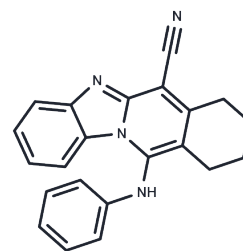


USP22-IN-1

Chemical Properties

CAS No. : 309735-96-4
 Formula: C₂₂H₁₈N₄
 Molecular Weight: 338.41
 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	USP22-IN-1 is a ubiquitin-specific peptidase 22 (USP22) inhibitor that can be used to treat proliferative diseases or cancer.
Targets(IC50)	DUB
In vitro	USP22-IN-1 (USP22i-S02), as a USP22-specific inhibitor. (i)USP22i-S02 (10 ug/mL) inhibits Treg suppressive functions.[2]
In vivo	USP22-IN-1 (USP22i-S02) (20 mg/kg; i.p.; twice a day for 5 days) inhibits tumor cell expression of PD-L1, both of which enhance antitumor immune response. In addition, USP22i-S02 can directly inhibit tumor cell proliferation through USP22 suppression.[2]

Solubility Information

Solubility	DMSO: 4.72 mg/mL (13.95 mM),Sonication is recommended. Ethanol: 2.7 mg/mL (7.98 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: 0.47 mg/mL (1.39 mM),Suspension. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.955 mL	14.775 mL	29.550 mL
5 mM	0.591 mL	2.955 mL	5.910 mL
10 mM	0.2955 mL	1.4775 mL	2.955 mL
50 mM	0.0591 mL	0.2955 mL	0.591 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

Montauti E, et al. A deubiquitination module essential for Treg fitness in the tumor microenvironment. *Sci Adv.* 2022;8(47):eabo4116.

Fang deyu, et al. Inhibitors of ubiquitin specific peptidase 22 (USP22) for treatment of proliferative diseases or cancer. WO2022226402 A1.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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