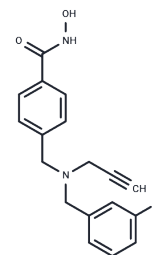


HDAC1/MAO-B-IN-1

Chemical Properties

CAS No. :	2759855-37-1
Formula:	C ₁₈ H ₁₇ ClN ₂ O ₂
Molecular Weight:	328.79
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	HDAC1/MAO-B-IN-1 has the potential to be used in the Alzheimer's disease research. HDAC1/MAO-B-IN-1 is a potent and selective inhibitor of HDAC1/MAO-B that can cross the blood-brain barrier. The IC ₅₀ values of HDAC1/MAO-B-IN-1 for HDAC1 and MAO-B are 21.4 nM and 99.0 nM, respectively [1].
Targets(IC ₅₀)	Others,HDAC,Monoamine Oxidase
In vitro	HDAC1/MAO-B-IN-1 (compound 1f) inhibits hMAO-B, hMAO-A, and hHDAC1 with IC ₅₀ values of 99.0 nM, 9923.0 nM, and 21.4 nM, respectively [1]. At 50 μM over 24 hours, it shows neuroprotective effects and reduces reactive oxygen species (ROS) production in PC12 cells, as confirmed by a Cell Viability Assay [1].
In vivo	Administered intragastrically (i.g.) at 20 mg/kg, HDAC1/MAO-B-IN-1 demonstrates favorable permeability across the blood-brain barrier (BBB) [1]. When administered intraperitoneally (i.p.) at 15 mg/kg for 15 consecutive days, it enhances the learning and memory functionalities in ICR mice, both male (6-8 weeks old) and female (20-25 g) models [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0415 mL	15.2073 mL	30.4146 mL
5 mM	0.6083 mL	3.0415 mL	6.0829 mL
10 mM	0.3041 mL	1.5207 mL	3.0415 mL
50 mM	0.0608 mL	0.3041 mL	0.6083 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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