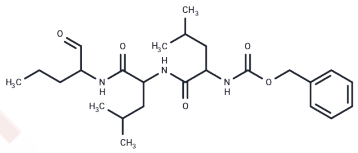
Data Sheet (Cat.No.T21617)

TargetMol

MG-115

Chemical Properties



CAS No. : 133407-86-0

Formula: C25H39N3O5

Molecular Weight: 461.59

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	MG-115 (Z-LL-Nva-CHO) is a potent and reversible inhibitor of proteasome , with K i s of 21 nM and 35 nM for 20S and 26S proteasome, respectively. MG-115 specifically inhibit the chymotrypsin-like activity of the proteasome, induces p53-dependent apoptosis [1] [2] [3].
Targets(IC50)	Apoptosis,Proteasome
In vitro	MG-115, at concentrations ranging from 0.1 to 10 μM over 24 hours, not only diminishes the viability of HepG2 cells in a dose-dependent manner but also enhances the reporter gene expression driven by CWK 18 DNA condensates. Cell viability assays further confirm that MG-115's exposure leads to a dose-dependent decrease in cell viability, quantitatively inhibiting proteasomal activity with an IC 50 value of 2 μM in HepG2 cells.

Solubility Information

Solubility	DMSO: 45 mg/mL (97.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 4 mg/mL (8.67 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	2.1664 mL	10.8321 mL	21.6642 mL
5 mM	0.4333 mL	2.1664 mL	4.3328 mL
10 mM	0.2166 mL	1.0832 mL	2.1664 mL
50 mM	0.0433 mL	0.2166 mL	0.4333 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

Rock KL, et, al. Inhibitors of the proteasome block the degradation of most cell proteins and the generation of peptides presented on MHC class I molecules. Cell. 1994 Sep 9;78(5):761-71.
Lopes UG, et, al. p53-dependent induction of apoptosis by proteasome inhibitors. J Biol Chem. 1997 May 16;272 (20):12893-6.
Kim J, et, al. The proteasome metabolizes peptide-mediated nonviral gene delivery systems. Gene Ther. 2005 Nov; 12(21):1581-90.