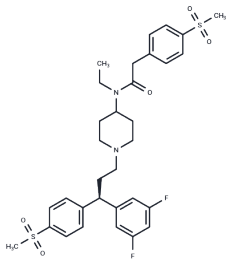
Data Sheet (Cat.No.T30260)

TargetMol

AZD-5672

Chemical Properties



CAS No. : 780750-65-4

Formula: C32H38F2N2O5S2

Molecular Weight: 632.78

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	AZD-5672 is an antagonist of CCR5 with an IC50 of 0.32 nM. AZD-5672 inhibits hERG cardiac ion channel binding and P-gp-mediated digoxin transport with IC50s of 7.3 μM and 32 μM. AZD-5672 can be used in studies about rheumatoid arthritis.
Targets(IC50)	CCR,P-gp,Potassium Channel
In vitro	In Caco-2 cells, AZD-5672 (0-100 μM) inhibits P-gp-mediated digoxin transport in a concentration-dependent manner[1].
In vivo	AZD-5672 (1-2 mg/kg; i.v) shows moderate bioavailability with Cl, Vss and t1/2 of 28 mL/min/kg, 5.3 L/kg, and 2.6 h in rats while 18 mL/min/kg, 5.7 L/kg, and 3.9 h in dogs [3].

Solubility Information

Solubility	DMSO: 30 mg/mL (47.41 mM),Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5803 mL	7.9016 mL	15.8033 mL
5 mM	0.3161 mL	1.5803 mL	3.1607 mL
10 mM	0.158 mL	0.7902 mL	1.5803 mL
50 mM	0.0316 mL	0.158 mL	0.3161 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

Elsby R, et al. The utility of in vitro data in making accurate predictions of human P-glycoprotein-mediated drug-drug interactions: a case study for AZD5672. Drug Metab Dispos. 2011 Feb;39(2):275-82.
Gerlag DM, et al. Preclinical and clinical investigation of a CCR5 antagonist, AZD5672, in patients with rheumatoid arthritis receiving methotrexate. Arthritis Rheum. 2010 Nov;62(11):3154-60.
Cumming JG, et al. Balancing hERG affinity and absorption in the discovery of AZD5672, an orally active CCR5 antagonist for the treatment of rheumatoid arthritis. Bioorg Med Chem Lett. 2012 Feb 15;22(4):1655-9.

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