Data Sheet (Cat.No.T2258)



VER-50589

Chemical Properties

CAS No.: 747413-08-7

Formula: C19H17ClN2O5

Molecular Weight: 388.8

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	VER-50589 is a potent HSP90 inhibitor.		
Targets(IC50)	Apoptosis,HSP		
In vitro	The induction of HSP72 and HSP27 by VER-50589 was accompanied by depletion of client proteins (including C-RAF, B-RAF, and survivin) and the protein arginine methyltransferase PRMT5, which further led to cell cycle arrest and apoptosis.VER-50589 inhibited the intrinsic ATPase activity of recombinant yeast Hsp90 with an IC50 of 143 nM, and inhibited the intrinsic ATPase activity of recombinant yeast Hsp90 in vitro with an IC50 of 143 nM. and produced antiproliferative activity in a panel of human cancer cell lines and non-tumorigenic cells in vitro.		
In vivo	The induction of HSP72 and HSP27 by VER-50589 was accompanied by depletion of client proteins (including C-RAF, B-RAF, and survivin) and the protein arginine methyltransferase PRMT5, which further led to cell cycle arrest and apoptosis.VER-50589 inhibited the intrinsic ATPase activity of recombinant yeast Hsp90 with an IC50 of 143 nM, and inhibited the intrinsic ATPase activity of recombinant yeast Hsp90 in vitro with an IC50 of 143 nM. and produced antiproliferative activity in a panel of human cancer cell lines and non-tumorigenic cells in vitro.		
Kinase Assay	Fluorescence Polarization Assay: Binding of HSP90 inhibitors to human full-length recombinant HSP90β is determined by a competitive binding fluorescence polarization assay, using a fluorescent pyrazole resorcinol probe.		
Cell Research	Antiproliferative effects are measured using the sulforhodamine B assay. HUVEC sensitivity is determined by an alkaline phosphatase method.(Only for Reference)		

Solubility Information

Solubility	Ethanol: 71 mg/mL (182.61 mM), Sonication is recommended.		
	H2O: < 1 mg/mL (insoluble or slightly soluble),		
	DMSO: 71 mg/mL (182.61 mM), Sonication is recommended.		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		

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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.572 mL	12.8601 mL	25.7202 mL
5 mM	0.5144 mL	2.572 mL	5.144 mL
10 mM	0.2572 mL	1.286 mL	2.572 mL
50 mM	0.0514 mL	0.2572 mL	0.5144 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.

Reference

Sharp SY, et al. Mol Cancer Ther. 2007, 6(4), 1198-1211.

Li J, Han X, Sun M, et al.Caspase-9 inhibition triggers Hsp90-based chemotherapy-mediated tumor intrinsic innate sensing and enhances antitumor immunity. Journal for Immunotherapy of Cancer. 2023, 11(12).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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