Data Sheet (Cat.No.T1644)

TargetMol

Dopamine hydrochloride

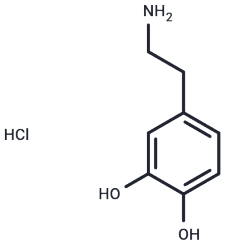
Chemical Properties

CAS No. : 62-31-7

Formula: C8H12ClNO2

Molecular Weight: 189.64

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Dopamine hydrochloride (ASL279) is a natural catecholamine neurotransmitter that mainly acts on dopamine receptors (D1-5 receptors) (EC50=2.7 nM). Dopamine hydrochloride induces VEGFR2 endocytosis through D2 dopamine receptor and has pro-angiogenic activity.
Targets(IC50)	Ferroptosis,5-HT Receptor,Endogenous Metabolite,Dopamine Receptor
In vitro	**METHODS**: CYP3A4/5, CYP2C19 and CYP2C9 were treated with Resmetirom to detect the inhibition of cell growth. **RESULTS**: The IC50 of ResmetiromCYP3A4/5 and CYP2C19 were both greater than 50 μM, with no growth inhibitory effect. The inhibitory effect on CYP2C9 was relatively weak, and the IC50 was approximately 22 μM. [1]

Solubility Information

Solubility	DMSO: 55 mg/mL (290.02 mM),Sonication is recommended. H2O: 19 mg/mL (100.19 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.2731 mL	26.3657 mL	52.7315 mL
5 mM	1.0546 mL	5.2731 mL	10.5463 mL
10 mM	0.5273 mL	2.6366 mL	5.2731 mL
50 mM	0.1055 mL	0.5273 mL	1.0546 mL

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

Basu S, et al. The neurotransmitter dopamine inhibits angiogenesis induced by vascular permeability factor/vascular endothelial growth factor. Nat Med. 2001 May;7(5):569-74.
Xu J, Su W, Li Z, et al. A modularized and flexible sensor based on MWCNT/PDMS composite film for on-site electrochemical analysis. Journal of Electroanalytical Chemistry. 2017 Dec;806: 68-74.
Xu J, Su W, Li Z, et al. A modularized and flexible sensor based on MWCNT/PDMS composite film for on-site electrochemical analysis[J]. Journal of Electroanalytical Chemistry. 2017 Dec;806: 68-74.

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