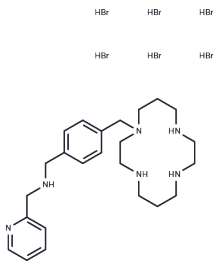
Data Sheet (Cat.No.T7208)

TargetMol

AMD 3465 hexahydrobromide

Chemical Properties



CAS No. : 185991-07-5

Formula: C24H44Br6N6

Molecular Weight: 896.07

Storage: 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	AMD 3465 hexahydrobromide (GENZ-644494 (hexahydrobromide)) is a CXCR4 receptor antagonist with potential anticancer and anti-HIV activity.
Targets(IC50)	HIV Protease,CXCR
In vitro	AMD 3465 hexahydrobromide inhibits binding of 12G5 mAb and CXCL12AF647 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 IIIB, 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	Administering 2.5 mg/kg/d of AMD 3465 subcutaneously for five weeks significantly inhibits the growth of U87 glioblastoma multiforme (GBM) and Daoy medulloblastoma xenografts.

Solubility Information

Solubility	H2O: 38 mg/mL (42.41 mM),Sonication is recommended. DMSO: 250 mg/mL (279 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (2.23 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.116 mL	5.5799 mL	11.1598 mL
5 mM	0.2232 mL	1.116 mL	2.232 mL
10 mM	0.1116 mL	0.558 mL	1.116 mL
50 mM	0.0223 mL	0.1116 mL	0.2232 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

Hatse S, et al. AMD3465, a monomacrocyclic CXCR4 antagonist and potent HIV entry inhibitor. Biochem Pharmacol. 2005 Sep 1;70(5):752-61.