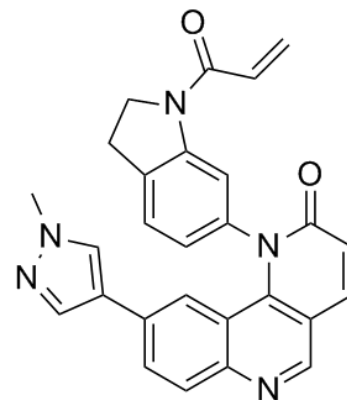


**Product Name** : QL-47  
**Cat. No.** : PC-46006  
**CAS No.** : 1469988-75-7  
**Molecular Formula** : C<sub>27</sub>H<sub>21</sub>N<sub>5</sub>O<sub>2</sub>  
**Molecular Weight** : 447.4879  
**Target** : BTK  
**Solubility** : DMSO: < 9.4 mg/mL



### Biological Activity

QL-47 is a potent, selective, and irreversible **BTK** inhibitor with IC<sub>50</sub> of 7 nM. QL-47 inhibits BTK kinase activity with an IC<sub>50</sub> of 7 nM, inhibits autophosphorylation of BTK on Tyr223 in cells with an EC<sub>50</sub> of 475 nM, and inhibits phosphorylation of a downstream effector PLCγ2 (Tyr759) with an EC<sub>50</sub> of 318 nM. QL-47 induces a G1 cell cycle arrest that is associated with pronounced degradation of BTK protein in Ramos cells. QL-47 inhibits the proliferation of B-cell lymphoma cancer cell lines at submicromolar concentrations.

### References

- Wu H, et al. ACS Chem Biol. 2014 May 16;9(5):1086-91.  
Liang Y, et al. ACS Med Chem Lett. 2017 Feb 3;8(3):344-349.  
Wang B, et al. Eur J Med Chem. 2017 Sep 8;137:545-557.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com