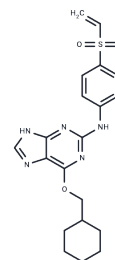


NU6300

Chemical Properties

CAS No. : 2070015-09-5
Formula: C₂₀H₂₃N₅O₃S
Molecular Weight: 413.49
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	NU6300 is an inhibitor of the first covalent ATP-competitive CDK2.
Targets(IC50)	CDK,NOD
In vitro	NU6300 blocks the inhibitor binding site. The effect was time-dependent and relatively slow, with less than 50% reduction of the apparent binding capacity in 20 hr. NU6300 is a covalent CDK2 inhibitor that illustrates the potential of using vinyl sulfones to mediate irreversible inhibition.

Solubility Information

Solubility	DMSO: 80 mg/mL (193.48 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: 3.3 mg/mL (7.98 mM),Sonication is recommended. <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	2.4184 mL	12.0922 mL	24.1844 mL
5 mM	0.4837 mL	2.4184 mL	4.8369 mL
10 mM	0.2418 mL	1.2092 mL	2.4184 mL
50 mM	0.0484 mL	0.2418 mL	0.4837 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

Jiang X, et al. NU6300 covalently reacts with cysteine-191 of gasdermin D to block its cleavage and palmitoylation. *Sci Adv.* 2024 Feb 9;10(6):eadi9284.

Jiang L, Yu Y, Li Z, et al. BMS-265246, a Cyclin-Dependent Kinase Inhibitor, Inhibits the Infection of Herpes Simplex Virus Type 1. *Viruses.* 2023, 15(8): 1642.

Anscombe E, et al. Identification and Characterization of an Irreversible Inhibitor of CDK2. *Chem Biol.* 2015 Sep 17; 22(9):1159-64.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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