

OTUB2-IN-1

Chemical Properties

CAS No. :

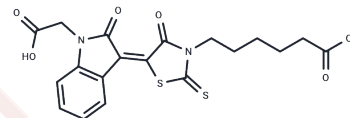
Formula: C₁₉H₁₈N₂O₆S₂

Molecular Weight: 434.49

Store at low temperature

Storage: Store at -20°C

Actual storage temperature shall be subject to the COA.



Biological Description

Description	OTUB2-IN-1 is a selective OTUB2 inhibitor with anti-tumor activity that inhibits the expression of PD-L1 protein in tumor cells and inhibits tumor growth, and can be used to study skin cancer and non-small cell lung cancer (NSCLC).
Targets(IC50)	DUB
In vitro	Incubation of recombinant GST-OTUB2 protein with OTUB2-IN-1 resulted in significant inhibition of Ub-R110 cleavage by GST-OTUB2 in a dose-dependent manner, suggesting that OTUB2-IN-1 can inhibit the hydrolytic activity of recombinant GST-OTUB2 protein toward its substrate Ub-R110 in vitro. [1]
In vivo	Evaluated the therapeutic potential of OTUB2-IN-1 using a mouse LL/2 tumor model. OTUB2-IN-1 treatment significantly suppressed tumor growth and prolonged mouse survival, and no obvious toxicity was observed. To clarify the effect of OTUB2-IN-1 in tumor inhibition through regulation of PD-L1 in vivo, LL/2 cells with stably expressed PD-L1 and control plasmids were used to establish a tumor model. As expected, in comparison to the control group, overexpressed PD-L1 resulted in a substantial increase in tumor growth, whereas OTUB2-IN-1 significantly reduced the PD-L1-overexpressing tumor growth. [1]

Solubility Information

Solubility	DMSO: 40 mg/mL (92.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3015 mL	11.5077 mL	23.0155 mL
5 mM	0.4603 mL	2.3015 mL	4.6031 mL
10 mM	0.2302 mL	1.1508 mL	2.3015 mL
50 mM	0.046 mL	0.2302 mL	0.4603 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

Ren W, et al. Pharmaceutical targeting of OTUB2 sensitizes tumors to cytotoxic T cells via degradation of PD-LNAt Commun. 2024 Jan 2;15(1):9.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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