Data Sheet (Cat.No.T10716)



CCR7 Ligand 1

Chemical Properties

CAS No.: 681514-83-0

Formula: C22H29N5O5S

Molecular Weight: 475.56

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	CCR7 Ligand 1 (CCR7-Cmp2105) is an allosteric ligand and antagonist for human CC chemokine receptor 7 (CCR7) with a Kd of 3 nM. This thiadiazole-dioxide ligand suppresses arrestin binding in response to activation by CCL19 with an IC50 of 7.3 µM.
Targets(IC50)	Others
In vitro	CCR7 Ligand 1 (CCR7-Cmp2105) binds specifically to the intracellular domain of CCR7 between transmembrane segments TM1, TM2, TM3, and TM6, and the loop linking TM7 and helix 8 [1]. This binding allosterically inhibits CCL19 binding to CCR7 with an IC50 of 35 nM in scintillation proximity assays (bottom) [1], and varying concentrations (20, 40, 60, 80, 100 µM) of CCR7 Ligand 1 enhance CCR7's thermal stability concentration-dependently [1].

Solubility Information

Solubility	DMSO: 12.5 mg/mL (26.28 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1028 mL	10.5139 mL	21.0278 mL
5 mM	0.4206 mL	2.1028 mL	4.2056 mL
10 mM	0.2103 mL	1.0514 mL	2.1028 mL
50 mM	0.0421 mL	0.2103 mL	0.4206 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

Jaeger K, et al. Structural Basis for Allosteric Ligand Recognition in the Human CC Chemokine Receptor 7. Cell. 2019 Aug 22;178(5):1222-1230.e10.

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