Data Sheet (Cat.No.T1520)



Aliskiren hemifumarate

Chemical Properties

CAS No.: 173334-58-2

Formula: C30H53N3O6·1/2C4H4O4

Molecular Weight: 1219.6

Appearance: no data available

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1

year year

Biological Description

Description	Aliskiren hemifumarate (CGP60536B) is an orally active nonpeptide renin inhibitor with antihypertensive activity.
Targets(IC50)	RAAS,Autophagy
In vitro	Aliskiren hemifumarate appears to bind to both the hydrophobic S1/S3-binding pocket and to a large, distinct subpocket that extends from the S3-binding site towards the hydrophobic core of renin. Oral bioavailability of Aliskiren hemifumarate is 2.4% in rats, 16% in marmosets and about 2.5% in humans. [2]
Kinase Assay	Radioligand Binding Assay: Human CB1 and CB2 stably transfect HEK 293 cells and cell membrane is purified. 0.2-8 µg of the purified membrane is incubated with 0.75 nM [3H] CP55,940 and Rimonabant in the incubation buffer (50 mM Tris-HCl, 5 mM MgCl2, 1 mM EDTA, 0.3%BSA, pH 7.4). The non-specific binding is defined in the presence of 1 µM of CP55,940. The reactions are incubated for one and a half hours at 30 °C in Multiscreen. The reactions are terminated by manifold filtration and washed four times with ice-cold wash buffer (50 mM Tris, pH 7.4, 0.25% BSA). The radioactivity bound to the filters is measured by Topcount. The IC50 is determined as the concentration of Rimonabant required to inhibit 50% of the binding of [3H] CP55,940 and calculated by non-linear regression.

Solubility Information

Solubility	DMSO: 93 mg/mL (76.25 mM), Sonication is recommended.	
	H2O: 92 mg/mL (75.43 mM), Sonication is recommended.	
	Ethanol: 93 mg/mL (76.25 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Page 1 of 2 www.targetmol.com

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.8199 mL	4.0997 mL	8.1994 mL
5 mM	0.164 mL	0.8199 mL	1.6399 mL
10 mM	0.082 mL	0.410 mL	0.8199 mL
50 mM	0.0164 mL	0.082 mL	0.164 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.

Reference

Nakamura Y, et al. ACS Med Chem Lett, 2012, 3(9), 754-758. Buczko W, et al. Pharmacol Rep, 2008, 60(5), 623-631. Wood JM, et al. Biochem Biophys Res Commun, 2003, 308(4), 698-705. Gradman AH, et al. Circulation, 2005, 111(8), 12012-12018. Oparil S, et al. Lancet, 2007, 370(9583), 221-229.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481

Page 2 of 2 www.targetmol.com