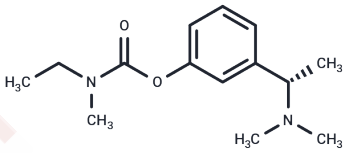
# Data Sheet (Cat.No.T0229)

TargetMol

## Rivastigmine

### Chemical Properties



CAS No. : 123441-03-2

Formula: C14H22N2O2

Molecular Weight: 250.34

Storage: Keep away from direct sunlight,Keep away from moisture,Store at low temperature
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 | Rivastigmine (Exelon) is a Cholinesterase Inhibitor, used for therapy of Alzheimer disease. |
| Targets(IC50) | Cholinesterase (ChE) |
| In vivo | Preclinical biochemical studies indicates that rivastigmine has central nervous system selectivity over peripheral inhibition. It ameliorates memory impairment in rats with forebrain lesions. The drug is rapidly absorbed orally, with a bioavailability of 0.355 and low protein binding (40%). Its elimination halflife is less than 2 hours, and it is converted to an inactive metabolite at the site of action, bypassing hepatic metabolic pathways. Its disposition essentially is unaltered in patients with renal or hepatic impairment. It also has dosedependent effects on AChE inhibition[1]. |
| Cell Research | Chronic toxicity is assessed 7 days after continuous exposure of cells to donepezil or rivastigmine using cell viability and cell esterase activity and the estimated cell numbers as parameters for viability. Culture medium including the tested drugs is changed once after 4 days.(Only for Reference) |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 70 mg/mL (279.62 mM),Sonication is recommended.<br>(< 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 (7.99 mM),Sonication is recommended.<br>*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 | 3.9946 mL | 19.9728 mL | 39.9457 mL |
| 5 mM | 0.7989 mL | 3.9946 mL | 7.9891 mL |
| 10 mM | 0.3995 mL | 1.9973 mL | 3.9946 mL |
| 50 mM | 0.0799 mL | 0.3995 mL | 0.7989 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

Jann MW, et al. Pharmacotherapy. 2000, 20(1):1-12.
Abdel-Aal RA, et al. Eur J Pharmacol. 2011, 659(2-3):169-76.
Goldblum D, et al. Ophthalmic Res. 2002, 34(2):97-103.