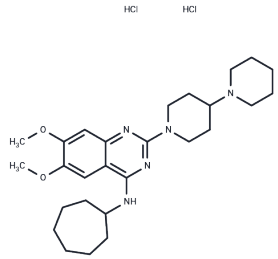
Data Sheet (Cat.No.T10639)

TargetMol

C-021 dihydrochloride

Chemical Properties



CAS No. : 1784252-84-1

Formula: C27H43Cl2N5O2

Molecular Weight: 540.57

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	C-021 dihydrochloride is a potent CCR4 antagonist that effectively inhibits functional chemotaxis in humans and mice, with IC50 values of 140 nM and 39 nM, respectively.
Targets(IC50)	CCR
In vitro	C-021 (Compound 1b) effectively prevents human CCL22-derived [35S]GTPγS from binding to the receptor (IC50: 18 nM). In human liver microsomes (HML), C-021 exhibits CLint value of 17,377 mL/h/kg[1].
In vivo	In the murine oxazolone-induced contact hypersensitivity test, the potency of C-021 is evident after subcutaneous administration. When C-021 is administered orally, however, very little inhibition is observed[1]. C-021 (1 mg/kg; i.p.; daily; for 3 days) significantly less microgliosis in acute liver failuremice[2]

Solubility Information

Solubility	DMSO: 5.41 mg/mL (10.01 mM),Sonication is recommended. H2O: 9.25 mg/mL (17.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8499 mL	9.2495 mL	18.499 mL
5 mM	0.370 mL	1.8499 mL	3.6998 mL
10 mM	0.185 mL	0.9249 mL	1.8499 mL
50 mM	0.037 mL	0.185 mL	0.370 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

Yokoyama K, et al. Potent and orally bioavailable CCR4 antagonists: Synthesis and structure-activity relationship study of 2-aminoquinazolines. Bioorg Med Chem. 2009 Jan 1;17(1):64-73.
McMillin M, Frampton G, Thompson M, Galindo C, Standeford H, Whittington E, Alpini G, DeMorrow S. Neuronal CCL2 is upregulated during hepatic encephalopathy and contributes to microglia activation and neurological decline. J Neuroinflammation. 2014 Jul 10;11:121.