3,4-DHMA (trifluoroacetate salt)
Item No. 10515

Formal Name: 4-(2-(methylamino)propyl)benzene-1,2-diol, 2,2,2-trifluoroacetate
Synonyms: 3,4-Dihydroxymethamphetamine, HHMA
MF: C_{10}H_{15}NO_{2} \cdot CF_{3}COOH
FW: 295.3
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A solution in methanol
UV/Vis: λ_{max} 283 nm

Laboratory Procedures
For long term storage, we suggest that 3,4-dihydroxymethamphetamine (3,4-DHMA) (trifluoroacetate salt) be stored as supplied at -20°C. It should be stable for at least one year.

3,4-DHMA (trifluoroacetate salt) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 3,4-DHMA (trifluoroacetate salt) in these solvents is approximately 30 mg/ml.

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. If an organic solvent-free solution of 3,4-DHMA (trifluoroacetate salt) is needed, it can be prepared by evaporating the methanol and directly dissolving the neat oil in aqueous buffers. The solubility of 3,4-DHMA (trifluoroacetate salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

3,4-DHMA is a catecholamine derived from the metabolism of 3,4-methylenedioxymethamphetamine (MDMA) by debrisoquine hydroxylase. DHMA can be subsequently O-methylated by catechol-O-methyltransferase to produce 4-hydroxy-3-methoxymethamphetamine or be glucuronidated prior to excretion. DHMA, unlike MDMA, is relatively ineffective at stimulating hypothalamic vasopressin or oxytocin release or directing serotonergic neurotoxicity. This product is intended for forensic or research purposes.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10515

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 or email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

The limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s sole and exclusive remedy hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.