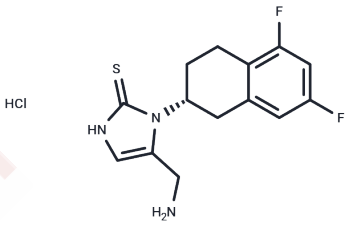
Data Sheet (Cat.No.T6356)

TargetMol

(R)-Nepicastat HCl

Chemical Properties



CAS No. :	195881-94-8
Formula:	C14H15F2N3S·HCl
Molecular Weight:	331.81
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	(R)-Nepicastat HCl (RS-25560-198 HCl), the R-enantiomer of Nepicastat HCl, is a potent and selective inhibitor with IC50 of 25.1 nM and 18.3 nM for bovine and human dopamine-β-hydroxylase, with negligible affinity for twelve other enzymes and thirteen neurotransmitter receptors.
Targets(IC50)	Hydroxylase
In vitro	(R)-Nepicastat produces concentration-dependent inhibition of bovine and human dopamine-β-hydroxylase activity in vitro. [1]
In vivo	(R)-Nepicastat (30 mg/kg, p.o.) reduces noradrenaline content, dopamine content and dopamine/noradrenaline ratio in mesenteric artery and left ventricle of spontaneously hypertensive rats (SHRs). [1]

Solubility Information

Solubility	H2O: <1 mg/mL, DMSO: 61 mg/mL (183.84 mM),Sonication is recommended. Ethanol: <1 mg/mL, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0138 mL	15.0689 mL	30.1377 mL
5 mM	0.6028 mL	3.0138 mL	6.0275 mL
10 mM	0.3014 mL	1.5069 mL	3.0138 mL
50 mM	0.0603 mL	0.3014 mL	0.6028 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

Stanley WC, et al. Br J Pharmacol. 1997, 121(8), 1803-1809.