

XL413 xHCl

## Chemical Properties

CAS No. : 1169562-71-3

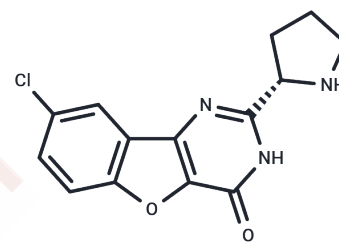
Formula: C<sub>14</sub>H<sub>12</sub>ClN<sub>3</sub>O<sub>2</sub>. xHCl

Molecular Weight:

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	XL413 HCl is an ATP-competitive Cdc7 inhibitor (IC <sub>50</sub> : 3.4 nM) that is potent and selective. XL413 HCl inhibited CK2 and PIM1 with IC <sub>50</sub> values of 215 and 42 nM, respectively. XL413 HCl showed an EC <sub>50</sub> value of 118 against pMCM.
Targets(IC <sub>50</sub> )	Casein Kinase, CDK, Pim
In vitro	XL413 HCl shows cytotoxic effects on tumors, with IC <sub>50</sub> of 22.9 μM in HCC1954 cells and 1.1 μM in Colo-205 cells.[2] BMS-863233 HCl is an effective DDK inhibitor in vitro, with an IC <sub>50</sub> of 22.7 nM.[2] XL413 HCl is defective in inhibiting DDK-dependent Mcm2 phosphorylation in HCC1954 cells but is effective in Colo-205 cells.[2]
In vivo	XL413 HCl (10, 30, or 100 mg/kg; p.o.; mice) is well tolerated at all doses, with no significant body weight loss.[1] XL413 HCl (100 mg/kg; p.o.; mice) show excellent plasma exposures in mice and possesses good PK properties.[1]

## Solubility Information

Solubility	H <sub>2</sub> O: 9.00 mg/mL, Sonication is recommended. DMSO: 3.10 mg/mL, Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Reference

Koltun ES, et al. Discovery of XL413, a potent and selective CDC7 inhibitor [published correction appears in Bioorg Med Chem Lett. 2012 Aug 1;22(15):5157]. Bioorg Med Chem Lett. 2012;22(11):3727-3731.

Sasi NK, et al. The potent Cdc7-Dbf4 (DDK) kinase inhibitor XL413 has limited activity in many cancer cell lines and discovery of potential new DDK inhibitor scaffolds. PLoS One. 2014;9(11):e113300.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481