Web: www.taiclone.com
Tel: +886-2-2735-9682
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AMD 3465 (hexahydrobromide)

Catalog No: tcsc2784

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
185991-07-5

Formula:
$C_{24}H_{44}Br_6N_6$

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

Target:
CXCR;CXCR;HIV

Purity / Grade:
>98%

Solubility:
H2O : ≥ 38 mg/mL (42.41 mM)

Alternative Names:
GENZ-644494 hexahydrobromide

Observed Molecular Weight:
896.07

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Product Description

AMD 3465 hexahydrobromide is a potent antagonist of **CXCR4**, inhibits binding of 12G5 mAb and $CXCL12^{AF647}$ to **CXCR4**, with **IC_{50}**s of 0.75 nM and 18 nM in SupT1 cells; AMD 3465 also potently inhibits the replication of **X4 HIV** strains (**IC_{50}**: 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 hexahydrobromide is a potent antagonist of CXCR4, inhibits binding of 12G5 mAb and $CXCL12^{AF647}$ to CXCR4, with IC_{50}s of 0.75 nM and 18 nM in SupT1 cells. AMD 3465 (50 nM) totally blocks CXCL12-induced calcium mobilization, with an IC_{50} 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_{50}: 1-10 nM), but has no effect on CCR5-using (R5) viruses. AMD3465 is cytotoxic to the X4 HIV-1 strains IIIB, NL4.3, RF and HE with an IC_{50} ranging from 6 to 12 nM. The IC_{50} 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].