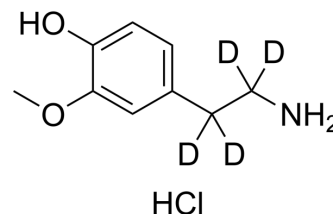


## 3-Methoxytyramine-d<sub>4</sub> hydrochloride

<b>Cat. No.:</b>	HY-103638S
<b>CAS No.:</b>	1216788-76-9
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>10</sub> D <sub>4</sub> ClNO <sub>2</sub>
<b>Molecular Weight:</b>	207.69
<b>Target:</b>	Drug Metabolite; Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (240.74 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	4.8149 mL	24.0743 mL	48.1487 mL
		5 mM	0.9630 mL	4.8149 mL	9.6297 mL
		10 mM	0.4815 mL	2.4074 mL	4.8149 mL
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 1.25 mg/mL (6.02 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (6.02 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 1.25 mg/mL (6.02 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	3-Methoxytyramine-d <sub>4</sub> (hydrochloride) is the deuterium labeled 3-Methoxytyramine hydrochloride. 3-Methoxytyramine hydrochloride is an inactive metabolite of dopamine which can activate trace amine associated receptor 1 (TAAR1)[1][2].
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Sotnikova TD, et al. The dopamine metabolite 3-methoxytyramine is a neuromodulator. *PLoS One.* 2010 Oct 18;5(10):e13452.
- [3]. Guldberg HC, et al. Some observations on the estimation of 3-methoxytyramine in brain tissue. *Br J Pharmacol.* 1971 Aug;42(4):505-11.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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