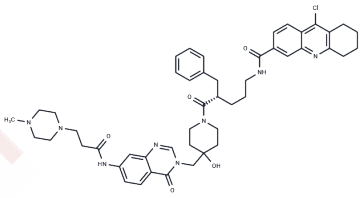
Data Sheet (Cat.No.T9122)

TargetMol

XL177A

Chemical Properties



CAS No. : 2417089-74-6

Formula: C48H57ClN8O5

Molecular Weight: 861.47

Storage: Store at low temperature,Keep away from moisture
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	XL177A is a selective irreversible USP7 inhibitor(IC50 : 0.34 nM). XL177A elicits cancer cell killing through a p53-dependent mechanism.
Targets(IC50)	DUB
In vitro	XL177A irreversibly inhibits USP7 with sub-nM potency and selectivity across the human proteome.?Evaluation of the cellular effects of XL177A reveals that selective USP7 inhibition suppresses cancer cell growth predominantly through a p53-dependent mechanism:?XL177A specifically upregulates p53 transcriptional targets transcriptome-wide, hotspot mutations in TP53 but not any other genes predict response to XL177A across a panel of ~500 cancer cell lines, and TP53 knockout rescues XL177A-mediated growth suppression of TP53 wild-type (WT) cells.?Together, these findings suggest TP53 mutational status as a biomarker for response to USP7 inhibition.?We find that Ewing sarcoma and malignant rhabdoid tumor (MRT), two pediatric cancers that are sensitive to other p53-dependent cytotoxic drugs, also display increased sensitivity to XL177A.

Solubility Information

Solubility	DMSO: 55 mg/mL (63.84 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: 2 mg/mL (2.32 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	1.1608 mL	5.804 mL	11.6081 mL
5 mM	0.2322 mL	1.1608 mL	2.3216 mL
10 mM	0.1161 mL	0.5804 mL	1.1608 mL
50 mM	0.0232 mL	0.1161 mL	0.2322 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

Nathan J Schauer, et al. Selective USP7 inhibition elicits cancer cell killing through a p53-dependent mechanism. Sci Rep.2020 Mar 24;10(1):5324.