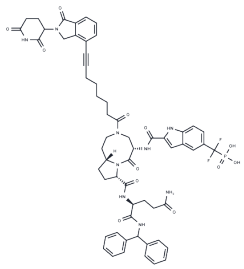
Data Sheet (Cat.No.T18680)

TargetMol

SD-36

Chemical Properties



CAS No. : 2429877-44-9

Formula: C59H62F2N9O12P

Molecular Weight: 1158.15

Storage: Keep away from moisture,Store under nitrogen
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	SD-36 is a selective and efficient STAT3 protein degrader (Kd=~50 nM) with antitumor activity that promotes growth inhibition and induces apoptosis by inhibiting Mcl-1 in gliomas.SD-36 inhibits the transcriptional activity of STAT3.
Targets(IC50)	Apoptosis,STAT,PROTACs
In vitro	SD-36 inhibits the growth of a subset of acute myeloid leukemia and anaplastic large-cell lymphoma cell lines by inducing cell-cycle arrest and/or apoptosis[1]. At concentrations of 0.005-5 μM over 4 days, SD-36 demonstrates potent activity (IC50 < 2 μM) in MOLM-16, DEL, Karpas-299, KI-JK, SU-DHL-I, and SUP-M2 cell lines[1]. Additionally, at 1 μM over 5 hours, SD-36 completely depletes both monomeric and dimeric STAT3 protein in MOLM-16 cells[1].
In vivo	SD-36 (25-100 mg/kg; i.v.; weekly dosing for 4 weeks) achieves complete and long-lasting tumor regression in mice[1]. In the SU-DHL-1 xenograft model, SD-36 effectively inhibits tumor growth at 25 and 50 mg/kg administered on day 1, 3, and 5 per week, achieving complete tumor regression at 100 mg/kg with the same schedule[1]. Additionally, SD-36 at 50 mg/kg administered 3 times per week completely inhibits tumor growth in the SUP-M2 tumor model[1].

Solubility Information

Solubility	DMSO: 30 mg/mL (25.9 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 (0.86 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	0.8634 mL	4.3172 mL	8.6345 mL
5 mM	0.1727 mL	0.8634 mL	1.7269 mL
10 mM	0.0863 mL	0.4317 mL	0.8634 mL
50 mM	0.0173 mL	0.0863 mL	0.1727 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

Bai L, et al. A Potent and Selective Small-Molecule Degrader of STAT3 Achieves Complete Tumor Regression In Vivo. Cancer Cell. 2019 Nov 11;36(5):498-511.e17.

Suo Y, Du D, Chen C, Zhu H, Wang X, Song N, Lu D, Yang Y, Li J, Wang J, Luo Z, Zhou B, Luo C, Zhou H. Uncovering PROTAC Sensitivity and Efficacy by Multidimensional Proteome Profiling: A Case for STAT3. J Med Chem. 2024 Mar 28;67(6):4804-4818. doi: 10.1021/acs.jmedchem.3c02371. Epub 2024 Mar 11. PMID: 38466231.