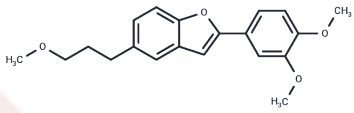
Data Sheet (Cat.No.TQ0026)

TargetMol

MDR-1339

Chemical Properties



CAS No. : 1018946-38-7

Formula: C20H22O4

Molecular Weight: 326.39

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	MDR-1339 (DWK-1339) is an orally active, blood-brain-barrier-permeable inhibitor of amyloid-β (Aβ) aggregation.
Targets(IC50)	Beta Amyloid,Gamma-secretase
In vitro	MDR-1339 shows no significant inhibition of a panel of CYP isozymes, while it slightly inhibits CYP2C8 (IC50: 31.4 μM). MDR-1339 (1.5-10 μM) protects cells from this Aβ-induced toxicity. MDR-1339 (3.1-50 μM) also dose-dependently blocks the formation of Aβ aggregates and disaggregates Aβ fibrils.
In vivo	MDR-1339 (0.1-10 mg/kg, p.o.) dose-dependently restores passive avoidance responses in Alzheimer's disease mice models (ED50: 0.19 mg/kg) and significantly improves spontaneous alternation while reducing Aβ1-40 and Aβ1-42 levels in APP/PS1 mice at 30 and 100 mg/kg, p.o. daily for 8 weeks.

Solubility Information

Solubility	DMSO: 40 mg/mL (122.55 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (6.13 mM),Sonication is recommended. *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	3.0638 mL	15.3191 mL	30.6382 mL
5 mM	0.6128 mL	3.0638 mL	6.1276 mL
10 mM	0.3064 mL	1.5319 mL	3.0638 mL
50 mM	0.0613 mL	0.3064 mL	0.6128 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

Ha HJ, et al. Discovery of an Orally Bioavailable Benzofuran Analogue That Serves as a β-Amyloid Aggregation Inhibitor for the Potential Treatment of Alzheimer's Disease. J Med Chem. 2018 Jan 11;61(1):396-402.