

# 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

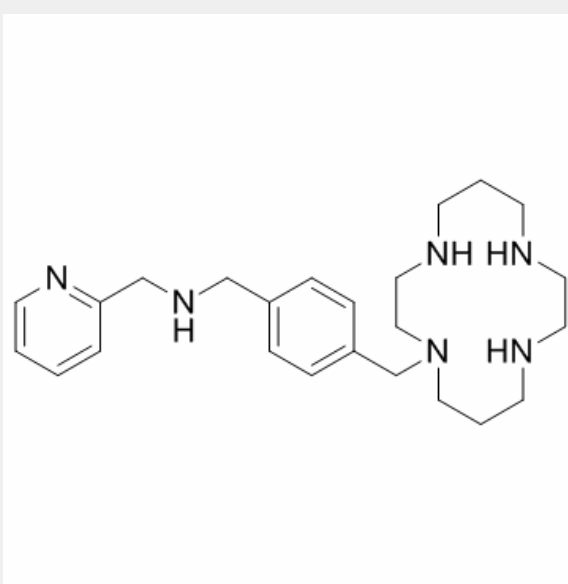
## Product Description

AMD 3465 is a potent antagonist of **CXCR4**, inhibits binding of 12G5 mAb and CXCL12<sup>AF647</sup> to **CXCR4**, with **IC<sub>50</sub>**s of 0.75 nM and 18 nM in SupT1 cells; AMD 3465 also potently inhibits the replication of **X4 HIV** strains (**IC<sub>50</sub>**: 1-10 nM), but has no effect on CCR5-using (R5) viruses.

IC50 & Target: IC50: 0.75 nM (12G5 mAb-CXCR4), 18 nM (CXCL12<sup>AF647</sup>-CXCR4), 1-10 nM (X4 HIV)<sup>[1]</sup>

**In Vitro:** AMD 3465 is a potent antagonist of CXCR4, inhibits binding of 12G5 mAb and CXCL12<sup>AF647</sup> to CXCR4, with IC<sub>50</sub>s of 0.75 nM and 18 nM in SupT1 cells. AMD 3465 (50 nM) totally blocks CXCL12-induced calcium mobilization, with an IC<sub>50</sub> 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 (IC<sub>50</sub>: 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 IC<sub>50</sub> ranging from 6 to 12 nM. The IC<sub>50</sub> for suppression of the HIV-2 strains ROD and EHO is 12.3 nM<sup>[1]</sup>. 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<sup>[2]</sup>.

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



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!