Aurora kinase inhibitor-2

Cat. No.: HY-112355

CAS No.: 331770-21-9

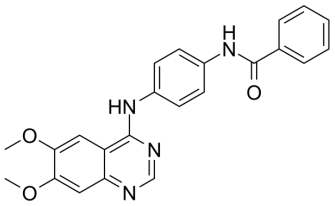
Molecular Formula: $C_{23}H_{20}N_4O_3$

Molecular Weight: 400.43

Target: Aurora Kinase

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage: 4°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (249.73 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4973 mL	12.4866 mL	24.9732 mL
	5 mM	0.4995 mL	2.4973 mL	4.9946 mL
	10 mM	0.2497 mL	1.2487 mL	2.4973 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.24 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.24 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.19 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Aurora kinase inhibitor-2 is a selective and ATP-competitive Aurora kinase inhibitor with IC_{50}s of 310 nM and 240 nM for Aurora A and Aurora B, respectively[1].

IC_{50} & Target

Aurora A	Aurora B
310 nM (IC_{50})	240 nM (IC_{50})

In Vitro

Aurora kinase inhibitor-2 (Compound 1) shows excellent levels of Aurora A enzyme inhibition and is also effective in an MCF7 cellular anti-proliferative assay (IC_{50} value of 1.25 μM)[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Andrew A Mortlock, et al. Progress in the development of selective inhibitors of aurora kinases. Curr Top Med Chem. 2005;5(8):807-21.

[2]. Nicola M Heron, et al. SAR and inhibitor complex structure determination of a novel class of potent and specific Aurora kinase inhibitors. Bioorg Med Chem Lett. 2006 Mar 1;16(5):1320-3.

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