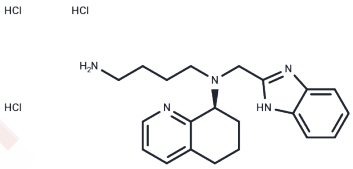
Data Sheet (Cat.No.T10296)

TargetMol

Mavorixafor trihydrochloride

Chemical Properties



CAS No. : 2309699-17-8

Formula: C21H30Cl3N5

Molecular Weight: 458.86

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	Mavorixafor trihydrochloride is a selective and orally available CXCR4 antagonist (IC50: 13 nM against CXCR4 125I-SDF binding) and also inhibits the replication of T-tropic HIV-1 (NL4.3 strain) in MT-4 cells and PBMCs (IC50s: 1 and 9 nM).
Targets(IC50)	HIV Protease,CXCR
In vitro	Mavorixafor (AMD-070) shows no effect on other chemokine receptors (CCR1, CCR2b, CCR4, CCR5, CXCR1, and CXCR2) [1]. Mavorixafor (6.6 μM) significantly suppresses the anchorage-dependent growth, the migration and matrigel invasion of the B88-SDF-1 cells [2].
In vivo	Mavorixafor, at a dosage of 2 mg/kg administered orally, substantially decreases the count of metastatic lung nodules in mice while concurrently reducing the expression of human Alu DNA, all without causing loss in body weight [2].

Solubility Information

Solubility	DMSO: 6 mg/mL (13.08 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1793 mL	10.8966 mL	21.7931 mL
5 mM	0.4359 mL	2.1793 mL	4.3586 mL
10 mM	0.2179 mL	1.0897 mL	2.1793 mL
50 mM	0.0436 mL	0.2179 mL	0.4359 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

Skerlj RT, et al. Discovery of novel small molecule orally bioavailable C-X-C chemokine receptor 4 antagonists that are potent inhibitors of T-tropic (X4) HIV-1 replication. J Med Chem. 2010 Apr 22;53(8):3376-88.
Uchida D, et al. Effect of a novel orally bioavailable CXCR4 inhibitor, AMD070, on the metastasis of oral cancer cells. Oncol Rep. 2018 Jul;40(1):303-308.