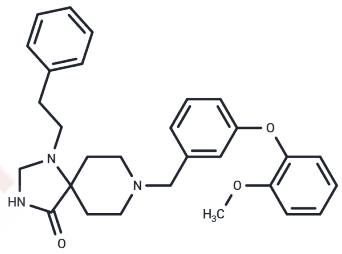
Data Sheet (Cat.No.T11862)

TargetMol

LMD-009

Chemical Properties



CAS No. : 950195-51-4

Formula: C29H33N3O3

Molecular Weight: 471.59

Storage: Store at low temperature
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	LMD-009 is a non-peptide, selective CCR8 agonist that mediates chemotaxis, inositol phosphate accumulation, and calcium release, with an EC50 of 11-87 nM.
Targets(IC50)	CCR
In vitro	**Methods**: COS-7 cells were treated with LMD-009 (0-20 nM, 90 minutes) and cell viability was measured. **Results**: LMD-009 stimulated inositol phosphate accumulation in COS-7 cells expressing the human CCR8 receptor with an EC50 value of 11 nM. It did not inhibit any other human chemokine receptors. **Methods**: Chinese hamster ovary cells were treated with LMD-009 (0-100 nM, 1 hour) and cell viability was measured. **Results**: The EC50 value of LMD-009 for regulating calcium release in Chinese hamster ovary cells was 87 nM. [1]

Solubility Information

Solubility	DMSO: 200 mg/mL (424.1 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: 5 mg/mL (10.6 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	2.1205 mL	10.6024 mL	21.2049 mL
5 mM	0.4241 mL	2.1205 mL	4.241 mL
10 mM	0.212 mL	1.0602 mL	2.1205 mL
50 mM	0.0424 mL	0.212 mL	0.4241 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

Jensen PC, et al. Molecular interaction of a potent nonpeptide agonist with the chemokine receptor CCR8. Mol Pharmacol. 2007 Aug;72(2):327-40.