

XL413 (hydrochloride)

Catalog No: tcsc1957



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1169562-71-3

Formula:

$C_{14}H_{12}ClN_3O_2 \cdot xHCl$

Pathway:

Cell Cycle/DNA Damage

Target:

CDK

Purity / Grade:

>98%

Solubility:

DMSO : 3.4 mg/mL (Need ultrasonic and warming)

Observed Molecular Weight:

1000

Product Description

XL413 hydrochloride is a potent, selective and ATP competitive inhibitor of **Cdc7**, with an **IC₅₀** of 3.4 nM, and also shows potent

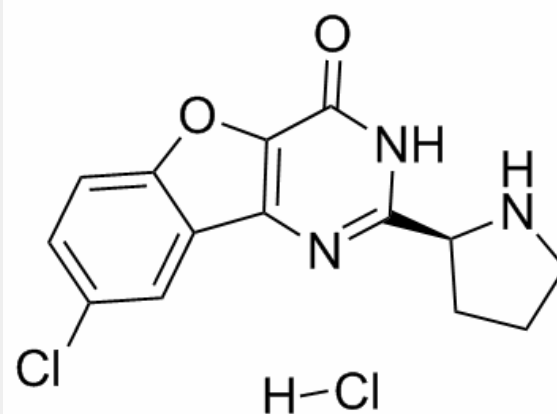
effect with **IC₅₀**s of 215, 42 nM on CK2, PIM1, respectively, and an **EC₅₀** of 118 nM on pMCM.

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 μ M in HCC1954 cells and 1.1 μ 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^[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].



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