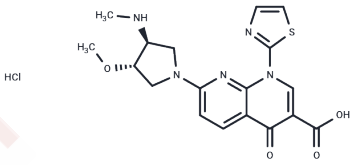
Data Sheet (Cat.No.T22456)

TargetMol

Voreloxin hydrochloride

Chemical Properties



CAS No. : 175519-16-1

Formula: C18H20ClN5O4S

Molecular Weight: 437.9

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	Voreloxin hydrochloride (SNS-595 hydrochloride) is a potent inhibitor of Topoisomerase II with broad-spectrum anti-tumor activity.
Targets(IC50)	Apoptosis,Topoisomerase
In vitro	Voreloxin potentially inhibits the relaxation of topoisomerase II relaxation with IC50 of 3.2 μg /mL with no effect on topoisomerase II cleavage. Voreloxin has a cytotoxic activity against human tumor cell lines more potent than that of etoposide. [1] Voreloxin also has broad anti-proliferative activity in 15 cell lines, including 4 drug-resistant lines, with IC50 ranging from 0.04 to 1.155 μM. [2]
In vivo	Voreloxin (50 mg/kg i.p.) shows potent antitumor activity in mice implanted with P388 leukemia cells. [1] Voreloxin (25 mg/kg i.v.) demonstrates strong tumor growth inhibition in 10 of 11 solid tumor (ovarian, breast, melanoma, gastric, colon, and lung) xenograft models, 2 hematologic tumor xenograft models, 3 multidrug resistant tumor models and 3 murine syngeneic tumor models (Colon 26, M5076 Ovarian Sarcoma, Lewis Lung carcinoma). [2]
Cell Research	Cell lines: P388 leukemia cells. Concentrations: about 10 μg/mL. Incubation Time: 72 hours. Method: Cells are seed in a 96-well microtiter plate (0.1 mL/well), preincubated for 24 h except for P388 cells, and incubated with various concentrations of a test compound in the 5% CO2 incubator at 37℃ for 72 h. Then, 0.02 mL MTT solution (5 mg/mL) is added in each well, and a further 4 h cells culturing is carried out. The medium is removed and 0.2 mL of DMSO is added in each well to dissolve the formed formazan. The absorbance is measured using Multiskan Bichromatic.
Animal Research	Animal Models: Mice implanted with P388 leukemia cells. Dosages: about 50 mg/kg. Administration: i.p.

Solubility Information

Solubility	DMSO: 1.09 mg/mL (2.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2836 mL	11.4181 mL	22.8363 mL
5 mM	0.4567 mL	2.2836 mL	4.5673 mL
10 mM	0.2284 mL	1.1418 mL	2.2836 mL
50 mM	0.0457 mL	0.2284 mL	0.4567 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

Tsuzuki Y, et al. J Med Chem. 2004, 47(8), 2097-2109.
Hoch U, et al. Cancer Chemother Pharmacol. 2009, 64(1), 53-65.