Harmaline

Item No. 10995

CAS Registry No.: 304-21-2
Formal Name: 4,9-dihydro-7-methoxy-1-methyl-3H-pyrido[3,4-b]indole
MF: \( C_{13}H_{14}N_2O \)
FW: 214.3
Purity: \( \geq 98\% \)
Stability: \( \geq 2 \) years at -20°C
Supplied as: A crystalline solid
UV/Vis.: \( \lambda_{\text{max}}: 205, 220, 335 \) nm

Laboratory Procedures

For long term storage, we suggest that harmaline be stored as supplied at -20°C. It should be stable for at least two years. Harmaline is supplied as a crystalline solid. A stock solution may be made by dissolving the harmaline in the solvent of choice. Harmaline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of harmaline in these solvents is approximately 0.5, 0.25, and 1.4 mg/ml, respectively.

Harmaline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, harmaline should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Harmaline has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Harmaline is a psychoactive indole found naturally in certain plants. Its stimulating activities are achieved, in part, through inhibition of monoamine oxidases, thus increasing the levels of monoamine neurotransmitters (e.g., at 7-70 μM/kg in rats).\(^1\) Harmaline (30 mg/kg) induces tremor in mice through the N-methyl-D-aspartate (NMDA) receptor, at which harmaline may act as an inverse agonist.\(^2,3\) This compound has also been identified as an adulterant in herbal mixtures containing synthetic cannabinoids and is described as contributing to poisoning when combined with a hallucinogenic tryptamine.\(^4,5\) This product is intended for forensic or research purposes.

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10995

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

MATERIAL 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 Material Safety Data Sheet, which has been sent via email to your institution.

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