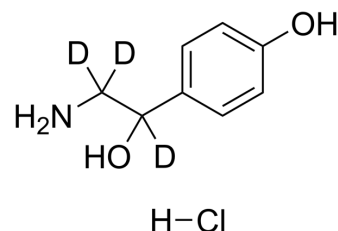


## Octopamine-d<sub>4</sub> hydrochloride

<b>Cat. No.:</b>	HY-B0528AS
<b>CAS No.:</b>	1219803-62-9
<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>9</sub> D <sub>3</sub> ClNO <sub>2</sub>
<b>Molecular Weight:</b>	192.66
<b>Target:</b>	Adrenergic Receptor; Endogenous Metabolite
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; 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)



### BIOLOGICAL ACTIVITY

<b>Description</b>	Octopamine-d <sub>4</sub> (hydrochloride) is the deuterium labeled Octopamine hydrochloride. Octopamine ((±)-p-Octopamine) hydrochloride, a biogenic monoamine structurally related to noradrenaline, acts as a neurohormone, a neuromodulator and a neurotransmitter in invertebrates. Octopamine hydrochloride can stimulate alpha <sub>2</sub> -adrenoceptors (ARs) in Chinese hamster ovary cells transfected with human alpha <sub>2</sub> -ARs. Octopamine hydrochloride increased glycogenolysis, glycolysis, oxygen uptake, gluconeogenesis and the portal perfusion pressure[1][2][3].
<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.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Farooqui T. Octopamine-mediated neuromodulation of insect senses. *Neurochem Res.* 2007;32(9):1511-1529.
- [3]. Roeder T. Octopamine in invertebrates. *Prog Neurobiol.* 1999;59(5):533-561.
- [4]. Axelrod J, et al. Octopamine. *Nature.* 1977;265(5594):501-504.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA