence :</b> H-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-D-His-OH	
<b>Mol. Formula :</b> C <sub>53</sub> H <sub>77</sub> N <sub>13</sub> O <sub>12</sub>	<b>FW :</b> 1088.3
<b>Note :</b> <i>Hemopressin analog (MPSP-90; PEPT-053).</i>	
<b>Catalog number :</b> MPSP-103	
<b>Name :</b> VD-Hemopressin	
<b>Sequence :</b> H-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH	
<b>Mol. Formula :</b> C <sub>62</sub> H <sub>91</sub> N <sub>15</sub> O <sub>16</sub>	<b>FW :</b> 1302.5
<b>Note :</b> <i>Agonist of CB<sub>1</sub> cannabinoid receptors.</i>	
<b>Reference :</b> Gomes et al., FASEB J. 2009; 23(9): 3020-9.	
<b>Catalog number :</b> MPSP-105	
<b>Name :</b> RVD-Hemopressin	
<b>Sequence :</b> H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-Ser-His-OH	
<b>Mol. Formula :</b> C <sub>68</sub> H <sub>103</sub> N <sub>19</sub> O <sub>17</sub>	<b>FW :</b> 1458.7
<b>Note :</b> <i>Agonist of CB<sub>1</sub> cannabinoid receptors.</i>	
<b>Reference :</b> Gomes et al., FASEB J. 2009; 23(9): 3020-9	
<b>Catalog number :</b> MPSP-107	
<b>Name :</b> RVD-Hemopressin (1-7)	
<b>Sequence :</b> H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>59</sub> H <sub>91</sub> N <sub>15</sub> O <sub>14</sub>	<b>FW :</b> 1234.5
<b>Note :</b> <i>RVD-Hemopressin analog (MPSP-105; PEPT-057).</i>	

## 7 - Peptides

**Catalog number :** PEPT-053**Name :** Hemopressin *tris*(trifluoroacetate)**Sequence :** H-Pro-Val-Asp-Phe-Lys-Phe-Leu-Ser-His**Mol. Formula :** C<sub>59</sub>H<sub>81</sub>F<sub>9</sub>N<sub>13</sub>O<sub>18</sub>**FW :** 1431.36**Note :** CB<sub>1</sub> cannabinoid receptor inverse agonist. Analgesic.**Reference :** Heimann, AS; *et al. Proc Natl Acad Sci USA* 2007, 104, 20588-93.**Catalog number :** PEPT-054**Name :** Leu<sup>6</sup>-Hemopressin**Sequence :** H-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH**Mol. Formula :** C<sub>50</sub>H<sub>79</sub>N<sub>13</sub>O<sub>12</sub>**FW :** 1054.26**Note :** CB<sub>1</sub> cannabinoid receptor antagonist.**Reference :** Gomes *et al.*, The FASEB Journal, 23, 1 (2009)**Catalog number :** PEPT-055**Name :** VD-Leu<sup>6</sup>-Hemopressin**Sequence :** H-Val-Asp-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH**Mol. Formula :** C<sub>59</sub>H<sub>93</sub>N<sub>15</sub>O<sub>16</sub>**FW :** 1268.1**Note :** CB<sub>1</sub> cannabinoid receptor antagonist.**Reference :** Gelman *et al.*, J. Neurochem., 113, 871 (2010)**Catalog number :** PEPT-057**Name :** RVD-Leu<sup>6</sup>-Hemopressin *tetrakis*(trifluoroacetate)**Sequence :** H-Arg-Val-Asp-Pro-Val-Asn-Phe-Lys-Leu-Leu-Ser-His-OH**Mol. Formula :** C<sub>65</sub>H<sub>105</sub>N<sub>19</sub>O<sub>17</sub> • 4 CF<sub>3</sub>CO<sub>2</sub>H**FW :** 1880.75**Note :** N-terminal extended hemopressin, CB1 receptor agonist.**Reference :** Dale, CS, *et al.*, Peptides, 26, 431 (2005).  
Gomes, I, *et al.*, FASEB J, 23, 3020 (2009).**Peptides: Miscellaneous****Catalog number :** PEPT-059**Name :** Oxytocin**Sequence :** H-Cys(1)-Tyr-Ile-Gln-Asn-Cys(1)-Pro-Leu-Gly-NH<sub>2</sub>**Mol. Formula :** C<sub>43</sub>H<sub>66</sub>N<sub>12</sub>O<sub>12</sub>S<sub>2</sub>**FW :** 1007.2**Catalog number :** PEPT-062**Name :** Vasopressin (Human)**Sequence :** H-Cys(1)-Tyr-Phe-Gln-Asn-Cys(1)-Pro-Arg-Gly-NH<sub>2</sub>**Mol. Formula :** C<sub>54</sub>H<sub>69</sub>F<sub>12</sub>N<sub>15</sub>O<sub>20</sub>S<sub>2</sub>**FW :** 1540.33

**Peptides: Nicotinic Class****Catalog number :** MPSP-109**Name :**  $\omega$ -Conotoxin GVIA**Sequence :** H-Cys-Lys-Ser-Hyp-Gly-Ser-Ser-Cys-Ser-Hyp-Thr-Ser-Tyr-Asn-Cys-Cys-Arg-Ser-Cys-Asn-Hyp-Tyr-Thr-Lys-Arg-Cys-Tyr-NH<sub>2</sub> (disulfide bonds Cys1-Cys16, Cys8-Cys19, Cys15-Cys26)**Mol. Formula :** C<sub>120</sub>H<sub>182</sub>N<sub>38</sub>O<sub>43</sub>S<sub>6</sub> **FW :** 3037.4**Note :**  $\omega$ -Conotoxin GVIA, extracted from the venom of the fish-hunting cone snail *Conus geographus* is a neuronal calcium channel blocker.**Reference :** B.M. Olivera et al., *Biochemistry* 26, 2086 (1987); D.R. Hillyard et al., *Neuron* 9, 69 (1992); K. Sato et al., *Biochem. Biophys. Res. Commun.* 194, 1292 (1993); J.R. Abbott et al., *Int. J. Devl Neurosci.* 12, 43 (1994)**Catalog number :** MPSP-111**Name :**  $\omega$ -Conotoxin MVIIA**Sequence :** H-Cys-Lys-Gly-Lys-Gly-Ala-Lys-Cys-Ser-Arg-Leu-Met-Tyr-Asp-Cys-Cys-Thr-Gly-Ser-Cys-Arg-Ser-Gly-Lys-Cys-NH<sub>2</sub> (disulfide bonds Cys1-Cys16, Cys8-Cys20, Cys15-Cys25)**Mol. Formula :** C<sub>102</sub>H<sub>172</sub>N<sub>36</sub>O<sub>32</sub>S<sub>7</sub> **FW :** 2639.2**Note :**  $\omega$ -Conotoxin MVIIA, extracted from the venom of the fish-hunting cone snail *Conus magus* is a neuronal calcium channel blocker.**Reference :** B.M. Olivera et al., *Biochemistry* 26, 2086 (1987); D.R. Hillyard et al., *Neuron* 9, 69 (1992); J.R. Abbott et al., *Int. J. Devl Neurosci.* 12, 43 (1994); R. Newcomb et al., *Brain Res.* 638, 95 (1994)**Catalog number :** MPSP-113**Name :**  $\omega$ -Conotoxin MVIIC**Sequence :** H-Cys-Lys-Gly-Lys-Gly-Ala-Pro-Cys-Arg-Lys-Thr-Met-Tyr-Asp-Cys-Cys-Ser-Gly-Ser-Cys-Gly-Arg-Arg-Gly-Lys-Cys-NH<sub>2</sub> (disulfide bonds Cys1-Cys16, Cys8-Cys20, Cys15-Cys26)**Mol. Formula :** C<sub>106</sub>H<sub>178</sub>N<sub>40</sub>O<sub>32</sub>S<sub>7</sub> **FW :** 2749.3**Note :**  $\omega$ -Conotoxin MVIIC, extracted from the venom of the fish-hunting cone snail *Conus magus* is a neuronal calcium channel blocker.**Reference :** D.R. Hillyard et al., *Neuron* 9, 69 (1992); R. Newcomb et al., *Brain Res.* 638, 95 (1994)**Catalog number :** PEPT-058**Name :**  $\alpha$ -Conotoxin MII *tris*(trifluoroacetate)**Sequence :** H-Gly-Cys-Cys-Ser-Asn-Pro-Val-Cys-His-Leu-Glu-His-Ser-Asn-Leu-Cys-NH<sub>2</sub> (disulfide bonds Cys2-Cys8, Cys3-Cys16)**Mol. Formula :** C<sub>67</sub>H<sub>103</sub>N<sub>23</sub>O<sub>22</sub>S<sub>4</sub> • 3 CF<sub>3</sub>CO<sub>2</sub>H **FW :** 2053.02**Note :** *Highly potent and selective  $\alpha 3\beta 2$  nicotinic receptor antagonist.***Reference :** Cartier, G, et al., *J Biol Chem*, 271, 7522 (1966).  
Hill, JM, et al., *Biochemistry*, 37, 15621 (1998).**Peptides: Opioid****Catalog number :** MPSP-001**Name :** DPDPE**Sequence :** H-Tyr-c[D-Pen-Gly-Phe-D-Pen]-OH**Mol. Formula :** C<sub>30</sub>H<sub>39</sub>N<sub>7</sub>O<sub>5</sub>S<sub>2</sub> **FW :** 645.8**Note :** *Synthetic, conformationally restricted enkephalin agonist selective for the  $\delta 1$  receptor. Minimal cross-reactivity with  $\mu$ - and  $\kappa$ - receptors.***Reference :** Mosberg, HI; Omnaas JR; Goldstein A *Mol Pharmacol* 1987, 31, 599-602.  
Knapp, RJ; Yamamura HI *Biochem Pharmacol* 1992, 44, 1687-95.

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<b>Catalog number :</b> MPSP-002	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DPDPE	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-c[D-Pen-Gly-Phe-D-Pen]-OH	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>37</sub> N <sub>7</sub> O <sub>5</sub> S <sub>23</sub> H <sub>2</sub>	<b>FW :</b> 649.8
<b>Note :</b> <i>Radioactive ligand for MPSP-001</i>	
<b>Reference :</b> Cotton, R; <i>et al. Eur J Pharmacol</i> <b>1984</b> , <i>97</i> , 331-2.	
<b>Catalog number :</b> MPSP-003	
<b>Name :</b> DSLET	
<b>Sequence :</b> H-Tyr-D-Ser-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>46</sub> N <sub>6</sub> O <sub>10</sub>	<b>FW :</b> 686.9
<b>Note :</b> <i>Synthetic enkephalin agonist selective for the δ2 receptor.</i>	
<b>Reference :</b> Fournie-Zaluski, MC; <i>et al. Mol Pharmacol</i> <b>1981</b> , <i>20</i> , 484-91. Traynor, JR; Elliott J <i>Trends Pharmacol Sci</i> <b>1993</b> , <i>14</i> , 84-6.	
<b>Catalog number :</b> MPSP-004	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DSLET	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ser-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>103</sub> H <sub>2</sub>	<b>FW :</b> 690.9
<b>Note :</b> <i>Radioactive ligand for MPSP-003</i>	
<b>Reference :</b> David, M; <i>et al. Eur J Pharmacol</i> <b>1982</b> , <i>78</i> , 385-7.	
<b>Catalog number :</b> MPSP-005	
<b>Name :</b> DTLET	
<b>Sequence :</b> H-Tyr-D-Ser-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>48</sub> N <sub>6</sub> O <sub>10</sub>	<b>FW :</b> 700.9
<b>Note :</b> <i>Synthetic enkephalin agonist moderately selective for the δ receptor.</i>	
<b>Reference :</b> Zajac, JM; <i>et al. Biochem Biophys Res Commun</i> <b>1983</b> , <i>111</i> , 390-7. Delay-Goyet, P; <i>et al. FEBS Lett</i> <b>1985</b> , <i>183</i> , 439-43.	
<b>Catalog number :</b> MPSP-006	
<b>Name :</b> DADLE	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-Phe-D-Leu-OH	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>39</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 569.7
<b>Note :</b> <i>Synthetic enkephalin agonist having improved biological stability and some selectivity for the δ receptor over the μ receptor.</i>	
<b>Reference :</b> Chang, KJ; Cuatrecasas P <i>J Biol Chem</i> <b>1979</b> , <i>254</i> , 2610-8. Gorin, FA; <i>et al. J Med Chem</i> <b>1980</b> , <i>23</i> , 1113-22. Knapp, RJ; Yamamura HI <i>Biochem Pharmacol</i> <b>1992</b> , <i>44</i> , 1687-95.	
<b>Catalog number :</b> MPSP-007	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DADLE	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ala-Gly-Phe-D-Leu-OH	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>37</sub> N <sub>5</sub> O <sub>73</sub> H <sub>2</sub>	<b>FW :</b> 573.7
<b>Note :</b> <i>Tritiated DADLE</i>	
<b>Reference :</b> Luciano, MG; <i>et al. Brain Res Bull</i> <b>1981</b> , <i>7</i> , 677-82.	

<b>Catalog number :</b> MPSP-008	
<b>Name :</b> ICI 174,864	
<b>Sequence :</b> N,N-Diallyl-Tyr-Aib-Aib-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>53</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 691.87
<b>Note :</b> <i>Synthetic enkephalin antagonist selective for the δ receptor.</i>	
<b>Reference :</b> Cotton, R; <i>et al. Eur J Pharmacol</i> <b>1984</b> , <i>97</i> , 331-2. Dray, A; Nunan L <i>Peptides</i> <b>1984</b> , <i>5</i> , 1015-6. Smith, CB; Bennett-Kelly L; Woods JH <i>Neuropeptides</i> <b>1984</b> , <i>5</i> , 161-4.	
<b>Catalog number :</b> MPSP-009	
<b>Name :</b> PLO17	
<b>Sequence :</b> H-Tyr-Pro-N <sup>α</sup> -Me-Phe-D-Pro-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>37</sub> N <sub>5</sub> O <sub>5</sub>	<b>FW :</b> 535.65
<b>Note :</b> <i>Synthetic morphiceptin agonist selective for the μ receptor. Casomorphin analog.</i>	
<b>Reference :</b> Chang, KJ; <i>et al. J Pharmacol Exp Ther</i> <b>1983</b> , <i>227</i> , 403-8.	
<b>Catalog number :</b> MPSP-010	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]PLO17	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Pro-N <sup>α</sup> -Me-Phe-D-Pro-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>35</sub> N <sub>5</sub> O <sub>5</sub> H <sub>2</sub>	<b>FW :</b> 539.6
<b>Note :</b> <i>Radioactive ligand for MPSP-009.</i>	
<b>Reference :</b> Hawkins, KN; <i>et al. Eur J Pharmacol</i> <b>1987</b> , <i>133</i> , 351-2.	
<b>Catalog number :</b> MPSP-011	
<b>Name :</b> DAMGO	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-N <sup>α</sup> -Me-Phe-Gly-ol	
<b>Mol. Formula :</b> C <sub>26</sub> H <sub>35</sub> N <sub>5</sub> O <sub>6</sub>	<b>FW :</b> 513.7
<b>Note :</b> <i>Synthetic enkephalin agonist highly selective for the μ receptor.</i>	
<b>Reference :</b> Kosterlitz, HW; Paterson SJ; Robson LE <i>Br J Pharmacol</i> <b>1981</b> , <i>73</i> , 939-49. Reddy, PA; <i>et al. Org Prep Proc Internat</i> <b>1995</b> , <i>27</i> , 469.	
<b>Catalog number :</b> MPSP-012	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DAMGO	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ala-Gly-N <sup>α</sup> -Me-Phe-Gly-ol	
<b>Mol. Formula :</b> C <sub>26</sub> H <sub>33</sub> N <sub>5</sub> O <sub>6</sub> H <sub>2</sub>	<b>FW :</b> 517.7
<b>Note :</b> <i>Radioactive ligand for MPSP-011</i>	
<b>Reference :</b> Zajac, JM; Roques BP <i>Life Sci</i> <b>1983</b> , <i>33 Suppl 1</i> , 155-8.	
<b>Catalog number :</b> MPSP-013	
<b>Name :</b> CTAP	
<b>Sequence :</b> H-D-Phe-c[Cys-Tyr-D-Trp-Arg-Thr-Pen]-Thr-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>51</sub> H <sub>69</sub> N <sub>13</sub> O <sub>11</sub> S <sub>2</sub>	<b>FW :</b> 1103.0
<b>Note :</b> <i>Cyclic somatostatin analog with high μ selectivity.</i>	
<b>Reference :</b> Pelton, JT; <i>et al. J Med Chem</i> <b>1986</b> , <i>29</i> , 2370-5. Bilsky, EJ; <i>et al. J Pharmacol Exp Ther</i> <b>1996</b> , <i>277</i> , 484-90.	

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<b>Catalog number :</b> MPSP-014	
<b>Name :</b> [ <sup>3</sup> H]CTAP	
<b>Sequence :</b> H-D-Phe[ <sup>3</sup> H]-c[Cys-Tyr-D-Trp-Arg-Thr-Pen]-Thr-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>51</sub> H <sub>68</sub> N <sub>13</sub> O <sub>11</sub> S <sub>23</sub> H	<b>FW :</b> 1105.0
<b>Note :</b> <i>Radioactive ligand for MPSP-013</i>	
<b>Reference :</b> Abbruscato, TJ; et al. <i>J Pharmacol Exp Ther</i> <b>1997</b> , <i>280</i> , 402-9.	
<b>Catalog number :</b> MPSP-015	
<b>Name :</b> Dynorphin(1-17)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>99</sub> H <sub>155</sub> N <sub>31</sub> O <sub>23</sub>	<b>FW :</b> 2147.8
<b>Note :</b> <i>Considered the endogenous ligand for kappa receptors.</i>	
<b>Reference :</b> Goldstein, A; et al. <i>Proc Natl Acad Sci USA</i> <b>1981</b> , <i>78</i> , 7219-23. Cox, BM; et al. <i>Life Sci</i> <b>1975</b> , <i>16</i> , 1777-1782. Goldstein, A; et al. <i>Proc Natl Acad Sci USA</i> <b>1979</b> , <i>78</i> , 6666-70.	
<b>Catalog number :</b> MPSP-016	
<b>Name :</b> Dynorphin (1-13)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-OH	
<b>Mol. Formula :</b> C <sub>75</sub> H <sub>126</sub> N <sub>24</sub> O <sub>15</sub>	<b>FW :</b> 1604.2
<b>Note :</b> <i>Truncated analog of dynorphin A with similar potency</i>	
<b>Reference :</b> Goldstein, A; et al. <i>Proc Natl Acad Sci USA</i> <b>1979</b> , <i>78</i> , 6666-70.	
<b>Catalog number :</b> MPSP-017	
<b>Name :</b> Dynorphin (1-13) amide	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>75</sub> H <sub>127</sub> N <sub>25</sub> O <sub>14</sub>	<b>FW :</b> 1603.2
<b>Note :</b> <i>Truncated amide analog of dynorphin A with similar potency</i>	
<b>Reference :</b> Chavkin, C; Goldstein, A <i>Proc Natl Acad Sci USA</i> <b>1981</b> , <i>78</i> , 6543-7.	
<b>Catalog number :</b> MPSP-018	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Dynorphin (1-13) amide	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>75</sub> H <sub>125</sub> N <sub>25</sub> O <sub>143</sub> H <sub>2</sub>	<b>FW :</b> 1607.2
<b>Note :</b> <i>Radioactive ligand for MPSP-017</i>	
<b>Catalog number :</b> MPSP-019	
<b>Name :</b> Dynorphin (1-11)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH	
<b>Mol. Formula :</b> C <sub>63</sub> H <sub>103</sub> N <sub>21</sub> O <sub>13</sub>	<b>FW :</b> 1362.7
<b>Note :</b> <i>Truncated analog of dynorphin A with similar potency</i>	
<b>Catalog number :</b> MPSP-020	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Dynorphin (1-11)	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH	
<b>Mol. Formula :</b> C <sub>63</sub> H <sub>101</sub> N <sub>21</sub> O <sub>133</sub> H <sub>2</sub>	<b>FW :</b> 1366.7
<b>Note :</b> <i>Radioactive ligand for MPSP-019</i>	
<b>Reference :</b> Chavkin, C; Goldstein, A <i>Proc Natl Acad Sci USA</i> <b>1981</b> , <i>78</i> , 6543-7.	



<b>Catalog number :</b> MPSP-021	
<b>Name :</b> Dynorphin (1-9)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-OH	
<b>Mol. Formula :</b> C <sub>52</sub> H <sub>84</sub> N <sub>18</sub> O <sub>11</sub>	<b>FW :</b> 1137.5
<b>Note :</b> <i>Selective ligand for κ-binding sites.</i>	
<b>Reference :</b> Corbett, AD; <i>et al. Nature</i> <b>1982</b> , 299, 79-81. Yoshimura, K; <i>et al. J Pharmacol Exp Ther</i> <b>1982</b> , 222, 71-9.	
<b>Catalog number :</b> MPSP-022	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Dynorphin (1-9)	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-OH	
<b>Mol. Formula :</b> C <sub>52</sub> H <sub>82</sub> N <sub>18</sub> O <sub>113</sub> H <sub>2</sub>	<b>FW :</b> 1141.5
<b>Note :</b> <i>Radioactive ligand for MPSP-021</i>	
<b>Reference :</b> Robson, LE; <i>et al. Life Sci</i> <b>1983</b> , 33 Suppl 1, 283-6. Wood, MS; Rodriguez FD; Traynor JR <i>Neuropharmacology</i> <b>1989</b> , 28, 1041-6.	
<b>Catalog number :</b> MPSP-023	
<b>Name :</b> Dynorphin B	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Gln-Phe-Lys-Val-Val-Thr-OH	
<b>Mol. Formula :</b> C <sub>74</sub> H <sub>115</sub> N <sub>21</sub> O <sub>17</sub>	<b>FW :</b> 1571.1
<b>Note :</b> <i>N-terminal part of leumorphin</i>	
<b>Reference :</b> Kilpatrick, DL; <i>et al. Proc Natl Acad Sci USA</i> <b>1982</b> , 79, 6480-83. Seizinger, BR; <i>et al. J Neurochem</i> <b>1984</b> , 42, 447-457.	
<b>Catalog number :</b> MPSP-024	
<b>Name :</b> β-Endorphin	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-Tyr-Lys-Lys-Gly-Glu-OH	
<b>Mol. Formula :</b> C <sub>158</sub> H <sub>251</sub> N <sub>39</sub> O <sub>46</sub> S	<b>FW :</b> 3465.6
<b>Note :</b> <i>Endogenous opioid peptide. Contains enkephalin sequence.</i>	
<b>Reference :</b> Li, CH; <i>et al. Biochem Biophys Res Commun</i> <b>1976</b> , 72, 1542-1547. Cox, BM; <i>et al. Proc Natl Acad Sci USA</i> <b>1976</b> , 73, 1821-1823. Bradbury, AF; <i>et al. Nature</i> <b>1976</b> , 260, 165-166.	
<b>Catalog number :</b> MPSP-025	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]β-Endorphin	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Met-Thr-Ser-Glu-Lys-Ser-Gln-Thr-Pro-Leu-Val-Thr-Leu-Phe-Lys-Asn-Ala-Ile-Ile-Lys-Asn-Ala-[ <sup>3</sup> H <sub>2</sub> ]Tyr-Lys-Lys-Gly-Glu-OH	
<b>Mol. Formula :</b> C <sub>158</sub> H <sub>249</sub> N <sub>39</sub> O <sub>46</sub> S <sub>3</sub> H <sub>2</sub>	<b>FW :</b> 3469.6
<b>Note :</b> <i>Radioactive ligand for MPSP-024</i>	
<b>Reference :</b> Li, CH; <i>et al. Proc Natl Acad Sci USA</i> <b>1980</b> , 77, 2303-4.	
<b>Catalog number :</b> MPSP-026	
<b>Name :</b> [ <sup>125</sup> I]β-Endorphin	
<b>Sequence :</b> H-YGGFMTSEKSQTPLVTLFKNAIIKNAYKY[ <sup>125</sup> I <sub>2</sub> ]GE-OH	
<b>Mol. Formula :</b> C <sub>158</sub> H <sub>249</sub> N <sub>39</sub> O <sub>46</sub> S <sub>125</sub> I <sub>2</sub>	<b>FW :</b> 3589.6
<b>Note :</b> <i>Radioactive ligand for MPSP-024</i>	
<b>Reference :</b> Deby-Dupont, G; <i>et al. C R Seances Soc Biol Fil</i> <b>1983</b> , 177, 259-68. Schweigerer, L; <i>et al. J Biol Chem</i> <b>1983</b> , 258, 12287-92.	

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<b>Catalog number :</b> MPSP-027	
<b>Name :</b> DALDA	
<b>Sequence :</b> H-Tyr-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>45</sub> N <sub>9</sub> O <sub>5</sub>	<b>FW :</b> 611.8
<b>Note :</b> <i>Synthetic tetrapeptide agonist highly selective for the μ receptor.</i>	
<b>Reference :</b> Schiller, PW; <i>et al. J Med Chem</i> <b>1989</b> , <i>32</i> , 698-703.	
<b>Catalog number :</b> MPSP-028	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DALDA	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>43</sub> N <sub>9</sub> O <sub>5</sub> H <sub>2</sub>	<b>FW :</b> 615.8
<b>Note :</b> <i>Radioactive ligand for MPSP-027</i>	
<b>Catalog number :</b> MPSP-029	
<b>Name :</b> Met-Enkephalin-amide	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Met-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>27</sub> H <sub>36</sub> N <sub>6</sub> O <sub>6</sub> S	<b>FW :</b> 572.8
<b>Note :</b> <i>Amide analog of [Met5]enkephalin, endogenous opioid peptide.</i>	
<b>Reference :</b> Hughes, J; <i>et al. Nature</i> <b>1975</b> , <i>258</i> , 577-80. Vavrek, RJ; <i>et al. Peptides</i> <b>1981</b> , <i>2</i> , 303-8.	
<b>Catalog number :</b> MPSP-030	
<b>Name :</b> Deltorphin I	
<b>Sequence :</b> H-Tyr-D-Ala-Phe-Asp-Val-Val-Gly-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>52</sub> N <sub>8</sub> O <sub>10</sub>	<b>FW :</b> 768.9
<b>Note :</b> <i>Selective δ receptor agonist isolated from the skin of Phyllomedusa bicolor</i>	
<b>Reference :</b> Amodeo, P; <i>et al. Pept Res</i> <b>1992</b> , <i>5</i> , 48-55. Melchiorri, P; <i>et al. Eur J Pharmacol</i> <b>1991</b> , <i>195</i> , 201-7. Salvadori, S; <i>et al. J Med Chem</i> <b>1991</b> , <i>34</i> , 1656-61.	
<b>Catalog number :</b> MPSP-031	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Deltorphin I	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ala-Phe-Asp-Val-Val-Gly-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>50</sub> N <sub>8</sub> O <sub>10</sub> H <sub>2</sub>	<b>FW :</b> 772.9
<b>Note :</b> <i>Radioactive ligand for MPSP-030</i>	
<b>Reference :</b> Erspamer, V; <i>et al. Proc Natl Acad Sci USA</i> <b>1989</b> , <i>86</i> , 5188.	
<b>Catalog number :</b> MPSP-032	
<b>Name :</b> DSTBULET	
<b>Sequence :</b> H-Tyr-D-Ser(Bu <sup>t</sup> )-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>44</sub> N <sub>6</sub> O <sub>10</sub>	<b>FW :</b> 742.9
<b>Note :</b> <i>Synthetic enkephalin agonist selective for the δ receptor</i>	
<b>Reference :</b> Delay-Goyet, P; <i>et al. J Biol Chem</i> <b>1988</b> , <i>263</i> , 4124-30. Gacel, G; <i>et al. J Med Chem</i> <b>1988</b> , <i>31</i> , 1891-7.	
<b>Catalog number :</b> MPSP-033	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DSTBULET	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ser(Bu <sup>t</sup> )-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>10</sub> H <sub>2</sub>	<b>FW :</b> 746.9
<b>Note :</b> <i>Radioactive ligand for MPSP-032</i>	
<b>Reference :</b> Delay-Goyet, P <i>NIDA Res Mono</i> <b>1986</b> , <i>75</i> , 197-200.	

<b>Catalog number :</b> MPSP-034	
<b>Name :</b> DALCE	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>43</sub> N <sub>6</sub> O <sub>8</sub> S	<b>FW :</b> 673.0
<b>Note :</b> <i>Irreversible antagonist for the δ1 receptor.</i>	
<b>Reference :</b> Bowen, WD, <i>et al. J Biol Chem</i> <b>1987</b> , <i>262</i> , 13434-9. Traynor, JR; Elliott, J <i>TIPS</i> <b>1993</b> , <i>14</i> , 84.	
<b>Catalog number :</b> MPSP-035	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]DALCE	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ala-Gly-Phe-Leu-Cys-OH	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>10</sub> S <sub>3</sub> H <sub>2</sub>	<b>FW :</b> 677.0
<b>Note :</b> <i>Radioactive ligand for MPSP-034</i>	
<b>Catalog number :</b> MPSP-036	
<b>Name :</b> Deltorphin II	
<b>Sequence :</b> H-Tyr-D-Ala-Phe-Glu-Val-Val-Gly-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>54</sub> N <sub>8</sub> O <sub>10</sub>	<b>FW :</b> 782.9
<b>Note :</b> <i>A selective δ-opioid receptor agonist isolated from the skin of Phyllomedusa bicolor</i>	
<b>Reference :</b> Amodeo, P; <i>et al. Pept Res</i> <b>1992</b> , <i>5</i> , 48-55. Melchiorri, P; <i>et al. Eur J Pharmacol</i> <b>1991</b> , <i>195</i> , 201-7. Salvadori, S; <i>et al. J Med Chem</i> <b>1991</b> , <i>34</i> , 1656-61.	
<b>Catalog number :</b> MPSP-037	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Deltorphin II	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-D-Ala-Phe-Glu-Val-Val-Gly-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>52</sub> N <sub>8</sub> O <sub>10</sub> H <sub>2</sub>	<b>FW :</b> 786.9
<b>Note :</b> <i>Radioactive ligand for MPSP-036</i>	
<b>Reference :</b> Erspamer, V; <i>et al. Proc Natl Acad Sci USA</i> <b>1989</b> , <i>86</i> , 5188.	
<b>Catalog number :</b> MPSP-038	
<b>Name :</b> TIPP-Enkephalin (TIPP)	
<b>Sequence :</b> H-Tyr-Tic-Phe-Phe-OH	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>38</sub> N <sub>4</sub> O <sub>6</sub>	<b>FW :</b> 634.8
<b>Note :</b> <i>Highly potent and selective δ-opioid receptor antagonist</i>	
<b>Reference :</b> Schiller, PW; <i>et al. Proc Natl Acad Sci USA</i> <b>1992</b> , <i>89</i> , 11871-11875. Flippen-Anderson, JL; <i>et al. Lett Pept Sci</i> <b>1994</b> , <i>1</i> , 107.	
<b>Catalog number :</b> MPSP-039	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Tipp-Enkephalin	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Tic-Phe-Phe-OH	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>36</sub> N <sub>4</sub> O <sub>6</sub> H <sub>2</sub>	<b>FW :</b> 638.8
<b>Note :</b> <i>Radioactive ligand for MPSP-038</i>	
<b>Reference :</b> Nevin, ST; <i>et al. Life Sci</i> <b>1993</b> , <i>53</i> , PL57-62.	
<b>Catalog number :</b> MPSP-040	
<b>Name :</b> Dynorphin (2-17)	
<b>Sequence :</b> H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>90</sub> H <sub>156</sub> N <sub>30</sub> O <sub>21</sub>	<b>FW :</b> 1984.8
<b>Note :</b> <i>Dynorphin truncation that does not bind to opioid receptors.</i>	
<b>Reference :</b> Chavkin, C; Goldstein, A <i>Proc Natl Acad Sci USA</i> <b>1981</b> , <i>78</i> , 6543-6547.	

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<b>Catalog number :</b> MPSP-041	
<b>Name :</b> [ <sup>3</sup> H]Dynorphin (2-17)	
<b>Sequence :</b> H-Gly-Gly-Phe[ <sup>3</sup> H]-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-Trp-Asp-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>90</sub> H <sub>155</sub> N <sub>30</sub> O <sub>213</sub> H	<b>FW :</b> 1986.8
<b>Note :</b> <i>Radioactive ligand for MPSP-040</i>	
<b>Catalog number :</b> MPSP-042	
<b>Name :</b> Metkephamid	
<b>Sequence :</b> H-Tyr-Ala-Gly-N <sup>α</sup> -Me-Phe-Met-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>40</sub> N <sub>6</sub> O <sub>6</sub> S	<b>FW :</b> 600.8
<b>Note :</b> <i>Stable, systemically active analog of [Met5]enkephalin.</i>	
<b>Reference :</b> RCFredrickson, et al. , Science, 211, 603-605(1981)	
<b>Catalog number :</b> MPSP-044	
<b>Name :</b> <i>p</i> -Cl-Phe-DPDPE	
<b>Sequence :</b> H-Tyr-c[D-Pen-Gly-4-Cl-Phe-D-Pen]-OH	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>38</sub> ClN <sub>5</sub> O <sub>7</sub> S <sub>2</sub>	<b>FW :</b> 680.4
<b>Note :</b> <i>Analog of DPDPE. δ-selectivity 5 times higher than DPDPE due to a 5-fold increased δ-receptor affinity.</i>	
<b>Reference :</b> Toth, G; et al. <i>J Med Chem</i> <b>1990</b> , <i>33</i> , 249-53. Vaughn, LK; et al. <i>Life Sci</i> <b>1989</b> , <i>45</i> , 1001-8.	
<b>Catalog number :</b> MPSP-045	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ] <i>p</i> -Cl-Phe-DPDPE	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-c[D-Pen-Gly-4-Cl-Phe-D-Pen]-OH	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>36</sub> ClN <sub>5</sub> O <sub>7</sub> S <sub>23</sub> H <sub>2</sub>	<b>FW :</b> 684.4
<b>Note :</b> <i>Radioactive ligand for MPSP-044</i>	
<b>Catalog number :</b> MPSP-046	
<b>Name :</b> Dynorphin (2-13)	
<b>Sequence :</b> H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys-OH	
<b>Mol. Formula :</b> C <sub>66</sub> H <sub>117</sub> N <sub>23</sub> O <sub>13</sub>	<b>FW :</b> 1441.1
<b>Note :</b> <i>Dynorphin truncation that does not bind to opioid receptors. Highly immunoreactive.</i>	
<b>Reference :</b> Young, EA; et al. <i>Peptides</i> <b>1987</b> , <i>8</i> , 701-7. Walker, JM; et al. <i>Eur J Pharmacol</i> <b>1982</b> , <i>85</i> , 121-2.	
<b>Catalog number :</b> MPSP-048	
<b>Name :</b> Dynorphin (2-11)	
<b>Sequence :</b> H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-OH	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>10</sub>	<b>FW :</b> 1199.7
<b>Note :</b> <i>Dynorphin truncation which does not bind to opioid receptors</i>	
<b>Reference :</b> Takemori, AE; Loh HH; Lee NM <i>J Pharmacol Exp Ther</i> <b>1993</b> , <i>266</i> , 121-4. Meyer, ME <i>Pharmacol Biochem Behav</i> <b>1993</b> , <i>44</i> , 329-32.	
<b>Catalog number :</b> MPSP-050	
<b>Name :</b> Dynorphin A (1-8)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH	
<b>Mol. Formula :</b> C <sub>46</sub> H <sub>72</sub> N <sub>14</sub> O <sub>10</sub>	<b>FW :</b> 981.4
<b>Note :</b> <i>Endogenous peptide agonist for opioid receptors.</i>	
<b>Reference :</b> Nakao, K; et al. <i>Biochem Biophys Res Commun</i> <b>1983</b> , <i>117</i> , 695-701. Seizinger, BR; et al. <i>J Neurochem</i> <b>1984</b> , <i>42</i> , 447-57. Bell, KM; Traynor JR <i>Can J Physiol Pharmacol</i> <b>1998</b> , <i>76</i> , 325-33.	

<b>Catalog number :</b> MPSP-052	
<b>Name :</b> Dynorphin A (2-8)	
<b>Sequence :</b> H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>63</sub> N <sub>13</sub> O <sub>8</sub>	<b>FW :</b> 818.2
<b>Note :</b> <i>Truncated analog of dynorphin A which does not bind to opioid receptors</i>	
<b>Reference :</b> Takemori, AE; Loh HH; Lee NM <i>J Pharmacol Exp Ther</i> <b>1993</b> , 266, 121-4. Meyer, ME <i>Pharmacol Biochem Behav</i> <b>1993</b> , 44, 329-32.	
<b>Catalog number :</b> MPSP-054	
<b>Name :</b> CTOP	
<b>Sequence :</b> H-D-Phe-c[Cys-Tyr-D-Trp-Orn-Thr-Pen]-Thr-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>50</sub> H <sub>67</sub> N <sub>11</sub> O <sub>11</sub> S <sub>2</sub>	<b>FW :</b> 1062.4
<b>Note :</b> <i>Cyclic somatin analog with high μ selectivity.</i>	
<b>Reference :</b> Gulya, K; et al. <i>Life Sci</i> <b>1986</b> , 38, 2221-9. Pelton, JT; et al. <i>J Med Chem</i> <b>1986</b> , 29, 2370-5.	
<b>Catalog number :</b> MPSP-056	
<b>Name :</b> TIPP[Ψ]	
<b>Sequence :</b> H-Tyr-TicΨ[CH <sub>2</sub> -NH]Phe-Phe-OH	
<b>Mol. Formula :</b> C <sub>37</sub> H <sub>40</sub> N <sub>4</sub> O <sub>5</sub>	<b>FW :</b> 620.8
<b>Note :</b> <i>Highly potent and stable δ receptor antagonist with extraordinary δ selectivity.</i>	
<b>Reference :</b> Schiller, PW; et al. <i>J Med Chem</i> <b>1993</b> , 36, 3182-7. Visconti, LM; et al. <i>Neurosci Lett</i> <b>1994</b> , 181, 47-9.	
<b>Catalog number :</b> MPSP-058	
<b>Name :</b> Orphanin FQ; Nociceptin	
<b>Sequence :</b> H-Phe-Gly-Gly-Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>79</sub> H <sub>129</sub> N <sub>27</sub> O <sub>22</sub>	<b>FW :</b> 1809.4
<b>Note :</b> <i>Endogenous ligand for orphan opioid like receptor (ORL)</i>	
<b>Reference :</b> Reinscheid, RK; et al. <i>Science</i> <b>1995</b> , 270, 792-4. Meunier, JC; et al. <i>Nature</i> <b>1995</b> , 377, 532-5.	
<b>Catalog number :</b> MPSP-059	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Orphanin FQ; [ <sup>3</sup> H <sub>2</sub> ]Nociceptin	
<b>Sequence :</b> H-Phe[ <sup>3</sup> H]-Gly-Gly-Phe[ <sup>3</sup> H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>79</sub> H <sub>127</sub> N <sub>27</sub> O <sub>223</sub> H <sub>2</sub>	<b>FW :</b> 1813.4
<b>Note :</b> <i>Radioactive ligand for MPSP-058</i>	
<b>Reference :</b> Dooley, CT; Houghten RA <i>Life Sci</i> <b>1996</b> , 59, PL23-9.	
<b>Catalog number :</b> MPSP-060	
<b>Name :</b> Dansyl-PQR-amide	
<b>Sequence :</b> Dansyl-Pro-Gln-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>41</sub> N <sub>9</sub> O <sub>6</sub> S	<b>FW :</b> 631.5
<b>Note :</b> <i>Fluorescent truncation analog of neuropeptide FF(NPFF) an anti-opiate peptide</i>	
<b>Reference :</b> Malin, DH; et al. <i>Life Sci</i> <b>1993</b> , 53, PL261-6.	
<b>Catalog number :</b> MPSP-062	
<b>Name :</b> Benzyl-PQR-amide	
<b>Sequence :</b> Benzyl-Pro-Gln-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>23</sub> H <sub>36</sub> N <sub>8</sub> O <sub>4</sub>	<b>FW :</b> 488.6
<b>Note :</b> <i>Truncation analog of neuropeptide FF(NPFF) an anti-opiate peptide</i>	

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<b>Catalog number :</b> MPSP-064	
<b>Name :</b> Met-Enkephalin-acid	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Met-OH	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>37</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 573.7
<b>Note :</b> <i>Endogenous opioid peptide</i>	
<b>Catalog number :</b> MPSP-066	
<b>Name :</b> [ <sup>3</sup> Ψ <sup>4</sup> ,D-Leu <sup>8</sup> ]Dynorphin A (1-8)amide	
<b>Sequence :</b> H-Tyr-Gly-Gly-Ψ(CH <sub>2</sub> -NH)-Phe-Leu-Arg-Arg-D-Leu-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> N <sub>6</sub> O <sub>10</sub>	<b>FW :</b> 967.4
<b>Note :</b> <i>Kappa-selective dynorphin A analog</i>	
<b>Reference :</b> Ambo, A; <i>et al. Chem Pharm Bull</i> <b>1995</b> , <i>43</i> , 1547-50.	
<b>Catalog number :</b> MPSP-068	
<b>Name :</b> TICP[Ψ]	
<b>Sequence :</b> H-Tyr-TicΨ[CH <sub>2</sub> -NH]Cha-Phe-OH	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>38</sub> N <sub>6</sub> O <sub>5</sub>	<b>FW :</b> 610.7
<b>Note :</b> <i>Very stable potent δ antagonist</i>	
<b>Reference :</b> Schiller, PW; <i>et al. J Signal Transduction Research</i> <b>1999</b> , <i>19</i> , 573-88. Szatmari, I; <i>et al. Peptides</i> <b>1999</b> , <i>20</i> , 1079-83.	
<b>Catalog number :</b> MPSP-070	
<b>Name :</b> Endomorphin-1	
<b>Sequence :</b> H-Tyr-Pro-Trp-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>38</sub> N <sub>6</sub> O <sub>5</sub>	<b>FW :</b> 610.7
<b>Note :</b> <i>Endogenous tetrapeptide agonist selective for the μ receptor.</i>	
<b>Reference :</b> Zadina, JE; <i>et al. Nature</i> <b>1997</b> , <i>386</i> , 499. Goldberg, IE; <i>et al. J Pharmacol Exp Ther</i> <b>1998</b> , <i>286</i> , 1007. McConalogue, K; <i>et al. Neuroscience</i> <b>1999</b> , <i>90</i> , 1051.	
<b>Catalog number :</b> MPSP-073	
<b>Name :</b> Endomorphin-2	
<b>Sequence :</b> H-Tyr-Pro-Phe-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>37</sub> N <sub>5</sub> O <sub>5</sub>	<b>FW :</b> 571.7
<b>Note :</b> <i>Endogenous tetrapeptide agonist selective for the μ receptor.</i>	
<b>Reference :</b> Zadina, JE; <i>et al. Nature</i> <b>1997</b> , <i>386</i> , 499-502. Goldberg, IE; <i>et al. J Pharmacol Exp Ther</i> <b>1998</b> , <i>286</i> , 1007-13. McConalogue, K; <i>et al. Neuroscience</i> <b>1999</b> , <i>90</i> , 1051-9.	
<b>Catalog number :</b> MPSP-074	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Endomorphin-2	
<b>Sequence :</b> H-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Pro-Phe-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>35</sub> N <sub>5</sub> O <sub>5</sub> H <sub>2</sub>	<b>FW :</b> 575.7
<b>Note :</b> <i>Radioactive ligand for MPSP-073</i>	
<b>Reference :</b> Spetee, M; <i>et al. Biochem Biophys Res Commun</i> <b>1998</b> , <i>250</i> , 720-5.	
<b>Catalog number :</b> MPSP-076	
<b>Name :</b> Kaffiralin-2	
<b>Sequence :</b> H-D-Phe-D-Phe-D-Nle-D-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>44</sub> N <sub>8</sub> O <sub>4</sub>	<b>FW :</b> 580.7
<b>Note :</b> <i>Kappa-selective agonist identified from a combinatorial library.</i>	
<b>Reference :</b> Dooly, CT; <i>et al. J Bio Chem</i> <b>1998</b> , <i>273</i> , 18848-18856.	

<b>Catalog number :</b> MPSP-077	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Kaffiralin-2	
<b>Sequence :</b> H-[ <sup>3</sup> H]D-Phe-[ <sup>3</sup> H]D-Phe-D-Ile-D-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>42</sub> N <sub>8</sub> O <sub>43</sub> H <sub>2</sub>	<b>FW :</b> 584.7
<b>Note :</b> <i>Radioactive ligand for MPSP-076.</i>	
<b>Catalog number :</b> MPSP-078	
<b>Name :</b> Kaffiralin-1	
<b>Sequence :</b> H-D-Phe-D-Phe-D-Ile-D-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>44</sub> N <sub>8</sub> O <sub>4</sub>	<b>FW :</b> 580.7
<b>Note :</b> <i>Kappa-selective agonist identified from a combinatorial library</i>	
<b>Reference :</b> Dooley, CT; <i>et al. J Biol Chem</i> <b>1998</b> , <i>273</i> , 18848-56.	
<b>Catalog number :</b> MPSP-079	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Kaffiralin-1	
<b>Sequence :</b> H-[ <sup>3</sup> H]D-Phe-[ <sup>3</sup> H]D-Phe-D-Ile-D-Arg-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>42</sub> N <sub>8</sub> O <sub>43</sub> H <sub>2</sub>	<b>FW :</b> 584.7
<b>Note :</b> <i>Radioactive ligand for MPSP-076</i>	
<b>Reference :</b> Dooley, CT; <i>et al. J Biol Chem</i> <b>1998</b> , <i>273</i> , 18848-56.	
<b>Catalog number :</b> MPSP-080	
<b>Name :</b> Leu-Enkephalin-acid	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>37</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 555.3
<b>Note :</b> <i>Endogenous enkephalin.</i>	
<b>Reference :</b> Hughes, J; <i>et al. Nature</i> <b>1975</b> , <i>258</i> , 577. Jones, D <i>Tetrahedron Lett</i> <b>1977</b> , 2853. Vilkas, E; <i>et al. Int J Peptide Protein Res</i> <b>1980</b> , <i>15</i> , 29.	
<b>Catalog number :</b> MPSP-081	
<b>Name :</b> [ <sup>3</sup> H <sub>2</sub> ]Leu-Enkephalin-acid	
<b>Sequence :</b> H-[ <sup>3</sup> H <sub>2</sub> ]Tyr-Gly-Gly-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>37</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 559.3
<b>Note :</b> <i>Radioactive ligand for MPSP-080.</i>	
<b>Catalog number :</b> MPSP-082	
<b>Name :</b> [ <sup>3</sup> H <sub>4</sub> ]Tyr <sup>14</sup> Orphanin FQ	
<b>Sequence :</b> H-Phe[ <sup>3</sup> H]-Gly-Gly-Phe[ <sup>3</sup> H]-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Tyr[ <sup>3</sup> H <sub>2</sub> ]-Ala-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>82</sub> H <sub>123</sub> N <sub>27</sub> O <sub>233</sub> H <sub>4</sub>	<b>FW :</b> 1867.1
<b>Note :</b> <i>Radioactive ligand for MPSP-058</i>	
<b>Reference :</b> Dooley, CT; <i>et al. Life Science</i> <b>1996</b> , <i>59</i> , PL23-PL29.	
<b>Catalog number :</b> MPSP-083	
<b>Name :</b> (Tyr <sup>14</sup> )Orphanin FQ analog	
<b>Sequence :</b> H-Phe-Gly-Gly-Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Tyr-Ala-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>82</sub> H <sub>127</sub> N <sub>27</sub> O <sub>23</sub>	<b>FW :</b> 1859.1
<b>Note :</b> <i>Control ligand for MPSP-082.</i>	

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<b>Catalog number :</b> MPSP-084	
<b>Name :</b> (DMT) <sup>1</sup> -DALDA	
<b>Sequence :</b> H-DMT-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>49</sub> N <sub>9</sub> O <sub>5</sub>	<b>FW :</b> 639.6
<b>Note :</b> <i>Super DALDA</i>	
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , <i>279</i> , 34682-90.	
<b>Catalog number :</b> MPSP-086	
<b>Name :</b> DV1.2.DA1.5.Lan.Enk.(DPDPE lanthionine analog)	
<b>Sequence :</b> H-Tyr-[D-S(Val L-Gly-Phe-D-Ala L)]-OH	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub> S	<b>FW :</b> 584.7
<b>Note :</b> <i>DPDPE lanthionine analog.</i>	
<b>Catalog number :</b> MPSP-088	
<b>Name :</b> [(2S)-Mdp] <sup>1</sup> -Dyn NH <sub>2</sub> (1-11); Dynantin	
<b>Sequence :</b> [(2S)-Mdp] <sup>1</sup> -Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>66</sub> H <sub>109</sub> N <sub>21</sub> O <sub>12</sub>	<b>FW :</b> 1388.4
<b>Note :</b> <i>Highly and potent selective kappa antagonist.</i>	
<b>Reference :</b> Lu, Y <i>et al. J Med Chem</i> <b>2001</b> , <i>44</i> , 3048-53.	
<b>Catalog number :</b> MPSP-095	
<b>Name :</b> [ <sup>3</sup> H <sub>4</sub> ]Orphanin FQ	
<b>Sequence :</b> H-[ <sup>3</sup> H]Phe-Gly-Gly-[ <sup>3</sup> H]Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-[ <sup>3</sup> H <sub>2</sub> ]Leu-Ala-Asn-Gln-OH	
<b>Mol. Formula :</b> C <sub>79</sub> H <sub>125</sub> N <sub>27</sub> O <sub>223</sub> H <sub>4</sub>	<b>FW :</b> 1817.4
<b>Note :</b> <i>Radioactive ligand for MPSP-058.</i>	
<b>Catalog number :</b> PEPT-001	
<b>Name :</b> DADLE hydrochloride; [D-Ala <sup>2</sup> ,D-Leu <sup>5</sup> ]Enkephalin	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-Phe-D-Leu-OH	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>40</sub> ClN <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 606.12
<b>Note :</b> <i>Synthetic enkephalin agonist having improved biological stability and some selectivity for the δ receptor over the μ receptor.</i>	
<b>Reference :</b> Chang, KJ; Cuatrecasas, PJ <i>J Biol Chem</i> <b>1979</b> , <i>254</i> , 2610. Gorin, FA; <i>et al. J Med Chem</i> <b>1980</b> , <i>23</i> , 1113. Knapp, RJ; Yamamura, HI <i>Biochem Pharmacol</i> <b>1992</b> , <i>44</i> , 1687.	
<b>Catalog number :</b> PEPT-003	
<b>Name :</b> [Leu <sup>5</sup> ]Enkephalin trifluoroacetate	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>30</sub> H <sub>38</sub> F <sub>3</sub> N <sub>5</sub> O <sub>9</sub>	<b>FW :</b> 669.62
<b>Note :</b> <i>Endogenous enkephalin.</i>	
<b>Reference :</b> Hughes, J; <i>et al. Nature</i> <b>1975</b> , <i>258</i> , 577. Jones, D <i>Tetrahedron Lett</i> <b>1977</b> , 2853. Vilkas, E; <i>et al. Int J Peptide Protein Res</i> <b>1980</b> , <i>15</i> , 29.	



<b>Catalog number :</b> PEPT-004	
<b>Name :</b> N-( <i>tert</i> -Butyloxycarbonyl)tyrosylglycylglycylphenylalanylleucine methyl ester	
<b>Sequence :</b> Boc-Tyr-Gly-Gly-Phe-Leu-OMe	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>47</sub> N <sub>5</sub> O <sub>9</sub>	<b>FW :</b> 669.77
<b>Note :</b> [ <i>Leu</i> <sup>5</sup> ]enkephalin synthetic precursor.	
<b>Reference :</b> Vilkas, E; et al. <i>Int J Peptide Protein Res</i> <b>1980</b> , <i>15</i> , 29.	
<b>Catalog number :</b> PEPT-006	
<b>Name :</b> N-( <i>tert</i> -Butyloxycarbonyl)tyrosylglycylglycylphenylalanylmethionine methyl ester	
<b>Sequence :</b> Boc-Tyr-Gly-Gly-Phe-Met-OMe	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>45</sub> N <sub>5</sub> O <sub>9</sub> S	<b>FW :</b> 687.81
<b>Note :</b> [ <i>Met</i> <sup>5</sup> ]enkephalin synthetic precursor.	
<b>Reference :</b> Bhotre, BJ; et al. <i>J Indian Chem Soc</i> <b>1978</b> , <i>55</i> , 1128.	
<b>Catalog number :</b> PEPT-007	
<b>Name :</b> [ <i>Met</i> <sup>5</sup> ]Enkephalinamide hydrochloride	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Met-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>27</sub> H <sub>37</sub> ClN <sub>6</sub> O <sub>6</sub> S	<b>FW :</b> 609.14
<b>Note :</b> Amide analog of [ <i>Met</i> <sup>5</sup> ]enkephalin.	
<b>Reference :</b> Puig, MM; et al. <i>Arch Int Pharmacol Ther</i> <b>1979</b> , <i>226</i> , 69. Berger, E; et al. <i>Pharmazie</i> <b>1979</b> , <i>34</i> , 349.	
<b>Catalog number :</b> PEPT-008	
<b>Name :</b> DALA hydrochloride	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-Phe-Met-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>39</sub> ClN <sub>6</sub> O <sub>6</sub> S	<b>FW :</b> 623.17
<b>Note :</b> Potent, long-lasting analog of [ <i>Met</i> <sup>5</sup> ]enkephalin.	
<b>Reference :</b> Pert, CB; et al. <i>Science</i> <b>1976</b> , <i>194</i> , 330.	
<b>Catalog number :</b> PEPT-009	
<b>Name :</b> Metkephamide hydrochloride	
<b>Sequence :</b> Tyr-D-Ala-Gly-N <sup>α</sup> -Me-Phe-Met-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>29</sub> H <sub>41</sub> ClN <sub>6</sub> O <sub>6</sub> S	<b>FW :</b> 637.19
<b>Note :</b> Stable, systemically active analog of [ <i>Met</i> <sup>5</sup> ]enkephalin.	
<b>Reference :</b> Frederickson, RCA; et al. <i>Science</i> <b>1981</b> , <i>211</i> , 603.	
<b>Catalog number :</b> PEPT-010	
<b>Name :</b> DPDPE trifluoroacetate; [ <i>D</i> -Pen <sup>2</sup> , <i>D</i> -Pen <sup>5</sup> ]Enkephalin	
<b>Sequence :</b> H-Tyr-c[ <i>D</i> -Pen-Gly-Phe- <i>D</i> -Pen]-OH	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>40</sub> F <sub>3</sub> N <sub>5</sub> O <sub>9</sub> S <sub>2</sub>	<b>FW :</b> 759.82
<b>Note :</b> Synthetic, conformationally restricted enkephalin agonist selective for the δ <sub>1</sub> receptor.	
<b>Reference :</b> Mosberg, HI; et al. <i>Proc Natl Acad Sci USA</i> <b>1983</b> , <i>80</i> , 5871-4. Knapp, RJ; Yamamura, HI <i>Biochem Pharmacol</i> <b>1992</b> , <i>44</i> , 1687. Traynor, JR; Elliott, J <i>TIPS</i> <b>1993</b> , <i>14</i> , 84.	

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<b>Catalog number :</b> PEPT-014	
<b>Name :</b> DAMGO trifluoroacetate	
<b>Sequence :</b> Tyr-D-Ala-Gly-N <sup>α</sup> -Me-Phe-Gly-ol	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>36</sub> F <sub>3</sub> N <sub>5</sub> O <sub>8</sub>	<b>FW :</b> 627.62
<b>Note :</b> <i>Synthetic enkephalin agonist highly selective for the μ receptor.</i>	
<b>Reference :</b> Handa, BK; <i>et al. Eur J Pharmacol</i> <b>1981</b> , <i>70</i> , 531. Kosterlitz, HW; Paterson, SJ <i>Br J Pharmacol</i> <b>1981</b> , <i>73</i> , 299P. Reddy, PA; <i>et al. Org Prep Proc Internat</i> <b>1995</b> , <i>27</i> , 469.	
<b>Catalog number :</b> PEPT-015	
<b>Name :</b> N-( <i>tert</i> -Butyloxycarbonyl)tyrosyl-D-alanylglycyl-N <sup>α</sup> -methylphenylalanylglycine methyl ester	
<b>Sequence :</b> Boc-Tyr-D-Ala-N <sup>α</sup> -Me-Phe-Gly-OCH <sub>3</sub>	
<b>Mol. Formula :</b> C <sub>32</sub> H <sub>43</sub> N <sub>5</sub> O <sub>9</sub>	<b>FW :</b> 641.72
<b>Catalog number :</b> PEPT-017	
<b>Name :</b> ICI 174864 hydrochloride	
<b>Sequence :</b> N,N-Diallyl-Tyr-Aib-Aib-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>54</sub> ClN <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 728.34
<b>Note :</b> <i>Synthetic enkephalin antagonist selective for the δ receptor.</i>	
<b>Reference :</b> Cotten, R; <i>et al. US Patent</i> 4,474,767 ( <b>1984</b> ). Cotten, R; <i>et al. Eur J Pharmacol</i> <b>1984</b> , <i>97</i> , 331. Dray, D; Nunan, L <i>Peptides</i> <b>1984</b> , <i>5</i> , 1015.	
<b>Catalog number :</b> PEPT-018	
<b>Name :</b> N,N-Diallyl-O- <i>tert</i> -butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrylphenylalanylleucine	
<b>Sequence :</b> N,N-Diallyl-Tyr(Bu <sup>t</sup> )-Aib-Aib-Phe-Leu-OH	
<b>Mol. Formula :</b> C <sub>42</sub> H <sub>61</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 747.98
<b>Reference :</b> Cotton, R.; <i>et al. Eur J Pharmacol</i> <b>1984</b> , <i>97</i> , 331-2.	
<b>Catalog number :</b> PEPT-019	
<b>Name :</b> N,N-Diallyl-O- <i>tert</i> -butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrylphenylalanylleucine methyl ester	
<b>Sequence :</b> N,N-Diallyl-Tyr(Bu <sup>t</sup> )-Aib-Aib-Phe-Leu-OMe	
<b>Mol. Formula :</b> C <sub>43</sub> H <sub>63</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 762.01
<b>Note :</b> <i>ICI 174864 synthetic intermediate.</i>	
<b>Reference :</b> Flippen-Anderson, JL; <i>et al. Lett Pept Sci</i> <b>1994</b> , <i>1</i> , 107.	
<b>Catalog number :</b> PEPT-020	
<b>Name :</b> Methyl N,N-Diallyl-O- <i>tert</i> -butyltyrosyl-α-aminoisobutyryl-α-aminoisobutyrate	
<b>Sequence :</b> N,N-Diallyl-Tyr(Bu <sup>t</sup> )-Aib-Aib-OMe	
<b>Mol. Formula :</b> C <sub>28</sub> H <sub>43</sub> N <sub>3</sub> O <sub>5</sub>	<b>FW :</b> 501.67
<b>Catalog number :</b> PEPT-021	
<b>Name :</b> DTLET trifluoroacetate	
<b>Sequence :</b> Tyr-D-Thr-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>36</sub> H <sub>49</sub> F <sub>3</sub> N <sub>6</sub> O <sub>12</sub>	<b>FW :</b> 814.81
<b>Reference :</b> Zajac, JM; <i>et al. Biochem Biophys Res Commun</i> <b>1983</b> , <i>111</i> , 390. Delay-Goyet, P; <i>et al. FEBS Lett</i> <b>1985</b> , <i>183</i> , 439.	

**Catalog number :** PEPT-022**Name :** N-(*tert*-Butyloxycarbonyl)tyrosyl-O-*tert*-butyl-D-threonylglycylphenylalanylleucine hydrazide**Sequence :** Boc-Tyr(Bu<sup>t</sup>)-D-Thr-Gly-Phe-Leu-NH-NH<sub>2</sub>**Mol. Formula :** C<sub>39</sub>H<sub>59</sub>N<sub>7</sub>O<sub>9</sub>**FW :** 769.95**Catalog number :** PEPT-023**Name :** PL017 trifluoroacetate**Sequence :** Tyr-Pro-N<sup>α</sup>-Me-Phe-D-Pro-NH<sub>2</sub>**Mol. Formula :** C<sub>31</sub>H<sub>38</sub>F<sub>3</sub>N<sub>5</sub>O<sub>7</sub>**FW :** 649.67**Note :** *Synthetic morphiceptin agonist selective for the μ receptor.***Reference :** Chang, KJ; *et al. Science* **1981**, *212*, 75.**Catalog number :** PEPT-030**Name :** TIPP trifluoroacetate**Sequence :** H-Tyr-Tic-Phe-Phe-OH**Mol. Formula :** C<sub>39</sub>H<sub>39</sub>F<sub>3</sub>N<sub>4</sub>O<sub>8</sub>**FW :** 748.76**Note :** *Highly potent and selective δ receptor antagonist.***Reference :** Schiller, PW; *et al. Proc Natl Acad Sci USA* **1992**, *89*, 11871.**Catalog number :** PEPT-031**Name :** D-TIPP-NH<sub>2</sub> trifluoroacetate/acetate**Sequence :** Tyr-D-Tic-Phe-Phe-NH<sub>2</sub>**Mol. Formula :** C<sub>39</sub>H<sub>40.9</sub>F<sub>2.1</sub>N<sub>5</sub>O<sub>7</sub>**FW :** 731.58**Note :** *Potent and highly selective μ receptor agonist.***Reference :** Schiller, PW; *et al. Proc Natl Acad Sci USA* **1992**, *89*, 11871.  
Flippen-Anderson, JL; *et al. J Peptide Res* **1997**, *49*, 384.**Catalog number :** PEPT-032**Name :** TIPP[Ψ] acetate/trifluoroacetate**Sequence :** H-Tyr-TicΨ[CH<sub>2</sub>NH]Phe-Phe-OH**Mol. Formula :** C<sub>41</sub>H<sub>45</sub>F<sub>3</sub>N<sub>4</sub>O<sub>9</sub>**FW :** 794.82**Note :** *Highly potent and stable δ receptor antagonist with extraordinary δ selectivity.***Reference :** Schiller, PW; *et al. J Med Chem* **1993**, *36*, 3182.  
Visconti, LM; *et al. Neurosci Lett* **1994**, *181*, 47.**Catalog number :** PEPT-033**Name :** Deltorphan I hemitrifluoroacetate**Sequence :** Tyr-D-Ala-Phe-Asp-Val-Val-Gly-NH<sub>2</sub>**Mol. Formula :** C<sub>37</sub>H<sub>52</sub>N<sub>8</sub>O<sub>10</sub>**FW :** 768.87**Note :** *Selective δ receptor agonist isolated from the skin of *Phyllomedusa bicolor*.***Reference :** Erspamer, V; *et al. Proc Natl Acad Sci USA* **1989**, *86*, 5188.  
Salvadori, S; *et al. J Med Chem* **1991**, *34*, 1656.  
DLHeyl and SESchullery, *CurrMedChem.*, *4*, 117 (1997).

<b>Catalog number :</b> PEPT-034	
<b>Name :</b> Deltorhin II trifluoroacetate	
<b>Sequence :</b> Tyr-D-Ala-Phe-Glu-Val-Val-Gly-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>40</sub> H <sub>55</sub> F <sub>3</sub> N <sub>8</sub> O <sub>12</sub>	<b>FW :</b> 896.92
<b>Note :</b> <i>Selective δ2 receptor agonist isolated from the skin of Phyllomedusa bicolor.</i>	
<b>Reference :</b> Erspamer, V; <i>et al. Proc Natl Acad Sci USA</i> <b>1989</b> , <i>86</i> , 5188. Salvadori, S; <i>et al. J Med Chem</i> <b>1991</b> , <i>34</i> , 1656. Traynor, JR; Elliott, J <i>TIPS</i> <b>1993</b> , <i>14</i> , 84.	
<b>Catalog number :</b> PEPT-035	
<b>Name :</b> DALCE trifluoroacetate	
<b>Sequence :</b> Tyr-D-Ala-Gly-Phe-Leu-Cys-OH	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>45</sub> F <sub>3</sub> N <sub>6</sub> O <sub>10</sub> S	<b>FW :</b> 786.82
<b>Note :</b> <i>Irreversible antagonist for the δ1 receptor.</i>	
<b>Reference :</b> Bowen, WD; <i>et al. J Biol Chem</i> <b>1987</b> , <i>262</i> , 13434-9. Traynor, JR; Elliott, J <i>TIPS</i> <b>1993</b> , <i>14</i> , 84.	
<b>Catalog number :</b> PEPT-036	
<b>Name :</b> FMRF amide bis(trifluoroacetate)	
<b>Sequence :</b> H-Phe-Met-Arg-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>33</sub> H <sub>44</sub> F <sub>6</sub> N <sub>8</sub> O <sub>8</sub> S	<b>FW :</b> 826.82
<b>Note :</b> <i>Molluscan cardioexcitatory neuropeptide.</i>	
<b>Reference :</b> Price, DA; Greenberg, MJ <i>Science</i> <b>1997</b> , <i>197</i> , 670. Tang, J; <i>et al. Proc Natl Acad Sci USA</i> <b>1984</b> , <i>81</i> , 5002.	
<b>Catalog number :</b> PEPT-037	
<b>Name :</b> Dermorphin trifluoroacetate	
<b>Sequence :</b> Tyr-D-Ala-Phe-Gly-Tyr-Pro-Ser-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>42</sub> H <sub>51</sub> F <sub>3</sub> N <sub>8</sub> O <sub>12</sub>	<b>FW :</b> 916.91
<b>Note :</b> <i>Selective μ receptor agonist isolated from the skin of Phyllomedusa sauvagei.</i>	
<b>Reference :</b> Montecucchi, PC; <i>et al. Int J Peptide Protein Res</i> <b>1981</b> , <i>17</i> , 275. Melchiorri, P; Negri, L <i>Gen Pharmac</i> <b>1996</b> , <i>27</i> , 1099.	
<b>Catalog number :</b> PEPT-038	
<b>Name :</b> DALDA tris(trifluoroacetate)	
<b>Sequence :</b> H-Tyr-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>36</sub> H <sub>48</sub> F <sub>9</sub> N <sub>9</sub> O <sub>11</sub>	<b>FW :</b> 611.75
<b>Note :</b> <i>Synthetic tetrapeptide agonist highly selective for the μ receptor.</i>	
<b>Reference :</b> Schiller, PW; <i>et al. J Med Chem</i> <b>1989</b> , <i>32</i> , 698.	
<b>Catalog number :</b> PEPT-039	
<b>Name :</b> DSLET trifluoroacetate	
<b>Sequence :</b> Tyr-D-Ser-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>35</sub> H <sub>47</sub> F <sub>3</sub> N <sub>6</sub> O <sub>12</sub>	<b>FW :</b> 800.79
<b>Note :</b> <i>Synthetic enkephalin agonist selective for the δ2 receptor.</i>	
<b>Reference :</b> Gacel, G; <i>et al. FEBS Lett</i> <b>1980</b> , <i>118</i> , 245. Gacel, G; <i>et al. J Med Chem</i> <b>1981</b> , <i>24</i> , 1119. Traynor, JR; Elliott, J <i>TIPS</i> <b>1993</b> , <i>14</i> , 84.	

<b>Catalog number :</b> PEPT-040	
<b>Name :</b> Dynorphin A 1-8 tris(trifluoroacetate)	
<b>Sequence :</b> H-Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH	
<b>Mol. Formula :</b> C <sub>52</sub> H <sub>75</sub> F <sub>9</sub> N <sub>14</sub> O <sub>16</sub>	<b>FW :</b> 1323.24
<b>Note :</b> <i>Endogenous peptide agonist for opioid receptors.</i>	
<b>Reference :</b> Weber, E; <i>et al. Nature</i> <b>1982</b> , 299, 77. Corbett, A; <i>et al. Nature</i> <b>1982</b> , 299, 79. Bell, KM; Traynor, JR <i>Can J Physiol Pharmacol</i> <b>1998</b> , 76, 325.	
<b>Catalog number :</b> PEPT-041	
<b>Name :</b> Dynorphin A 2-8 tris(trifluoroacetate)	
<b>Sequence :</b> H-Gly-Gly-Phe-Leu-Arg-Arg-Ile-OH	
<b>Mol. Formula :</b> C <sub>43</sub> H <sub>66</sub> F <sub>9</sub> N <sub>13</sub> O <sub>14</sub>	<b>FW :</b> 1159.69
<b>Note :</b> <i>Des-Tyr1 analog of dynorphin A (1-8).</i>	
<b>Reference :</b> Takemori, AE; Loh HH; Lee NM <i>J Pharmacol Exp Ther</i> <b>1993</b> , 266, 121-4. Meyer, ME <i>Pharmacol Biochem Behav</i> <b>1993</b> , 44, 329-32.	
<b>Catalog number :</b> PEPT-042	
<b>Name :</b> Biphalin trifluoroacetate/acetate	
<b>Sequence :</b> H-Tyr-D-Ala-Gly-Phe-NH-Tyr-D-Ala-Gly-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>50</sub> H <sub>58.3</sub> F <sub>5.7</sub> N <sub>10</sub> O <sub>14</sub>	<b>FW :</b> 1120.26
<b>Note :</b> <i>Synthetic dimeric enkephalin having potent agonist activity at μ and δ receptors.</i>	
<b>Reference :</b> Lipkowski, AW; <i>et al. Life Sci</i> <b>1987</b> , 40, 2283-8. Li, G; <i>et al. Bioorg Med Chem Lett</i> <b>1998</b> , 8, 555-60.	
<b>Catalog number :</b> PEPT-043	
<b>Name :</b> DSTBULET acetate	
<b>Sequence :</b> H-Tyr-D-Ser(Bu <sup>1</sup> )-Gly-Phe-Leu-Thr-OH	
<b>Mol. Formula :</b> C <sub>39</sub> H <sub>58</sub> N <sub>6</sub> O <sub>12</sub>	<b>FW :</b> 802.92
<b>Note :</b> <i>Synthetic enkephalin agonist selective for the δ receptor.</i>	
<b>Reference :</b> Delay-Goyet, P; <i>et al. J Biol Chem</i> <b>1988</b> , 263, 4124-30. Gacel, G; <i>et al. J Med Chem</i> <b>1988</b> , 31, 1891-7.	
<b>Catalog number :</b> PEPT-044	
<b>Name :</b> Endomorphin-1 Trifluoroacetate/Acetate	
<b>Sequence :</b> Tyr-Pro-Trp-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>36</sub> H <sub>39.15</sub> F <sub>2.85</sub> N <sub>6</sub> O <sub>7</sub>	<b>FW :</b> 722.04
<b>Note :</b> <i>Endogenous tetrapeptide agonist selective for the μ receptor.</i>	
<b>Reference :</b> JEZadina <i>et al.</i> , <i>Nature</i> , 386, 499 (1997) IEGoldberg <i>et al.</i> , <i>JPharmacolExpTher.</i> , 286, 1007 (1998) KMcConalogue <i>et al.</i> , <i>Neuroscience</i> , 90, 1051 (1999)	
<b>Catalog number :</b> PEPT-045	
<b>Name :</b> Endomorphin-2 Trifluoroacetate/Acetate	
<b>Sequence :</b> Tyr-Pro-Phe-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>34</sub> H <sub>38.3</sub> F <sub>2.7</sub> N <sub>5</sub> O <sub>7</sub>	<b>FW :</b> 680.30
<b>Note :</b> <i>Endogenous tetrapeptide agonist selective for the μ receptor.</i>	
<b>Reference :</b> Zadina, JE; <i>et al. Nature</i> <b>1997</b> , 386, 499-502. Goldberg, IE; <i>et al. J Pharmacol Exp Ther</i> <b>1998</b> , 286, 1007-13. McConalogue, K; <i>et al. Neuroscience</i> <b>1999</b> , 90, 1051-9.	

## 7 – Peptides

<b>Catalog number :</b> PEPT-046	
<b>Name :</b> DIPP-NH <sub>2</sub> [Ψ] <i>bis</i> (Trifluoroacetate)	
<b>Sequence :</b> Dmt-TicΨ[CH <sub>2</sub> NH]Phe-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>43</sub> H <sub>47</sub> F <sub>6</sub> N <sub>5</sub> O <sub>8</sub>	<b>FW :</b> 875.85
<b>Note :</b> <i>Synthetic high potency pseudopeptide having balanced μ agonist/δ antagonist properties.</i>	
<b>Reference :</b> Schiller, PW; <i>et al. J Med Chem</i> <b>1999</b> , 42, 3520-6.	
<b>Catalog number :</b> PEPT-047	
<b>Name :</b> Super DALDA; SS-02; [Dmt1]DALDA <i>tris</i> (trifluoroacetate)	
<b>Sequence :</b> Dmt-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>52</sub> F <sub>9</sub> N <sub>9</sub> O <sub>11</sub>	<b>FW :</b> 981.354
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , 279, 34682-90. Schiller, PW; <i>et al. Eur J Med Chem</i> <b>2000</b> , 35, 895-901.	
<b>Catalog number :</b> PEPT-048	
<b>Name :</b> 2',6'-Dimethyltyrosyl-Ng-nitro-D-arginylphenylalanyllysine trifluoroacetate	
<b>Sequence :</b> Dmt-D-Arg(NO <sub>2</sub> )-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>36</sub> H <sub>50</sub> F <sub>6</sub> N <sub>10</sub> O <sub>11</sub>	<b>FW :</b> 944.2
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , 279, 34682-90.	
<b>Catalog number :</b> PEPT-049	
<b>Name :</b> 2',6'-Dimethyltyrosyl-Ng-nitro-D-arginylphenylalanyl-Ne-2-Cl-Cbz-lysine trifluoroacetate	
<b>Sequence :</b> Dmt-D-Arg(NO <sub>2</sub> )-Phe-Lys(2-Cl-Cbz)-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>42</sub> H <sub>55</sub> ClF <sub>3</sub> N <sub>10</sub> O <sub>11</sub>	<b>FW :</b> 949.376
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , 279, 34682-90.	
<b>Catalog number :</b> PEPT-050	
<b>Name :</b> SS-31; D-Arginyl-(2',6'-dimethyl)tyrosylphenylalaninamide <i>tris</i> (Trifluoroacetate)	
<b>Sequence :</b> D-Arg-Dmt-Lys-Phe-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>38</sub> H <sub>52</sub> F <sub>9</sub> N <sub>9</sub> O <sub>11</sub>	<b>FW :</b> 981.354
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , 279, 34682-90.	
<b>Catalog number :</b> PEPT-051	
<b>Name :</b> SS-20; Phenylalanyl-D-arginylphenylalanyllysine <i>tris</i> (trifluoroacetate)	
<b>Sequence :</b> Phe-D-Arg-Phe-Lys-NH <sub>2</sub>	
<b>Mol. Formula :</b> C <sub>36</sub> H <sub>48</sub> F <sub>9</sub> N <sub>8</sub> O <sub>9</sub>	<b>FW :</b> 938.9
<b>Reference :</b> Zhao, K; <i>et al. J Biol Chem</i> <b>2004</b> , 279, 34682-90.	
<b>Catalog number :</b> PEPT-052	
<b>Name :</b> TIPP[Ψ] <i>bis</i> (trifluoroacetate)	
<b>Sequence :</b> Tyr-Tic-Ψ[CH <sub>2</sub> NH]Phe-Phe-OH	
<b>Mol. Formula :</b> C <sub>41</sub> H <sub>42</sub> F <sub>6</sub> N <sub>4</sub> O <sub>9</sub>	<b>FW :</b> 848.80
<b>Note :</b> <i>Selective delta opioid receptor antagonist.</i>	
<b>Reference :</b> Schiller, PW; <i>et al. J Med Chem</i> <b>1993</b> , 36, 3182-7.	

**Catalog number :** PEPT-056**Name :** Dynantin**Sequence :** [2S]-Mdp-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-NH<sub>2</sub>**Mol. Formula :** C<sub>66</sub>H<sub>109</sub>N<sub>21</sub>O<sub>12</sub> • 4 CF<sub>3</sub>CO<sub>2</sub>H**FW :** 1844.41**Note :** *κ-Opioid antagonist.***Reference :** (1) Lu, Y.; et al., *J Med Chem*, 2001, 44, 3048. (2) Schiller, P. W.; et al., *Life Sci*, 2003, 73, 691.**Catalog number :** PEPT-060**Name :** CJ-15,208**Sequence :** cyclo[Phe-D-Pro-Phe-Trp]**Mol. Formula :** C<sub>34</sub>H<sub>35</sub>N<sub>5</sub>O<sub>4</sub> • CF<sub>3</sub>CO<sub>2</sub>H**FW :** 691.70**Note :** *Kappa-opioid receptor antagonist. Peptide content 63%.***Reference:** Ross, NC; et al., *Tetrahedron Lett.* 2010, 51, 5020-5023.**Catalog number :** PEPT-061**Name :** D-Trp<sup>4</sup>-CJ-15,208**Sequence :** cyclo[Phe-D-Pro-Phe-Trp]**Mol. Formula :** C<sub>34</sub>H<sub>35</sub>N<sub>5</sub>O<sub>4</sub> • CF<sub>3</sub>CO<sub>2</sub>H**FW :** 691.70**Note :** *Kappa-opioid receptor antagonist. Peptide content 54%.***Reference:** Ross, NC; et al., *Tetrahedron Lett.* 2010, 51, 5020-5023.**Peptides: Orexin Class****Catalog number :** MPSP-115**Name :** Orexin A (human, bovine, rat, mouse), Hypocretin-1**Sequence :** pGlu-Pro-Leu-Pro-Asp-Cys-Cys-Arg-Gln-Lys-Thr-Cys-Ser-Cys-Arg-Leu-Tyr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Leu-NH<sub>2</sub> (Disulfide bridges Cys6-Cys12 and Cys7-Cys14)**Mol. Formula :** C<sub>152</sub>H<sub>243</sub>N<sub>47</sub>O<sub>44</sub>S<sub>4</sub>**FW :** 3561.2**Note :** *Hypothalamic neuropeptide that regulates feeding behavior.***Reference :** M.W. Schwartz, *Nat. Med.* 4, 385 (1998); T. Sakurai et al., *Cell* 92, 573 (1998); M.R. Jain et al., *Regul. Peptides* 87, 19 (2000); E. Goncz et al., *Endocrinology* 149, 1618 (2008)**Catalog number :** MPSP-116**Name :** Orexin B (human), Hypocretin-2**Sequence :** H-Arg-Ser-Gly-Pro-Pro-Gly-Leu-Gln-Gly-Arg-Leu-Gln-Arg-Leu-Leu-Gln-Ala-Ser-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Met-NH<sub>2</sub>**Mol. Formula :** C<sub>123</sub>H<sub>212</sub>N<sub>44</sub>O<sub>35</sub>S**FW :** 2899.4**Note :** *Hypothalamic neuropeptide that regulates feeding behavior.***Reference :** M.W. Schwartz, *Nat. Med.* 4, 385 (1998); T. Sakurai et al., *Cell* 92, 573 (1998); M.R. Jain et al., *Regul. Peptides* 87, 19 (2000)





★ = custom synthesis

**Sedatives: Barbiturate Class**

Catalog number : 2100-001

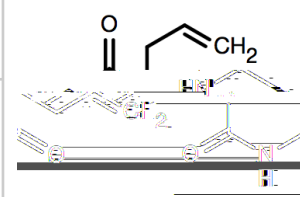
CASRN : 52-43-7

Name : 5,5-Diallylbarbituric acid; Allobarbital

Mol. formula : C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>

FW : 208.21

DEA schedule : 2

Notes : *Anti-convulsant*References : *Merck Index*, 14th ed., Monograph 263.

Catalog number : 2100-006

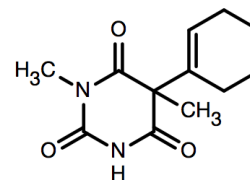
CASRN : 56-29-1

Name : (±)-Hexobarbital

Mol. formula : C<sub>12</sub>H<sub>16</sub>N<sub>2</sub>O<sub>3</sub>

FW : 236.26

DEA schedule : 2

Notes : *Hypnotic; sedative; GABA moderator*References : *Merck Index*, 14th ed., Monograph 4704.

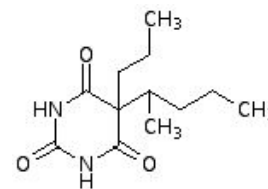
Catalog number : 2100-010

Name : (±)-5-Propyl-5-(1'-methylbutyl)barbituric acid

Mol. formula : C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>

FW : 240.30

DEA schedule : 2

Notes : *Sedative*

Catalog number : 2125-001

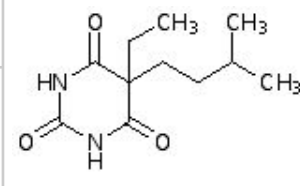
CASRN : 57-43-2

Name : (±)-Amobarbital

Mol. formula : C<sub>11</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>

FW : 226.27

DEA schedule : 2

Notes : *Hypnotic; sedative (but not anti-anxiety)*References : *Merck Index*, 14th ed., Monograph 570.

Catalog number : 2270-002

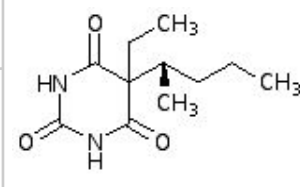
CASRN : 21642-82-0

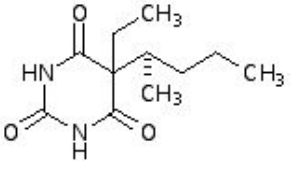
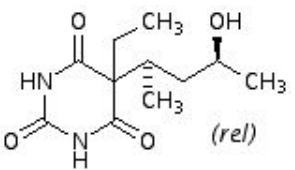
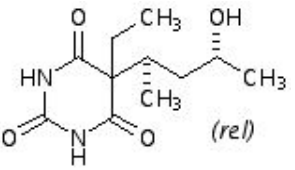
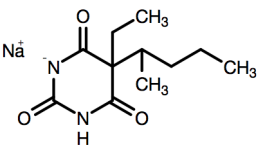
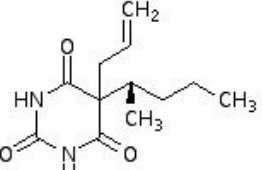
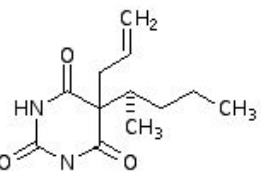
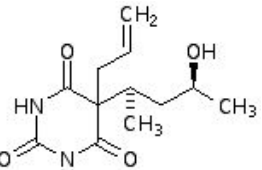
Name : (-)-(S)-Pentobarbital

Mol. formula : C<sub>11</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>

FW : 226.27

DEA schedule : 2

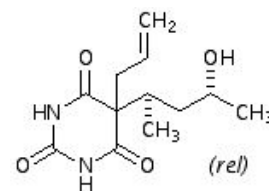
Notes : *Hypnotic; sedative (but not anti-anxiety)*

<b>Catalog number :</b> 2270-003		<b>CASRN :</b> 21642-83-1	
<b>Name :</b> (+)-(R)-Pentobarbital			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 226.27	<b>DEA schedule :</b> 2
<b>Notes :</b> Hypnotic; sedative (but not anti-anxiety)			
<b>References :</b> Merck Index, 14th ed., Monograph 7130.			
			
<b>Catalog number :</b> 2270-010			
<b>Name :</b> (1'RS,3'SR)-5-Ethyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub>		<b>FW :</b> 242.27	<b>DEA schedule :</b> 2
<b>Notes :</b> Pentobarbital metabolite			
<b>References :</b> Carroll, FI; Mitchell, GN <i>J Med Chem</i> 1975, 18, 37-41.			
			
<b>Catalog number :</b> 2270-011			
<b>Name :</b> (1'RS,3'RS)-5-Ethyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub>		<b>FW :</b> 242.27	<b>DEA schedule :</b> 2
<b>Notes :</b> Pentobarbital metabolite			
<b>References :</b> Carroll, FI; Mitchell, GN <i>J Med Chem</i> 1975, 18, 37-41.			
			
<b>Catalog number :</b> 2270-012		<b>CASRN :</b> 57-33-0	
<b>Name :</b> Sodium pentobarbital			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>17</sub> N <sub>2</sub> NaO <sub>3</sub>		<b>FW :</b> 249.26	<b>DEA schedule :</b> 2
<b>References :</b> ChemSpider ID 5762.			
			
<b>Catalog number :</b> 2315-001		<b>CASRN :</b> 20224-45-7	
<b>Name :</b> (-)-(S)-Secobarbital			
<b>Mol. formula :</b> C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 238.27	<b>DEA schedule :</b> 2
<b>Notes :</b> Sedative (but not anti-anxiety)			
			
<b>Catalog number :</b> 2315-002		<b>CASRN :</b> 22328-94-5	
<b>Name :</b> (+)-(R)-Secobarbital			
<b>Mol. formula :</b> C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 238.27	<b>DEA schedule :</b> 2
<b>Notes :</b> Hypnotic; sedative (but not anti-anxiety)			
<b>References :</b> Merck Index, 14th ed., Monograph 8420. Carroll, FI; Mitchell, GN <i>J Med Chem</i> 1975, 18, 37-41.			
			
<b>Catalog number :</b> 2315-010			
<b>Name :</b> (1'RS,3'SR)-5-Allyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acid			
<b>Mol. formula :</b> C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>4</sub>		<b>FW :</b> 254.28	<b>DEA schedule :</b> 2
<b>Notes :</b> Secobarbital metabolite			
			

Catalog number : 2315-011

Name : (1'*RS*,3'*RS*)-5-Allyl-5-(3'-hydroxy-1'-methylbutyl)barbituric acidMol. formula : C<sub>12</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>

FW : 254.28    DEA schedule : 2

Notes : *Secobarbital metabolite*References : Carroll, FI; Mitchell, GN *J Med Chem* 1975, 18, 37-41.**Sedatives: Benzodiazepine Class**

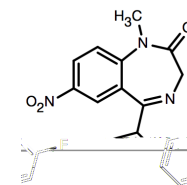
Catalog number : 2763-001

CASRN : 1622-62-4

Name : Flunitrazepam; Rohypnol

Mol. formula : C<sub>16</sub>H<sub>12</sub>FN<sub>3</sub>O<sub>3</sub>

FW : 313.28    DEA schedule : 4

Notes : *Hypnotic.*References : Mattila, MA; Larni, HM *Drugs* 1980, 20, 353-74.

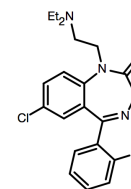
Catalog number : 2767-001

CASRN : 1172-18-5

Name : Flurazepam dihydrochloride

Mol. formula : C<sub>21</sub>H<sub>23</sub>ClFN<sub>3</sub>O

FW : 460.80    DEA schedule : 4

References : *Merck Index*, 14th ed., Monograph 4198.

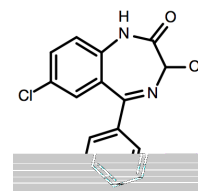
Catalog number : 2835-001

CASRN : 604-75-1

Name : (±)-Oxazepam

Mol. formula : C<sub>15</sub>H<sub>11</sub>ClN<sub>2</sub>O<sub>2</sub>

FW : 286.71    DEA schedule : 4

Notes : *Anti-anxiety, anti-insomnia*References : *Merck Index*, 14th ed., Monograph 6926.**Sedatives: Butyrolactam Class**

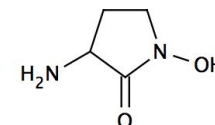
Catalog number : NOCD-070

CASRN : 1003-51-6

Name : (±)-3-Amino-1-hydroxypyrrolidin-2-one; (±)-HA-966

Mol. formula : C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>

FW : 116.12    DEA schedule : 0

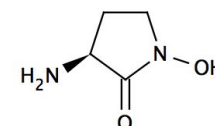
Notes : *Glycine/NMDA receptor antagonist*References : Leeson, PD; Iversen, LL *J Med Chem* 1994, 37, 4053-4067.

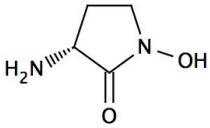
Catalog number : NOCD-071

Name : (-)-(S)-3-Amino-1-hydroxypyrrolidin-2-one; (-)-(S)-HA-966


Mol. formula : C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>

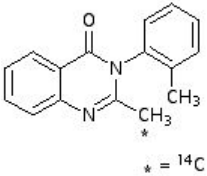
FW : 116.12    DEA schedule : 0

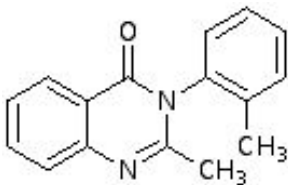
Notes : *Potent γ-butyrolactone-like sedative*References : Singh, L; et al. *Proc Natl Acad Sci USA* 1990, 87, 347-51.

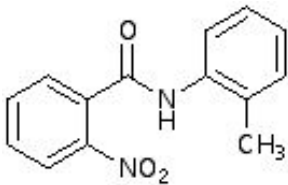
<b>Catalog number :</b> NOCD-072		
<b>Name :</b> (+)-(R)-3-Amino-1-hydroxypyrrolidin-2-one; (+)-(R)-HA-966		
<b>Mol. formula :</b> C <sub>4</sub> H <sub>8</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 116.12	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Glycine/NMDA receptor antagonist</i>		
<b>References :</b> Singh, L; <i>et al. Proc Natl Acad Sci USA</i> <b>1990</b> , <i>87</i> , 347-51.		
		

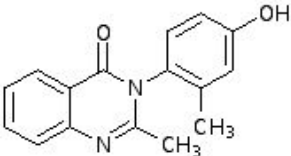
**Sedatives: Methaqualone Class**

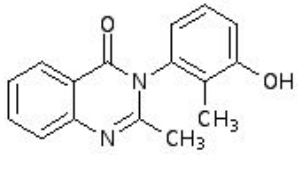
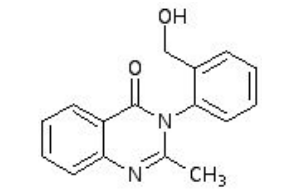
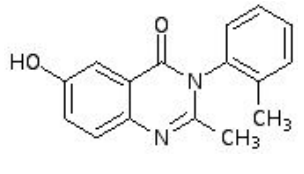
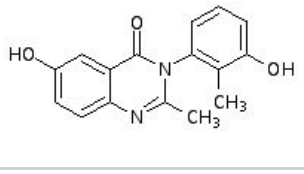
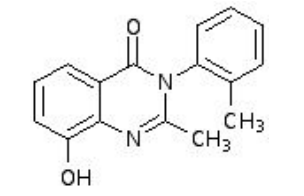
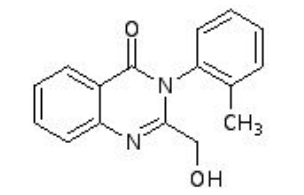
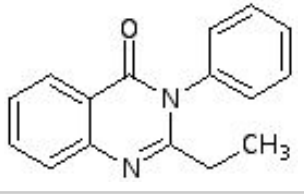
<b>Catalog number :</b> 2565-001		<b>CASRN :</b> 72-44-6
<b>Name :</b> [ <sup>2</sup> H <sub>4</sub> ]Methaqualone		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 254.32	<b>DEA schedule :</b> 1
<b>Notes :</b>		

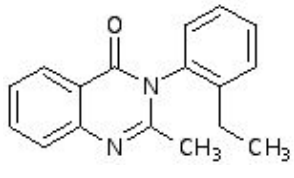
<b>Catalog number :</b> 2565-002		<b>CASRN :</b> 72-44-6
<b>Name :</b> [2- <sup>14</sup> C]Methaqualone		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 251.30	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>Sedative; hypnotic (carbon-labeled).</i>		

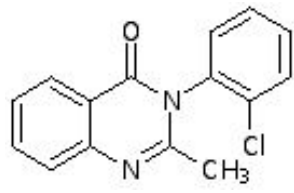
<b>Catalog number :</b> 2565-003		<b>CASRN :</b> 72-44-6
<b>Name :</b> Methaqualone		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 250.30	<b>DEA schedule :</b> 1
<b>Notes :</b> <i>CNS depressant; sedative; hypnotic</i>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 5960.		

<b>Catalog number :</b> 2565-012		<b>CASRN :</b> 2385-25-3
<b>Name :</b> 2-Nitro- <i>o</i> -benzotoluidide		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 256.26	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Methaqualone urinary metabolite</i>		
<b>References :</b> Murata, T; Yamamoto, I <i>Chem Pharm Bull</i> (Tokyo) <b>1970</b> , <i>18</i> , 133-7.		

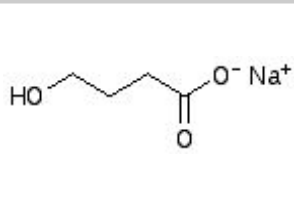
<b>Catalog number :</b> 2565-013		<b>CASRN :</b> 5060-52-6
<b>Name :</b> 4'-Hydroxymethaqualone		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30	<b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> <b>1979</b> , <i>16</i> , 25.		

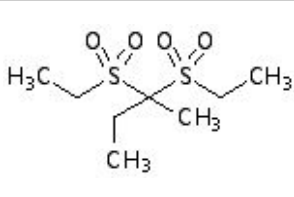
<b>Catalog number :</b> 2565-014	<b>CASRN :</b> 5060-63-9
<b>Name :</b> 3'-Hydroxymethaqualone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-015	<b>CASRN :</b> 5060-50-4
<b>Name :</b> 2'-Hydroxymethaqualone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-016	<b>CASRN :</b> 5060-51-5
<b>Name :</b> 6-Hydroxymethaqualone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-017	<b>CASRN :</b> 29541-82-0
<b>Name :</b> 6, 3'-Dihydroxymethaqualone	
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 282.29 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-018	<b>CASRN :</b> 5060-53-7
<b>Name :</b> 8-Hydroxymethaqualone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-019	<b>CASRN :</b> 5060-49-1
<b>Name :</b> 2-Hydroxymethaqualone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 266.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	
<b>Catalog number :</b> 2565-020	<b>CASRN :</b> 5260-41-3
<b>Name :</b> 2-Ethyl-3-phenyl-4(3H)-quinazolinone	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 250.30 <b>DEA schedule :</b> 0
<b>References :</b> Brine, GA; Coleman, ML; Carroll, FI <i>J Heterocyclic Chem</i> 1979, 16, 25.	

<b>Catalog number :</b> 2565-021	<b>CASRN :</b> 7432-25-9	
<b>Name :</b> Etaqualone hydrochloride		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>17</sub> ClN <sub>2</sub> O		<b>FW :</b> 300.79 <b>DEA schedule :</b> 0
<b>Notes :</b> CNS depressant; sedative; hypnotic		
<b>References :</b> Merck Index, 14th ed., Monograph 3714.		

<b>Catalog number :</b> 2572-001	<b>CASRN :</b> 340-57-8	
<b>Name :</b> Mecloqualone		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>11</sub> ClN <sub>2</sub> O		<b>FW :</b> 270.74 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS depressant; sedative; hypnotic		
<b>References :</b> Merck Index, 14th ed., Monograph 5781.		

**Sedatives: Miscellaneous**

<b>Catalog number :</b> 2010-001	<b>CASRN :</b> 502-85-2	
<b>Name :</b> γ-Hydroxybutyric acid, sodium salt; GHB		
<b>Mol. formula :</b> C <sub>4</sub> H <sub>7</sub> O <sub>3</sub> Na		<b>FW :</b> 126.09 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS depressant; analgesic		
<b>References :</b> Merck Index, 14th ed., Monograph 4815.		

<b>Catalog number :</b> 2605-001	<b>CASRN :</b> 76-20-0	
<b>Name :</b> Sulfonethylmethane; Ethylsulfonal		
<b>Mol. formula :</b> C <sub>8</sub> H <sub>18</sub> O <sub>4</sub> S <sub>4</sub>		<b>FW :</b> 242.36 <b>DEA schedule :</b> 3
<b>Notes :</b> Hypnotic		
<b>References :</b> Merck Index, 14th ed., Monograph 8958.		

★ = custom synthesis

**Stimulants: Aminorex Class**

Catalog number : 1590-001

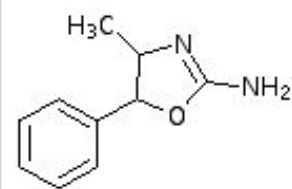
CASRN : 3568-94-3

Name : (±)-*cis*-(4*RS*,5*SR*)-2-Amino-4-methyl-5-phenyl-2-oxazoline;  
(±)-*cis*-4-MethylaminorexMol. formula : C<sub>10</sub>H<sub>12</sub>N<sub>2</sub>O

FW : 176.22    DEA schedule : 1

Notes : CNS stimulant

References : Merck Index, 14th ed., Monograph 6018.



Catalog number : 1590-002

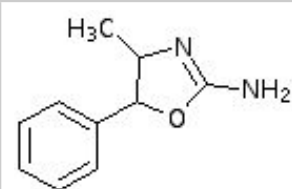
CASRN : 3568-94-3

Name : (±)-*cis*-(4*RS*,5*SR*)-2-Amino-4-methyl-5-phenyl-2-oxazoline  
hydrochloride; (±)-*cis*-4-Methylaminorex HClMol. formula : C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>O

FW : 212.68    DEA schedule : 1

Notes : CNS stimulant

References : Merck Index, 14th ed., Monograph 6018.



Catalog number : 1590-003

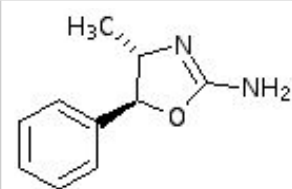
CASRN : 933777-34-5

Name : (-)-*trans*-(4*S*,5*S*)-2-Amino-4-methyl-5-phenyl-2-oxazoline  
hydrochloride; (-)-*trans*-4-Methylaminorex HClMol. formula : C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>O

FW : 212.68    DEA schedule : 1

Notes : CNS stimulant

References : Merck Index, 14th ed., Monograph 6018.



Catalog number : 1590-004

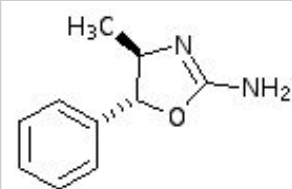
CASRN : 933777-37-8

Name : (+)-*trans*-(4*R*,5*R*)-2-Amino-4-methyl-5-phenyl-2-oxazoline  
hydrochloride; (+)-*trans*-4-Methylaminorex HClMol. formula : C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>O

FW : 212.68    DEA schedule : 1

Notes : CNS stimulant

References : Merck Index, 14th ed., Monograph 6018.



Catalog number : 1590-005

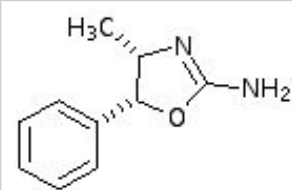
CASRN : 133633-24-6

Name : (-)-*cis*-(4*S*,5*R*)-2-Amino-4-methyl-5-phenyl-2-oxazoline  
hydrochloride; (-)-*cis*-4-Methylaminorex HClMol. formula : C<sub>10</sub>H<sub>13</sub>ClN<sub>2</sub>O

FW : 212.68    DEA schedule : 1

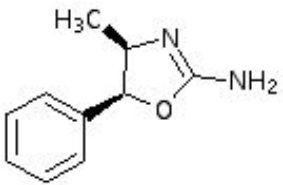
Notes : CNS stimulant

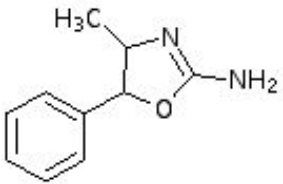
References : Merck Index, 14th ed., Monograph 6018.



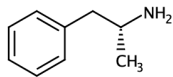
## 9 – Stimulants

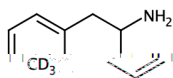
★ = custom synthesis

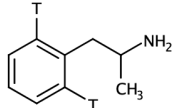
<b>Catalog number :</b> 1590-006	<b>CASRN :</b> 933777-34-5	
<b>Name :</b> (+)- <i>cis</i> -(4 <i>R</i> ,5 <i>S</i> )-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (+)- <i>cis</i> -4-Methylaminorex HCl		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>13</sub> ClN <sub>2</sub> O		<b>FW :</b> 212.68 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6018.		


<b>Catalog number :</b> 1590-007	<b>CASRN :</b> 2077-59-0	
<b>Name :</b> (±)- <i>trans</i> -(4 <i>R</i> ,5 <i>R</i> )-2-Amino-4-methyl-5-phenyl-2-oxazoline hydrochloride; (±)- <i>trans</i> -4-Methylaminorex HCl		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>13</sub> ClN <sub>2</sub> O		<b>FW :</b> 212.68 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6018.		

**Stimulants: Amphetamine Class**

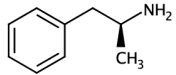
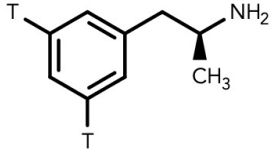
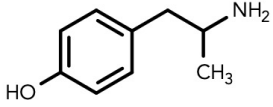
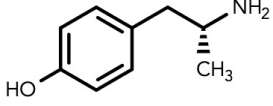
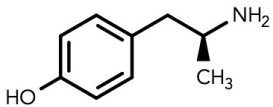
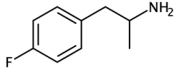
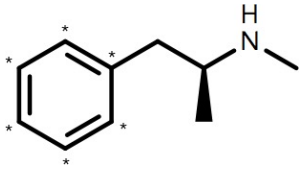
<b>Catalog number :</b> 1100-003	<b>CASRN :</b> 51-62-7	
<b>Name :</b> (-)-Amphetamine sulfate; Levamphetamine		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> N <sub>2</sub> O <sub>4</sub> S		<b>FW :</b> 368.50 <b>DEA schedule :</b> 2
<b>Notes :</b>		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 582.		

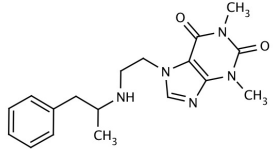
<b>Catalog number :</b> 1100-004	<b>CASRN :</b> 38875-35-3	
<b>Name :</b> (±)-[1,1,1- <sup>2</sup> H <sub>3</sub> ]Amphetamine sulfate		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N		<b>FW :</b> 374.53 <b>DEA schedule :</b> 2
<b>Notes :</b>		
<b>References :</b> Cho, AK; <i>et al.</i> , <i>Anal Chem</i> <b>1973</b> , <i>45</i> , 570-4. Valtier, S; Cody, JT <i>J Anal Toxicol</i> <b>1995</b> , <i>19</i> , 375-80.		

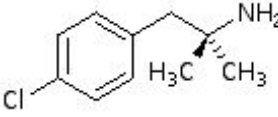
<b>Catalog number :</b> 1100-005	<b>CASRN :</b> 60-13-9	★
<b>Name :</b> (±)-[2',6'- <sup>3</sup> H <sub>2</sub> ]Amphetamine; 2,6-Tritioamphetamine		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N		<b>FW :</b> 135.21 <b>DEA schedule :</b> 2
<b>Notes :</b>		
<b>References :</b>		

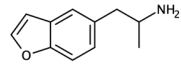
<b>Catalog number :</b> 1100-006	<b>CASRN :</b> 60-13-9	
<b>Name :</b> (+)-Amphetamine sulfate; Dextroamphetamine sulfate		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> N <sub>2</sub> O <sub>4</sub> S		<b>FW :</b> 368.50 <b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant; sympathomimetic; anorexic		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2954.		



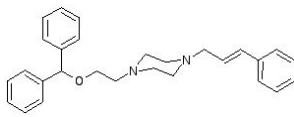
<b>Catalog number :</b> 1100-007		<b>CASRN :</b> 1462-73-3	
<b>Name :</b> (+)-Amphetamine hydrochloride; Dextroamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>14</sub> ClN		<b>FW :</b> 171.70	<b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant			
<b>References :</b> Merck Index, 14th ed., Monograph 2954.			
			
<b>Catalog number :</b> 1100-009		★	
<b>Name :</b> (+)-(S)-[3,5- <sup>3</sup> H(n)]Amphetamine			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N		<b>FW :</b> 139.22	<b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant (tritium-labeled).			
			
<b>Catalog number :</b> 1100-010		<b>CASRN :</b> 306-21-8	
<b>Name :</b> (±)-4-Hydroxyamphetamine hydrobromide			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>14</sub> BrNO		<b>FW :</b> 232.12	<b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant; sympathomimetic; mydriatic			
<b>References :</b> Merck Index, 14th ed., Monograph 4810.			
			
<b>Catalog number :</b> 1100-011		<b>CASRN :</b> 41509-97-1	
<b>Name :</b> (-)-4-Hydroxyamphetamine hydrobromide			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>14</sub> BrNO		<b>FW :</b> 232.12	<b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant; sympathomimetic; mydriatic			
<b>References :</b> Merck Index, 14th ed., Monograph 4810.			
			
<b>Catalog number :</b> 1100-012		<b>CASRN :</b> 1693-66-9	
<b>Name :</b> (+)-4-Hydroxyamphetamine hydrobromide			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>14</sub> BrNO		<b>FW :</b> 232.12	<b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant; sympathomimetic; mydriatic			
<b>References :</b> Merck Index, 14th ed., Monograph 4810.			
			
<b>Catalog number :</b> 1100-013		<b>CASRN :</b> 459-02-9	
new			
<b>Name :</b> 4-Fluoroamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>12</sub> FN • HCl		<b>FW :</b> 189.66	<b>DEA schedule :</b> 1
			
<b>Catalog number :</b> 1105-015		<b>CASRN :</b> n/a	
<b>Name :</b> (+)-(S)-[phenyl- <sup>14</sup> C <sub>6</sub> ]Methamphetamine HCl			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N		<b>FW :</b> 185.7	<b>DEA schedule :</b> 1
			

<b>Catalog number :</b> 1503-001	<b>CASRN :</b> 1892-80-4	
<b>Name :</b> Fenethylamine hydrochloride; Captagon HCl		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>24</sub> N <sub>5</sub> O <sub>2</sub> Cl		<b>FW :</b> 341419 <b>DEA schedule :</b> 2
<b>Notes :</b> CNS stimulant		
<b>References :</b> Merck Index, 14th ed., Monograph 3972.		

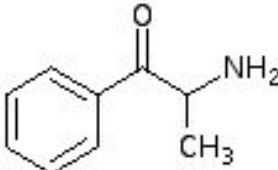
<b>Catalog number :</b> 1645-001	<b>CASRN :</b> 461-78-9	
<b>Name :</b> Chlorphentermine; 4-Chloro- $\alpha,\alpha$ -dimethyl- $\beta$ -phenethylamine		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClN		<b>FW :</b> 183.68 <b>DEA schedule :</b> 3
<b>Notes :</b> Anorectic		
<b>References :</b> Merck Index, 14th ed., Monograph 2182.		

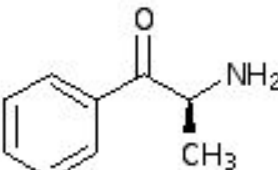
<b>Catalog number :</b> NOCD-158	<b>new</b>	<b>CASRN :</b> 286834-80-8
<b>Name :</b> 5-APB hydrochloride		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>13</sub> NO • HCl		<b>FW :</b> 211.69
<b>Notes :</b>		
<b>References :</b> Iversen L, et al., Eur J Pharm, 2013, 700(1-3), 147-51.		

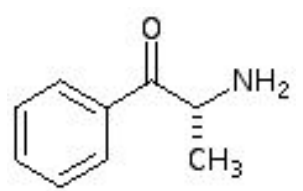
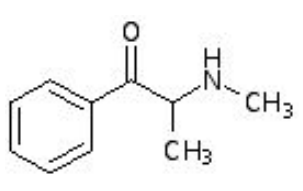
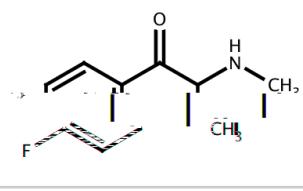
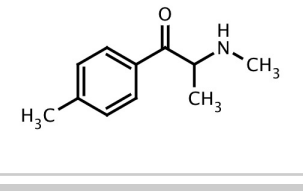
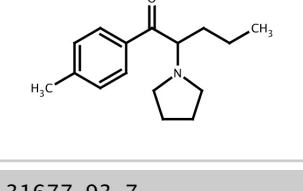
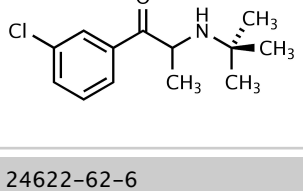
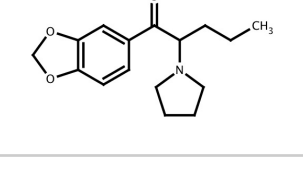
**Stimulants: Benzhydrol Class**

<b>Catalog number :</b> NOCD-040	<b>CASRN :</b> 67469-57-2	
<b>Name :</b> GBR 12783		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>34</sub> Cl <sub>2</sub> N <sub>2</sub> O		<b>FW :</b> 485.48 <b>DEA schedule :</b> 0
<b>Notes :</b> Dopamine uptake inhibitor.		
<b>References :</b> Bonnet, JJ; Costentin J Eur J Pharmacol 1986, 121, 199-209. Chagraoui, A; et al. Neurosci Lett 1987, 78, 175-9.		

**Stimulants: Cathinone Class**

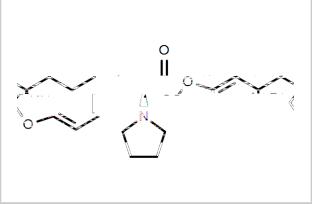
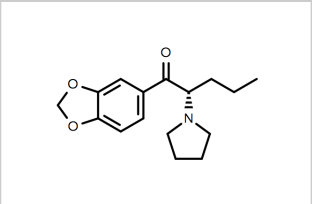
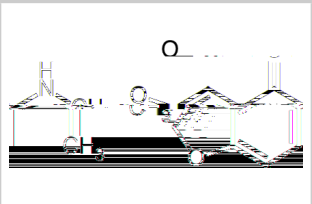
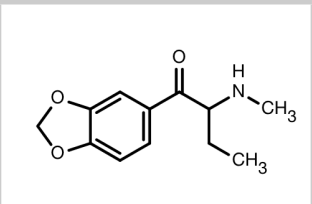
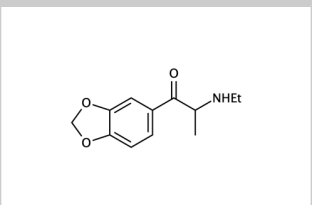
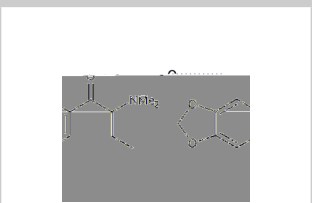
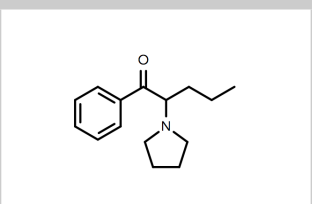
<b>Catalog number :</b> 1235-010	<b>CASRN :</b> 76333-53-4	
<b>Name :</b> ( $\pm$ )-Cathinone hydrochloride		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>12</sub> ClNO		<b>FW :</b> 185.66 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; psychotropic drug		
<b>References :</b> Kalix, P Pharmacol Toxicol 1992, 70, 77-86. Merck Index, 14th ed., Monograph 1906.		

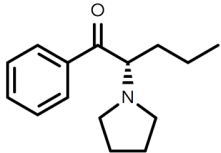
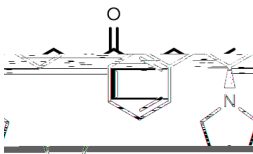
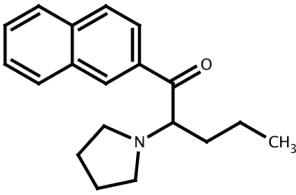
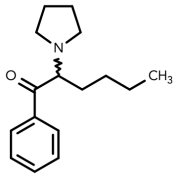
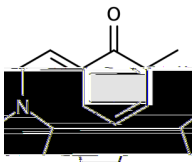
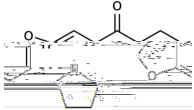
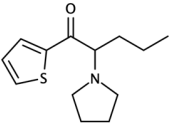
<b>Catalog number :</b> 1235-011	<b>CASRN :</b> 71031-15-7	
<b>Name :</b> (-)-( <i>S</i> )-Cathinone hydrochloride		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>12</sub> ClNO		<b>FW :</b> 185.66 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; psychotropic drug		
<b>References :</b> Merck Index, 14th ed., Monograph 1906.		

<b>Catalog number :</b> 1235-012	<b>CASRN :</b> 80096-54-4	
<b>Name :</b> (+)-( <i>R</i> )-Cathinone hydrochloride		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>12</sub> ClNO		<b>FW :</b> 185.66 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; psychotropic drug		
<b>Catalog number :</b> 1237-001	<b>CASRN :</b> 5650-44-2	
<b>Name :</b> (±)-N-Methcathinone hydrochloride		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO		<b>FW :</b> 199.67 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant; psychotropic drug		
<b>Catalog number :</b> 1237-003	<b>CASRN :</b> 7589-35-7	
<b>Name :</b> 4-Fluoromethcathinone; 4-FMC; Flephedrone		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>12</sub> FNO		<b>FW :</b> 181.21 <b>DEA schedule :</b> 1
<b>References :</b> Archer RP, <i>Forensic Sci Int</i> <b>2009</b> , 185(1-3), 10-20.		
<b>Catalog number :</b> 1248-001	<b>CASRN :</b> 1189726-22-4	
<b>Name :</b> (±)-Mephedrone hydrochloride		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO		<b>FW :</b> 213.70 <b>DEA schedule :</b> 0
<b>References :</b> Wood, DM; <i>et al. J Med Toxicol</i> <b>2010</b> , 10.1007/s13181-010-0018-5.		
<b>Catalog number :</b> 1485-001	<b>CASRN :</b> 1147-62-2	
<b>Name :</b> (±)-Pyrovalerone HCl		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> ClNO		<b>FW :</b> 281.82 <b>DEA schedule :</b> 5
<b>References :</b> Stille, G; <i>et al., Arzneimittelforschung</i> <b>1963</b> , 13, 871-7. Michaelis, W; Russel JH; Schindler O, <i>J Med Chem</i> <b>1970</b> , 13, 497-503.		
<b>Catalog number :</b> 1610-002	<b>CASRN :</b> 31677-93-7	
<b>Name :</b> (±)-Bupropion hydrochloride		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>19</sub> Cl <sub>2</sub> NO		<b>FW :</b> 276.21 <b>DEA schedule :</b> 0
<b>References :</b> Martin, P; Massol, J; Colin, JN; Lacomblez, L; Puech, AJ <i>Pharmacopsychiatry</i> <b>1990</b> , 23, 87-94.		
<b>Catalog number :</b> 7535-001	<b>CASRN :</b> 24622-62-6	
<b>Name :</b> (±)-Methylenedioxypropylpyrovalerone HCl; MDPV HCl		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>22</sub> ClNO <sub>3</sub>		<b>FW :</b> 311.81 <b>DEA schedule :</b> 1
<b>Notes :</b> Stimulant; norepinephrine/dopamine reuptake inhibitor.		
<b>References :</b> Coppola, M; Mondola R, <i>Toxicol Lett</i> <b>2012</b> , 208, 12-5.		

## 9 – Stimulants

★ = custom synthesis

<b>Catalog number :</b> 7535-002	<b>CASRN :</b> 1669434-93-8
<b>Name :</b> (R)-MDPV hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 275.35 <b>DEA schedule :</b> 1
<b>Notes :</b> Stimulant; norepinephrine/dopamine reuptake inhibitor.	
	
<b>Catalog number :</b> 7535-003	<b>CASRN :</b> 1669434-94-9
<b>Name :</b> (S)-MDPV hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 275.35 <b>DEA schedule :</b> 1
<b>Notes :</b> Stimulant; norepinephrine/dopamine reuptake inhibitor.	
	
<b>Catalog number :</b> 7540-001	<b>CASRN :</b> 186028-79-5
<b>Name :</b> Methylone HCl	
<b>Mol. formula :</b> C <sub>11</sub> H <sub>13</sub> NO <sub>3</sub>	<b>FW :</b> 207.23 <b>DEA schedule :</b> 1
<b>References :</b> Cozzi NV. <i>Neuropsychopharmacology</i> , 2012, 37(5), 1192-1203. Niesink RJ. <i>Addict Biol</i> , 2005, 10(4), 321-323.	
	
<b>Catalog number :</b> 7541-001	<b>CASRN :</b> 802575-11-7
<b>Name :</b> Butylone; bk-MBDB	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>15</sub> NO <sub>3</sub>	<b>FW :</b> 221.26 <b>DEA schedule :</b> 1
<b>References :</b> Gatch, MB; Taylor CM; Forster MJ, <i>Behav Pharmacol</i> 2013, 24, 437-47.	
	
<b>Catalog number :</b> 7541-002	<b>CASRN :</b> 1112937-64-0
<b>Name :</b> Ethylone HCl	
<b>Mol. formula :</b> C <sub>12</sub> H <sub>15</sub> NO <sub>3</sub> • HCl	<b>FW :</b> 257.72 <b>DEA schedule :</b> 1
<b>References :</b> Lee D, et al., <i>J Analytical Tox</i> , 2015, 39(7), 567-571.	
	
<b>Catalog number :</b> 7542-002	<b>CASRN :</b> 17763-12-1
<b>Name :</b> Dibutylone hydrochloride	
<b>Mol. formula :</b> C <sub>13</sub> H <sub>17</sub> NO <sub>3</sub> • HCl	<b>FW :</b> 271.74 <b>DEA schedule :</b> 1
<b>References :</b> Krotulski AJ, et al., <i>J Analytical Tox</i> , 2018, 42(7), 437-445.	
	
<b>Catalog number :</b> 7545-001	<b>CASRN :</b> 5485-65-4
<b>Name :</b> α-PVP hydrochloride	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>21</sub> NO	<b>FW :</b> 231.34 <b>DEA schedule :</b> 1
<b>Notes :</b> Stimulant; norepinephrine/dopamine reuptake inhibitor.	
<b>References :</b> Meltzer, PC; et al., <i>J Med Chem</i> 2006, 49, 1420-32.	
	

Catalog number : 7545-002			CASRN : n/a
Name : (S)- $\alpha$ -PVP HCl			
Mol. formula : C <sub>15</sub> H <sub>21</sub> NO	FW : 267.8	DEA schedule : 1	
Catalog number : 7545-003			CASRN : n/a
Name : (R)- $\alpha$ -PVP HCl			
Mol. formula : C <sub>15</sub> H <sub>21</sub> NO	FW : 267.8	DEA schedule : 1	
Catalog number : NOCD-126			CASRN : 850352-11-3
Name : Naphyrone; Naphthylpyrovalerone			
Mol. formula : C <sub>19</sub> H <sub>23</sub> NO	FW : 281.39	DEA schedule : 1	
References : Meltzer PC, Butler D, Deschamps JR, Madras BK. <i>J Med Chem</i> , 2006, 49(4), 1420-1432.			
Catalog number : NOCD-149			CASRN : 13415-86-6
Name : $\alpha$ -PHP hydrochloride			
Mol. formula : C <sub>16</sub> H <sub>23</sub> NO • HCl	FW : 281.82	DEA schedule : 1	
Notes : Longer side-chain analog of $\alpha$ -PVP.			
References : Meltzer PC, et al., <i>J Med Chem</i> , 2006, 49(4), 1420-1432. doi:10.1021/jm050797a. PMC 2602954. PMID 16480278.			
Catalog number : NOCD-150			CASRN : 19134-50-0
Name : $\alpha$ -PPP hydrochloride			
Mol. formula : C <sub>13</sub> H <sub>17</sub> NO • HCl	FW : 239.74	DEA schedule : 1	
References : Meltzer PC, et al., <i>J Med Chem</i> , 2006, 49(4), 1420-1432. doi:10.1021/jm050797a. PMC 2602954. PMID 16480278.			
Catalog number : NOCD-156			CASRN : 784985-33-7
Name : 3,4-MDPBP hydrochloride			
Mol. formula : C <sub>15</sub> H <sub>19</sub> NO <sub>3</sub> • HCl	FW : 297.78	DEA schedule : 0	
References : Gannon BM, et al., <i>Neuropharmacology</i> , 2017, 134(A), 28-35.			
Catalog number : NOCD-157			CASRN : 1400742-66-6
Name : $\alpha$ -PVT hydrochloride			
Mol. formula : C <sub>13</sub> H <sub>19</sub> NOS • HCl	FW : 273.83	DEA schedule : 0	
Notes : Cytotoxic cathinone analog.			
References : Nahoko U, et al., <i>Forensic Toxicology</i> , 2013, 31(2), 223-240. Jakub W, et al., <i>Neurotoxicity Research</i> , 2016, 30(2), 239-50.			

**Stimulants: Ephedrine Class**

Catalog number : 1230-016

CASRN : 53643-20-2

Name : (-)-Norephedrine hydrochloride

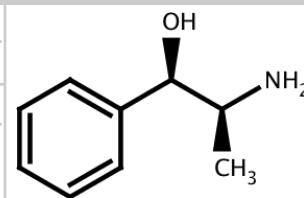
Mol. formula : C<sub>9</sub>H<sub>14</sub>ClNO

FW : 187.68

DEA schedule : 4

Notes : Nasal decongestant; appetite suppressant

References : Merck Index, 14th ed., Monograph 7307.



Catalog number : 1230-017

CASRN : 36393-56-3

Name : (+)-Norpseudoephedrine hydrochloride

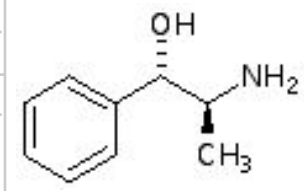
Mol. formula : C<sub>9</sub>H<sub>14</sub>ClNO

FW : 187.68

DEA schedule : 4

Notes : Nasal decongestant; appetite suppressant

References : Merck Index, 14th ed., Monograph 6714.

**Stimulants: Methamphetamine Class**

Catalog number : 1100-008

CASRN : 51799-33-8

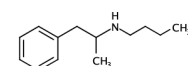
Name : rac-N-(n-Butyl)amphetamine hydrochloride

Mol. formula : C<sub>13</sub>H<sub>22</sub>ClN

FW : 227.78

DEA schedule : 2

Notes : CNS stimulant

References : Woolverton WL; Shybut, G; Johanson, CE *Pharmacol Biochem Behav* 1980, 13, 869-76.

Catalog number : 1105-001

CASRN : 51-57-0

Name : (+)-(S)-Methamphetamine hydrochloride

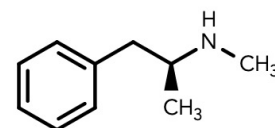
Mol. formula : C<sub>10</sub>H<sub>16</sub>ClN

FW : 185.70

DEA schedule : 2

Notes : CNS stimulant; sympathomimetic; anorexic

References : Merck Index, 14th ed., Monograph 5948.

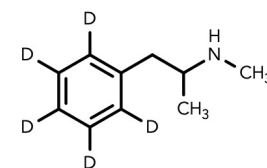


Catalog number : 1105-002

Name : (±)-[2',3',4',5',6'-<sup>2</sup>H<sub>5</sub>]Methamphetamine hydrochlorideMol. formula : C<sub>10</sub>H<sub>16</sub>ClN

FW : 190.72

DEA schedule : 2



Catalog number : 1105-003

CASRN : 537-46-2

Name : (+)-Methamphetamine base

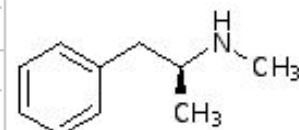
Mol. formula : C<sub>10</sub>H<sub>15</sub>N

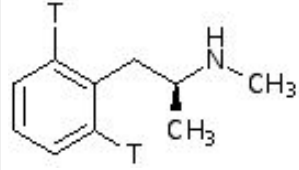
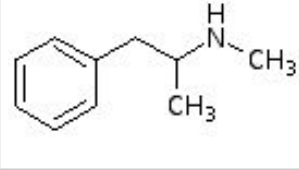
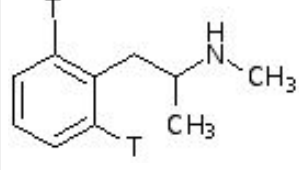
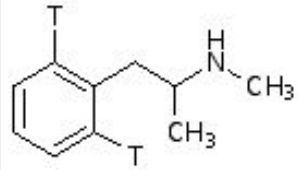
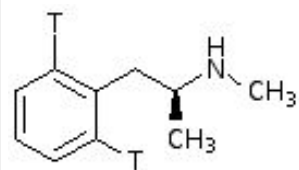
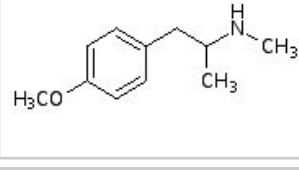
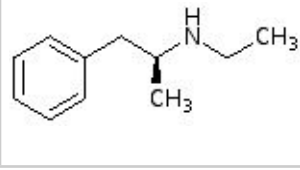
FW : 149.24

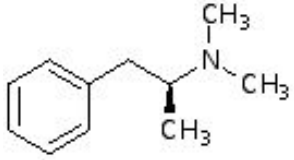
DEA schedule : 2

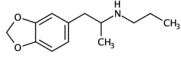
Notes : CNS stimulant

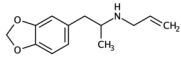
References : Merck Index, 14th ed., Monograph 5948.

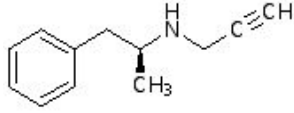


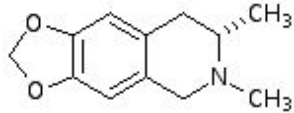
<b>Catalog number :</b> 1105-004			
<b>Name :</b> (+)-[2',6'- <sup>3</sup> H(n)]Methamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN	<b>FW :</b> 185.69	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant (tritium-labeled).			
<b>Catalog number :</b> 1105-005			<b>CASRN :</b> 300-42-5
<b>Name :</b> (±)-Methamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN	<b>FW :</b> 185.69	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant			
<b>References :</b> Merck Index, 14th ed., Monograph 5948.			
<b>Catalog number :</b> 1105-006			★
<b>Name :</b> (±)-[2',6'- <sup>3</sup> H(n)]Methamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN	<b>FW :</b> 189.71	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant (tritium-labeled).			
<b>Catalog number :</b> 1105-007			★
<b>Name :</b> (±)-[2,6- <sup>3</sup> H(n)]Methamphetamine			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N	<b>FW :</b> 153.25	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant (tritium-labeled).			
<b>Catalog number :</b> 1105-008			★
<b>Name :</b> (+)-[2,6- <sup>3</sup> H(n)]Methamphetamine			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N	<b>FW :</b> 153.25	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant (tritium-labeled).			
<b>Catalog number :</b> 1105-014			<b>CASRN :</b> 22331-70-0
<b>Name :</b> (±)-4-Methoxymethamphetamine hydrochloride; PMMA			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO	<b>FW :</b> 215.75	<b>DEA schedule :</b> 0	
<b>References :</b> Glennon, RA; Ismaiel, AE; Martin, B; Poff, D; Sutton, M <i>Pharmacol Biochem Behav</i> <b>1988</b> , <i>31</i> , 9-13.			
<b>Catalog number :</b> 1475-001			<b>CASRN :</b> 33817-11-7
<b>Name :</b> (+)-N-Ethylamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClN	<b>FW :</b> 199.71	<b>DEA schedule :</b> 1	
<b>Notes :</b> CNS stimulant			
<b>References :</b> Merck Index, 14th ed., Monograph 3763.			

<b>Catalog number :</b> 1480-001	<b>CASRN :</b> 17279-39-9	
<b>Name :</b> (+)-N,N-Dimethylamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClN		<b>FW :</b> 199.72 <b>DEA schedule :</b> 1
<b>Notes :</b> CNS stimulant		
<b>References :</b> Ricaurte, GA; <i>et al. Brain Res</i> <b>1989</b> , 490, 301-6. Katz, JL; <i>et al. Psychopharmacology (Berl)</i> <b>1992</b> , 107, 315-8.		

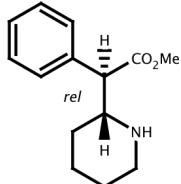
<b>Catalog number :</b> 7405-007	<b>new</b>	<b>CASRN :</b> 74341-77-8
<b>Name :</b> MDPR hydrochloride		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>19</sub> NO <sub>2</sub> • HCl		<b>FW :</b> 257.76 <b>DEA schedule :</b> 0
<b>Notes :</b> Pharmacologically inert methamphetamine homolog (PHIKAL #118).		
<b>References :</b> Braun, U; Shulgin, AT; Braun, G; <i>Journal of Pharmaceutical Sciences</i> (1980), 69(2), 192-5.		

<b>Catalog number :</b> 7405-008	<b>new</b>	<b>CASRN :</b> 74698-45-6
<b>Name :</b> MDAL hydrochloride		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>17</sub> NO <sub>2</sub> • HCl		<b>FW :</b> 255.74 <b>DEA schedule :</b> 0
<b>Notes :</b> Pharmacologically inert methamphetamine homolog (PHIKAL #101).		
<b>References :</b> Braun, U; Shulgin, AT; Braun, G; <i>Journal of Pharmaceutical Sciences</i> (1980), 69(2), 192-5.		

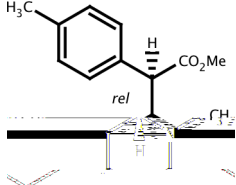
<b>Catalog number :</b> MEDD-007		
<b>Name :</b> (-)-(S)-Desmethylselegiline hydrochloride		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>16</sub> ClN		<b>FW :</b> 209.72 <b>DEA schedule :</b> 0
<b>References :</b> Mytilineou C; Radcliffe PM; Olanow CW <i>J Neurochem</i> <b>1997</b> , 68, 434-6.		

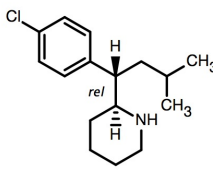
<b>Catalog number :</b> NOCD-074		
<b>Name :</b> (3S)-(+)-2,3-Dimethyl-6,7-methylenedioxytetrahydroisoquinoline hydrochloride		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>16</sub> ClNO <sub>2</sub>		<b>FW :</b> 241.72 <b>DEA schedule :</b> 0

### Stimulants: Methylphenidate Class

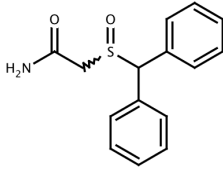
<b>Catalog number :</b> 1724-001	<b>CASRN :</b> 298-59-9	
<b>Name :</b> (±)- <i>threo</i> -Methylphenidate hydrochloride; Ritalin		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> ClNO <sub>2</sub>		<b>FW :</b> 269.77 <b>DEA schedule :</b> 2
<b>Notes :</b> Mild CNS stimulant		
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 6110.		

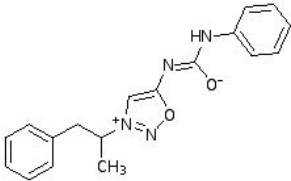


<b>Catalog number :</b> MEDD-014	<b>CASRN :</b> 204981-87-3
<b>Name :</b> (±)-N-Methyl- <i>threo-p</i> -methylmethylphenidate hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> ClNO <sub>2</sub>	

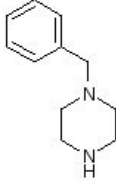
<b>Catalog number :</b> NOCD-140	<b>CASRN :</b> 928046-68-8
<b>Name :</b> (RR/SS)-2-[1-(4-Chlorophenyl)-3-methylbutyl]piperidine hydrochloride	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>24</sub> ClN	
<b>Notes :</b> <i>Methylphenidate analog</i>	
<b>References :</b> Froimowitz, M, et al., <i>J. Med. Chem.</i> <b>2007</b> , <i>50</i> , 219-232.	

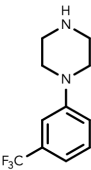
**Stimulants: Miscellaneous**

<b>Catalog number :</b> 1680-001	<b>CASRN :</b> 112111-43-0
<b>Name :</b> (±)-Modafinil	
<b>Mol. formula :</b> C <sub>15</sub> H <sub>15</sub> NO <sub>2</sub> S	
<b>References :</b> Minzenberg, M; Carter, C <i>Neuropsychopharmacology</i> <b>2007</b> , <i>33</i> , 1477-1502.	

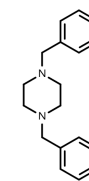
<b>Catalog number :</b> NOCD-076	<b>CASRN :</b> 34262-84-5
<b>Name :</b> Mesocarb; Sydnocarb	
<b>Mol. formula :</b> C <sub>18</sub> H <sub>18</sub> N <sub>4</sub> O <sub>2</sub>	
<b>Notes :</b> <i>Stimulant; dopamine reuptake inhibitor</i>	
<b>References :</b> Bashkatova V; et al. <i>Ann N Y Acad Sci</i> <b>2002</b> , <i>965</i> , 180-92.	

**Stimulants: Piperazine Class**

<b>Catalog number :</b> 7493-001	<b>CASRN :</b> 2759-28-6
<b>Name :</b> 1-Benzylpiperazine difumarate; BZP	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>24</sub> N <sub>2</sub> O <sub>8</sub>	
<b>Notes :</b> <i>Psychomotor stimulant; serotonin (5-HT1) agonist.</i>	
<b>References :</b> Lyon, RA; et al. <i>J Med Chem</i> <b>1986</b> , <i>29</i> , 630-4. Staack, RF <i>Lancet</i> <b>2007</b> , <i>369</i> , 1411-3. Lecompte, Y; Roussel O; Perrin M <i>Ann Pharm Fr</i> <b>2008</b> , <i>66</i> , 85-91.	

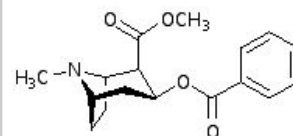
<b>Catalog number :</b> 7494-001	<b>CASRN :</b> 16015-69-3
<b>Name :</b> 1-(3-Trifluoromethylphenyl)piperazine hydrochloride; TFMPP	
<b>Mol. formula :</b> C <sub>11</sub> H <sub>14</sub> ClF <sub>3</sub> N <sub>2</sub>	
<b>Notes :</b> <i>Psychomotor stimulant; serotonin (5-HT1) agonist.</i>	
<b>References :</b> Glennon, RA; McKenney JD; Young R <i>Life Sci</i> <b>1984</b> , <i>35</i> , 1475-80. Lecompte, Y; Roussel O; Perrin M <i>Ann Pharm Fr</i> <b>2008</b> , <i>66</i> , 85-91.	

<b>Catalog number :</b> NOCD-152	<b>new</b>	<b>CASRN :</b> 1034-11-3
<b>Name :</b> 1,4-Dibenzylpiperazine dihydrochloride; DBZP		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>22</sub> N <sub>2</sub> • 2 HCl	<b>FW :</b> 339.31	<b>DEA schedule :</b> 0
<b>Notes :</b> <i>Benzylpiperazine (BZP) illicit synthesis by-product.</i>		
<b>References :</b> Castillo-Hernandez JC, et al., <i>Pharmacology</i> , <b>2017</b> , 99(5-6), 268-274. Foster A, et al., <i>Bioorg Med Chem Lett</i> , <b>2003</b> , 13(4), 749-751.		

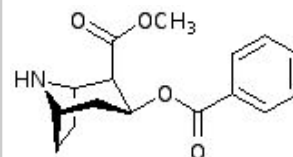


### Stimulants: Tropane Class

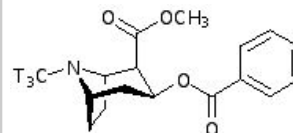
<b>Catalog number :</b> 9041-001	<b>CASRN :</b> 53-21-4
<b>Name :</b> (-)-Cocaine hydrochloride	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 339.81 <b>DEA schedule :</b> 2
<b>Notes :</b> <i>CNS stimulant; local anesthetic</i>	
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2455.	



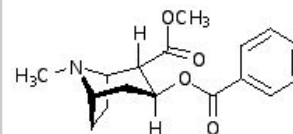
<b>Catalog number :</b> 9041-002	<b>CASRN :</b> 18717-72-1
<b>Name :</b> (-)-Norcocaine	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 289.32 <b>DEA schedule :</b> 2
<b>References :</b> Wang, Q; Simpao, A; Sun L; Falk, JL; Lau, CE <i>Psychopharmacology (Berl)</i> <b>2001</b> , 153, 341-52. Kovacic, P <i>Med Hypotheses</i> <b>2005</b> , 64, 350-6.	



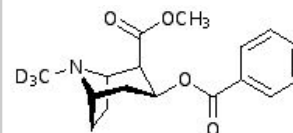
<b>Catalog number :</b> 9041-003	★
<b>Name :</b> (-)-[N-C <sup>3</sup> H <sub>3</sub> ]Cocaine	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 309.38 <b>DEA schedule :</b> 2



<b>Catalog number :</b> 9041-005	<b>CASRN :</b> 478-73-9
<b>Name :</b> (+)-Pseudococaine hydrochloride	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 339.81 <b>DEA schedule :</b> 2



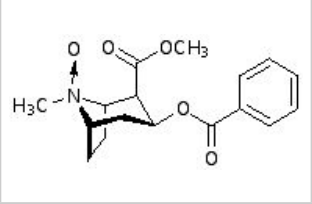
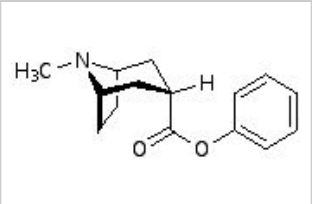
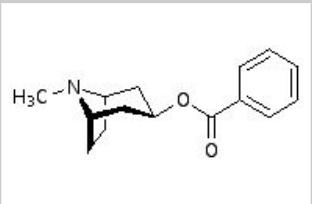
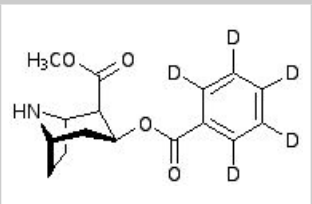
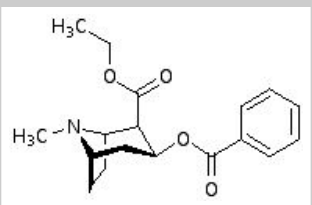
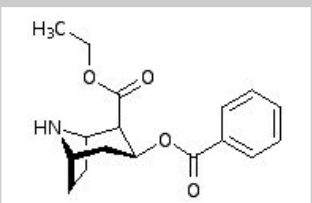
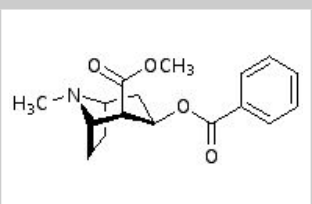
<b>Catalog number :</b> 9041-006	
<b>Name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Cocaine	
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 306.37 <b>DEA schedule :</b> 2

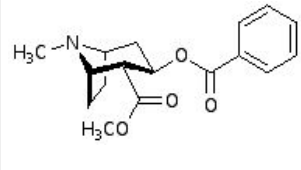
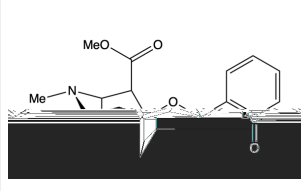
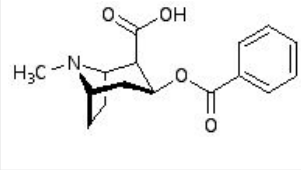
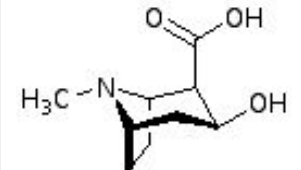
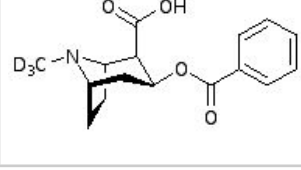
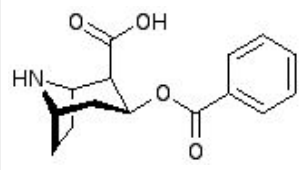
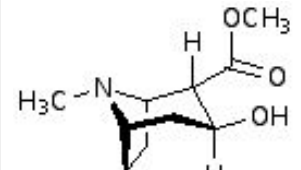


<b>Catalog number :</b> 9041-007			
<b>Name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Cocaine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 342.83	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9041-008			<b>CASRN :</b> 518-97-8
<b>Name :</b> (±)-Allopseudococaine hydrochloride			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 339.81	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9041-009			
<b>Name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Cocaine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 344.84	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9041-010			
<b>Name :</b> (±)-Allococaine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 303.35	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9041-011			<b>CASRN :</b> 521-67-5
<b>Name :</b> (-)- <i>trans</i> -Cinnamoylcocaine			
<b>Mol. formula :</b> C <sub>19</sub> H <sub>23</sub> NO <sub>4</sub>	<b>FW :</b> 329.38	<b>DEA schedule :</b> 2	
<b>References :</b> Novak, M; Salemink, CA; Khan, I J <i>Ethnopharmacol</i> <b>1984</b> , <i>10</i> , 261-74.			
<b>Catalog number :</b> 9041-012			<b>CASRN :</b> 50-36-2
<b>Name :</b> (-)-Cocaine base			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 303.35	<b>DEA schedule :</b> 2	
<b>Notes :</b> CNS stimulant; local anesthetic			
<b>References :</b> <i>Merck Index</i> , 14th ed., Monograph 2455.			
<b>Catalog number :</b> 9041-013			<b>CASRN :</b> 5937-29-1
<b>Name :</b> (-)-Cocaine methiodide			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>24</sub> INO <sub>4</sub>	<b>FW :</b> 445.28	<b>DEA schedule :</b> 2	
<b>References :</b> Abraham, P; Pitner, JB; Lewin, AH; Boja, JW; Kuhar, MJ; Carroll, FI <i>J Med Chem</i> <b>1992</b> , <i>35</i> , 141-4.			

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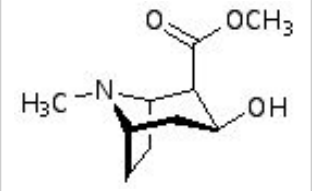
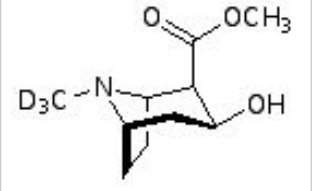
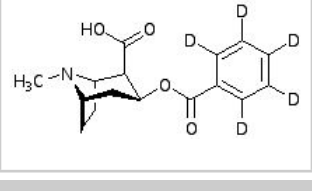
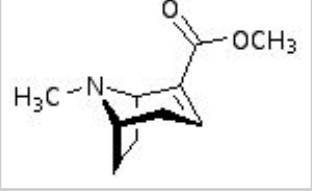
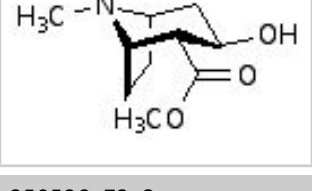
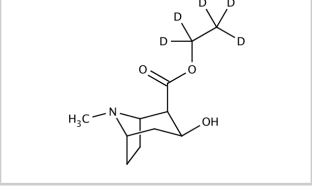
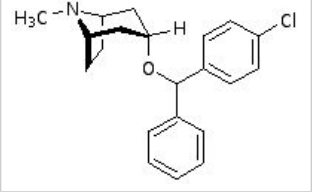
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<b>Catalog number :</b> 9041-014		
<b>Name :</b> (-)-Cocaine N-oxide hydrochloride		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>5</sub>	<b>FW :</b> 355.81	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-015		
<b>Name :</b> Isotropacocaine hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 281.79	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-016		<b>CASRN :</b> 637-23-0
<b>Name :</b> Tropicocaine hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 281.79	<b>DEA schedule :</b> 2
<b>References :</b> Novak, M; Salemink, CA; Khan, I <i>J Ethnopharmacol</i> <b>1984</b> , <i>10</i> , 261-74. Meyer, EM; <i>et al. J Pharmacol Exp Ther</i> <b>1990</b> , <i>254</i> , 584-90.		
<b>Catalog number :</b> 9041-017		
<b>Name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Norcocaine fumarate		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>8</sub>	<b>FW :</b> 410.43	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-018		
<b>Name :</b> (-)-Cocaethylene fumarate		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>27</sub> NO <sub>8</sub>	<b>FW :</b> 433.45	<b>DEA schedule :</b> 2
<b>Notes :</b> Cocaine metabolite.		
<b>References :</b> Hearn, WL; <i>et al. Pharmacol Biochem Behav</i> <b>1991</b> , <i>39</i> , 531-3. Hearn, WL; <i>et al. J Neurochem</i> <b>1991</b> , <i>56</i> , 698-701.		
<b>Catalog number :</b> 9041-019		<b>CASRN :</b> 137220-02-1
<b>Name :</b> (-)-Norcocaethylene fumarate		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>25</sub> NO <sub>8</sub>	<b>FW :</b> 419.43	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-020		<b>CASRN :</b> 47195-07-3
<b>Name :</b> (+)-Cocaine base		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 303.35	<b>DEA schedule :</b> 2
		

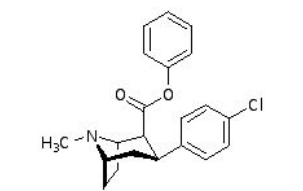
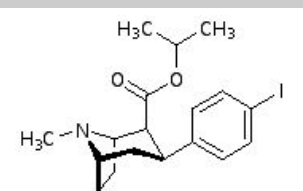
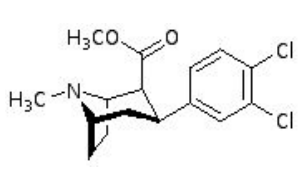
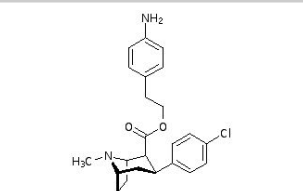
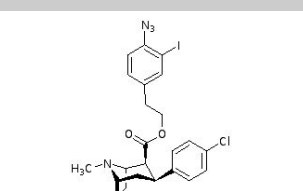
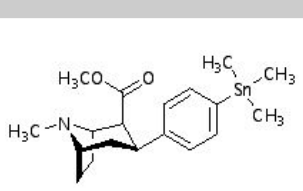
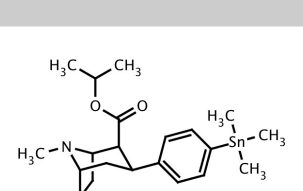
<b>Catalog number :</b> 9041-021	<b>CASRN :</b> 478-73-9	
<b>Name :</b> (-)-Pseudococaine hydrochloride		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 339.81	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-033	<b>new</b>	<b>CASRN :</b> 98843-26-6
<b>Name :</b> [ <i>β</i> -carbonyl- <sup>14</sup> C]Cocaine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 303.36	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9180-001	<b>CASRN :</b> 519-09-05	
<b>Name :</b> (-)-Benzoylecgonine		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 289.34	<b>DEA schedule :</b> 2
<b>Notes :</b> Major metabolite of cocaine.		
<b>References :</b> Merck Index, 14th ed., Monograph 1113.		
		
<b>Catalog number :</b> 9180-002	<b>CASRN :</b> 5796-31-6	
<b>Name :</b> (-)-Ecgonine hydrochloride		
<b>Mol. formula :</b> C <sub>9</sub> H <sub>16</sub> ClNO <sub>3</sub>	<b>FW :</b> 221.69	<b>DEA schedule :</b> 2
<b>Notes :</b> Cocaine metabolite.		
<b>References :</b> Merck Index, 14th ed., Monograph 3493.		
		
<b>Catalog number :</b> 9180-003		
<b>Name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Benzoylecgonine		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 292.34	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9180-004		
<b>Name :</b> (-)-Benzoynorecgonine hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>18</sub> ClNO <sub>4</sub>	<b>FW :</b> 311.77	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9180-005		
<b>Name :</b> (+)-Pseudoecgonine methyl ester		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>17</sub> NO <sub>3</sub>	<b>FW :</b> 199.25	<b>DEA schedule :</b> 2
		

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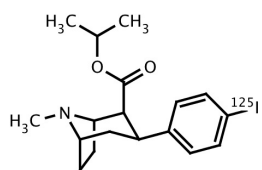
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<b>Catalog number :</b> 9180-006		<b>CASRN :</b> 7143-09-1	
<b>Name :</b> (-)-Ecgonine methyl ester hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>18</sub> ClNO <sub>3</sub>	<b>FW :</b> 235.71	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9180-007			
<b>Name :</b> [N-C <sup>2</sup> H <sub>3</sub> ]Ecgonine methyl ester hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>18</sub> ClNO <sub>3</sub>	<b>FW :</b> 238.73	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9180-011			
<b>Name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Benzoylecgonine			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 294.36	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9180-015			
<b>Name :</b> (-)-Anhydroecgonine methyl ester fumarate; Methyl ecgonidine			
<b>Mol. formula :</b> C <sub>14</sub> H <sub>19</sub> NO <sub>6</sub>	<b>FW :</b> 297.31	<b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9180-020			
<b>Name :</b> (-)-Pseudoecgonine methyl ester			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>17</sub> NO <sub>3</sub>	<b>FW :</b> 199.25	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9180-021		<b>CASRN :</b> 259526-73-3	
<b>Name :</b> Ecgonine (1,1,2,2,2- <sup>2</sup> H <sub>5</sub> )ethyl ester perchlorate			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>14</sub> D <sub>5</sub> NO <sub>3</sub> • HClO <sub>4</sub>	<b>FW :</b> 318.76	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> NOCD-004		<b>CASRN :</b> 5627-46-3	
<b>Name :</b> Clobenztropine HCl			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>24</sub> ClNO • HCl	<b>FW :</b> 378.35	<b>DEA schedule :</b> 0	

<b>Catalog number :</b> NOCD-020	<b>CASRN :</b> 130342-80-2	
<b>Name :</b> (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid methyl ester tartrate salt; RTI-31		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>8</sub>		<b>FW :</b> 443.87 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>		
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1995</b> , <i>38</i> , 379-88.		
<b>Catalog number :</b> NOCD-021	<b>CASRN :</b> 130342-81-3	
<b>Name :</b> (-)-3β-(4-Methylphenyl)tropan-2β-carboxylic acid methyl ester tartrate; RTI-32		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> NO <sub>8</sub>		<b>FW :</b> 423.46 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>		
<b>References :</b> Boja, JW; Carroll, FI; Rahman, MA; Philip, A; Lewin, AH; Kuhar, MJ <i>Eur J Pharmacol</i> <b>1990</b> , <i>184</i> , 329-32.		
<b>Catalog number :</b> NOCD-022	<b>CASRN :</b> 50370-56-4	
<b>Name :</b> (-)-3β-(4-Fluorophenyl)tropan-2β-carboxylic acid methyl ester tartrate; WIN 35,428		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> FNO <sub>8</sub>		<b>FW :</b> 427.42 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>		
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1995</b> , <i>38</i> , 379-88.		
<b>Catalog number :</b> NOCD-023	<b>CASRN :</b> 50372-80-0	
<b>Name :</b> (-)-3β-Phenyltropan-2β-carboxylic acid methyl ester tartrate; WIN 35,065-2		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>27</sub> NO <sub>8</sub>		<b>FW :</b> 409.43 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>		
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> <b>1995</b> , <i>38</i> , 379-88.		
<b>Catalog number :</b> NOCD-024		
<b>Name :</b> (+)-3β-Phenyltropan-2β-carboxylic acid methyl ester tartrate; WIN 35,065-3		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>27</sub> NO <sub>8</sub>		<b>FW :</b> 409.43 <b>DEA schedule :</b> 0
<b>Notes :</b>		
<b>References :</b>		
<b>Catalog number :</b> NOCD-025	<b>CASRN :</b> 133647-95-7	
<b>Name :</b> (-)-3β-(4-Iodophenyl)tropan-2β-carboxylic acid methyl ester tartrate; RTI-55		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> I NO <sub>8</sub>		<b>FW :</b> 535.32 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>		
<b>References :</b> Boja, JW; <i>et al. Eur J Pharmacol</i> <b>1991</b> , <i>194</i> , 133-4. Carroll, FI; <i>et al. J Med Chem</i> <b>1991</b> , <i>34</i> , 2719-25. Carroll, FI; <i>et al. J Med Chem</i> <b>1995</b> , <i>38</i> , 379-88.		

<b>Catalog number :</b> NOCD-026	<b>CASRN :</b> 316790-73-5
<b>Name :</b> (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid phenyl ester hydrochloride; RTI-113	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>25</sub> Cl <sub>2</sub> NO <sub>3</sub>	<b>FW :</b> 410.32 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Selective dopamine uptake inhibitor.</i>	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> 1995, 38, 379-88.	
<b>Catalog number :</b> NOCD-027	<b>CASRN :</b> 146145-21-3
<b>Name :</b> (-)-3β-(4-Iodophenyl)tropan-2β-carboxylic acid isopropyl ester hydrochloride; RTI-121; IPCIT	
<b>Mol. formula :</b> C <sub>18</sub> H <sub>25</sub> ClINO <sub>4</sub>	<b>FW :</b> 449.74 <b>DEA schedule :</b> 0
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> 1995, 38, 379-88.	
<b>Catalog number :</b> NOCD-028	
<b>Name :</b> (-)-3β-(3,4-Dichlorophenyl)tropan-2β-carboxylic acid methyl ester hydrochloride; RTI-111	
<b>Mol. formula :</b> C <sub>16</sub> H <sub>20</sub> Cl <sub>3</sub> NO <sub>2</sub>	<b>FW :</b> 364.70 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Nonselective monoamine uptake inhibitor.</i>	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> 1995, 38, 379-88.	
<b>Catalog number :</b> NOCD-029	
<b>Name :</b> (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid (4'-aminophenyl)ethyl ester dihydrochloride; RTI-75	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>29</sub> Cl <sub>3</sub> N <sub>2</sub> O <sub>2</sub>	<b>FW :</b> 471.86 <b>DEA schedule :</b> 0
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> 1992, 35, 1813-7.	
<b>Catalog number :</b> NOCD-030	
<b>Name :</b> (-)-3β-(4-Chlorophenyl)tropan-2β-carboxylic acid (4'-Azido-3'-iodophenyl)ethyl ester hydrochloride; RTI-82	
<b>Mol. formula :</b> C <sub>23</sub> H <sub>25</sub> Cl <sub>2</sub> IN <sub>4</sub> O <sub>2</sub>	<b>FW :</b> 587.29 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Dopamine transporter photoaffinity ligand.</i>	
<b>References :</b> Carroll, FI; <i>et al. J Med Chem</i> 1992, 35, 1813-7.	
<b>Catalog number :</b> NOCD-031	
<b>Name :</b> 3β-[4-(Trimethylstannyl)phenyl]tropan-2β-carboxylic acid methyl ester; RTI-89	
<b>Mol. formula :</b> C <sub>19</sub> H <sub>29</sub> NO <sub>2</sub> Sn	<b>FW :</b> 422.12 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Precursor for the synthesis of [<sup>125</sup>I]- and [<sup>123</sup>I]-RTI-55.</i>	
<b>References :</b> Carroll, FI; <i>et al. Med Chem Res</i> 1991, 1, 289-294.	
<b>Catalog number :</b> NOCD-032	
<b>Name :</b> (-)-3β-[4-(Trimethylstannyl)phenyl]tropan-2β-carboxylic acid isopropyl ester; RTI-136	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>33</sub> NO <sub>2</sub> Sn	<b>FW :</b> 450.19 <b>DEA schedule :</b> 0
<b>Notes :</b> <i>Precursor for the synthesis of [<sup>125</sup>I]- and [<sup>123</sup>I]-RTI-121.</i>	
<b>References :</b> Carroll, FI; <i>et al. Med Chem Res</i> 1991, 1, 289-294.	



Catalog number : NOCD-077			★
Name : [ <sup>125</sup> I]RTI-121			
Mol. formula : C <sub>18</sub> H <sub>24</sub> INO <sub>2</sub>	FW : 413.29	DEA schedule : 0	
References : Scheffel, U; <i>et al. Neuroreport</i> <b>1992</b> , <i>3</i> , 969–72. Carroll, FI; <i>et al. J Med Chem</i> <b>1995</b> , <i>38</i> , 379–88.			

**Stimulants (dosage form): Stock Solutions**

Catalog number : 9041-022			Dosage Form
Name : Injectable cocaine hydrochloride (10 mg/mL and 20 mg/mL)			
DEA schedule : 2			
Notes : <i>Not for human use.</i>			



★ = custom synthesis

**Miscellaneous: Dopaminergic**

Catalog number : MEDD-002

Name : (±)-1-(2-Bromo-4,5-dimethoxybenzyl)-7-hydroxy-6-methoxy-2-methyl-1,2,3,4-tetrahydroisoquinoline hydrobromide; A69024 HBr

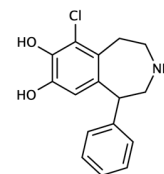
Mol. formula :  $C_{20}H_{25}Br_2NO_4$  FW : 503.23 DEA schedule : 0

Notes : Dopamine D1 receptor antagonist

References : Caine, SB; Koob, GF., *J Pharmacol Exp Ther* **1994**, *270*, 209-18.

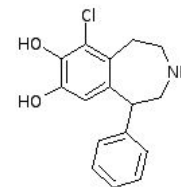
Catalog number : MEDD-004

Name : (±)-6-Chloro-7,8-dihydroxy-1-phenyl-2,3,4,5-tetrahydro[1H]-3-benzazepine hydrobromide

Mol. formula :  $C_{16}H_{17}BrClNO_2$  FW : 370.67 DEA schedule : 0

Catalog number : MEDD-005

Name : (±)-6-Chloro-7,8-dihydroxy-1-phenyl-2,3,4,5-tetrahydro[1H]-3-benzazepine hydrochloride

Mol. formula :  $C_{16}H_{17}Cl_2NO_2$  FW : 326.22 DEA schedule : 0

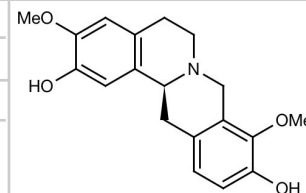
Catalog number : NOCD-014

CASRN : 16562-13-3

Name : L-Stepholidine

Mol. formula :  $C_{19}H_{21}NO_4$  FW : 327.37 DEA schedule : 0

Notes : D1 agonist / D2 antagonist

References : Mo, J; et al. *Curr Med Chem* **2007**, *14*, 2996-3002.  
Wang, W; et al. *Neuropharmacology* **2007**, *52*, 355-61.

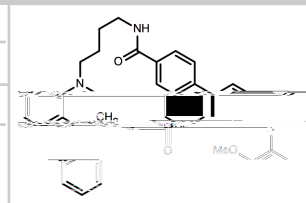
Catalog number : NOCD-047

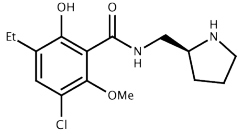
CASRN : 162408-66-4

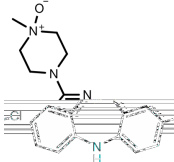
Name : GR103691

Mol. formula :  $C_{30}H_{37}N_3O_3$  FW : 566.57 DEA schedule : 0

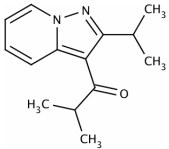
Notes : Selective dopamine D3 receptor antagonist

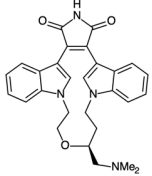
References : Audinot, V; et al. *J Pharmacol Exp Ther* **1998**, *287*, 187-97.

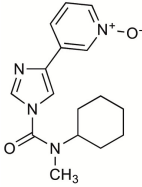
<b>Catalog number :</b> NOCD-120	<b>CASRN :</b> 101536-82-7	
<b>Name :</b> (+)-(-)-Noreticlopride HCl		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>3</sub>		<b>FW :</b> 349.26 <b>DEA schedule :</b> 0
<b>Notes :</b> Dopamine D2 receptor antagonist.		
<b>References :</b> de Paulis, T; Hall H; Ogren SO, <i>European Journal of Medicinal Chemistry</i> <b>1985</b> , <i>20</i> , 273-276.		

<b>Catalog number :</b> NOCD-135	<b>CASRN :</b> 34233-69-7	
<b>Name :</b> Clozapine N-oxide		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>19</sub> ClN <sub>4</sub> O		<b>FW :</b> 342.82 <b>DEA schedule :</b> 0
<b>Notes :</b> Clozapine metabolite.		
<b>References :</b> Jann, MW; et al., <i>Clin Pharmacokinet</i> <b>1993</b> , <i>24</i> , 161-76. Nawaratne, V; et al., <i>Mol Pharmacol</i> <b>2008</b> , <i>74</i> , 1119-31. Becnel, J; et al., <i>Cell Rep</i> <b>2013</b> , <i>4</i> , 1049-59.		

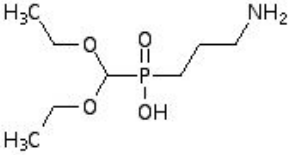
**Miscellaneous: Enzyme Inhibitors**

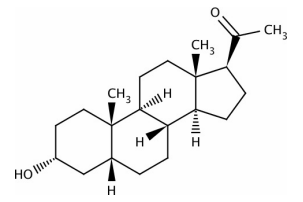
<b>Catalog number :</b> NOCD-104	<b>CASRN :</b> 50847-11-5	
<b>Name :</b> Ibudilast		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>18</sub> N <sub>2</sub> O		<b>FW :</b> 230.31 <b>DEA schedule :</b> 0
<b>Notes :</b> Orally-available phosphodiesterase inhibitor. Induces cerebral vasodilation.		
<b>References :</b> (1) Nishino, K; et al., <i>Jpn J Pharmacol</i> <b>1983</b> , <i>33</i> , 267-78; (2) Souness, JE; et al., <i>Br J Pharmacol</i> <b>1994</b> , <i>111</i> , 1081-8.		

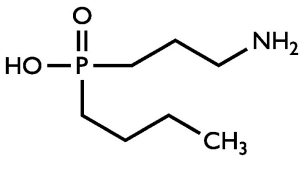
<b>Catalog number :</b> NOCD-127	<b>CASRN :</b> 169939-94-0	
<b>Name :</b> Ruboxistaurin; LY-333,531		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>28</sub> N <sub>4</sub> O <sub>3</sub>		<b>FW :</b> 468.55 <b>DEA schedule :</b> 0
<b>Notes :</b> PKCβ inhibitor.		
<b>References :</b> Gani O, Engh RA, <i>Nat Prod Rep</i> , <b>2010</b> , <i>27</i> , 489.		

<b>Catalog number :</b> NOCD-144	<b>CASRN :</b> 1233855-46-3	
<b>Name :</b> BIA 10-2474		
<b>Mol. formula :</b> C <sub>16</sub> H <sub>20</sub> N <sub>4</sub> O <sub>2</sub>		<b>FW :</b> 300.36 <b>DEA schedule :</b> 0
<b>Notes :</b> Fatty acid amide hydrolase (FAAH) inhibitor.		
<b>References :</b> US Patent Application 20150174103 (Compound 362)		

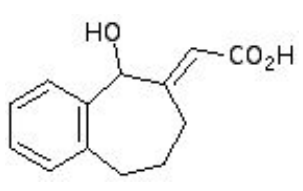
**Miscellaneous: GABA Receptor Related**

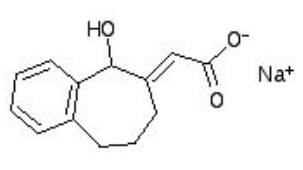
<b>Catalog number :</b> NOCD-045	<b>CASRN :</b> 123690-79-9	
<b>Name :</b> (3-Aminopropyl)(diethoxymethyl)phosphinic acid; CGP-35348		
<b>Mol. formula :</b> C <sub>8</sub> H <sub>20</sub> NO <sub>4</sub> P		<b>FW :</b> 225.23 <b>DEA schedule :</b> 0
<b>Notes :</b> GABAB receptor antagonist.		
<b>References :</b> Olpe, HR; et al. <i>Eur J Pharmacol</i> <b>1990</b> , <i>187</i> , 27-38.		

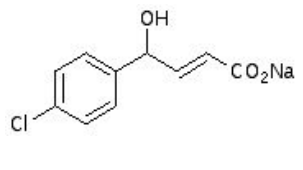
<b>Catalog number :</b> NOCD-102	<b>CASRN :</b> 128-20-1	
<b>Name :</b> Pregnanolone		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>34</sub> O <sub>2</sub>		<b>FW :</b> 318.49 <b>DEA schedule :</b> 0
<b>Notes :</b> Progesterone metabolite and barbiturate-like modulator of GABA <sub>A</sub> receptors.		
<b>References :</b> Quinton, MS; <i>et al. Pharmacol Biochem Behav</i> <b>2006</b> , <i>85</i> , 385-92. Kaminski, RM; <i>et al. Eur J Pharmacol</i> <b>2003</b> , <i>474</i> , 217-22. Leskiewicz, M; <i>et al. Pol J Pharmacol</i> <b>2003</b> , <i>55</i> , 1131-6.		

<b>Catalog number :</b> NOCD-103	<b>CASRN :</b> 145537-81-1	
<b>Name :</b> SGS-742; CGP-36742		
<b>Mol. formula :</b> C <sub>7</sub> H <sub>18</sub> NO <sub>2</sub> P		<b>FW :</b> 179.19 <b>DEA schedule :</b> 0
<b>Notes :</b> GABA <sub>B</sub> receptor antagonist.		
<b>References :</b> Bullock, R <i>Curr Opin Investig Drugs</i> 2005, <i>6</i> , 108-13. Foerstl, W; <i>et al. Biochem Pharmacol</i> 2004, <i>68</i> , 1479-87.		

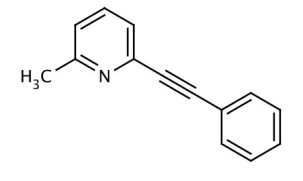
**Miscellaneous: GHB Receptor Related**

<b>Catalog number :</b> NOCD-042		
<b>Name :</b> 6,7,8,9-Tetrahydro-5-[H]benzocycloheptene-5-ol-4-ylideneacetic acid; NCS 382		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>14</sub> O <sub>3</sub>		<b>FW :</b> 218.25 <b>DEA schedule :</b> 0
<b>Notes :</b> γ-Hydroxybutyrate receptor antagonist; anticonvulsant.		
<b>References :</b> Maitre, M; <i>et al. J Pharmacol Exp Ther</i> <b>1990</b> , <i>255</i> , 657-63.		

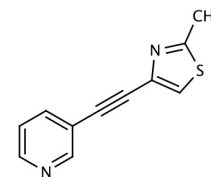
<b>Catalog number :</b> NOCD-043	<b>CASRN :</b> 131733-92-1	
<b>Name :</b> 6,7,8,9-Tetrahydro-5-[H]benzocycloheptene-5-ol-4-ylideneacetic acid, sodium salt; NCS 382 sodium salt		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>13</sub> O <sub>3</sub> Na		<b>FW :</b> 240.24 <b>DEA schedule :</b> 0
<b>Notes :</b> γ-Hydroxybutyrate receptor antagonist; anticonvulsant.		
<b>References :</b> Maitre, M; <i>et al. J Pharmacol Exp Ther</i> <b>1990</b> , <i>255</i> , 657-63.		

<b>Catalog number :</b> NOCD-044		
<b>Name :</b> <i>trans</i> -4-(4-Chlorophenyl)-4-hydroxy-2-butenic acid sodium salt; NCS 356		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>8</sub> ClO <sub>3</sub> Na		<b>FW :</b> 234.61 <b>DEA schedule :</b> 0
<b>Notes :</b> γ-Hydroxybutyrate receptor agonist.		
<b>References :</b> Gobaille, S; <i>et al. J Pharmacol Exp Ther</i> <b>1999</b> , <i>290</i> , 303-9.		

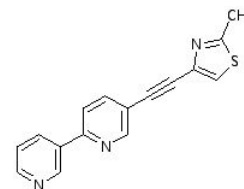
**Miscellaneous: Glutamate Receptor Related**

<b>Catalog number :</b> MEDD-018	<b>CASRN :</b> 219911-35-0	
<b>Name :</b> 6-Methyl-2-(phenylethynyl)pyridine hydrochloride; MPEP		
<b>Mol. formula :</b> C <sub>14</sub> H <sub>12</sub> ClN		<b>FW :</b> 229.71 <b>DEA schedule :</b> 0
<b>Notes :</b> mGlu5 antagonist		
<b>References :</b> Gasparini, F; <i>et al. Neuropharmacology</i> <b>1999</b> , <i>38</i> , 1493-503. Alagille, D; <i>et al. Bioorg Med Chem</i> <b>2005</b> , <i>13</i> , 197-209.		

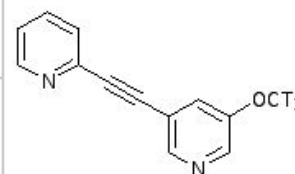
<b>Catalog number :</b> MEDD-026		<b>CASRN :</b> 329205-68-7	
<b>Name :</b> 3-[(2-Methyl-4-thiazolyl)ethynyl]pyridine; MTEP			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>8</sub> N <sub>2</sub> S	<b>FW :</b> 200.26	<b>DEA schedule :</b> 0	
<b>References :</b> Bradbury, MJ; <i>et al. J Pharmacol Exp Ther</i> <b>2005</b> , <i>313</i> , 395-402. Klodzinska, A; <i>et al. Neuropharmacology</i> <b>2004</b> , <i>47</i> , 342-50. Busse, CS; <i>et al. Neuropsychopharmacology</i> <b>2004</b> , <i>29</i> , 1971-9.			



<b>Catalog number :</b> NOCD-033		<b>CASRN :</b> 329204-25-3	
<b>Name :</b> 5-[(2-Methyl-4-thiazolyl)ethynyl]-2,3'-bipyridine; MTEb			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>11</sub> N <sub>3</sub> S	<b>FW :</b> 277.34	<b>DEA schedule :</b> 0	
<b>References :</b> Roppe, JR; <i>et al. Bioorg Med Chem Lett</i> <b>2004</b> , <i>14</i> , 3993-3996.			

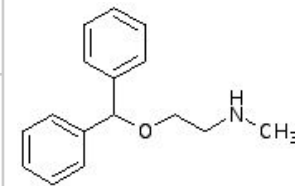


<b>Catalog number :</b> NOCD-058		★	
<b>Name :</b> 3-[ <sup>3</sup> H]Methoxy-5-(pyridin-2-yl-ethynyl)pyridine			
<b>Mol. formula :</b> C <sub>13</sub> H <sub>10</sub> N <sub>2</sub> O	<b>FW :</b> 216.26	<b>DEA schedule :</b> 0	
<b>Notes :</b> Tritium-labeled MPEP analog			

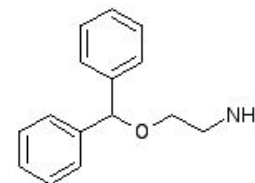


### Miscellaneous: Histamine Receptor Related

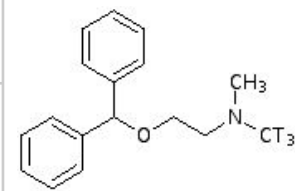
<b>Catalog number :</b> NOCD-060			
<b>Name :</b> Nordiphenhydramine hydrochloride			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>20</sub> ClNO	<b>FW :</b> 277.80	<b>DEA schedule :</b> 0	
<b>Notes :</b> Diphenhydramine metabolite			



<b>Catalog number :</b> NOCD-061			
<b>Name :</b> Dinordiphenhydramine hydrochloride			
<b>Mol. formula :</b> C <sub>15</sub> H <sub>18</sub> ClNO	<b>FW :</b> 263.76	<b>DEA schedule :</b> 0	
<b>Notes :</b> Diphenhydramine metabolite			



<b>Catalog number :</b> NOCD-063		★	
<b>Name :</b> [N-C <sup>3</sup> H <sub>3</sub> ]Diphenhydramine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO	<b>FW :</b> 261.38	<b>DEA schedule :</b> 0	



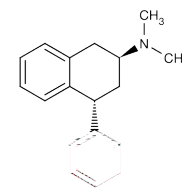
**Miscellaneous: Miscellaneous**

Catalog number : NOCD-109

CASRN : 152786-06-6

Name : *trans*-PAT hydrochlorideMol. formula : C<sub>18</sub>H<sub>21</sub>N • HCl

FW : 287.83    DEA schedule : 0

References : Booth, R. G.; Fang, L.; Huang, Y.; Wilczynski, A.; Sivendran, S., *Eur. J. Pharmacol.*, **615**, 1-9 (2009).

Catalog number : NOCD-161

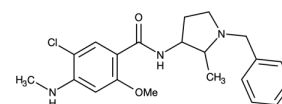
new

CASRN : 75272-39-8

Name : Nemonapride

Mol. formula : C<sub>21</sub>H<sub>26</sub>ClN<sub>3</sub>O<sub>2</sub>

FW : 387.91    DEA schedule : 0

Notes : *Atypical antipsychotic.*

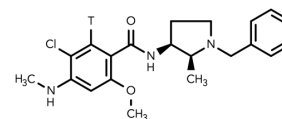
Catalog number : NOCD-162

new

CASRN : 75272-39-8

Name : [<sup>3</sup>H]NemonaprideMol. formula : C<sub>21</sub>H<sub>26</sub>ClN<sub>3</sub>O<sub>2</sub>

FW : 387.91    DEA schedule : 0

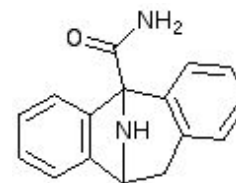
**Miscellaneous: NMDA Receptor Related**

Catalog number : MEDD-003

Name : (±)-5-(Aminocarbonyl)-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5,10-imine hydrochloride; ADCI HCl

Mol. formula : C<sub>16</sub>H<sub>15</sub>ClN<sub>2</sub>O

FW : 286.76    DEA schedule : 0

Notes : *NMDA channel blocker*

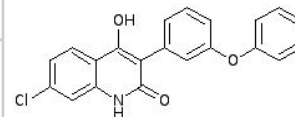
Catalog number : NOCD-010

CASRN : 142326-59-8

Name : 7-Chloro-4-hydroxy-3-(3-phenoxyphenyl)-2(1H)quinoline; L 701,324

Mol. formula : C<sub>21</sub>H<sub>14</sub>ClNO<sub>3</sub>

FW : 363.79    DEA schedule : 0

Notes : *Glycine/NMDA receptor antagonist.*References : Bristow, LJ; *et al. Psychopharmacology (Berl)* **1995**, *118*, 230-2.  
Bristow, LJ; *et al. J Pharmacol Exp Ther* **1996**, *279*, 492-501.

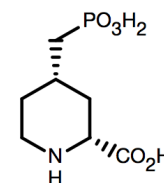
Catalog number : NOCD-019

CASRN : 110347-85-8

Name : CGS 19755; Selfotel

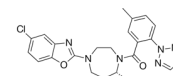
Mol. formula : C<sub>7</sub>H<sub>14</sub>NO<sub>5</sub>P

FW : 223.16    DEA schedule : 0

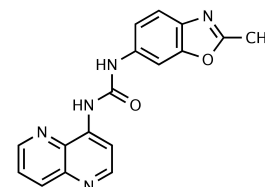
Notes : *NMDA receptor antagonist.*References : Hutchison, AJ; *et al. J Med Chem* **1989**, *32*, 2171-8.

**Miscellaneous: Orexin Receptor Related**

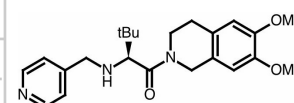
Catalog number : 2223-001	<b>new</b>	CASRN : 1030377-33-3
Name : Suvorexant		
Mol. formula : C <sub>23</sub> H <sub>23</sub> ClN <sub>6</sub> O <sub>2</sub>	FW : 450.93	DEA schedule : 4
Notes : <i>Suvorexant is a selective, dual orexin receptor antagonist.</i>		
References : Patel, KV; Aspesi, AV; Evoy, KE; <i>Ann Pharmacother</i> 2015, 49(4), 477-483. PMID 25667197.		



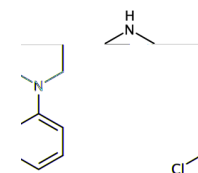
Catalog number : NOCD-006	CASRN : 249889-64-3
Name : SB-334867 (base)	
Mol. formula : C <sub>17</sub> H <sub>13</sub> N <sub>5</sub> O <sub>2</sub>	FW : 392.24    DEA schedule : 0
Notes : <i>Orexin (hypocretin) antagonist</i>	
References : Coe, JW; et al., <i>Bioorg Med Chem Lett</i> , 2005, 15, 4889-4897. McElhinny, CJ, Jr.; et al., <i>Bioorg Med Chem Lett</i> , 2012, 22, 6661-6664.	



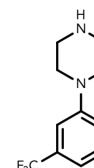
Catalog number : NOCD-111	CASRN : 372523-75-6
Name : Cp-5	
Mol. formula : C <sub>23</sub> H <sub>33</sub> ClN <sub>3</sub> O <sub>3</sub>	FW : 470.44    DEA schedule : 0
Notes : <i>Non-peptidic orexin-2 receptor selective antagonist.</i>	
References : Hirose, M, et al., <i>Bioorg Med Chem Letters</i> , 2003, 13, 4497-4499.	

**Miscellaneous: Piperazine Class**

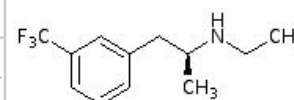
Catalog number : NOCD-153	<b>new</b>	CASRN : 13078-15-4
Name : <i>m</i> -Chlorophenylpiperazine hydrochloride; mCPP		
Mol. formula : C <sub>10</sub> H <sub>13</sub> ClN <sub>2</sub> • HCl	FW : 233.14	DEA schedule : 0
Notes : <i>m</i> -Chlorophenylpiperazine is a metabolite of trazodone.		
References : Bossong MG, Van Dijk JP, Niesink RJ, <i>Addiction Biology</i> , 2005, 10(4), 321-3. doi:10.1080/13556210500350794. PMID 16318952.		



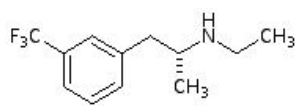
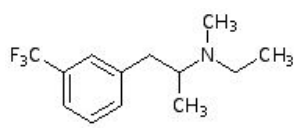
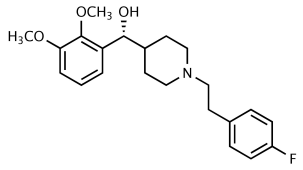
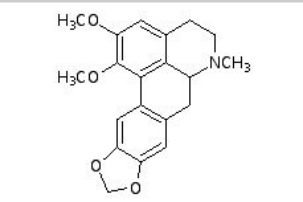
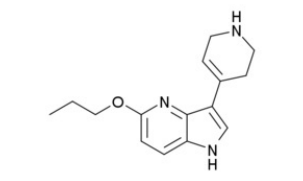
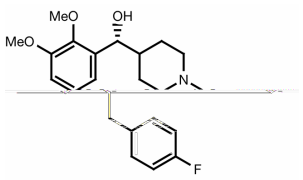
Catalog number : NOCD-154	<b>new</b>	CASRN : 15532-75-9
Name : TFMPP dihydrochloride		
Mol. formula : C <sub>11</sub> H <sub>13</sub> F <sub>3</sub> N <sub>2</sub> • 2 HCl	FW : 303.15	DEA schedule : 0
Notes : <i>Psychomotor stimulant; serotonin (5-HT<sub>1</sub>) agonist.</i>		
References : Schep LJ, et al., <i>Clin Toxicol</i> , 2011, 49(3), 131-41. Baumann MH, et al., <i>Neuropsychopharmacology</i> , 2005, 30(3), 550-60.		

**Miscellaneous: Serotonergic**

Catalog number : 1670-001	CASRN : 3239-45-0
Name : (+)-Fenfluramine hydrochloride	
Mol. formula : C <sub>12</sub> H <sub>17</sub> ClF <sub>3</sub> N	FW : 267.72    DEA schedule : 4
Notes : <i>CNS stimulant; serotonin releaser</i>	
References : <i>Merck Index</i> , 14th ed., Monograph 3973.	





<b>Catalog number :</b> 1670-002	<b>CASRN :</b> 3616-78-2	
<b>Name :</b> (-)-Fenfluramine hydrochloride		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>17</sub> ClF <sub>3</sub> N		<b>FW :</b> 267.72 <b>DEA schedule :</b> 4
<b>Notes :</b> CNS stimulant		
<b>References :</b> Merck Index, 14th ed., Monograph 3973.		
<b>Catalog number :</b> 1670-003	<b>CASRN :</b> 342653-35-4 (parent)	
<b>Name :</b> (±)-N-Methylfenfluramine hydrochloride		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>19</sub> ClF <sub>3</sub> N		<b>FW :</b> 281.75 <b>DEA schedule :</b> 0
<b>Notes :</b> CNS stimulant		
<b>Catalog number :</b> NOCD-015	<b>CASRN :</b> 139290-65-6	
<b>Name :</b> MDL-100907; Volinanserin		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>29</sub> ClFNO <sub>3</sub>		<b>FW :</b> 418.94 <b>DEA schedule :</b> 0
<b>Notes :</b> 5-HT <sub>2A</sub> antagonist		
<b>References :</b> Ullrich, T; Rice KCBioorg Med Chem <b>2000</b> , 8, 2427-32.		
<b>Catalog number :</b> NOCD-048	<b>CASRN :</b> 2565-01-7	
<b>Name :</b> Nantenine		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>21</sub> NO <sub>4</sub>		<b>FW :</b> 339.39 <b>DEA schedule :</b> 0
<b>Notes :</b> Serotonergic receptor antagonist.		
<b>References :</b> Fantegrossi, WE; et al. <i>Psychopharmacology (Berl)</i> <b>2004</b> , 173, 270-7.		
<b>Catalog number :</b> NOCD-143	<b>CASRN :</b> 131084-35-90	
<b>Name :</b> CP-94,253		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>19</sub> N <sub>3</sub> O		<b>FW :</b> 257.33 <b>DEA schedule :</b> 0
<b>Notes :</b> Potent and selective serotonin 5-HT <sub>1B</sub> receptor agonist.		
<b>References :</b> Koe KB, Nielsen JA, Macor JE, Heym J. Biochemical and behavioral studies of the 5-HT <sub>1B</sub> receptor agonist, CP-94,253. <i>Drug Dev Res</i> <b>1992</b> , 26(3), 241-250.		
<b>Catalog number :</b> NOCD-170	<b>CASRN :</b> 139290-65-6	
<b>Name :</b> Volinanserin; MDL 100907		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>28</sub> FNO <sub>3</sub>		<b>FW :</b> 373.47 <b>DEA schedule :</b> 0
<b>Notes :</b> Selective 5-HT <sub>2A</sub> receptor antagonist.		
<b>References :</b> Nic Dhonnchadha BA, et al., <i>Behav Neurosci</i> <b>2009</b> , 123(2), 382-96. doi: 10.1037/a0014592. PMID: 19331461; PMCID: PMC3830454.		

**Miscellaneous: Trace Amine-Associated Receptor**

Catalog number : NOCD-147

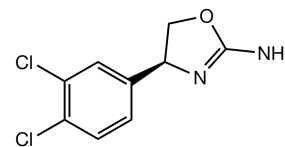
CASRN : 1043491-54-8

Name : RO 5203648

Mol. formula :  $C_9H_9Cl_3N_2O$ 

FW : 267.54    DEA schedule : 0

Notes : Trace amine-associated receptor 1 (TAAR1) full agonist.

References : Lam V. M., *et al.*, *Med. Chem. Commun.*, **2015**, 6, 2216-2223.**Miscellaneous: Tropane Class**

Catalog number : NOCD-169

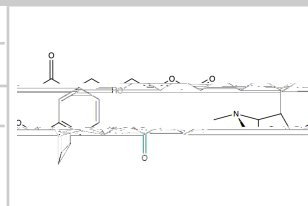
new

CASRN : 173443-27-1

Name : GNC Hapten

Mol. formula :  $C_{22}H_{29}NO_6$ 

FW : 403.47    DEA schedule : 0

**Miscellaneous: Uptake Inhibitor**

Catalog number : NOCD-112

CASRN : 410074-74-7

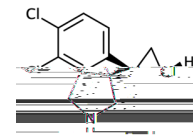


Name : Amitifadine; EB 1010; DOV 21,947

Mol. formula :  $C_{11}H_{11}Cl_2N \cdot HCl$ 

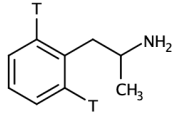
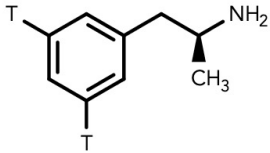
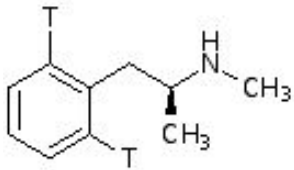
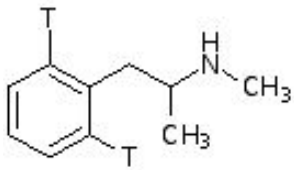
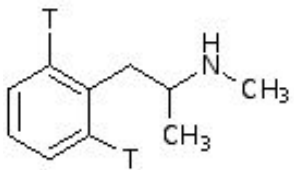
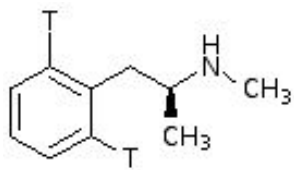
FW : 264.58    DEA schedule : 0

Notes : Serotonin / norepinephrine / dopamine reuptake inhibitor.

References : Tizzano, JP, *et al.*, *J Pharm Exp Ther*, **2008**, 324(3), 1111 - 1126. Xu, F, *et al.*, *Org Letters*, **2006**, 8(17), 3885 - 388.

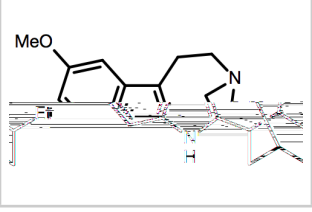
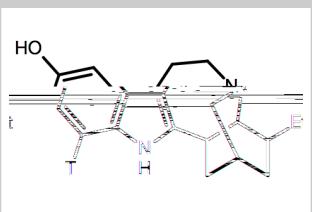
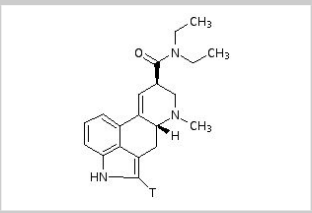
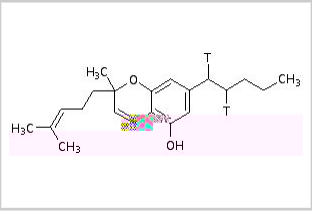
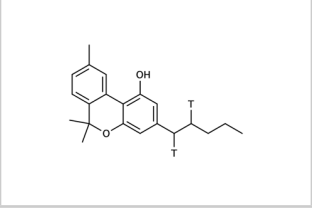

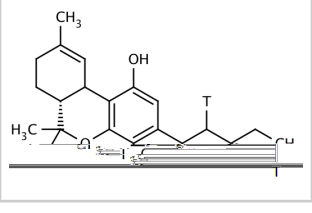
## 11a – Radiolabeled (Tritium)

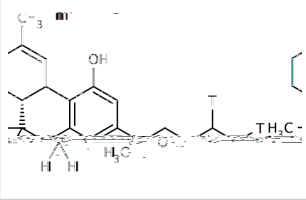
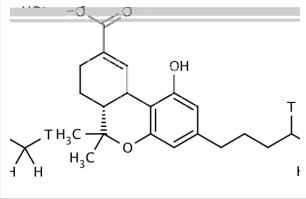
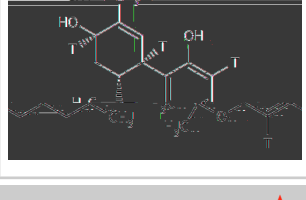
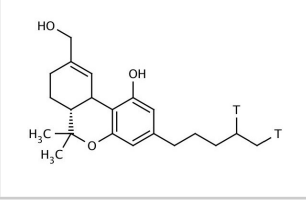
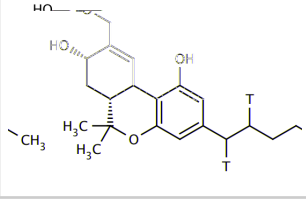
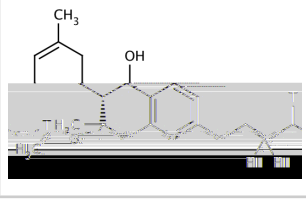
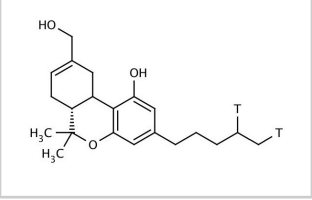
★ = custom synthesis

<b>Catalog number :</b> 1100-005 <span style="float: right;">★</span>			
<b>Drug name :</b> (±)-[2',6'- <sup>3</sup> H <sub>2</sub> ]Amphetamine; 2,6-Tritioamphetamine			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N			<b>FW :</b> 135.21 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			
<b>Catalog number :</b> 1100-009 <span style="float: right;">★</span>			
<b>Drug name :</b> (+)-(-)-[3,5- <sup>3</sup> H(n)]Amphetamine			
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N			<b>FW :</b> 139.22 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			
<b>Catalog number :</b> 1105-004			
<b>Drug name :</b> (+)-[2',6'- <sup>3</sup> H(n)]Methamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN			<b>FW :</b> 185.69 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			
<b>Catalog number :</b> 1105-006 <span style="float: right;">★</span>			
<b>Drug name :</b> (±)-[2',6'- <sup>3</sup> H(n)]Methamphetamine hydrochloride			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN			<b>FW :</b> 189.71 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			
<b>Catalog number :</b> 1105-007 <span style="float: right;">★</span>			
<b>Drug name :</b> (±)-[2,6- <sup>3</sup> H(n)]Methamphetamine			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N			<b>FW :</b> 153.25 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			
<b>Catalog number :</b> 1105-008 <span style="float: right;">★</span>			
<b>Drug name :</b> (+)-[2,6- <sup>3</sup> H(n)]Methamphetamine			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N			<b>FW :</b> 153.25 <b>DEA schedule :</b> 2
<b>Note :</b> <i>CNS stimulant (tritium-labeled).</i>			

## 11a – Radiolabeled (Tritium)

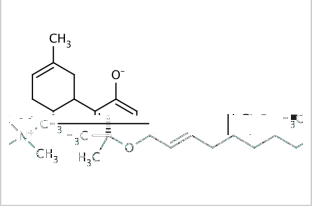
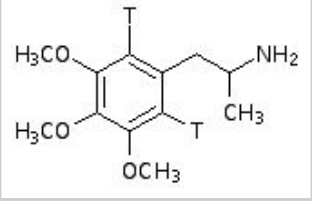
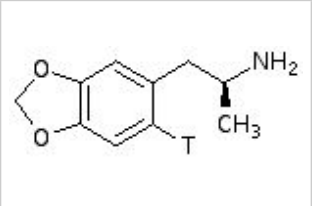
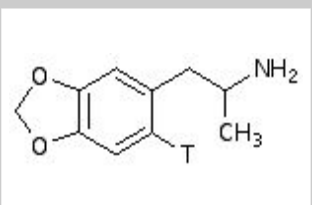
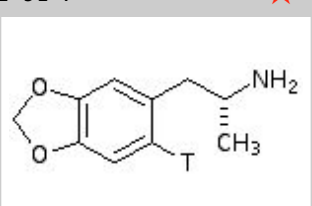
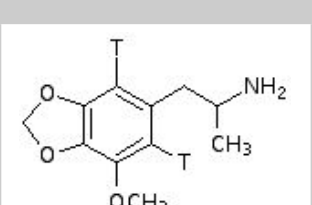
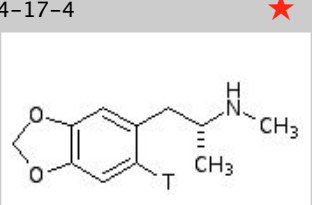
★ = custom synthesis

Catalog number : 7260-002		CASRN : 146560-35-2	★
Drug name : Tritium-labeled Ibogaine; [12- <sup>3</sup> H]Ibogaine			
Mol. formula : C <sub>20</sub> H <sub>26</sub> N <sub>2</sub> O	FW : 312.44	DEA schedule : 1	
Note : <i>Hallucinogen (tritium-labeled).</i>			
Catalog number : 7260-005			★
Drug name : [12- <sup>3</sup> H]-Noribogaine			
Mol. formula : C <sub>19</sub> H <sub>24</sub> N <sub>2</sub> O	FW : 296.41	DEA schedule : 0	
Note : <i>Ibogaine-like effect without tremors (tritium-labeled).</i>			
Catalog number : 7315-007		CASRN : 377756-22-4	★
Drug name : [2- <sup>3</sup> H]-(+)-Lysergic acid diethylamide; (+)-[3H]-LSD			
Mol. formula : C <sub>20</sub> H <sub>25</sub> N <sub>3</sub> O	FW : 323.42	DEA schedule : 1	
			
Catalog number : 7360-008		CASRN : 20675-51-8 (parent)	★
Drug name : [1',2'- <sup>3</sup> H <sub>2</sub> ]Cannabichromene			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 314.46	DEA schedule : 1	
Note : <i>Non-psychoactive constituent of cannabis (tritium-labeled).</i>			
Reference : <i>Instrumental Data for Drug Analysis</i> , 2nd Ed., 1996, Volume 1, p304.			
Catalog number : 7360-021		CASRN : 521-35-7 (parent)	★
Drug name : [1',2'- <sup>3</sup> H <sub>2</sub> ]Cannabinol			
Mol. formula : C <sub>21</sub> H <sub>26</sub> O <sub>2</sub>	FW : 310.43	DEA schedule : 1	
			
Catalog number : 7360-023			★
Drug name : [1',2'- <sup>3</sup> H <sub>2</sub> ]Cannabinol			
Mol. formula : C <sub>21</sub> H <sub>26</sub> O <sub>2</sub>	FW : 310.43	DEA schedule : 1	
			
Catalog number : 7370-004			★
Drug name : [1',2'- <sup>3</sup> H <sub>2</sub> ]Δ <sup>9</sup> -THC			
Mol. formula : C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48	DEA schedule : 1	
Note : <i>Hallucinogen; psychotropic; analgesic (tritium-labeled).</i>			

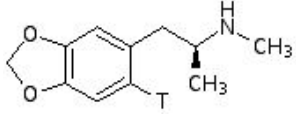
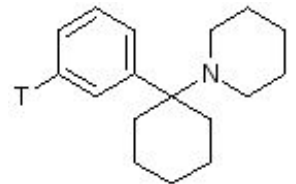
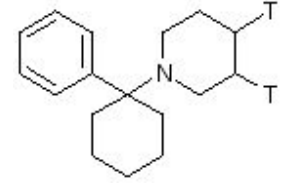
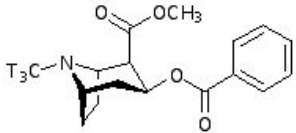
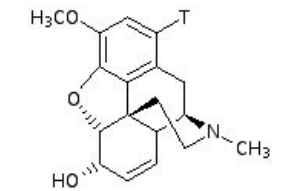
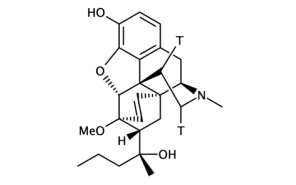
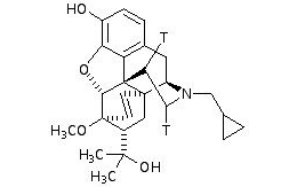
Catalog number : 7370-009			★
Drug name :	[4',5'- <sup>3</sup> H] $\Delta^9$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48    DEA schedule : 1	
Catalog number : 7370-017			★
Drug name :	[4',5'- <sup>3</sup> H] <sub>9</sub> -Carboxy-11-nor- $\Delta^9$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	FW : 348.46    DEA schedule : 1	
Note :	Urinary metabolite of THC (tritium-labeled).		
Catalog number : 7370-021			★
Drug name :	[2,4,8,10a- <sup>3</sup> H <sub>4</sub> ]-8 $\beta$ -Hydroxy- $\Delta^9$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	FW : 338.49    DEA schedule : 1	
Catalog number : 7370-024			★
CASRN : 58545-42-9			
Drug name :	[4',5'- <sup>3</sup> H <sub>2</sub> ]-11-Hydroxy- $\Delta^9$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48    DEA schedule : 1	
Catalog number : 7370-026			★
Drug name :	[1',2'- <sup>3</sup> H <sub>2</sub> ]-8 $\alpha$ ,11-Dihydroxy- $\Delta^9$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>4</sub>	FW : 350.48    DEA schedule : 1	
Catalog number : 7370-027			★
Drug name :	[4',5'- <sup>3</sup> H <sub>2</sub> ] $\Delta^8$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48    DEA schedule : 1	
Note :	Hallucinogen; psychotropic; analgesic (tritium-labeled).		
Catalog number : 7370-035			★
CASRN : n/a			
Drug name :	[4',5'- <sup>3</sup> H <sub>2</sub> ]-11-Hydroxy- $\Delta^8$ -THC		
Mol. formula :	C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	FW : 318.48    DEA schedule : 1	

## 11a – Radiolabeled (Tritium)

★ = custom synthesis

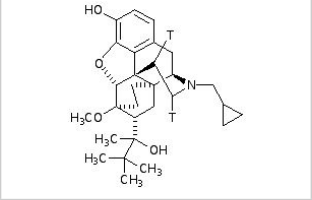
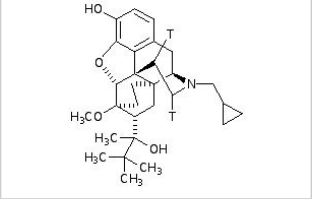
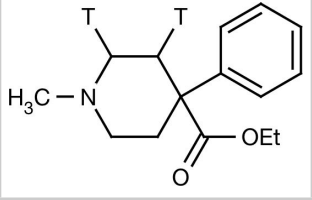
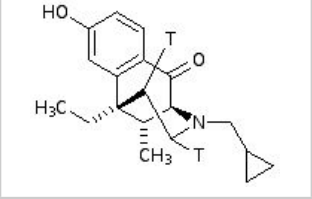
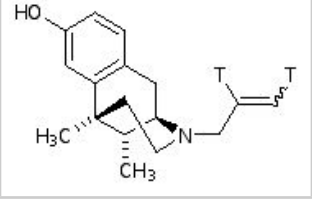
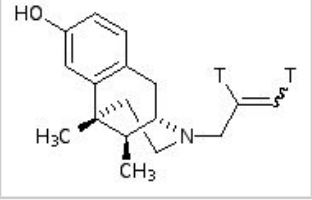
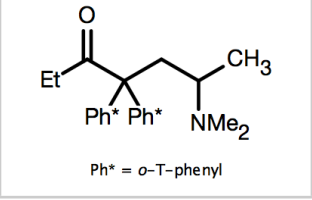
<b>Catalog number :</b> 7370-052 <span style="float: right;">★</span>		
<b>Drug name :</b> [ <sup>3</sup> H <sub>3</sub> ]-5'-Trimethylammonium-Δ <sup>8</sup> -THC phenolate		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>37</sub> NO <sub>2</sub> <b>FW :</b> 371.56 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7390-002 <span style="float: right;">★</span>		
<b>Drug name :</b> (±)-[2,6- <sup>3</sup> H <sub>2</sub> (n)]-3,4,5-Trimethoxyamphetamine hydrochloride		
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>3</sub> <b>FW :</b> 265.76 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7400-004 <span style="float: right;">★</span>		
<b>Drug name :</b> (+)-[6'- <sup>3</sup> H(n)-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[6'- <sup>3</sup> H(n)]MDA		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub> <b>FW :</b> 215.68 <b>DEA schedule :</b> 1		
<b>Note :</b> <i>Hallucinogen (tritium-labeled).</i>		
<b>Catalog number :</b> 7400-005		
<b>Drug name :</b> [6- <sup>3</sup> H <sub>2</sub> (n)]-3,4-Methylenedioxyamphetamine hydrochloride; [6- <sup>3</sup> H <sub>2</sub> (n)]MDA		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub> <b>FW :</b> 217.68 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7400-006 <span style="float: right;">CASRN : 6292-91-7</span> <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[6'- <sup>3</sup> H <sub>2</sub> (n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (-)-[6'- <sup>3</sup> H <sub>2</sub> (n)]MDA		
<b>Mol. formula :</b> C <sub>10</sub> H <sub>14</sub> ClNO <sub>2</sub> <b>FW :</b> 217.68 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7401-002		
<b>Drug name :</b> [2',6'- <sup>3</sup> H(n)]-3-Methoxy-4,5-methylenedioxyamphetamine hydrochloride; [2,6- <sup>3</sup> H(n)]MMDA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>3</sub> <b>FW :</b> 249.72 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 7405-005 <span style="float: right;">CASRN : 4764-17-4</span> <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[6'- <sup>3</sup> H(n)]-3',4'-Methylenedioxymethamphetamine hydrochloride; (-)-[ <sup>3</sup> H]MDMA		
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub> <b>FW :</b> 231.71 <b>DEA schedule :</b> 1		
<b>Note :</b> <i>CNS stimulant; hallucinogen (tritium-labeled).</i>		

★ = custom synthesis

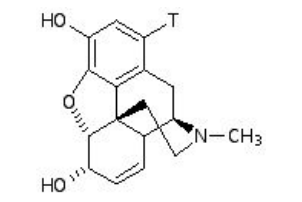
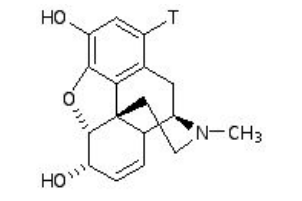
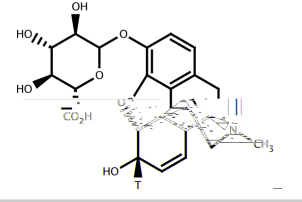
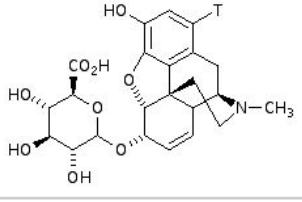
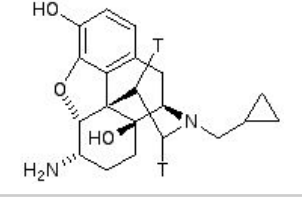
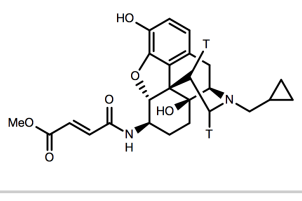
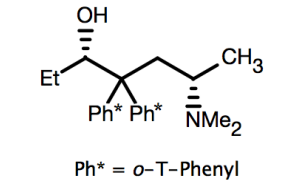
<b>Catalog number :</b> 7405-006			
<b>Drug name :</b> (+)-[6'- <sup>3</sup> H(n)]-3',4'-Methylenedioxyamphetamine hydrochloride; (+)-[ <sup>3</sup> H]MDMA			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>16</sub> ClNO <sub>2</sub>	<b>FW :</b> 231.71	<b>DEA schedule :</b> 1	
<b>Note :</b> CNS stimulant; hallucinogen (tritium-labeled).			
<b>Catalog number :</b> 7471-001			★
<b>Drug name :</b> [Phenyl-3- <sup>3</sup> H(n)]Phencyclidine; [Phenyl-3- <sup>3</sup> H(n)]PCP			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 245.40	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-043			★
<b>Drug name :</b> [3',4'- <sup>3</sup> H]Phencyclidine; [3,4- <sup>3</sup> H]PCP			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 247.4	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9041-003			★
<b>Drug name :</b> (-)-[N-C <sup>3</sup> H <sub>3</sub> ]Cocaine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 309.38	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9050-011			★
<b>Drug name :</b> [1- <sup>3</sup> H]Codeine			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>21</sub> NO <sub>3</sub>	<b>FW :</b> 301.37	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9056-001			★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Etorphine			
<b>Mol. formula :</b> C <sub>25</sub> H <sub>33</sub> NO <sub>4</sub>	<b>FW :</b> 429.58	<b>DEA schedule :</b> 1	
<b>Note :</b> (See Notes 1 & 2 in Section B before ordering.)			
<b>Catalog number :</b> 9058-002			★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Diprenorphine			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>36</sub> ClNO <sub>4</sub>	<b>FW :</b> 429.58	<b>DEA schedule :</b> 2	
<b>Note :</b> (See Notes 1 & 2 in Section B before ordering.)			

## 11a – Radiolabeled (Tritium)

★ = custom synthesis

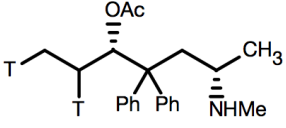
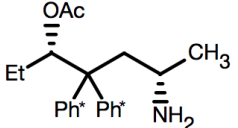
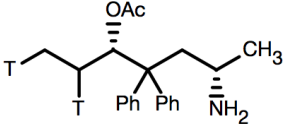
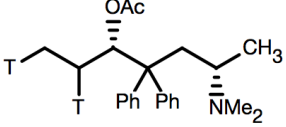
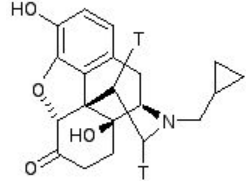
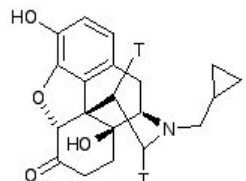
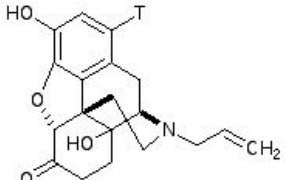
<b>Catalog number :</b> 9064-002	<b>CASRN :</b> 161772-95-8	★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Buprenorphine hydrochloride		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>38</sub> ClNO <sub>4</sub>	<b>FW :</b> 508.11	<b>DEA schedule :</b> 5
<b>Note :</b> <i>Narcotic analgesic (tritium-labeled).</i>		
<b>Reference :</b> Robinson, <i>SE CNS Drug Rev</i> 2002, 8, 377-90.		
		
<b>Catalog number :</b> 9064-003	<b>CASRN :</b> 161772-95-8	★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Buprenorphine		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>41</sub> NO <sub>4</sub>	<b>FW :</b> 508.11	<b>DEA schedule :</b> 3
<b>Note :</b> <i>Narcotic analgesic (tritium-labeled).</i>		
<b>Reference :</b> Robinson, <i>SE CNS Drug Rev</i> 2002, 8, 377-90.		
		
<b>Catalog number :</b> 9230-003		★
<b>Drug name :</b> [2,3- <sup>3</sup> H <sub>2</sub> ]Meperidine hydrochloride		
<b>Mol. formula :</b> C <sub>15</sub> H <sub>22</sub> ClNO <sub>2</sub>	<b>FW :</b> 287.81	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9240-003		★
<b>Drug name :</b> [11,12- <sup>3</sup> H <sub>2</sub> ](–)-Ethylketazocine		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>25</sub> NO <sub>2</sub>	<b>FW :</b> 303.42	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 9240-019		★
<b>Drug name :</b> (–)-[17,18- <sup>3</sup> H]N-Allylnormetazocine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>23</sub> NO	<b>FW :</b> 261.39	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9240-040		★
<b>Drug name :</b> (+)-[17,18- <sup>3</sup> H <sub>2</sub> ]N-Allylnormetazocine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>23</sub> NO	<b>FW :</b> 261.39	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9250-006		★
<b>Drug name :</b> (±)-[o,o'- <sup>3</sup> H <sub>2</sub> (n)]Methadone		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>27</sub> NO	<b>FW :</b> 313.46	<b>DEA schedule :</b> 2
		

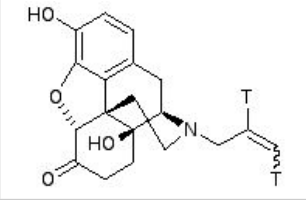
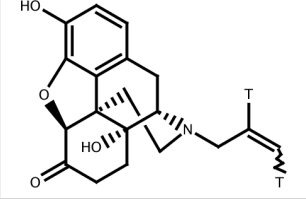
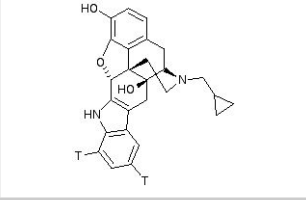
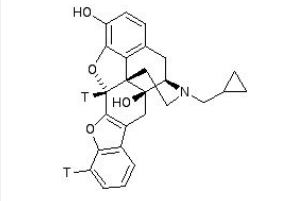
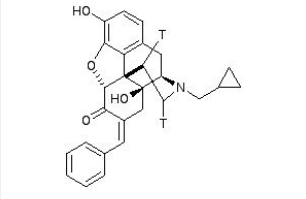
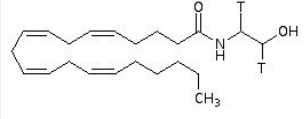
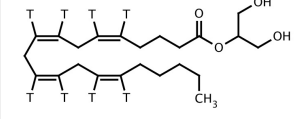


<b>Catalog number :</b> 9300-002			★
<b>Drug name :</b> Tritium-labeled Morphine sulfate			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 475.50	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-006			CASRN : 80573-75-7
<b>Drug name :</b> [1- <sup>3</sup> H(n)]Morphine			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 287.35	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-011			★
<b>Drug name :</b> Morphine-(6- <sup>3</sup> H)-3-glucuronide			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 463.47	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-014			★
<b>Drug name :</b> [1- <sup>3</sup> H]Morphine-6-glucuronide			
<b>Mol. formula :</b> C <sub>23</sub> H <sub>27</sub> NO <sub>9</sub>	<b>FW :</b> 463.47	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9333-009			★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]-6β-Naltrexamine			
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 346.45	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9333-012			★
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]-6β-Funaltrexamine			
<b>Mol. formula :</b> C <sub>26</sub> H <sub>33</sub> ClN <sub>2</sub> O <sub>6</sub>	<b>FW :</b> 458.53	<b>DEA schedule :</b> 2	
<b>Note :</b> Irreversible μ-opioid receptor antagonist (tritium-labeled).			
<b>Reference :</b> Portoghese, PS; el Kouhen, R; Law, PY; Loh, HH; Le Bourdonnec, B <i>Farmaco</i> <b>2001</b> , 56, 191-6.			
<b>Catalog number :</b> 9605-003			★
<b>Drug name :</b> (-)-[o,o'- <sup>3</sup> H <sub>2</sub> (n)]α-Methadol hydrochloride			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>29</sub> NO	<b>FW :</b> 347.93	<b>DEA schedule :</b> 1	
<b>Reference :</b> Portoghese, PS; Williams DA <i>J Med Chem</i> <b>1969</b> , 12, 839-44.			

## 11a – Radiolabeled (Tritium)

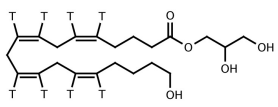
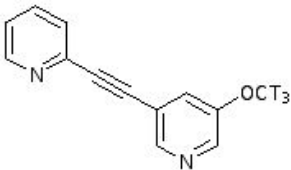
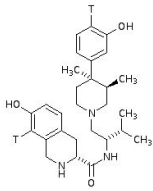
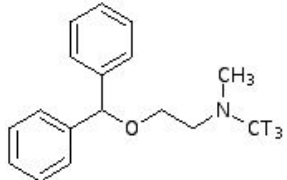
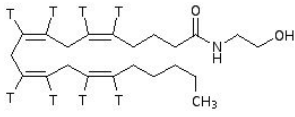
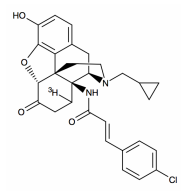
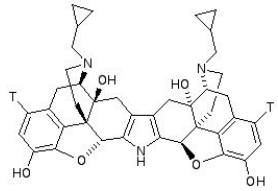
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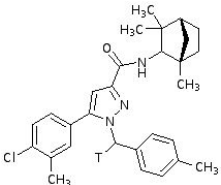
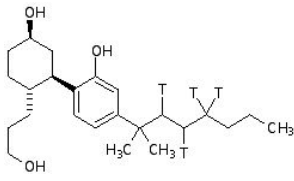
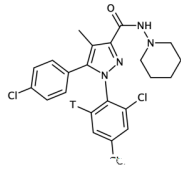
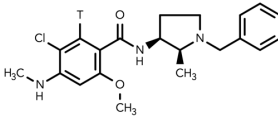
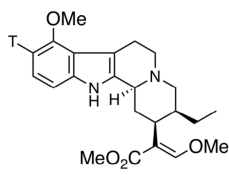
<b>Catalog number :</b> 9633-006 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[1,2- <sup>3</sup> H]α-Acetylnormethadol hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub> <b>FW :</b> 375.94 <b>DEA schedule :</b> 1		
<b>Catalog number :</b> 9633-011 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[o,o'- <sup>3</sup> H <sub>2</sub> (n)]-α-Acetyl-N,N-dinormethadol hydrochloride	 <p>Ph* = o-T-phenyl</p>	
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub> <b>FW :</b> 389.97 <b>DEA schedule :</b> 0		
<b>Catalog number :</b> 9633-015 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[1,2- <sup>3</sup> H <sub>2</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub> <b>FW :</b> 361.9-2 <b>DEA schedule :</b> 0		
<b>Catalog number :</b> 9648-012 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[1,2- <sup>3</sup> H <sub>2</sub> ]α-Acetylmethadol		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub> <b>FW :</b> 353.50 <b>DEA schedule :</b> 2		
<b>Catalog number :</b> 9652-012 <span style="float: right;">★</span>		
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Naltrexone		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>4</sub> <b>FW :</b> 345.42 <b>DEA schedule :</b> 0		
<b>Catalog number :</b> 9652-013 <span style="float: right;">★</span>		
<b>Drug name :</b> [15,16- <sup>3</sup> H <sub>2</sub> ]Naltrexone hydrochloride		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>24</sub> ClNO <sub>4</sub> <b>FW :</b> 381.88 <b>DEA schedule :</b> 0		
<b>Catalog number :</b> 9652-031 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[1- <sup>3</sup> H(n)]Naloxone		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub> <b>FW :</b> 329.38 <b>DEA schedule :</b> 0		

<b>Catalog number :</b> 9652-035 <span style="float: right;">★</span>		
<b>Drug name :</b> (-)-[19,20- <sup>3</sup> H <sub>2</sub> ]Naloxone		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 331.39	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-039 <span style="float: right;">★</span>		
<b>Drug name :</b> (+)-[19,20- <sup>3</sup> H <sub>2</sub> ]Naloxone		
<b>Mol. formula :</b> C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 331.39	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-061 <span style="float: right;">★</span>		
<b>Drug name :</b> [5',7'- <sup>3</sup> H <sub>2</sub> ]Naltrindole		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>	<b>FW :</b> 418.51	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9652-065 <span style="float: right;">★</span>		
<b>Drug name :</b> Tritium-labeled Naltriben		
<b>Mol. formula :</b> C <sub>26</sub> H <sub>25</sub> NO <sub>4</sub>	<b>FW :</b> 419.50	<b>DEA schedule :</b> 0
<b>Note :</b> <i>Selective δ-opioid receptor antagonist (tritium-labeled).</i>		
<b>Reference :</b> Sofuoglu, M; Portoghese, PS; Takemori, AE <i>J Pharmacol Exp Ther</i> <b>1991</b> , 257, 676-80.		
		
<b>Catalog number :</b> 9652-068 <span style="float: right;">★</span>		
<b>Drug name :</b> [15,16- <sup>3</sup> H]-7-Benzylidene-7-dehydronaltrexone; [ <sup>3</sup> H]BNTX		
<b>Mol. formula :</b> C <sub>27</sub> H <sub>28</sub> ClNO <sub>4</sub>	<b>FW :</b> 433.52	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> NOCD-008 <span style="float: right;">★</span>		
<b>Drug name :</b> Arachidonyl[1,2- <sup>3</sup> H]ethanolamide; Tritiated Anandamide		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>37</sub> NO <sub>2</sub>	<b>FW :</b> 347.54	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> NOCD-018 <span style="float: right;">★</span>		
<b>Drug name :</b> [ <sup>3</sup> H]-2-Arachidonylglycerol; [ <sup>3</sup> H]-2-AG		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>38</sub> O <sub>4</sub>	<b>FW :</b> 378.55	<b>DEA schedule :</b> 0
<b>Note :</b> <i>Cannabinoid CB1 receptor agonist (tritium-labeled).</i>		
<b>Reference :</b> Stella, N; Schweitzer, P; Piomelli, D <i>Nature</i> <b>1997</b> , 388, 773-8.		
		

## 11a – Radiolabeled (Tritium)

★ = custom synthesis

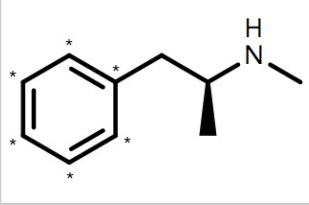
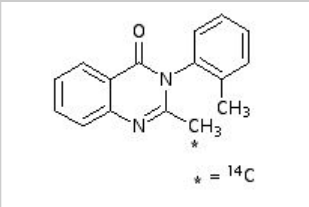
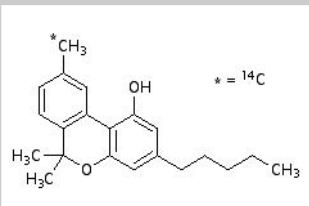
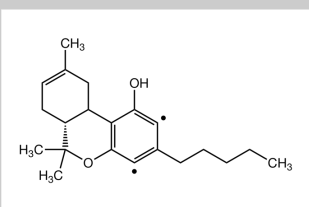
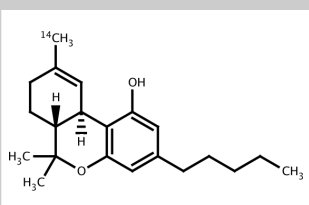
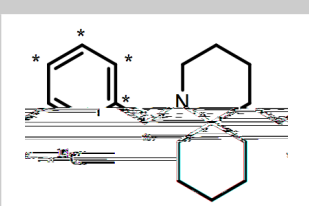
<b>Catalog number :</b> NOCD-035		★
<b>Drug name :</b> Tritium-labeled 1-Arachidonylglycerol; [ <sup>3</sup> H]-1-AG		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>38</sub> O <sub>4</sub>	<b>FW :</b> 378.55 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Cannabinoid CB1 receptor agonist (tritium-labeled).</i>		
<b>Reference :</b> Stella, N; Schweitzer, P; Piomelli D <i>Nature</i> <b>1997</b> , <i>388</i> , 773-8.		
<b>Catalog number :</b> NOCD-058		★
<b>Drug name :</b> 3-[ <sup>3</sup> H]Methoxy-5-(pyridin-2-yl-ethynyl)pyridine		
<b>Mol. formula :</b> C <sub>13</sub> H <sub>10</sub> N <sub>2</sub> O	<b>FW :</b> 216.26 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Tritium-labeled MPEP analog</i>		
<b>Catalog number :</b> NOCD-059		
<b>Drug name :</b> [ <sup>3</sup> H]JDTic		
<b>Mol. formula :</b> C <sub>28</sub> H <sub>39</sub> N <sub>3</sub> O <sub>3</sub>	<b>FW :</b> 469.64 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Selective kappa-opioid antagonist (tritium-labeled).</i>		
<b>Reference :</b> Thomas, JB; <i>et al.</i> <i>J Med Chem</i> <b>2001</b> , <i>44</i> , 2687-90.		
<b>Catalog number :</b> NOCD-063		★
<b>Drug name :</b> [N-C <sup>3</sup> H <sub>3</sub> ]Diphenhydramine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO	<b>FW :</b> 261.38 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> NOCD-078		★
<b>Drug name :</b> Tritium-labeled Arachidonylethanolamide; Tritiated Anandamide		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>37</sub> NO <sub>2</sub>	<b>FW :</b> 347.54 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Cannabinoid CB1 and CB2 receptor radioligand.</i>		
<b>Catalog number :</b> NOCD-079		★
<b>Drug name :</b> Tritium-labeled Clocinnamox		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>29</sub> ClN <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 505.01 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Irreversible mu-opioid receptor antagonist (tritium-labeled).</i>		
<b>Reference :</b> Comer, SD; <i>et al.</i> <i>J Pharmacol Exp Ther</i> <b>1992</b> , <i>262</i> , 1051-6.		
<b>Catalog number :</b> NOCD-084		★
<b>Drug name :</b> [1,1'- <sup>3</sup> H(n)]Norbinaltorphimine; [ <sup>3</sup> H]norBNI		
<b>Mol. formula :</b> C <sub>40</sub> H <sub>43</sub> N <sub>3</sub> O <sub>6</sub>	<b>FW :</b> 665.80 <b>DEA schedule :</b> 0	
<b>Reference :</b> Birch, PJ; <i>et al.</i> <i>Eur J Pharmacol</i> <b>1987</b> , <i>144</i> , 405-8. Portoghese, PS; Lipkowski, AW; Takemori, AE <i>Life Sci</i> <b>1987</b> , <i>40</i> , 1287-92.		

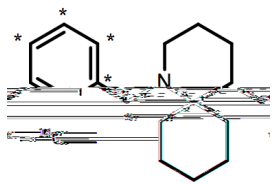
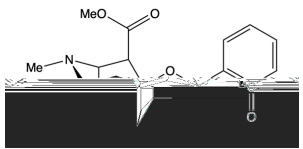
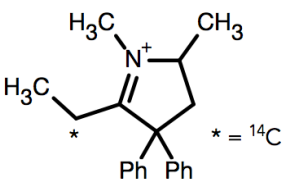
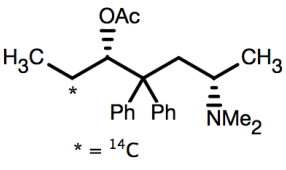
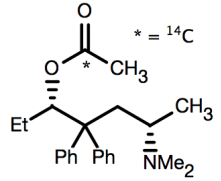
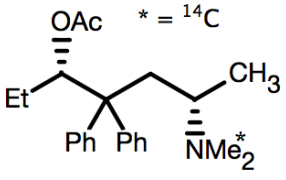
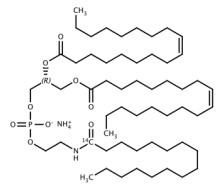
<b>Catalog number :</b> NOCD-086	<b>CASRN :</b> 475471-24-0	★
<b>Drug name :</b> Tritium-labeled SR144528		
<b>Mol. formula :</b> C <sub>29</sub> H <sub>34</sub> N <sub>3</sub> OCl	<b>FW :</b> 478.05	<b>DEA schedule :</b> 0
<b>Note :</b> <i>Cannabinoid CB2 receptor radioligand (tritium-labeled).</i>		
<b>Reference :</b> Portier, M; <i>et al. J Pharmacol Exp Ther</i> <b>1999</b> , <i>288</i> , 582-9. Rinaldi-Carmona, M; <i>et al. J Pharmacol Exp Ther</i> <b>1998</b> , <i>284</i> , 644-50.		
		
<b>Catalog number :</b> NOCD-092	<b>CASRN :</b> 119095-48-6	
<b>Drug name :</b> [2,3,4,4- <sup>3</sup> H <sub>4</sub> ]-(-)-CP 55,940		
<b>Mol. formula :</b> C <sub>24</sub> H <sub>40</sub> O <sub>3</sub>	<b>FW :</b> 376.58	<b>DEA schedule :</b> 0
<b>Note :</b> <i>High affinity CB1 and CB2 receptor radioligand (tritium-labeled).</i>		
		
<b>Catalog number :</b> NOCD-101	<b>CASRN :</b> 170937-38-9	
<b>Drug name :</b> [ <sup>3</sup> H]SR141716A		
<b>Mol. formula :</b> C <sub>22</sub> H <sub>21</sub> Cl <sub>3</sub> N <sub>4</sub> O	<b>FW :</b> 465.80	<b>DEA schedule :</b> 0
<b>Note :</b> <i>Cannabinoid CB1 receptor radioligand (tritium-labeled).</i>		
<b>Reference :</b> Seltzman, H; <i>et al. J Chem Soc, Chem Commun</i> <b>1995</b> , 1549-1550.		
		
<b>Catalog number :</b> NOCD-162	<b>CASRN :</b> 75272-39-8	new
<b>Drug name :</b> [ <sup>3</sup> H]Nemonapride		
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> ClN <sub>3</sub> O <sub>2</sub>	<b>FW :</b> 387.91	<b>DEA schedule :</b> 0
<b>Reference:</b>		
		
<b>Catalog number :</b> NOCD-168	<b>CASRN :</b> n/a	new
<b>Drug name :</b> [ <sup>3</sup> H]Mitragnine		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>4</sub>	<b>FW :</b> 398.5	<b>DEA schedule :</b> 0
<b>Reference:</b>		
		



# 11b – Radiolabeled (Carbon-14)

★ = custom synthesis

<b>Catalog number :</b> 1105-015		<b>CASRN :</b> n/a	
<b>Drug name :</b> (+)-(S)-[phenyl- <sup>14</sup> C]Methamphetamine HCl			
<b>Mol. formula :</b> C <sub>10</sub> H <sub>15</sub> N	<b>FW :</b> 185.7	<b>DEA schedule :</b> 1	
<b>Reference:</b>			
			
<b>Catalog number :</b> 2565-002		<b>CASRN :</b> 72-44-6	
<b>Drug name :</b> [2- <sup>14</sup> C]Methaqualone			
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 251.30	<b>DEA schedule :</b> 1	
<b>Note :</b> Sedative; hypnotic (carbon-labeled).			
			
<b>Catalog number :</b> 7360-015			
<b>Drug name :</b> [11- <sup>14</sup> C]Cannabinol			
<b>Mol. formula :</b> C <sub>2014</sub> H <sub>26</sub> O <sub>2</sub>	<b>FW :</b> 310.43	<b>DEA schedule :</b> 1	
<b>Note :</b> Inactive constituent of cannabis (carbon-labeled).			
			
<b>Catalog number :</b> 7370-032			
<b>Drug name :</b> [2,4- <sup>14</sup> C]Δ <sup>8</sup> -THC			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 318.45	<b>DEA schedule :</b> 1	
<b>Note :</b> Hallucinogen; psychotropic; analgesic (carbon-labeled).			
			
<b>Catalog number :</b> 7370-033			
<b>Drug name :</b> [11- <sup>14</sup> C]Δ <sup>9</sup> -THC			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 316.45	<b>DEA schedule :</b> 1	
<b>Note :</b> Hallucinogen; psychotropic; analgesic (carbon-labeled).			
			
<b>Catalog number :</b> 7471-002			
<b>Drug name :</b> [ <sup>14</sup> C]Phencyclidine HBr; [ <sup>14</sup> C]PCP			
<b>Mol. formula :</b> C <sub>18</sub> H <sub>28</sub> BrN	<b>FW :</b> 523.53	<b>DEA schedule :</b> 2	
			

<b>Catalog number :</b> 7471-007		
<b>Drug name :</b> [Phenyl-U- <sup>14</sup> C]-1-(1-Phenylcyclohexyl)Piperidine; [Phenyl-U- <sup>14</sup> C]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 245.39	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-033 <span style="background-color: yellow;">new</span> <b>CASRN :</b> 98843-26-6		
<b>Drug name :</b> [3-carbonyl- <sup>14</sup> C]Cocaine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 303.36	<b>DEA schedule :</b> 2
<b>Reference:</b>		
		
<b>Catalog number :</b> 9250-026		
<b>Drug name :</b> [1'- <sup>14</sup> C]-2-Ethyl-1,5-dimethyl-3,3-diphenylpyrrolinium perchlorate		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> ClNO <sub>4</sub>	<b>FW :</b> 536.01	<b>DEA schedule :</b> 0
		
<b>Catalog number :</b> 9648-013		
<b>Drug name :</b> (-)-[2- <sup>14</sup> C]-α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 353.50	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9648-014		
<b>Drug name :</b> (-)-[Acetyl- <sup>14</sup> C]-α-Acetylmethadol		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 353.50	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9648-015		
<b>Drug name :</b> (-)-[N- <sup>14</sup> CH <sub>3</sub> ]-α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>31</sub> NO <sub>2</sub>	<b>FW :</b> 353.50	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> NOCD-000		
<b>Drug name :</b> N-[1- <sup>14</sup> C]-Palmitoyl-1,2-dioleoyl- <i>sn</i> -glycero-3-phosphoethanolamine ammonium salt		
<b>Mol. formula :</b> C <sub>57</sub> H <sub>111</sub> N <sub>2</sub> O <sub>9</sub> P	<b>FW :</b> 999.47	<b>DEA schedule :</b> 0
<b>Note :</b> Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).		
<b>Reference :</b> Morishita J; <i>et al. J Neurochem</i> 2005, 94, 753-62.		
		



<b>Catalog number :</b> NOCD-005		
<b>Drug name :</b> Palmitoyl[1- <sup>14</sup> C]ethanolamide		
<b>Mol. formula :</b> C <sub>18</sub> H <sub>37</sub> NO <sub>2</sub>	<b>FW :</b> 299.49 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Cannabinoid CB2 receptor agonist (carbon-labeled).</i>		
<b>Catalog number :</b> NOCD-007		
<b>Drug name :</b> Arachidonyl[1- <sup>14</sup> C]ethanolamide		
<b>Mol. formula :</b> C <sub>23</sub> H <sub>37</sub> NO <sub>2</sub>	<b>FW :</b> 361.56 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).</i>		
<b>Catalog number :</b> NOCD-009		
<b>Drug name :</b> N-[1- <sup>14</sup> C]-Arachidonyl-1,2-dioleoyl- <i>sn</i> -glycero-3-phosphoethanolamine ammonium salt		
<b>Mol. formula :</b> C <sub>61</sub> H <sub>111</sub> N <sub>2</sub> O <sub>9</sub> P	<b>FW :</b> 1047.52 <b>DEA schedule :</b> 0	
<b>Note :</b> <i>Putative biosynthetic precursor of endogenous cannabinoids (carbon-labeled).</i>		
<b>Reference :</b> Morishita, J; <i>et al. J Neurochem</i> 2005, 94, 753-62.		



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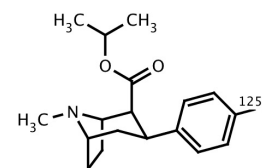
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FW : 413.29

DEA schedule : 0

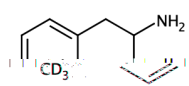
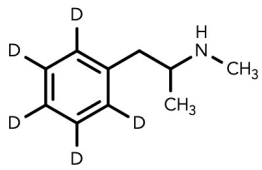

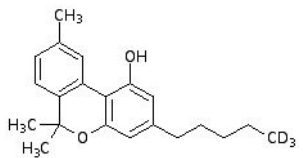
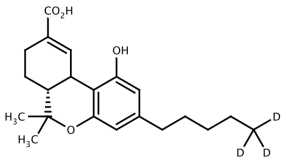
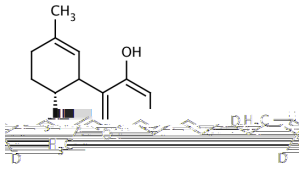
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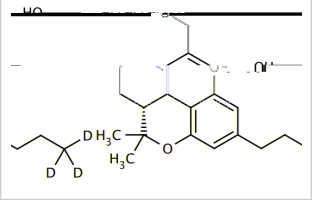
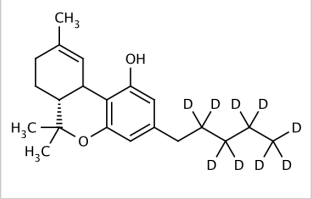
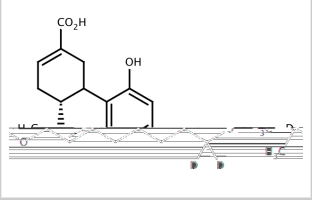
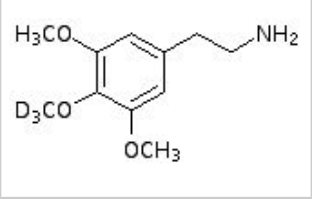
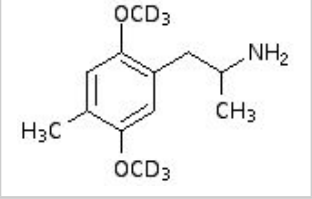
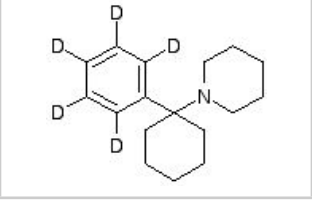
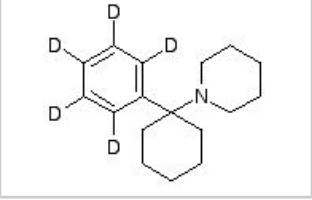


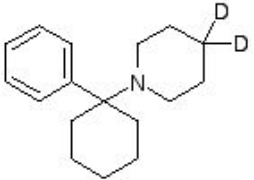
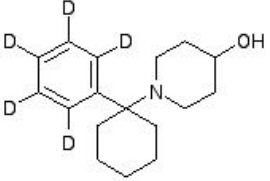
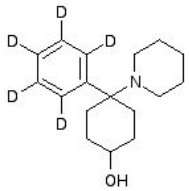
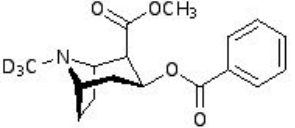
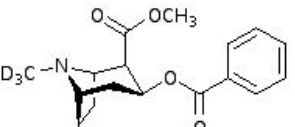
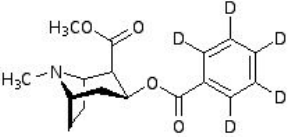
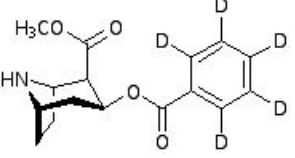


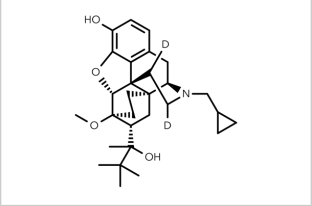
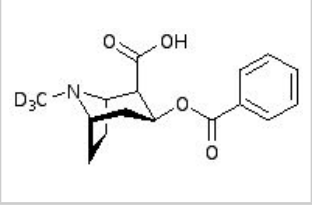
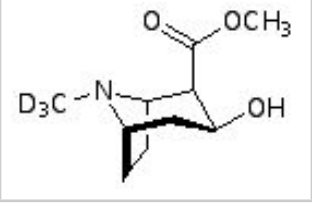
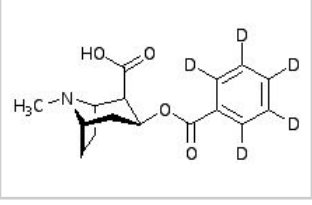
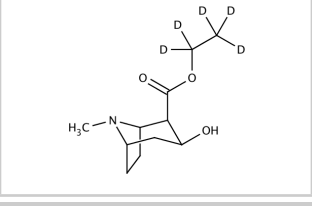
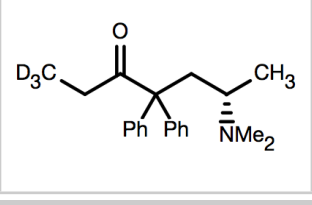
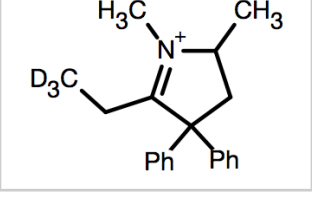
## 12 – Deuterium Labeled

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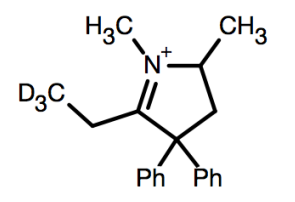
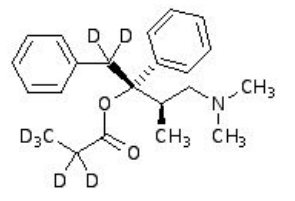
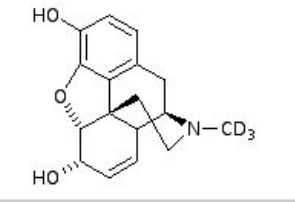
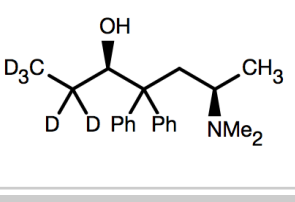
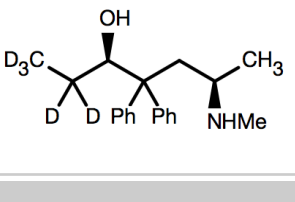
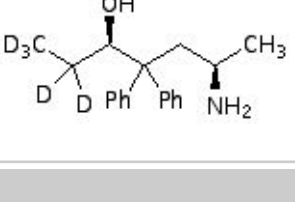
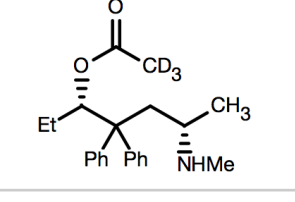
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<b>Drug name :</b> (±)-[1,1,1- <sup>2</sup> H <sub>3</sub> ]Amphetamine sulfate				
<b>Mol. formula :</b> C <sub>9</sub> H <sub>13</sub> N	<b>FW :</b> 374.53			<b>DEA schedule :</b> 2
<b>Reference :</b> Cho, AK; <i>et al.</i> , <i>Anal Chem</i> <b>1973</b> , <i>45</i> , 570-4. Valtier, S; Cody, JT <i>J Anal Toxicol</i> <b>1995</b> , <i>19</i> , 375-80.				
<b>Catalog number :</b> 1105-002				
<b>Drug name :</b> (±)-[2',3',4',5',6'- <sup>2</sup> H <sub>5</sub> ]Methamphetamine hydrochloride				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>16</sub> ClN	<b>FW :</b> 190.72			<b>DEA schedule :</b> 2
<b>Catalog number :</b> 2565-001		<b>CASRN :</b> 72-44-6		
<b>Drug name :</b> [ <sup>2</sup> H <sub>4</sub> ]Methaqualone				
<b>Mol. formula :</b> C <sub>16</sub> H <sub>14</sub> N <sub>2</sub> O	<b>FW :</b> 254.32			<b>DEA schedule :</b> 1
<b>Catalog number :</b> 7360-014				
<b>Drug name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]Cannabinol				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>26</sub> O <sub>2</sub>	<b>FW :</b> 310.43			<b>DEA schedule :</b> 1
<b>Note :</b> <i>Inactive constituent of cannabis (deuterium-labeled).</i>				
<b>Catalog number :</b> 7370-003		<b>CASRN :</b> 113269-48-0		
<b>Drug name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]9-Carboxy-11-nor-Δ <sup>9</sup> -THC				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	<b>FW :</b> 347.46			<b>DEA schedule :</b> 1
<b>Note :</b> <i>Urinary metabolite of THC (deuterium-labeled).</i>				
<b>Catalog number :</b> 7370-005		<b>CASRN :</b> 81586-39-2		
<b>Drug name :</b> Deuterium-labeled Δ <sup>9</sup> -THC				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 317			<b>DEA schedule :</b> 1
<b>Note :</b> <i>Hallucinogen; psychotropic; analgesic (deuterium-labeled).</i>				

<b>Catalog number :</b> 7370-010		<b>CASRN :</b> 130410-26-3	
<b>Drug name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]-11-Hydroxy- $\Delta^9$ -THC			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>3</sub>	<b>FW :</b> 333	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7370-025			
<b>Drug name :</b> [2',2',3',3',4',4',5',5',5'- <sup>2</sup> H <sub>9</sub> ] $\Delta^9$ -THC			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>30</sub> O <sub>2</sub>	<b>FW :</b> 323.52	<b>DEA schedule :</b> 1	
<b>Note :</b> <i>Hallucinogen; psychotropic; analgesic (deuterium-labeled).</i>			
<b>Catalog number :</b> 7370-038			
<b>Drug name :</b> [5'- <sup>2</sup> H <sub>3</sub> ]-11-nor- $\Delta^8$ -THC-9-carboxylic acid			
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> O <sub>4</sub>	<b>FW :</b> 347.46	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7381-002			
<b>Drug name :</b> [4'-OC <sup>2</sup> H <sub>3</sub> ]Mescaline hydrochloride			
<b>Mol. formula :</b> C <sub>11</sub> H <sub>18</sub> ClNO <sub>3</sub>	<b>FW :</b> 247.72	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7395-004			
<b>Drug name :</b> [OC <sup>2</sup> H <sub>3</sub> ]-2,5-Dimethoxy-4-methylamphetamine HCl; [OC <sup>2</sup> H <sub>3</sub> ]DOM			
<b>Mol. formula :</b> C <sub>12</sub> H <sub>20</sub> ClNO <sub>2</sub>	<b>FW :</b> 251.78	<b>DEA schedule :</b> 1	
<b>Catalog number :</b> 7471-003			
<b>Drug name :</b> [Phenyl-2,3,4,5,6- <sup>2</sup> H <sub>5</sub> ]Phencyclidine; [Phenyl-2,3,4,5,6- <sup>2</sup> H <sub>5</sub> ]PCP			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> N	<b>FW :</b> 248.42	<b>DEA schedule :</b> 2	
<b>Catalog number :</b> 7471-006			
<b>Drug name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]Phencyclidine hydrochloride; [Phenyl- <sup>2</sup> H <sub>5</sub> ]PCP HCl			
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClN	<b>FW :</b> 284.89	<b>DEA schedule :</b> 2	

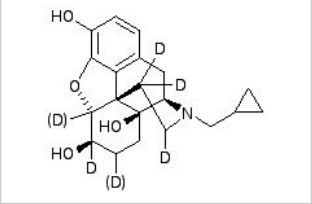
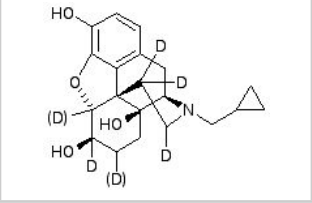
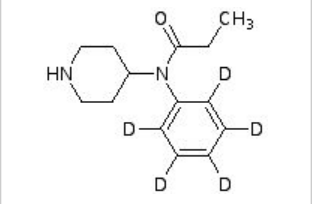
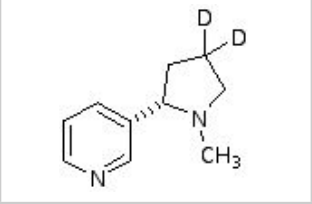
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<b>Drug name :</b> [Piperidino-4,4- <sup>2</sup> H <sub>2</sub> ]Phencyclidine hydrochloride; [Piperidino-4,4- <sup>2</sup> H <sub>2</sub> ]PCP		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>26</sub> ClN	<b>FW :</b> 281.86	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 7471-082		
<b>Drug name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]-1-(1-Phenylcyclohexyl)-4-hydroxypiperidine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 264.43	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 7471-084		
<b>Drug name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]-1-(1-Phenyl-4-hydroxycyclohexyl)piperidine ( <i>cis/trans</i> )		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>25</sub> NO	<b>FW :</b> 264.43	<b>DEA schedule :</b> 1
		
<b>Catalog number :</b> 9041-006		
<b>Drug name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Cocaine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 306.37	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-007		
<b>Drug name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Cocaine hydrochloride		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>22</sub> ClNO <sub>4</sub>	<b>FW :</b> 342.83	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-009		
<b>Drug name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Cocaine		
<b>Mol. formula :</b> C <sub>17</sub> H <sub>21</sub> NO <sub>4</sub>	<b>FW :</b> 344.84	<b>DEA schedule :</b> 2
		
<b>Catalog number :</b> 9041-017		
<b>Drug name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Norcocaine fumarate		
<b>Mol. formula :</b> C <sub>20</sub> H <sub>23</sub> NO <sub>8</sub>	<b>FW :</b> 410.43	<b>DEA schedule :</b> 2
		

<b>Catalog number :</b> 9064-006		<b>CASRN :</b> 161772-95-8		
<b>Drug name :</b> [15, 16- <sup>2</sup> H <sub>2</sub> ]Buprenorphine HCl				
<b>Mol. formula :</b> C <sub>29</sub> H <sub>42</sub> ClNO <sub>4</sub>	<b>FW :</b> 504.11			<b>DEA schedule :</b> 3
<b>Reference:</b>				
<b>Catalog number :</b> 9180-003				
<b>Drug name :</b> (-)-[N-C <sup>2</sup> H <sub>3</sub> ]Benzoylecgonine				
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 292.34			<b>DEA schedule :</b> 2
<b>Reference:</b>				
<b>Catalog number :</b> 9180-007				
<b>Drug name :</b> [N-C <sup>2</sup> H <sub>3</sub> ]Ecgonine methyl ester hydrochloride				
<b>Mol. formula :</b> C <sub>10</sub> H <sub>18</sub> ClNO <sub>3</sub>	<b>FW :</b> 238.73			<b>DEA schedule :</b> 2
<b>Reference:</b>				
<b>Catalog number :</b> 9180-011				
<b>Drug name :</b> (-)-[Phenyl- <sup>2</sup> H <sub>5</sub> ]Benzoylecgonine				
<b>Mol. formula :</b> C <sub>16</sub> H <sub>19</sub> NO <sub>4</sub>	<b>FW :</b> 294.36			<b>DEA schedule :</b> 2
<b>Reference:</b>				
<b>Catalog number :</b> 9180-021		<b>CASRN :</b> 259526-73-3		
<b>Drug name :</b> Ecgonine (1,1,2,2,2- <sup>2</sup> H <sub>5</sub> )ethyl ester perchlorate				
<b>Mol. formula :</b> C <sub>11</sub> H <sub>14</sub> D <sub>5</sub> NO <sub>3</sub> • HClO <sub>4</sub>	<b>FW :</b> 318.76			<b>DEA schedule :</b> 2
<b>Reference:</b>				
<b>Catalog number :</b> 9250-011				
<b>Drug name :</b> (+)-[1,1,1- <sup>2</sup> H <sub>3</sub> ]Methadone hydrochloride				
<b>Mol. formula :</b> C <sub>21</sub> H <sub>28</sub> ClNO	<b>FW :</b> 348.92			<b>DEA schedule :</b> 2
<b>Reference:</b>				
<b>Catalog number :</b> 9250-027				
<b>Drug name :</b> [Ethyl-2',2',2'- <sup>2</sup> H <sub>3</sub> ]-1,5-Dimethyl-3,3-diphenyl-2-ethylpyrrolinium perchlorate				
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> ClNO <sub>4</sub>	<b>FW :</b> 384.91			<b>DEA schedule :</b> 0
<b>Reference:</b>				



<b>Catalog number :</b> 9250-032			
<b>Drug name :</b>	[Ethyl-2',2',2'- <sup>2</sup> H <sub>3</sub> ]-3,3-Diphenyl-2-ethyl-5-methyl-1-pyrroline hydrochloride		
<b>Mol. formula :</b>	C <sub>20</sub> H <sub>25</sub> ClN	<b>FW :</b> 302.86 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9273-004			
<b>Drug name :</b>	[ <sup>2</sup> H <sub>7</sub> ]Propoxyphene hydrochloride		
<b>Mol. formula :</b>	C <sub>22</sub> H <sub>29</sub> NO <sub>2</sub>	<b>FW :</b> 346.51 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9300-005		<b>CASRN :</b> 67293-88-3	
<b>Drug name :</b>	[N-C <sup>2</sup> H <sub>3</sub> ]Morphine		
<b>Mol. formula :</b>	C <sub>17</sub> H <sub>19</sub> NO <sub>3</sub>	<b>FW :</b> 288.36 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9605-010			
<b>Drug name :</b>	[1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ]α-Methadol hydrochloride		
<b>Mol. formula :</b>	C <sub>21</sub> H <sub>30</sub> ClNO	<b>FW :</b> 347.93 <b>DEA schedule :</b> 1	
<b>Reference :</b>	Portoghese, PS; Williams DA <i>J Med Chem</i> <b>1969</b> , <i>12</i> , 839-44.		
<b>Catalog number :</b> 9605-021			
<b>Drug name :</b>	[1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ]α-Normethadol perchlorate		
<b>Mol. formula :</b>	C <sub>20</sub> H <sub>28</sub> ClNO <sub>5</sub>	<b>FW :</b> 397.90 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9605-031			
<b>Drug name :</b>	[1,1,1,2,2- <sup>2</sup> H <sub>5</sub> ]α-N,N-Dinormethadol maleate		
<b>Mol. formula :</b>	C <sub>19</sub> H <sub>25</sub> NO	<b>FW :</b> 399.49 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-003			
<b>Drug name :</b>	(-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-Acetylnormethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>22</sub> H <sub>30</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94 <b>DEA schedule :</b> 1	

<b>Catalog number :</b> 9633-004			
<b>Drug name :</b>	(-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetylnormethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>23</sub> H <sub>22</sub> ClNO <sub>2</sub>	<b>FW :</b> 375.94 <b>DEA schedule :</b> 1	
<b>Catalog number :</b> 9633-012			
<b>Drug name :</b>	(-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.92 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9633-014			
<b>Drug name :</b>	(-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetyl-N,N-dinormethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 361.92 <b>DEA schedule :</b> 0	
<b>Catalog number :</b> 9648-010			
<b>Drug name :</b>	(-)-[1,1,1,2,2,3- <sup>2</sup> H <sub>6</sub> ]α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>24</sub> H <sub>34</sub> ClNO	<b>FW :</b> 389.97 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9648-011			
<b>Drug name :</b>	(-)-[Acetyl- <sup>2</sup> H <sub>3</sub> ]α-acetylmethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>21</sub> H <sub>28</sub> ClNO <sub>2</sub>	<b>FW :</b> 389.97 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9648-016			
<b>Drug name :</b>	(-)-[2,2,3- <sup>2</sup> H <sub>3</sub> ]α-Acetylmethadol hydrochloride		
<b>Mol. formula :</b>	C <sub>23</sub> H <sub>32</sub> ClNO <sub>2</sub>	<b>FW :</b> 353.50 <b>DEA schedule :</b> 2	
<b>Catalog number :</b> 9652-014			
<b>Drug name :</b>	[15,15,16- <sup>2</sup> H <sub>3</sub> ]Naltrexone		
<b>Mol. formula :</b>	C <sub>20</sub> H <sub>23</sub> NO <sub>4</sub>	<b>FW :</b> 344.42 <b>DEA schedule :</b> 0	

<b>Catalog number :</b> 9652-052		
<b>Drug name :</b> [5,6,7,15,15,16- <sup>2</sup> H <sub>6</sub> ]-6β-Naltrexol hydrochloride	<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>4</sub>	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>26</sub> ClNO <sub>4</sub>	<b>FW :</b> 385.91	<b>DEA schedule :</b> 0
<b>Catalog number :</b> 9652-057		
<b>Drug name :</b> [5,6,7,15,15,16- <sup>2</sup> H <sub>6</sub> ]-6α-Naltrexol	<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> NO <sub>4</sub>	
<b>Mol. formula :</b> C <sub>20</sub> H <sub>25</sub> NO <sub>4</sub>	<b>FW :</b> 349.45	<b>DEA schedule :</b> 0
<b>Catalog number :</b> 9801-008		<b>CASRN :</b> 1211527-23-9
<b>Drug name :</b> [Phenyl- <sup>2</sup> H <sub>5</sub> ]N-4-Piperidyl-N-phenylpropanamide	<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O	
<b>Mol. formula :</b> C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O	<b>FW :</b> 237.36	
<b>Note :</b> Precursor for the synthesis of mass-labeled fentanyl analogs.		
<b>Catalog number :</b> NICT-015		<b>CASRN :</b> 121949-85-7
<b>Drug name :</b> (-)-Nicotine-4,4-d <sub>2</sub> (-)-di-p-toluoyl-L-tartrate	<b>Mol. formula :</b> C <sub>30</sub> H <sub>32</sub> N <sub>2</sub> O <sub>8</sub>	
<b>Mol. formula :</b> C <sub>30</sub> H <sub>32</sub> N <sub>2</sub> O <sub>8</sub>	<b>FW :</b> 550.60	
<b>Reference :</b> Jacob, PJ <i>Labelled Comp Radiopharm</i> 1988, 25, 1117-28.		



Limited quantities of Nicotine Research Cigarettes (NRC)s manufactured under the NIDA DSP are available to research investigators under specified parameters such as nicotine and tar yields ,and type as reduced nicotine (RN), reduced nicotine and menthol (RN-Men), reduced nicotine and high tar (RN-HT), reduced nicotine, high tar and menthol (RN-HT-Men), and conventional nicotine (CN). The NIDA DSP will consider requests for its current inventory of NRCs from researcher investigators funded through the NIH to conduct tobacco science research.

To facilitate planning for either usage of the current inventory of NRCs, or future manufacturing needs, the NIDA DSP requests that research investigators who intend to submit requests for NRCs from the NIDA DSP send an email request with the following information: 1) anticipated total quantity (carton) of each type of NRC needed with their Tobacco Product Master File (TPMF) codes and Type, 2) the requested timeline and amounts for initial receipt, and 3) requested timeline of replenishment of each type of NRC. For those research investigators who have NIDA/NIH grants, they can submit their request according to the NIDA DSP Guidelines for Research Chemicals, Controlled Substances, and Nicotine Research Cigarettes (NRC). For more information, please email [NIDANRCSupply@mail.nih.gov](mailto:NIDANRCSupply@mail.nih.gov)

Characteristics of the NRC inventory are described in the following table:

Nicotine Research Cigarettes (RTI)									
TPMF Code	Type	Filter PD (mm H <sub>2</sub> O)	Filter Type (Mono/Dual)	Filter Type (Regular/Menthol)	Tipping Paper Perforation	Nicotine Content (mg/g tobacco)	Specifications Nicotine Yield	Specifications Tar Yield	
NRC100	RN-HV	81	Dual	Regular	800CU	0.47 ± 0.02	0.02 ± 0.01	3.0 ± 1.5	
NRC101	RN-HV-Men	81	Dual	Menthol	800CU	0.47 ± 0.01	0.02 ± 0.01	3.0 ± 1.5	
NRC102	RN	81	Dual	Regular	100CU	0.42 ± 0.01	0.03 ± 0.01	9.0 ± 1.5	
NRC103	RN-Men	81	Dual	Menthol	100CU	0.44 ± 0.01	0.03 ± 0.01	9.0 ± 1.5	
NRC104	RN-HT	56	Mono	Regular	0CU	0.51 ± 0.00	0.04 ± 0.02	13.0 ± 2.0	
NRC105	RN-HT-Men	56	Mono	Menthol	0CU	0.46 ± 0.01	0.04 ± 0.02	13.0 ± 2.0	
NRC200	RN	81	Dual	Regular	100CU	1.40 ± 0.03	0.07 ± 0.02	9.0 ± 1.5	
NRC201	RN-Men	81	Dual	Menthol	100CU	1.34 ± 0.07	0.07 ± 0.02	9.0 ± 1.5	
NRC300	RN	81	Dual	Regular	100CU	2.53 ± 0.04	0.12 ± 0.03	9.0 ± 1.5	
NRC301	RN-Men	81	Dual	Menthol	100CU	2.54 ± 0.05	0.12 ± 0.03	9.0 ± 1.5	
NRC302	RN-HT-Men	56	Mono	Menthol	0CU	2.50 ± 0.04	0.16 ± 0.03	13.0 ± 2.0	
NRC400	RN	81	Dual	Regular	100CU	5.62 ± 0.18	0.26 ± 0.06	9.0 ± 1.5	
NRC401	RN-Men	81	Dual	Menthol	100CU	5.54 ± 0.27	0.26 ± 0.06	9.0 ± 1.5	
NRC402	RN-HT	81	Mono	Regular	100CU	6.03 ± 0.18	0.33 ± 0.06	13.0 ± 2.0	
NRC405	RN-HT-Men	56	Mono	Menthol	0CU	5.96 ± 0.21	0.40 ± 0.08	13.0 ± 2.0	
NRC404	RN-HT	56	Mono	Regular	0CU	8.08 ± 0.15	0.60 ± 0.12	13.0 ± 2.0	
NRC500	RN-HT	81	Mono	Regular	100CU	12.06 ± 0.41	0.70 ± 0.15	13.0 ± 2.0	
NRC501	RN-Men	81	Dual	Menthol	100CU	11.26 ± 0.11	0.60 ± 0.12	9.0 ± 1.5	
NRC600	CN	81	Dual	Regular	100CU	17.36 ± 0.28	0.80 ± 0.15	10.5 ± 1.5	
NRC601	CN-Men	81	Dual	Menthol	100CU	16.50 ± 0.17	0.80 ± 0.15	10.5 ± 1.5	
NRC602	CN-HT-Men	56	Mono	Menthol	0CU	16.10 ± 0.52	1.10 ± 0.20	16.0 ± 2.0	
NRC700	LTNR-HT	81	Mono	Regular	100CU	25.94 ± 0.65	1.60 ± 0.30	16.0 ± 2.0	
NRC701	LTNR-Men	81	Dual	Menthol	100CU	25.83 ± 0.48	1.60 ± 0.30	12.0 ± 2.0	

## Definitions

CN	Conventional Nicotine
CN-HT-Men	Conventional Nicotine-High Tar-Menthol
CN-Men	Conventional Nicotine-Menthol
CU	Coresta Units
	[ 0CU = Non-perforated tipping paper ]
Dual filter	Consists of 10 mm paper and 15 mm cellulose acetate segments
LTNR-HT	Low Tar Nicotine Ratio-High Tar
LTNR-Men	Low Tar Nicotine Ratio-Menthol
Mono filter	Consists of 25 mm cellulose acetate segment
PD	Pressure drop
RN	Reduced Nicotine
RN-HT	Reduced Nicotine-High Tar
RN-HT-Men	Reduced Nicotine-High Tar-Menthol
RN-HV	Reduced Nicotine-High Ventilation
RN-HV-Men	Reduced Nicotine-High Ventilation-Menthol
RN-Men	Reduced Nicotine-Menthol
TPMF	Tobacco Product Master File number





## Marijuana Plant Material

Research grade marijuana products are available in a variety of cannabinoid content specifications as shown below. For detailed information on specific batches please refer to the NIDA website (<http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog>). NIDA may also be able to develop bulk marijuana of other specific THC and CBD contents by mixing batches to meet researcher needs. For further information please contact the NIDA Drug Supply Program Director, Dr Hari Singh, at [hsingh@nida.nih.gov](mailto:hsingh@nida.nih.gov).

Marijuana cigarettes and bulk marijuana plant material produced under the NIDA DSP are available at no cost to research investigators who have an NIH grant. Marijuana is also available to research investigators who are funded through non-Federal sources on a cost-reimbursement basis. Please see the Note at the end of the tables for more information on costs.

## Marijuana cigarettes

The following represents the existing stocks of manufactured marijuana cigarettes, which will be made available to the research community until depleted. For additional information on the specific cannabinoid content please see <http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog>. Please note that NIDA does not plan to manufacture marijuana cigarettes in the near future. Only bulk marijuana will generally be available for research:

Placebo Marijuana Cigarettes (Placebo)	0.001% THC
Marijuana Cigarettes (Medium)	2.0% THC
Marijuana Cigarettes (Medium)	3.6% THC
Marijuana Cigarettes (High)	5.6% THC
Marijuana Cigarettes (High)	6.4% THC

## Bulk Marijuana

Bulk marijuana is currently available in the following general categories, and due to recent interest its strength is being provided for both THC and CBD as *Low* (<1%), *Medium* (1-5%), *High* (5-10%), and *Very High* (>10%). Bulk marijuana has small amounts of other cannabinoids (CBC, CBG, CBN, and THCV) which are reported in the batch specific details (<http://www.drugabuse.gov/researchers/research-resources/nida-drug-supply-program-dsp/bulk-marijuana-plant-material-addendum-to-drug-supply-catalog>).

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**Placebo marijuana (produced by solvent extraction)**

1. THC (0%) / CBD (0%)

**Low THC varieties**

1. Low THC (<1%) / Medium CBD (1-5%)
2. Low THC (<1%) / High CBD (5-10%)
3. Low THC (<1%) / Very High CBD (>10%)

**Medium THC varieties**

1. Medium THC (1-5%) / Low CBD (<1%)
2. Medium THC (1-5%) / Medium CBD (1-5%)
3. Medium THC (1-5%) / High CBD (5-10%)
4. Medium THC (1-5%) / Very High CBD (>10%)

**High THC varieties**

1. High THC (5-10%) / Low CBD (<1%)
2. High THC (5-10%) / High CBD (5-10%)
3. High THC (5-10%) / Very High CBD (>10%)

**Very high THC varieties**

1. Very High THC (>10%) / Low CBD (<1%)

**Important note regarding cost-reimbursement**

The services and material from the NIDA Drug Supply Program are generally free to NIH-sponsored investigators. Some requests may incur a nominal fee depending on study status, funding source, and type of material being requested. Pursuant to HHS policy published May 21, 1999 marijuana for non-Federally funded research is to be provided on a cost-reimbursement basis. NIDA intends to implement the following pricing schedule for collection of fees for marijuana once HHS and NIH develop updated policies and transactional procedures on the specifics regarding cost-reimbursement of research substances for non-Federally supported projects. These policies and procedures may significantly impact the timing, mechanisms, and recipient of any collected fees but will not impact the shipments. An update will be posted once the final Guidance is received.

**Marijuana Pricing Schedule**

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<u>Item</u>	<u>Price</u>
Non-placebo Cigarette	\$10.96 each
Placebo Cigarette	\$13.94 each
Bulk Marijuana	\$2,497.00 per kilogram

The NIDA DSP provides investigational new drug products (finished dosage forms) intended for human use to investigators for use in conducting research and clinical studies. These supplies are manufactured, packaged, labeled, stored, and tested to verify conformance to specification under FDA regulations for cGMP compliance of Phase 1 Investigational Drugs. The procedures for requesting human-use dosage forms are slightly different from the general ordering guidelines. For details and instructions contact:

Richard Kline, Ph.D.  
Phone: (301) 827-5243  
Email: [rkline@nida.nih.gov](mailto:rkline@nida.nih.gov)

Nora Chiang, Ph.D.  
Phone: (301) 827-5920  
Email: [nchiang@nida.nih.gov](mailto:nchiang@nida.nih.gov)

### Available Human-Use Dosage Forms:

1. Cocaine HCl for Injection, 80 mg/4 mL vial (20 mg/mL)
2. Methamphetamine HCl for Injection, 50 mg/5 mL vial (10 mg/mL)
3. Methylphenidate HCl for Injection, 50 mg/vial (lyophilate)

