

Hello Bio, Inc.  
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500  
F. 609-228-4994

customercare-usa@hellobio.com



## DATASHEET

### ±-Octopamine hydrochloride

#### Product overview

<b>Name</b>	±-Octopamine hydrochloride
<b>Cat No</b>	HB2791
<b>Alternative names</b>	Epirenor, Norfen
<b>Biological action</b>	Activator
<b>Purity</b>	>99%
<b>Description</b>	Invertebrate neurotransmitter. Chemogenetic DmOctβ1 receptor activator.

#### Biological Data

<b>Biological description</b>	Invertebrate neurotransmitter which is structurally related to noradrenaline. Acts as a neurohormone, neuromodulator and neurotransmitter in invertebrates. Gas-coupled DmOctβ1 receptor (EC <sub>50</sub> value = ~12 nM at DmOctβ1R). Shown to activate the chemogenetic Gas-coupled DmOctβ1 receptor in mouse excitatory neurons of the hippocampus to elevate cAMP levels in tissue expressing the receptor. This approach has been shown to make animals resilient to memory deficits normally caused by sleep loss and to render hippocampal synaptic plasticity resilient to sleep deprivation.
-------------------------------	--

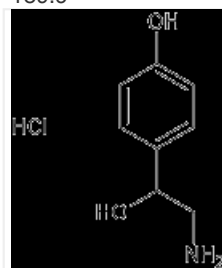
#### Solubility & Handling

<b>Storage instructions</b>	Room temperature
<b>Solubility overview</b>	Soluble in water (100 mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

#### Chemical Data

<b>Chemical name</b>	(±)-2-Amino-1-(4-hydroxyphenyl)ethanol hydrochloride
<b>Molecular Weight</b>	189.6

**Chemical structure**



<b>Molecular Formula</b>	C <sub>8</sub> H <sub>11</sub> NO <sub>2</sub> .HCl
<b>CAS Number</b>	770-05-8
<b>PubChem identifier</b>	102484
<b>SMILES</b>	C1=CC(=CC=C1C(N)O)O.Cl
<b>InChi</b>	InChI=1S/C8H11NO2.ClH/c9-5-8(11)6-1-3-7(10)4-2-6;/h1-4,8,10-11H,5,9H2;1H
<b>InChiKey</b>	PUMZXCBVHLCWQG-UHFFFAOYSA-N
<b>MDL number</b>	MFCD00012881

## References

### Selective inhibition of adenylyl cyclase by octopamine via a human cloned alpha 2A-adrenoceptor.

Airriess CN et al (1997) British journal of pharmacology 122

**PubMedID** [9313925](#)

### Octopamine in invertebrates.

Roeder T (1999) Progress in neurobiology 59

**PubMedID** [10515667](#)

### Chemogenetic Enhancement of cAMP Signaling Renders Hippocampal Synaptic Plasticity Resilient to the Impact of Acute Sleep Deprivation.

Walsh EN et al (2023) eNeuro 10

**PubMedID** [36635248](#)

---