Product Information

4-MTA (hydrochloride)
Item No. 11862

CAS Registry No.: 94784-92-6
Formal Name: α-methyl-4-(methylthio)-benzeneethanamine, monohydrochloride
Synonyms: 4-Methylthioamphetamine, P 1882
MF: C10H15NS • HCl
FW: 217.8
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax 258 nm

Laboratory Procedures
For long term storage, we suggest that 4-MTA (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

4-MTA (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-MTA (hydrochloride) in the solvent of choice. 4-MTA (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 4-MTA (hydrochloride) in ethanol is approximately 11 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers of 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 4-MTA (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 4-MTA (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

4-MTA, is a selective serotonergic agent which increases serotonin release, blocks its re-uptake (IC50 = 102 nM), and inhibits monoamine oxidase A,1,3 The detection of this designer drug in serum and urine has been described, as has its metabolism.3-6 This product is intended for research and forensic applications.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/11862

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.

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. Cayman’s sole liability 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.