

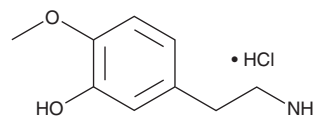
PRODUCT INFORMATION



3-hydroxy-4-Methoxyphenethylamine (hydrochloride)

Item No. 36012

CAS Registry No.: 645-33-0
Formal Name: 5-(2-aminoethyl)-2-methoxy-phenol, monohydrochloride
Synonyms: 4-O-methyl Dopamine, *p*-methoxy Dopamine, *para*-methoxy Dopamine, 4-methoxy-3-Hydroxyphenethylamine
MF: C₉H₁₃NO₂ • HCl
FW: 203.7
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

3-hydroxy-4-Methoxyphenethylamine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the 3-hydroxy-4-methoxyphenethylamine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 3-hydroxy-4-Methoxyphenethylamine (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 3-hydroxy-4-methoxyphenethylamine (hydrochloride) in these solvents is approximately 5 mg/ml. 3-hydroxy-4-Methoxyphenethylamine (hydrochloride) is slightly soluble in ethanol.

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 3-hydroxy-4-methoxyphenethylamine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3-hydroxy-4-methoxyphenethylamine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-hydroxy-4-Methoxyphenethylamine is a metabolite of the catecholamine dopamine (Item Nos. 36532 | 21992).¹ It is formed from dopamine by catechol-O-methyltransferase (COMT). 3-hydroxy-4-Methoxyphenethylamine (200 μM) decreases the viability of SH-SY5Y cells.² It induces tachycardia and increases blood pressure in normotensive or DOCA-salt hypertensive rats when administered at a dose of 1 mg/kg.³ 3-hydroxy-4-Methoxyphenethylamine (100 mg/kg) induces tremors and rigidity in mice.⁴

References

1. Shoup, R.E., Davis, G.C., and Kissinger, P.T. Determination of catechol-O-methyltransferase activity in various tissues by liquid chromatography. *Anal. Chem.* **52**(3), 483-487 (1980).
2. Haque, M.E., Asanuma, M., Higashi, Y., *et al.* Apoptosis-inducing neurotoxicity of dopamine and its metabolites via reactive quinone generation in neuroblastoma cells. *Biochim. Biophys. Acta* **1619**(1), 39-52 (2003).
3. Gregson, R.P., Lohr, R.R., Marwood, J.F., *et al.* 3-Hydroxy-4-methoxyphenethylamine, the cardioactive constituent of a soft coral. *Experientia* **37**(5), 493-494 (1981).
4. Spoerlein, M.T. and VanderWende, C. Nature of the tremors induced by *p*-methoxydopamine. *Life Sci.* **6**(19), 2029-2035 (1967).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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