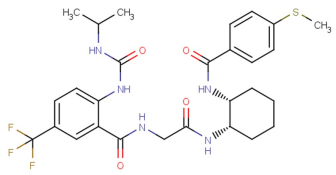
Data Sheet (Cat.No.T14688)

TargetMol
A DRUG SCREENING EXPERT

BMS CCR2 22

Chemical Properties



CAS No.:	445479-97-0
Formula:	C28H34F3N5O4S
Molecular Weight:	593.66
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	BMS CCR2 22 is a potent, specific and high affinity CC-type chemokine receptor 2 (CCR2) antagonist. It has excellent binding affinity (binding IC50 of 5.1 nM) and potent functional antagonism (calcium flux IC50 of 18 nM and chemotaxis IC50 of 1 nM)[1][2].
Targets(IC_{50})	CCR2: 5.1 nM
In vitro	BMS CCR2 22 is a potent, specific and high affinity CC-type chemokine receptor 2 (CCR2) antagonist. BMS CCR2 22 (Compound 22) has binding affinity for wild-type and E291A mutants with IC50 values of 7.5 nM and 3.7 nM, respectively[1]. It has excellent binding affinity (binding IC50 of 5.1 nM) and potent functional antagonism (calcium flux IC50 of 18 nM and chemotaxis IC50 of 1 nM)[1][2]. BMS CCR2 22 inhibits the internalization of hMCP1_AF647 with an IC50 value of approximately 2 nM[2]. BMS CCR2 22 prevents both the binding and the internalization of fluorescently labeled hMCP-1_AF647 internalization in human monocytes. The addition of BMS CCR2 22 (0.1-10 μM; 24 h), cenicriviroc (CVC) or a combination of both BMS CCR2 22 and MVC to human aortic endothelial cells (HAoECs) prior to MCP-1 stimulation do not alter E-selectin, ICAM-1, or CD99 cell surface expression. Incubation of HAoECs with BMS CCR2 22 before MCP-1 significantly increases VCAM-1 and PECAM1 cell surface levels (from 72.8 to 160% and from 97.2 and 127%, respectively)[3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.684 mL	8.422 mL	16.845 mL
5 mM	0.337 mL	1.684 mL	3.369 mL
10 mM	0.168 mL	0.842 mL	1.684 mL
50 mM	0.034 mL	0.168 mL	0.337 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. Cherney RJ, et al. Discovery of disubstituted cyclohexanes as a new class of CC chemokine receptor 2 antagonists. J Med Chem. 2008 Feb 28;51(4):721-4.
2. Kredel S, et al. High-content analysis of CCR2 antagonists on human primary monocytes. J Biomol Screen. 2011 Aug;16(7):683-93.
3. D'Antoni ML, et al. Cenicriviroc inhibits trans-endothelial passage of monocytes and is associated with impaired E-selectin expression. J Leukoc Biol. 2018 Dec;104(6):1241-1252.

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