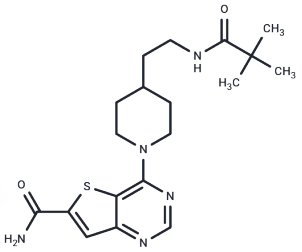
Data Sheet (Cat.No.T12918)

TargetMol

SIRT-IN-1

Chemical Properties



CAS No. : 1431411-60-7

Formula: C19H27N5O2S

Molecular Weight: 389.52

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	SIRT-IN-1 is a potent inhibitor of SIRT1, SIRT2, and SIRT3, with IC50 values of 15, 10, and 33 μM, respectively
Targets(IC50)	Sirtuin
In vitro	SIRT-IN-1 is one of the most potent inhibitor of truncated pan SIRT1/ 2/3(IC50 values are 0.015, 0.010, 0.033 μM, respectively). SIRT-IN-1 binds identically in the catalytic active site (RMS=0.29), occupying the nicotinamide C-pocket and acetyl lysine substrate channel.

Solubility Information

Solubility	DMSO: 3.9 mg/mL (10.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.57 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	2.5673 mL	12.8363 mL	25.6726 mL
5 mM	0.5135 mL	2.5673 mL	5.1345 mL
10 mM	0.2567 mL	1.2836 mL	2.5673 mL
50 mM	0.0513 mL	0.2567 mL	0.5135 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

Disch JS, et al. Discovery of thieno[3,2-d]pyrimidine-6-carboxamides as potent inhibitors of SIRT1, SIRT2, and SIRT3. J Med Chem. 2013 May 9;56(9):3666-79.