

# 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<sub>50</sub>** of 3.4 nM, and also shows potent effect with **IC<sub>50</sub>s**

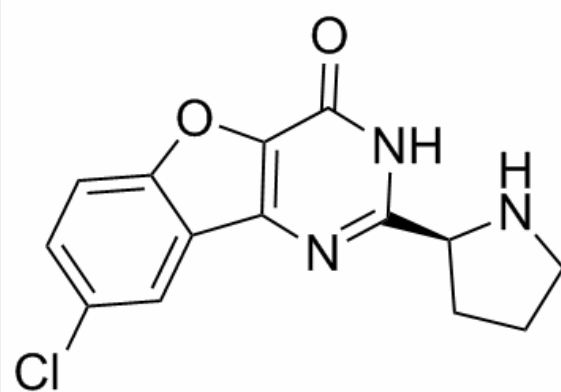
of 215, 42 nM on CK2, PIM1, respectively, and an **EC<sub>50</sub>** of 118 nM on pMCM.

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

EC50: 118 nM (pMCM)<sup>[1]</sup>

**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)<sup>[1]</sup>. XL413 shows cytotoxic effects on tumors, with  $IC_{50}$  of 22.9  $\mu$ M in HCC1954 cells and 1.1  $\mu$ M 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<sup>[2]</sup>.

**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<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!