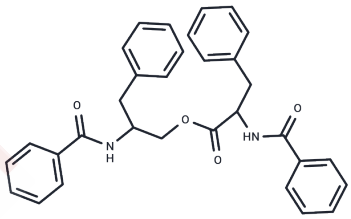
Data Sheet (Cat.No.T10390)

TargetMol

Asperphenamate

Chemical Properties



CAS No. : 63631-36-7

Formula: C32H30N2O4

Molecular Weight: 506.59

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	Asperphenamate is a fungal metabolite of Aspergillus flatiipes. The IC50s for T47D cells, MDA-MB-231 cells, and HL-60 cells are 92.3 μM, 96.5 μM, and 97.9 μM. Asperphenamate shows an anticancer effect.
Targets(IC50)	Autophagy,Antifungal,Cysteine Protease
In vitro	Asperphenamate induces autophagy and inhibits cancer cell proliferation. Asperphenamate inhibits cathepsin L and also weakly inhibits cathepsin S[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (177.66 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (6.51 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	1.974 mL	9.8699 mL	19.7398 mL
5 mM	0.3948 mL	1.974 mL	3.948 mL
10 mM	0.1974 mL	0.987 mL	1.974 mL
50 mM	0.0395 mL	0.1974 mL	0.3948 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

Alice M.Clark, et al. Synthesis of asperphenamate, a novel fungal metabolite. Phytochemistry
LeiYuan, et al. Total synthesis and anticancer activity studies of the stereoisomers of asperphenamate and patriscabratine. Chinese Chemical Letters Volume 21, Issue 2, February 2010, Pages 155-158.
Yuan L, et al. Discovery of novel cathepsin inhibitors with potent anti-metastatic effects in breast cancer cells. Bioorg Chem. 2018 Dec;81:672-680.