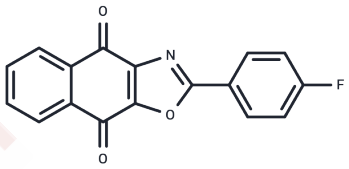
Data Sheet (Cat.No.T14852)

TargetMol

C527

Chemical Properties



CAS No. : 192718-06-2

Formula: C17H8FNO3

Molecular Weight: 293.25

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	C527 is a potent pan DUB enzyme inhibitor with a high affinity for the USP1/UAF1 complex (IC50=0.88 μM).
Targets(IC50)	DUB
In vitro	C527 inhibits the DUB activity of the USP12/USP46 complex and other DUB enzymes in vitro. However, the IC50 of C527 for these DUB enzymes was higher in comparison with USP1/UAF1 complex. C527 has considerably less inhibitory effect on UCH-L1 and UCH-L3, a different subclass of DUB enzymes. C527 treatments causes an increase in the levels of Ub-FANCD2 and Ub-FANCI and it also lead to an increase in ubiquitinated forms of FANCD2 and FANCI, cause a decrease in homologous recombination activity, and sensitize cells to DNA damaging agents[1]. Pretreatment of USP1/UAF1 with C527 resulted in inhibition of its enzyme activity with an IC50 of 0.88±0.03 μM. Pretreatment of cells with the C527 causes an enhancement in the cytoxicity of mitomycin C and camptothecin.

Solubility Information

Solubility	DMSO: 1.85 mg/mL (6.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4101 mL	17.0503 mL	34.1006 mL
5 mM	0.682 mL	3.4101 mL	6.8201 mL
10 mM	0.341 mL	1.705 mL	3.4101 mL
50 mM	0.0682 mL	0.341 mL	0.682 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

Mistry H, et al. Small-molecule inhibitors of USP1 target ID1 degradation in leukemic cells. Mol Cancer Ther. 2013 Dec;12(12):2651-62.