Data Sheet (Cat.No.T13114)

TargetMol

CCR2 antagonist 4

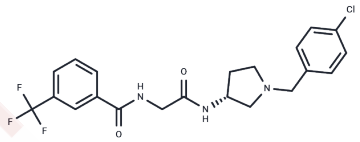
Chemical Properties

CAS No. : 226226-39-7

Formula: C21H21ClF3N3O2

Molecular Weight: 439.86

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	CCR2 antagonist 4 (Teijin compound 1) is a potent and specific CCR2 antagonist with IC50 values of 180 nM and 24 nM for CCR2 inhibition and MCP-1-induced chemotaxis inhibition, respectively.
Targets(IC50)	CCR
In vivo	Vp-TSL targets specifically aortic plaque endothelial VCAM-1 and CCR2 antagonist 4 reduces the mouse monocyte/macrophage cell line (RAW 264.7) adhesion/ infiltration into the aorta in ApoE-deficient mice[3].

Solubility Information

Solubility	DMSO: 50 mg/mL (113.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.55 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2735 mL	11.3673 mL	22.7345 mL
5 mM	0.4547 mL	2.2735 mL	4.5469 mL
10 mM	0.2273 mL	1.1367 mL	2.2735 mL
50 mM	0.0455 mL	0.2273 mL	0.4547 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

Moree WJ, et al. Potent antagonists of the CCR2b receptor. Part 3: SAR of the (R)-3-aminopyrrolidine series. Bioorg Med Chem Lett. 2008 Mar 15;18(6):1869-73.
Hall SE, et al. Elucidation of binding sites of dual antagonists in the human chemokine receptors CCR2 and CCR5. Mol Pharmacol. 2009 Jun;75(6):1325-36.
Calin M, et al. VCAM-1 directed target-sensitive liposomes carrying CCR2 antagonists bind to activated endothelium and reduce adhesion and transmigration of monocytes. Eur J Pharm Biopharm. 2015 Jan;89:18-29.