Data Sheet (Cat.No.T6362)

TargetMol

Domatinostat

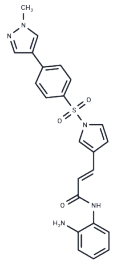
Chemical Properties

CAS No. : 910462-43-0

Formula: C23H21N5O3S

Molecular Weight: 447.51

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	Domatinostat (4SC202) is a selective class I HDAC inhibitor with IC50 of 1.20 μM, 1.12 μM, and 0.57 μM for HDAC1, HDAC2, and HDAC3, respectively. Also displays inhibitory activity against Lysine specific demethylase 1 (LSD1). Phase 1.
Targets(IC50)	Apoptosis,HDAC
In vitro	In HeLa cells, 4SC-202 induces hyperacetylation of histone H3 with EC50 of 1.1 μM. 4SC-202 induces a G2/M cell cycle arrest by interfering with the normal development of the mitotic spindle and causing collapsed spindle apparatus and multiple nucleation centres. In addition, 4SC-202 shows a broad anti-proliferative activity towards human cancer cell lines with a mean IC50 of 0.7 μM. [1]
In vivo	In vivo, 4SC-202 has a high oral bioavailability, and shows high metabolic stability and a low plasma clearance. 4SC-202 (120 mg/kg p.o.) shows pronounced and robust anti-tumor activity in both A549 NSCLC xenograft and RKO27 colon carcinoma model. [1]

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 82 mg/mL (183.24 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.37 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	2.2346 mL	11.1729 mL	22.3459 mL
5 mM	0.4469 mL	2.2346 mL	4.4692 mL
10 mM	0.2235 mL	1.1173 mL	2.2346 mL
50 mM	0.0447 mL	0.2235 mL	0.4469 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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