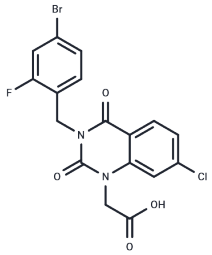
Data Sheet (Cat.No.T35299)

TargetMol

Zenarestat

Chemical Properties



CAS No. : 112733-06-9

Formula: C17H11BrClFN2O4

Molecular Weight: 441.64

Storage: 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	Zenarestat is an orally active aldose reductase inhibitor capable of ameliorating diabetic peripheral neuropathy in rats with type 2 diabetes.
Targets(IC50)	Reductase
In vivo	**Methods**: Zenarestat (3.2 mg/kg and 32 mg/kg, once daily for 8 consecutive weeks) was orally administered to Zucker diabetic fatty (ZDF) rats to investigate the effects of zenarestat on peripheral neuropathy in the type 2 diabetes animal model ZDF rats. **Results**: At the dose of 3.2 mg/kg, zenarestat did not show significant effects on FML latency delay and MNCV slowing; however, at the dose of 32 mg/kg, zenarestat treatment significantly improved these neurologic disorders in ZDF rats and reduced the accumulation of sorbitol in nerves to levels nearly equivalent to those in lean rats.[3]

Solubility Information

Solubility	DMSO: 80 mg/mL (181.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2643 mL	11.3214 mL	22.6429 mL
5 mM	0.4529 mL	2.2643 mL	4.5286 mL
10 mM	0.2264 mL	1.1321 mL	2.2643 mL
50 mM	0.0453 mL	0.2264 mL	0.4529 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

Zenarestat. FK 366, FR 74366, FR 901366. Drugs R D. 2002;3(4):235-7.
Kihara M, et al. Effect of zenarestat, an aldose reductase inhibitor, on endoneurial blood flow in experimental diabetic neuropathy of rat. Neurosci Lett. 2001 Sep 14;310(2-3):81-4.
Shimoshige Y, et al. The effects of zenarestat, an aldose reductase inhibitor, on peripheral neuropathy in Zucker diabetic fatty rats. Metabolism. 2000 Nov;49(11):1395-9.
Tanaka Y, et al. Toxicokinetics of zenarestat, an aldose reductase inhibitor in animals and man. Xenobiotica. 1994 May;24(5):461-71.