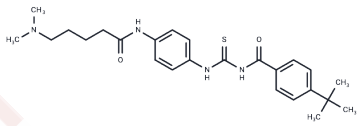
Data Sheet (Cat.No.T1818)

TargetMol

Tenovin-6

Chemical Properties



CAS No. : 1011557-82-6

Formula: C25H34N4O2S

Molecular Weight: 454.63

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	Tenovin-6 is a p53 transcriptional activity agonist.
Targets(IC50)	Autophagy,Dehydrogenase,Sirtuin,MDM-2/p53
In vivo	Tenovins are active on mammalian cells at one-digit micromolar concentrations and decrease tumor growth in vivo as single agents. Tenovin-6 (50 mg/kg, i.p.) inhibits the growth of tumor in mice[1].
Kinase Assay	Assays are carried out using purified components in the Fluor de Lys Fluorescent Assay Systems. Relevant FdL substrates are used at 7 μM and NAD+ at 1 mM. Tenovins are solubilized in DMSO with the final DSMO concentration in the reaction being less than 0.25%. For SirT1 and HDAC8, one unit of enzyme is used per reaction, and for SirT2 and SirT3, five units is used per reaction. Reactions are carried out at 37°C for 1 hr.
Cell Research	The MTS assay is used to evaluate cell viability. UM cells are seeded into each well of 96-well plates (5,000 cells/well) and treated the next day with control or Tenovin-6 in an increasing concentrations from 0 to 20?μM for 68?h, and then MTS is added at 20? μL/well to be read at a wave length of 490?nm, the IC50 is determined by curve fitting of the sigmoidal dose-response curve.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 91 mg/mL (200.16 mM),Sonication is recommended. H2O: 90 mg/mL (197.96 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: 3.3 mg/mL (7.26 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	2.1996 mL	10.998 mL	21.9959 mL
5 mM	0.4399 mL	2.1996 mL	4.3992 mL
10 mM	0.220 mL	1.0998 mL	2.1996 mL
50 mM	0.044 mL	0.220 mL	0.4399 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

Lain S, et al. Cancer Cell, 2008, 13(5), 454-463.
Wang B, Xu T, Qiu C, et al.Tenovin-6 exhibits inhibitory effects on the growth of Sonic Hedgehog (SHH) medulloblastoma, as evidenced by both in vitro and in vivo studies.International Immunopharmacology.2024, 142: 113075.