Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

XL413

Catalog No: tcsc1956

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1169558-38-6

Formula:
$C_{14}H_{12}ClN_3O_2$

Pathway:
Cell Cycle/DNA Damage

Target:
CDK

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
289.72

Product Description

XL413 is a potent, selective and ATP competitive inhibitor of **Cdc7**, with an **IC_{50}** of 3.4 nM, and also shows potent effect with **IC_{50}**s

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of 215, 42 nM on CK2, PIM1, respectively, and an **EC_{50}** of 118 nM on pMCM.

IC50 & Target: IC50: 3.4 nM (Cdc7), 42 nM (PIM1), 215 nM (CK2)[1]

EC50: 118 nM (pMCM)[1]

In Vitro: XL413 inhibits the cell proliferation (IC_{50} = 2685 nM), decreases cell viability (IC_{50} = 2142 nM) and elicits the caspase 3/7 activity (EC_{50} = 2288 nM) in Colo-205 cells. XL413 also significantly inhibits the anchorage-independent growth of colo-205 in soft agar (IC_{50} = 715 nM)[1]. XL413 shows cytotoxic effects on tumors, with IC_{50} of 22.9 μM in HCC1954 cells and 1.1 μM in Colo-205 cells. XL413 induces apoptosis in the Colo-205 cells, but not in HCC1954 cells. XL413 is effective DDK inhibitors in vitro, with IC_{50} of 22.7 nM. XL413 is defective in inhibiting DDK-dependent Mcm2 phosphorylation in HCC1954 cells but is effective in Colo-205 cells[2].

In Vivo: XL413 (100 mg/kg, p.o.) shows excellent plasma exposures in mice and possesses good PK properties. XL413 (10, 30, or 100 mg/kg, p.o.) is well tolerated at all the doses, with no significant body weight loss[1].