产品名称：**CNX-774**
产品别名：**CNX-774**

生物活性：

Description

CNX-774 is a potent, selective, and orally available small molecule inhibitor of Btk (IC50< 1 nM) that forms a ligand-directed covalent bond with Cys-481, a non-conserved amino acid within the active site of the enzyme. IC50 Value: <1 nM [1] Target: Btk Kinase In biochemical assays, CNX-774 has demonstrated potent inhibition of Btk with an IC50 of <1nM in a continuous-read assay. The covalent bonding of CNX-774 to Btk was confirmed by incubating recombinant Btk protein with a 10-fold molar excess of CNX-774 for 1 hour at room temperature and analysis by MALDI-TOF MS. A shift of protein mass corresponding to the molecular weight of CNX-774 confirmed the covalent bonding of CNX-774 to Btk. Digestion of the covalently bonded Btk with pepsin followed by MSMS analysis established the bonding of CNX-774 to Cys-481. Cellular potency as well as prolonged duration of action of CNX-774 was demonstrated in Ramos cells by using a biotinylated covalent probe that targets the same Cysteine residue as CNX-774. CNX-774 was found to be >90% extractable after 2 hrs of incubation in both rat and human whole blood. These results demonstrate that CNX-774 has potent inhibitory activity towards the intended target, Btk, while achieving remarkable specificity in a variety of assays designed to assess off-target reactivity towards abundant cellular thiols and blood proteins.

Solvent&Solubility

In Vitro:

DMSO : ≥ 45 mg/mL (90.09 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.0020 mL	10.0100 mL	20.0200 mL
5 mM	0.4004 mL	2.0020 mL	4.0040 mL
10 mM	0.2002 mL	1.0010 mL	2.0020 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References

[1]. Akinleye A, et al. Ibrutinib and novel BTK inhibitors in clinical development. J Hematol Oncol. 2013 Aug 19;6:59.

[2]. In Vitro Reactivity Assessment of Covalent Drugs Targeting Bruton's Tyrosine Kinase