

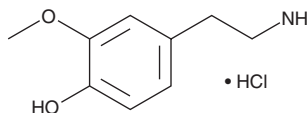
# PRODUCT INFORMATION



## 3-methoxy Tyramine (hydrochloride)

Item No. 20511

**CAS Registry No.:** 1477-68-5  
**Formal Name:** 4-(2-aminoethyl)-2-methoxy-phenol, monohydrochloride  
**Synonyms:** 3-Methoxy-4-hydroxyphenethylamine, 3-Methoxy-*p*-hydroxyphenethylamine, 3-O-methyl Dopamine  
**MF:**  $C_9H_{13}NO_2 \cdot HCl$   
**FW:** 203.7  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 229, 281 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 2$  years



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

### Laboratory Procedures

3-methoxy Tyramine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the 3-methoxy tyramine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 3-methoxy Tyramine (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 3-methoxy tyramine (hydrochloride) in these solvents is approximately 10 and 0.16 mg/ml, respectively.

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-methoxy tyramine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3-methoxy tyramine (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

3-methoxy Tyramine is a natural metabolite of dopamine, produced by catechol O-methyl transferase (COMT). It is a weak agonist of trace amine-associated receptor 1 ( $EC_{50} = 1.7 \mu M$ ).<sup>1</sup> 3-methoxy Tyramine levels are assessed to monitor COMT activity in Parkinson's disease.<sup>2</sup> Elevated 3-methoxy tyramine levels may also indicate abnormal catecholamine synthesis that occurs in certain neuroendocrine tumors.<sup>3</sup>

### References

1. Wainscott, D.B., Little, S.P., Yin, T., *et al.* *J. Pharmacol. Exp. Ther.* **320**(1), 475-485 (2007).
2. Espinoza, S., Managó, F., Leo, D., *et al.* *CNS Neurol. Disord. Drug Targets* **11**(3), 251-263 (2012).
3. van Berkel, A., Lenders, J. W., and Timmers, H. J. *Eur. J. Endocrinol.* **170**(3), R910-R119 (2014).

#### 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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