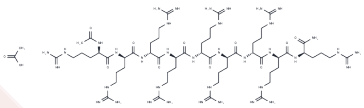
Data Sheet (Cat.No.TP1364L)

TargetMol

ALX 40-4C acetate

Chemical Properties



CAS No. :

Formula: C58H117N37O12

Molecular Weight: 1524.79

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	ALX 40-4C acetate is a CXCR4 inhibitor of the chemokine receptor (Ki = 1 μM) and suppresses the replication of X4 strains of HIV-1. ALX 40-4C acetate is an antagonist of the APJ receptor (IC50 = 2.9 μM).
Targets(IC50)	Apelin receptor,CXCR
In vitro	ALX 40-4C acetate shows potent anti HIV-1 effect, with EC50s of 0.34 ± 0.04 μg/mL, 0.37 ± 0.01 μg/mL for HIV-1 NL4-3, NC10, and 0.18 ± 0.11 μg/mL, 0.06 ± 0.02 μg/mL for HIV-1 HXB2, HC43, respectively, and with a CC50 (50% cytotoxic concentration) of 21 μg/mL. ALX 40-4C acetate also exhibits potent activity against env-recombinant HIV, with EC50s of 0.38 ± 0.01 μg/mL, 0.40 ± 0.0 μg/mL for HIV-1 NL4-3 env, NC10, and 1.34 ± 0.06 μg/mL, 1.02 ± 0.29 μg/mL for HIV-1 HXB2 env, HC43, and a CC50 of 21 μg/mL[1]. ALX 40-4C acetate binds to APJ with an IC50 of 2.9 μM. ALX 40-4C acetate inhibits HIV-1 gp120/APJ-mediated cell membrane fusion, with an IC50s of 3.41 μM and 3.1 μM for IIIB isolate and 89.6 isolate, respectively[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6558 mL	3.2791 mL	6.5583 mL
5 mM	0.1312 mL	0.6558 mL	1.3117 mL
10 mM	0.0656 mL	0.3279 mL	0.6558 mL
50 mM	0.0131 mL	0.0656 mL	0.1312 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

Armand-Ugón M, et al. HIV-1 resistance to the gp41-dependent fusion inhibitor C-34. Antiviral Res. 2003 Jul;59(2):137-42.

Zhou N, et al. Binding of ALX40-4C to APJ, a CNS-based receptor, inhibits its utilization as a co-receptor by HIV-1. Virology. 2003 Jul 20;312(1):196-203.

Doranz BJ, et al. Safe use of the CXCR4 inhibitor ALX40-4C in humans. AIDS Res Hum Retroviruses. 2001 Apr 10;17(6):475-86.

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