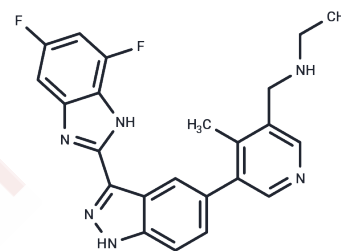


AG-024322

Chemical Properties

CAS No. :	837364-57-5
Formula:	C ₂₃ H ₂₀ F ₂ N ₆
Molecular Weight:	418.44
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	AG-024322 is a potent ATP-competitive inhibitor targeting pan-CDK, effectively inhibiting cell cycle kinases CDK1, CDK2, and CDK4 with Ki values in the 1-3 nM range (1-3 nM).
Targets(IC50)	Apoptosis,CDK,COX
In vitro	Biotin-PEG4-Picolyl azide can utilize the ubiquitin-proteasome system to achieve selective elimination of target proteins through E3 ubiquitin ligase-mediated specific degradation of target proteins [1].
In vivo	In male and female cynomolgus monkeys, AG-024322 (at doses of 2, 6, and 10 mg/kg; intravenous infusion; over 5 days) resulted in dose-dependent pancytopenic bone marrow hypocellularity and lymphoid depletion in lymph nodes, spleen, and/or thymus at doses greater than 6 mg/kg[1].

Solubility Information

Solubility	DMSO: 80 mg/mL (191.19 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 (7.89 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	2.3898 mL	11.9491 mL	23.8983 mL
5 mM	0.478 mL	2.3898 mL	4.7797 mL
10 mM	0.239 mL	1.1949 mL	2.3898 mL
50 mM	0.0478 mL	0.239 mL	0.478 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

- Brown AP, et al. Toxicity and toxicokinetics of the cyclin-dependent kinase inhibitor AG-024322 in cynomolgus monkeys following intravenous infusion. *Cancer Chemother Pharmacol.* 2008 Nov;62(6):1091-101.
- Jessen BA, et al. Peripheral white blood cell toxicity induced by broad spectrum cyclin-dependent kinase inhibitors. *J Appl Toxicol.* 2007 Mar-Apr;27(2):133-42.
- Cathy C. Zhang, et al. AG-024322 is a multi-targeted CDK inhibitor with potent antitumor activity in vivo. *Cellular and Molecular Biology 53: Cell Cycle Control and Cancer 1*

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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