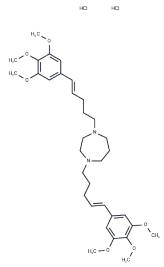
Data Sheet (Cat.No.T11742L)

TargetMol

K-7174 dihydrochloride

Chemical Properties



CAS No. : 191089-60-8

Formula: C33H50Cl2N2O6

Molecular Weight: 641.67

Storage: Store at low temperature,Keep away from moisture,
Store under nitrogen
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	K-7174 dihydrochloride is a proteasome and GATA inhibitor that inhibits neuronal degeneration and induces apoptosis.
Targets(IC50)	Apoptosis,Proteasome
In vitro	In KMS12-BM, U266, and RPMI8226 cell lines, K-7174 dihydrochloride (0-25 μM; 72 hours) inhibited the growth of multiple myeloma cells[3].
In vivo	In ICR mice injected with IL-β or TNF-α, K-7174 dihydrochloride (30 mg/kg; intraperitoneal injection; once daily for 9 days) increased erythropoietin (Epo) production, reticulocyte counts, and hemoglobin (Hb) concentrations[2].

Solubility Information

Solubility	H2O: 25 mg/mL (38.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5584 mL	7.7922 mL	15.5843 mL
5 mM	0.3117 mL	1.5584 mL	3.1169 mL
10 mM	0.1558 mL	0.7792 mL	1.5584 mL
50 mM	0.0312 mL	0.1558 mL	0.3117 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

Umetani M, et al. A novel cell adhesion inhibitor, K-7174, reduces the endothelial VCAM-1 induction by inflammatory cytokines, acting through the regulation of GATA. Biochem Biophys Res Commun. 2000 Jun 7;272(2):370-4.
Imagawa S, et al. A GATA-specific inhibitor (K-7174) rescues anemia induced by IL-1beta, TNF-alpha, or L-NMMA. FASEB J. 2003 Sep;17(12):1742-4.
Shimada T, et al. Unexpected blockade of adipocyte differentiation by K-7174: implication for endoplasmic reticulum stress. Biochem Biophys Res Commun. 2007 Nov 16;363(2):355-60.
Kikuchi J, et al. The novel orally active proteasome inhibitor K-7174 exerts anti-myeloma activity in vitro and in vivo by down-regulating the expression of class I histone deacetylases. J Biol Chem. 2013 Aug 30;288(35):25593-602.