DA 3003-2

Cat. No.: HY-118798

CAS No.: 383907-47-9

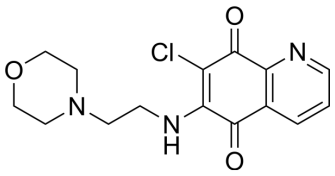
Molecular Formula: $C_{15}H_{16}ClN_3O_3$

Molecular Weight: 321.76

Target: Phosphatase

Pathway: Metabolic Enzyme/Protease

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 : 150 mg/mL (466.19 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1079 mL	15.5395 mL	31.0791 mL
	5 mM	0.6216 mL	3.1079 mL	6.2158 mL
	10 mM	0.3108 mL	1.5540 mL	3.1079 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: ≥ 3.75 mg/mL (11.65 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

DA 3003-2 is a potent and selectively Cdc25 inhibitor. DA 3003-2 shows antiproliferative activity. DA 3003-2 induces cell cycle arrest at the G2/M phase and increases the expression of P-tyr^{15} Cdc2. DA 3003-2 has the potential for the research of prostate cancer[1].

In Vitro

DA 3003-2 (0.3-30 μM; 48 h) shows antiproliferative activity with an IC_{50} value of 5 μM in PC-3 cells[1].
DA 3003-2 (5, 10 μM; 24, 1 h) induces cell cycle arrest at G2/M phase and increases the expression of P-tyr^{15} Cdc2 in PC-3 cells [1].

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

Cell Cytotoxicity Assay[1]

Cell Line:	PC-3 cells
Concentration:	0.3-30 μM

Incubation Time:	48 h
Result:	Showed antiproliferative efficacy in a dose-dependent manner with an IC_{50} value of 5 μM.

Cell Cycle Analysis[1]

Cell Line:	PC-3 cells
Concentration:	5, 10 μM
Incubation Time:	24 h
Result:	Induced cell cycle arrest at G2/M phase.

Western Blot Analysis[1]

Cell Line:	PC-3 cells
Concentration:	5, 10 μM
Incubation Time:	1 h
Result:	Increased the expression of P-tyr^{15} Cdc2.

REFERENCES

[1]. Nemoto K. G2/M accumulation in prostate cancer cell line PC-3 is induced by Cdc25 inhibitor 7-chloro-6-(2-morpholin-4-ylethylamino) quinoline-5, 8-dione (DA 3003-2). Exp Ther Med. 2010 Jul;1(4):647-650.

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