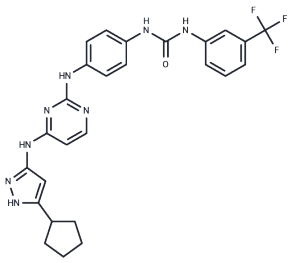
Data Sheet (Cat.No.T50110)

TargetMol

CD532

Chemical Properties



CAS No. : 1639009-81-6

Formula: C26H25F3N8O

Molecular Weight: 522.52

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	CD532 is A highly potent Aurora A kinase inhibitor with an IC50 value of 45 nM. CD532 can block Aurora A kinase activity, drive MYCN degradation, and can directly interact with AURKA and induce global conformational transformation. CD532 can be used to study cancer.
Targets(IC50)	Aurora Kinase
In vitro	In MYCN-amplified neuroblastoma cell lines SK-N-BE(2) and Kelly, CD532 (1-10000 nM; 72 h) exhibits cytotoxicity with EC50s of 223.2 nM and 146.7 nM, respectively[1]. In SK-N-BE(2) cells, CD532 (0.1-1 μM; 24 h) causes a dose-dependent loss of MYCN protein[1]. Furthermore, CD532 (1 μM; 6 h) prevents S-phase entry in SK-N-BE(2) cells[1].
In vivo	In mice with subcutaneous sonic hedgehog (SHH)-subtype medulloblastoma, CD532 (25 mg/kg; i.p. twice weekly for 3 weeks) decreases the tumor volume and increases survival[1]. In MYCN-amplified neuroblastoma xenografts, CD532 (60 mg/kg; i.p. for 2 days) reduces the level of MYCN protein[1]. CD532 (20 mg/kg; i.p.) in mice exhibits a serum half-life of ~1.5 hours and an AUC0-24 of 27 μM•h[1].

Solubility Information

Solubility	DMSO: 150 mg/mL (287.07 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: 5 mg/mL (9.57 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9138 mL	9.569 mL	19.138 mL
5 mM	0.3828 mL	1.9138 mL	3.8276 mL
10 mM	0.1914 mL	0.9569 mL	1.9138 mL
50 mM	0.0383 mL	0.1914 mL	0.3828 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

Gustafson WC, et, al. Drugging MYCN through an allosteric transition in Aurora kinase A. Cancer Cell. 2014 Sep 8;26 (3):414-427.

Lee JK, et, al. N-Myc Drives Neuroendocrine Prostate Cancer Initiated from Human Prostate Epithelial Cells. Cancer Cell. 2016 Apr 11;29(4):536-547.