

AMD 3465

Catalog No: tcsc2786



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

185991-24-6

Formula:

$C_{24}H_{38}N_6$

Pathway:

GPCR/G Protein;Immunology/Inflammation;Anti-infection

Target:

CXCR;CXCR;HIV

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

GENZ-644494

Observed Molecular Weight:

410.6

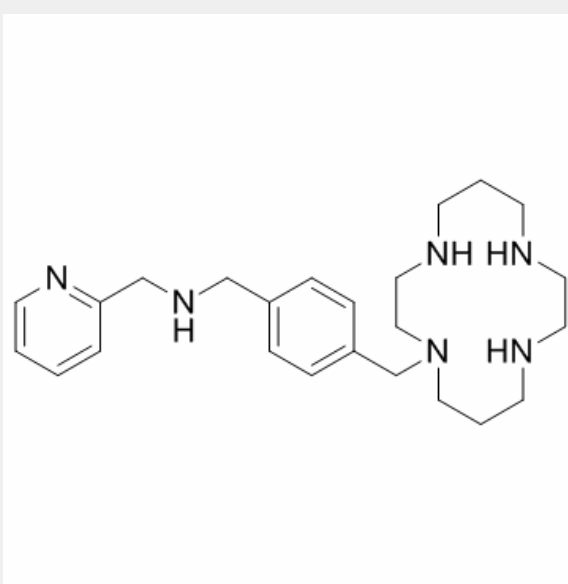
Product Description

AMD 3465 is a potent antagonist of **CXCR4**, inhibits binding of 12G5 mAb and CXCL12^{AF647} to **CXCR4**, with **IC₅₀**s of 0.75 nM and 18 nM in SupT1 cells; AMD 3465 also potently inhibits the replication of **X4 HIV** strains (**IC₅₀**: 1-10 nM), but has no effect on CCR5-using (R5) viruses.

IC50 & Target: IC50: 0.75 nM (12G5 mAb-CXCR4), 18 nM (CXCL12^{AF647}-CXCR4), 1-10 nM (X4 HIV)^[1]

In Vitro: AMD 3465 is a potent antagonist of CXCR4, inhibits binding of 12G5 mAb and CXCL12^{AF647} to CXCR4, with IC₅₀s of 0.75 nM and 18 nM in SupT1 cells. AMD 3465 (50 nM) totally blocks CXCL12-induced calcium mobilization, with an IC₅₀ of 17 nM, but shows no effect on the intracellular calcium fluxes elicited by the CCR5 ligands RANTES, LD78β and MIP-1β in U87.CD4.CCR5 cells. AMD 3465 also potently inhibits the replication of X4 HIV strains (IC₅₀: 1-10 nM), but has no effect on CCR5-using (R5) viruses. AMD3465 is cytotoxic to the X4 HIV-1 strains IIB, NL4.3, RF and HE with an IC₅₀ ranging from 6 to 12 nM. The IC₅₀ for suppression of the HIV-2 strains ROD and EHO is 12.3 nM^[1]. AMD 3465 inhibits CXCL-12-induced growth in U87 and Daoy cells. AMD 3465 treatment stimulates the phosphorylation of Erk1/2 in U87 and Daoy cells^[2].

In Vivo: AMD 3465 (2.5 mg/kg/d, s.c. for 5 weeks) significantly blocks the growth of U87 GBM and Daoy xenografts^[2].



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