

## Product Data Sheet

Product Name: QL47  
Cat. No.: GC37048

### Chemical Properties

Cas. No. 1469988-75-7

SMILES O=C1N(C2=C(C=C1)C=NC3=CC=C(C4=CN(C)N=C4)C=C32)C5=CC=C(CC6)C(N6C(C=C)=O)=C5

Formula  $C_{27}H_{21}N_5O_2$  M.Wt 447.49

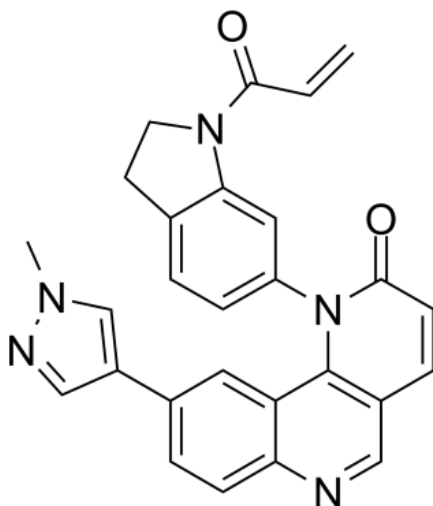
Solubility Water: < 0.1 mg/mL (insoluble);  
DMSO: < 1 mg/mL (insoluble or slightly soluble)

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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### Background

QL47 is a potent, selective and irreversible BTK kinase inhibitor with IC<sub>50</sub> of 7 nM. IC<sub>50</sub> Value: 7 nM  
Target: Btk in vitro: QL47 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. In Ramos cells QL47 induces a G1 cell cycle arrest which is associated with pronounced degradation of BTK protein. QL47 inhibits the proliferation of B-cell lymphoma cancer cell lines at submicromolar concentrations [1]. in vivo: N/A

[1]. Wu, H., et al., Discovery of a Potent, Covalent BTK Inhibitor for B-Cell Lymphoma. ACS Chem Biol, 2014.

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