Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

ALX 40-4C

Catalog No: tcsc0024689

Available Sizes

Size: 1mg

Size: 5mg

Specifications

CAS No:
143413-49-4

Formula:
$C_{56}H_{113}N_{37}O_{10}$

Pathway:
GPCR/G Protein;Immunology/Inflammation

Target:
CXCR;CXCR

Purity / Grade:
>98%

Solubility:
10 mM in H2O

Observed Molecular Weight:
1464.74

Product Description

ALX 40-4C is a small peptide inhibitor of the **chemokine receptor CXCR4**, inhibits SDF-1 from binding CXCR4 with a **K_i** of 1 μM, and suppresses the replication of X4 strains of HIV-1; ALX 40-4C Trifluoroacetate also acts as an antagonist of the **APJ receptor**, with an **IC_{50}** of 2.9 μM.

IC50 & Target: CXCR4[1]

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

IC50: 2.9 μM (APJ receptor)[3]

In Vitro: ALX 40-4C is a small peptide inhibitor of the chemokine receptor CXCR4, interacts with the second extracellular loop of CXCR4 and inhibits infection exclusively by blocking direct virus-CXCR4 interactions[1]. ALX 40-4C shows potent anti HIV-1 effect, with EC_{50}s 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 CC_{50} (50% cytotoxic concentration) of 21 μg/mL. ALX 40-4C also exhibits potent activity against env-recombinant HIV, with EC_{50}s 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 CC_{50} of 21 μg/mL[2]. ALX 40-4C binds to APJ with an IC_{50} of 2.9 μM. ALX 40-4C inhibits HIV-1 gp120/APJ-mediated cell membrane fusion, with an IC_{50}s of 3.41 μM and 3.1 μM for IIIB isolate and 89.6 isolate, respectively[3].