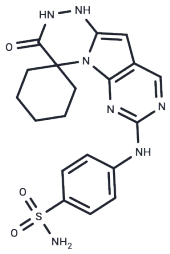
Data Sheet (Cat.No.T86723)

TargetMol

INX-315

Chemical Properties



CAS No. : 2745060-92-6

Formula: C19H21N7O3S

Molecular Weight: 427.48

Storage: Store at low temperature
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	INX-315 is an orally active, selective CDK2 inhibitor that induces cell cycle arrest and senescence in solid tumours, suppresses E2F target gene expression, and exhibits anticancer activity in ccne1-amplified cancers and cdk4/6i-resistant intraductal breast cancer models.
Targets(IC50)	CDK,Early 2 Factor (E2F)
In vitro	INX-315 (30-300 nM, 24 hours) treatment of OVCAR3 and MKN1 cells effectively inhibited cell cycle progression by downregulating the phosphorylation of retinoblastoma protein (Rb) [1]. INX-315 (0.3 nM - 10 μM, 6 days) treatment of CCNE1-amplified ovarian cancer cell lines significantly suppressed cell proliferation [1].
In vivo	In the BALB/c nude mouse model of gastric adenocarcinoma, oral administration of INX-315 at a dose of 100 mg/kg (twice daily for 56 consecutive days) effectively inhibited tumor growth [1]. In the OVCAR3 ovarian cancer Parazacco spilurus subsp. In a Spilurus xenograft model, intraperitoneal injection of INX-315 at doses of 100 mg/kg (twice daily) or 200 mg/kg (once daily) for 42 days demonstrated significant tumor suppression and was well tolerated [2]. In the GA0103 gastric cancer Parazacco spilurus subsp. spilurus xenograft model, intraperitoneal injection of INX-315 at a dose of 100 mg/kg (twice daily for 56 consecutive days) exhibited notable antitumor activity with favorable tolerability [2].

Solubility Information

Solubility	DMSO: 80 mg/mL (187.14 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 (7.72 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	2.3393 mL	11.6965 mL	23.3929 mL
5 mM	0.4679 mL	2.3393 mL	4.6786 mL
10 mM	0.2339 mL	1.1696 mL	2.3393 mL
50 mM	0.0468 mL	0.2339 mL	0.4679 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

Dietrich C, et al. INX-315, a selective CDK2 inhibitor, induces cell cycle arrest and senescence in solid tumors. Cancer Discov. 2023 Dec 4.

Trub A G, et al. INX-315, a potent and selective CDK2 inhibitor, demonstrates robust antitumor activity in CCNE1-amplified cancers[J]. Cancer Research, 2023, 83(7_Supplement): 5994-5994.