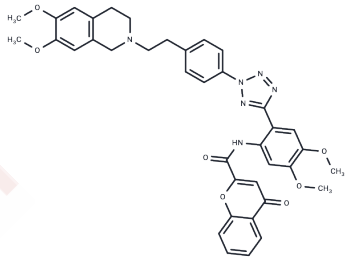
Data Sheet (Cat.No.T8426)

TargetMol

Encequidar

Chemical Properties



CAS No. : 849675-66-7

Formula: C38H36N6O7

Molecular Weight: 688.73

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	Encequidar (HM30181A) is a potent and selective P-glycoprotein inhibitor.
Targets(IC50)	P-gp
In vivo	HM30181 to inhibit Pgp at the murine BBB.?HM30181 was shown to be approximately equipotent with the reference Pgp inhibitor tariquidar in inhibiting rhodamine 123 efflux from CCRF-CEM T cells (IC(50), tariquidar: 8.2 2.0 nM, HM30181: 13.1 2.3 nM).?PET scans with the Pgp substrate (R)-[(11)C]verapamil in FVB wild-type mice pretreated i.v. with HM30181 (10 or 21 mg/kg) failed to show significant increases in (R)-[(11)C]verapamil brain uptake compared with vehicle treated animals.?PET scans with [(11)C]HM30181 showed low and not significantly different brain uptake of [(11)C]HM30181 in wild-type, Mdr1a/b((-/-)) and Bcrp1((-/-)) mice and significantly, i.e. 4.7-fold (P<0.01), higher brain uptake, relative to wild-type animals, in Mdr1a/b((-/-))Bcrp1((-/-)) mice[1].

Solubility Information

Solubility	DMSO: 6.9 mg/mL (10.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4519 mL	7.2597 mL	14.5195 mL
5 mM	0.2904 mL	1.4519 mL	2.9039 mL
10 mM	0.1452 mL	0.726 mL	1.4519 mL
50 mM	0.029 mL	0.1452 mL	0.2904 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

Bauer F, et al. Interaction of HM30181 with P-glycoprotein at the murine blood-brain barrier assessed with positron emission tomography. Eur J Pharmacol. 2012 Dec 5;696(1-3):18-27.

Jin Cheul Kim , Kyeong Soo Kim , Dong Shik Kim,et al.Effect of HM30181 Mesylate Salt-Loaded Microcapsules on the Oral Absorption of Paclitaxel as a Novel P-glycoprotein Inhibitor.Int J Pharm. 2016 Jun 15;506(1-2):93-101.