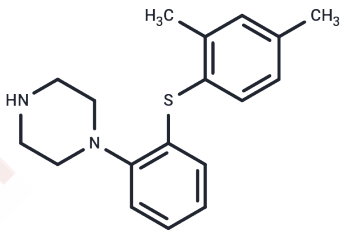
Data Sheet (Cat.No.T2395)

TargetMol

Vortioxetine

Chemical Properties



CAS No. : 508233-74-7

Formula: C18H22N2S

Molecular Weight: 298.45

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	Vortioxetine (Lu AA 21004) is a serotonergic antidepressant used for major depression disorders. Vortioxetine has been associated with a low rate of minor serum aminotransferase elevations during treatment.
Targets(IC50)	5-HT Receptor,Serotonin Transporter

Solubility Information

Solubility	Ethanol: 200 mM,Sonication is recommended. DMSO: 20 mg/mL (67.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.7 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3506 mL	16.7532 mL	33.5064 mL
5 mM	0.6701 mL	3.3506 mL	6.7013 mL
10 mM	0.3351 mL	1.6753 mL	3.3506 mL
50 mM	0.067 mL	0.3351 mL	0.6701 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

Bang-Andersen B, et al. J Med Chem, 2011, 54(9), 3206-3221.
Chen Y M, Fan H, Huang J, et al. Hippocampal F3/Contactin plays a role in chronic stress-induced depressive-like effects and the antidepressant actions of vortioxetine in mice. Biochemical Pharmacology. 2022: 115097
Wang, Yuan, et al. Hippocampal PPARα plays a role in the pharmacological mechanism of vortioxetine, a multimodal-acting antidepressant. Frontiers in Pharmacology. 12 (2021).
Li W Y, Shi T S, Huang J, et al.Activation of the mTORC1 signaling cascade in the hippocampus and medial prefrontal cortex is required for the antidepressant actions of vortioxetine in mice.International Journal of Neuropsychopharmacology.2023: pyad017.

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