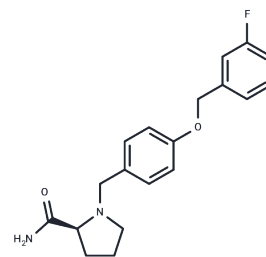


MAO-B-IN-5

Chemical Properties

CAS No. :	849909-77-9
Formula:	C19H21FN2O2
Molecular Weight:	328.38
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	MAO-B-IN-5 is a potent, selective, and orally active MAO-B inhibitor with an IC50 of 0.204 μ M, showing potential for research in Parkinson's disease (PD) [1].
Targets(IC50)	Others, Monoamine Oxidase
In vitro	MAO-B-IN-5 (compound D0) exhibits inhibitory activity against MAO, with IC50 values of 34.190 μ M for MAO-A and 0.204 μ M for MAO-B in Sf9 cells [1].
In vivo	MAO-B-IN-5 demonstrates oral bioavailability (F=13.6%) in rats when administered at doses of 1 mg/kg intravenously (i.v.) and 5 mg/kg orally (p.o.). The pharmacokinetic profile of MAO-B-IN-5 in Sprague-Dawley (SD) rats is detailed, with the compound showing a maximum concentration (Cmax) of 809 ng/mL and an area under the curve (AUC) of 347 ng·h/mL following a 1 mg/kg intravenous dose; the half-life (T1/2) is 0.37 hours, volume of steady state (Vss) is 1.11 h, and clearance (Cl) is 47.1 mL/min/kg. Orally administered at a dose of 5 mg/kg, MAO-B-IN-5 has a Cmax of 163 ng/mL, an AUC of 284 ng·h/mL, and a T1/2 of 1.27 hours, with an oral bioavailability of 16.3%.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0453 mL	15.2263 mL	30.4525 mL
5 mM	0.6091 mL	3.0453 mL	6.0905 mL
10 mM	0.3045 mL	1.5226 mL	3.0453 mL
50 mM	0.0609 mL	0.3045 mL	0.6091 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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