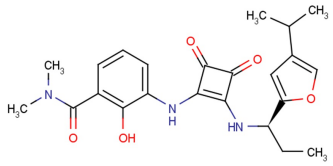
Data Sheet (Cat.No.T16864)

TargetMol
A DRUG SCREENING EXPERT

SCH 563705

Chemical Properties



CAS No.:	473728-58-4
Formula:	C23H27N3O5
Molecular Weight:	425.48
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	SCH 563705 is an effective and orally available CXCR2 and CXCR1 antagonist (IC50s: 1.3 nM, 7.3 nM and Kis of 1 and 3 nM, respectively).
Targets(IC_{50})	CXCR2: 1.3 nM CXCR1: 7.3 nM Mouse CXCR2: 5.2 nM
In vitro	SCH 563705 potently inhibits mouse CXCR2 (IC50 = 5.2 nM). SCH 563705 displays potent inhibition against both Gro-a and IL-8 induced human neutrophil migration (chemotaxis IC50 = 0.5 nM, against 30 nM of Gro-a; chemotaxis IC50 = 37 nM, against 3 nM of IL-8) [1][2].
In vivo	SCH 563705 has good oral pharmacokinetic profiles in rats, mice, monkeys, and dogs. SCH563705 (3-30 mg/kg p.o) treatment causes a dose-dependent elevation in plasma levels of CXCL1. SCH 563705 (50 mg/kg p.o) decreases blood Ly6G+ Ly6C+ neutrophil frequency and unchanged levels of Ly6GLy6Chi monocytes [1][2].

Solubility Information

Solubility	DMSO: 30 mg/mL (70.51 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.35 mL	11.751 mL	23.503 mL
5 mM	0.47 mL	2.35 mL	4.701 mL
10 mM	0.235 mL	1.175 mL	2.35 mL
50 mM	0.047 mL	0.235 mL	0.47 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Chao J, et al. C(4)-alkyl substituted furanyl cyclobutenediones as potent, orally bioavailable CXCR2 and CXCR1 receptor antagonists. Bioorg Med Chem Lett. 2007 Jul 1;17(13):3778-83.

2. Min SH, et al. Pharmacological targeting reveals distinct roles for CXCR2/CXCR1 and CCR2 in a mouse model of arthritis. Biochem Biophys Res Commun. 2010 Jan 1;391(1):1080-6.

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