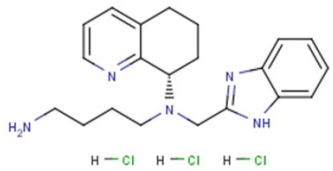
Data Sheet (Cat.No.T10296)

TargetMol
A DRUG SCREENING EXPERT

Mavorixafor trihydrochloride

Chemical Properties



CAS No.:	2309699-17-8
Formula:	C21H30Cl3N5
Molecular Weight:	458.86
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

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(IC_{50})	125I-SDF-CXCR4: 13 nM HIV-1 (NL4.3 strain): 9 nM (in PBMCs) HIV-1 NL4.3 strain: 3 nM (IC90, in MT-4 cells) HIV-1: 26 nM (IC90, in PBMCs)
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 (2 mg/kg, p.o.) significantly reduces the number of metastatic lung nodules in mice and lowers the expression of human Alu DNA in mice without body weight loss [2].

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.179 mL	10.897 mL	21.793 mL
5 mM	0.436 mL	2.179 mL	4.359 mL
10 mM	0.218 mL	1.09 mL	2.179 mL
50 mM	0.044 mL	0.218 mL	0.436 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. 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.

2. 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.

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