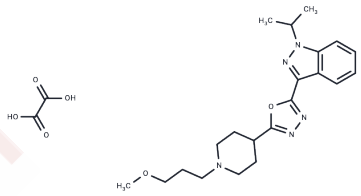
Data Sheet (Cat.No.T63069)

TargetMol

Usmarapride

Chemical Properties



CAS No. :	1428862-33-2
Formula:	C23H31N5O6
Molecular Weight:	473.53
Storage:	Keep away from moisture 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	Usmarapride is a potent and selective 5-HT_4 receptor partial agonist (EC_{50} = 27.5 nM) with oral bioavailability and blood-brain barrier penetrability, suitable for research on cognitive dysfunction associated with Alzheimer's disease.
Targets(IC50)	5-HT Receptor
In vivo	Methods: Male Wistar rats aged 10-12 weeks were orally administered usmarapride (1-3 mg/kg; p.o.). Results: Usmarapride ameliorated long-term memory impairment in the object recognition test (ORT). Methods: Rats were orally administered usmarapride (1, 3, 10 mg/kg; p.o.). Results: Usmarapride significantly reversed scopolamine-induced amnesia. Methods: The effects of usmarapride on parameters related to the object recognition test in rats were determined. Results: Usmarapride exerted statistically significant effects on both exploration time and recognition index at a dose of 3.0 mg/kg [1]. Methods: The pharmacokinetics and tissue distribution characteristics of usmarapride in rats were investigated. Results: Usmarapride exhibited favorable oral exposure, bioavailability and brain exposure in rats [1]. Methods: Rats were orally administered 3.0 mg/kg and intravenously administered 1.0 mg/kg usmarapride, respectively. Results: The pharmacokinetic study of usmarapride in rats was completed [1].

Solubility Information

Solubility	DMSO: 26.66 mg/mL (56.3 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1118 mL	10.559 mL	21.118 mL
5 mM	0.4224 mL	2.1118 mL	4.2236 mL
10 mM	0.2112 mL	1.0559 mL	2.1118 mL
50 mM	0.0422 mL	0.2112 mL	0.4224 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

Ramakrishna Nirogi, et al. Heteroaryl compounds as 5-ht4 receptor ligands. WO2013042135A1. 2012.