tetrahydro-Harmine

Item No. 14449

CAS Registry No.: 17019-01-1
Formal Name: 2,3,4,9-tetrahydro-7-methoxy-1-methyl-1H-pyrido[3,4-b]indole
Synonyms: Leptaflorine, THH
MF: C_{13}H_{16}N_{2}O
FW: 216.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \( \lambda_{\text{max}} \): 228, 271, 299 nm

Laboratory Procedures

For long term storage, we suggest that tetrahydro-harmine (THH) be stored as supplied at -20°C. It should be stable for at least two years.

THH is supplied as a crystalline solid. A stock solution may be made by dissolving the THH in the solvent of choice. THH is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of THH in ethanol and DMF is approximately 1.5 mg/ml and approximately 2 mg/ml in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of THH can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of THH in PBS, pH 7.2, is approximately 0.25 mg/ml.

We do not recommend storing the aqueous solution for more than one day.

THH is a fluorescent indole alkaloid extracted from *B. caapi*, a woody vine that is used to produce a psychoactive beverage, ayahuasca, which has been ritually ingested for medico-religious purposes throughout South America since pre-Columbian times. THH inhibits monoamine oxidase (MAO)-A and MAO-B with much weaker potency (IC_{50} = 74 nM and >100 μM, respectively) compared to the companion harmala alkaloids also found in *B. caapi*: harmaline (Item No. 10995; IC_{50} = 2.5 nM and 25 μM, respectively) and harmine (Item No. 10010324; IC_{50} = 2 nM and 20 μM, respectively).

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14449

**WARNING:** THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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