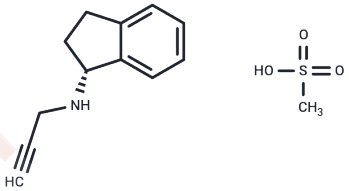
Data Sheet (Cat.No.T6962)

TargetMol

Rasagiline Mesylate

Chemical Properties



CAS No. : 161735-79-1

Formula: C13H17NO3S

Molecular Weight: 267.34

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	Rasagiline Mesylate (AGN1135) is a novel MAO-B inhibitor, which can treat idiopathic Parkinson's disease.
Targets(IC50)	Apoptosis,MAO,Autophagy,Monoamine Oxidase
In vitro	Rasagiline inhibits rat brain MAO type B and type A with IC50 of 4.43 nM and 412 nM, respectively. Rasagiline is three to 15 times more potent than selegiline for inhibition of MAO-B in rat brain and liver in vivo on acute and chronic administration, but has similar potency in vitro. [1] Rasagiline prevents nuclear accumulation of GAPDH induced by N-methyl(R) salsolinol in SH-SY5Y cells. Rasagiline prevents the collapse in ΔΨm, and following apoptotic process, which indicates that mitochondria may determine the survival and death of the cells. [2] Rasagiline has potent antiapoptotic and neuroprotective activities in response to serum and NGF withdrawal in partially neuronally differentiated PC12 cells and prevents the fall in mitochondrial membrane potential, the first step in cell death. [3] Rasagiline is metabolized to its major metabolite aminoindan, selegiline gives rise to L-methamphetamine. Rasagiline directly activates PKC-MAP kinase pathway by a concentration and time dependent phosphorylation of p42 and p44 MAP kinase. [4]
In vivo	Rasagiline ex vivo inhibits MAO in the brain and liver with ED50 of 4.43 nM and 412 nM, respectively. [1] Rasagiline (0.2 mg/kg and 1 mg/kg) accelerates the recovery of motor function and spatial memory and reduces the cerebral oedema by about 40-50% in the mouse. [5]

Solubility Information

Solubility	H2O: 93.51 mM,Sonication is recommended. DMSO: 60 mg/mL (224.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7406 mL	18.7028 mL	37.4056 mL
5 mM	0.7481 mL	3.7406 mL	7.4811 mL
10 mM	0.3741 mL	1.8703 mL	3.7406 mL
50 mM	0.0748 mL	0.3741 mL	0.7481 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

Youdim MB, et al. Br J Pharmacol, 2001, 132(2), 500-506.
Maruyama W, et al. J Neurochem, 2001, 78(4), 727-735.
Youdim MB, et al. Ann N Y Acad Sci, 2001, 939, 450-458.
Wang D, et al. Cancer Chemother Pharmacol, 2006, 57(1), 97-104.
Huang W, et al. Eur J Pharmacol, 1999, 366(2-3), 127-135.