

## Oxidopamine hydrobromide

### Chemical Properties

CAS No. : 636-00-0

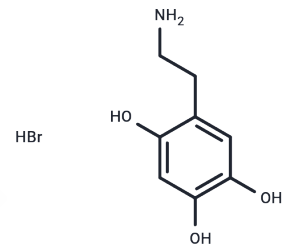
Formula: C<sub>8</sub>H<sub>12</sub>BrNO<sub>3</sub>

Molecular Weight: 250.09

Storage: Store at low temperature, Keep away from direct sunlight, Store under nitrogen, The compound is unstable in solution. Please use soon

Powder: -20°C for 3 years

Actual storage temperature shall be subject to the COA.



### Biological Description

Description	Oxidopamine hydrobromide (6-OHDA hydrobromide) is a widely used neurotoxin and an antagonist of the neurotransmitter dopamine. It selectively destroys dopaminergic neurons, promotes COX-2 activation, induces PGE <sub>2</sub> synthesis, and stimulates the secretion of the pro-inflammatory cytokine IL-1 $\beta$ . It is commonly used to establish animal models of Parkinson's disease (PD).
Targets(IC50)	Mitophagy, Autophagy, Dopamine Receptor

### Solubility Information

Solubility	H <sub>2</sub> O: 100 mg/mL (399.86 mM), Sonication is recommended. The compound is unstable in solution, please use soon. DMSO: 125 mg/mL (499.82 mM), Sonication is recommended. The compound is unstable in solution, please use soon. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (15.99 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.9986 mL	19.9928 mL	39.9856 mL
5 mM	0.7997 mL	3.9986 mL	7.9971 mL
10 mM	0.3999 mL	1.9993 mL	3.9986 mL
50 mM	0.080 mL	0.3999 mL	0.7997 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

- Fujita H et al. Cell-permeable cAMP analog suppresses 6-hydroxydopamine-induced apoptosis in PC12 cells through the activation of the Akt pathway. *Brain Res.* 2006 Oct 3;1113(1):10-23.
- Zhao N, Jiang K, Ge X, et al. Neurotransmitter norepinephrine regulates chromatosomes aggregation and the formation of blotches in coral trout *Plectropomus leopardus*. *Fish Physiology and Biochemistry.* 2024: 1-15.
- Soto-Otero R et al. Autoxidation and neurotoxicity of 6-hydroxydopamine in the presence of some antioxidants: potential implication in relation to the pathogenesis of Parkinson's disease. *J Neurochem.* 2000 Apr;74(4):1605-12.
- Wang G, Wang Y, Tang X, et al. Identification and validation of Atp5f1c in CD4+ T cell as a hub protein in Parkinson's disease. *International Journal of Biological Macromolecules.* 2025: 139858.

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