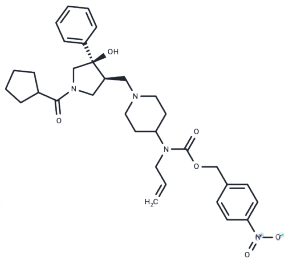
Data Sheet (Cat.No.T28171)

TargetMol

Nifeviroc

Chemical Properties



CAS No. : 934740-33-7

Formula: C33H42N4O6

Molecular Weight: 590.71

Storage: Keep away from moisture
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	Nifeviroc (TD-0232) is an orally active CCR5 antagonist used in the study of HIV-1 infection.
Targets(IC50)	HIV Protease,CCR
In vitro	Nifeviroc is a specific HIV-1 entry inhibitor that works only by antagonizing CCR5 and not CXCR4. [1]

Solubility Information

Solubility	DMSO: 80 mg/mL (135.43 mM),Sonication is recommended. H2O: 80 mg/mL (135.43 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: 3.3 mg/mL (5.59 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	1.6929 mL	8.4644 mL	16.9288 mL
5 mM	0.3386 mL	1.6929 mL	3.3858 mL
10 mM	0.1693 mL	0.8464 mL	1.6929 mL
50 mM	0.0339 mL	0.1693 mL	0.3386 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

Kang Y, et al. CCR5 antagonist TD-0680 uses a novel mechanism for enhanced potency against HIV-1 entry, cell-mediated infection, and a resistant variant. J Biol Chem. 2012 May 11;287(20):16499-509.
Wu W, et al. Determination of nifeviroc, a novel CCR5 antagonist: application to a pharmacokinetic study. J Pharm Biomed Anal. 2011 Nov 1;56(3):637-40.
Ben L, et al. Studies on the structure-activity relationship of 1,3,3,4-tetra-substituted pyrrolidine embodied CCR5 receptor antagonists. Part 1: Tuning the N-substituents. Bioorg Med Chem Lett. 2010 Jul 15;20(14):4012-4.
Ben L, Jones ED, Zhou E, Li C, Baylis DC, Yu S, Wang M, He X, Coates JA, Rhodes DI, Pei G, Deadman JJ, Xie X, Ma D. Studies on the structure-activity relationship of 1,3,3,4-tetra-substituted pyrrolidine embodied CCR5 receptor antagonists. Part 1: Tuning the N-substituents. Bioorg Med Chem Lett. 2010 Jul 15;20(14):4012-4. doi: 10.1016/j.bmcl.2010.05.102. PubMed PMID: 20561788.