CDK2-IN-4

Cat. No.: HY-117535

CAS No.: 2079895-42-2

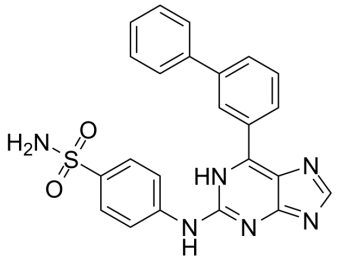
Molecular Formula: $C_{23}H_{18}N_6O_2S$

Molecular Weight: 442.49

Target: CDK

Pathway: Cell Cycle/DNA Damage

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20.83 mg/mL (47.07 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2599 mL	11.2997 mL	22.5994 mL
	5 mM	0.4520 mL	2.2599 mL	4.5199 mL
	10 mM	0.2260 mL	1.1300 mL	2.2599 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (4.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CDK2-IN-4 (compound 73) is a potent and selective CDK2 inhibitor with an IC_{50} of 44 nM for CDK2/cyclin A, shows 2,000-fold selectivity over CDK1/cyclin B (IC_{50}=86 uM)[1].

IC_{50} & Target		
	cdk2/cyclin A	Cdk1/cyclin B
	44 nM (IC_{50})	86 μM (IC_{50})

In Vitro

CDK2-IN-4 (compound 73) demonstrates appreciable nanomolar potency versus CDK2 in isolated kinase assays, the maximal concentration tested in cellular assays (30 μM) had no or limited effects on the growth of cells[1]
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- mSystems. 2023 Nov 2:e0051023.
- Freie Universität Berlin. 2023 Nov 29.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Coxon CR, et al. Cyclin-Dependent Kinase (CDK) Inhibitors: Structure-Activity Relationships and Insights into the CDK-2 Selectivity of 6-Substituted 2-Arylaminopurines. J Med Chem. 2017 Mar 9;60(5):1746-1767.

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