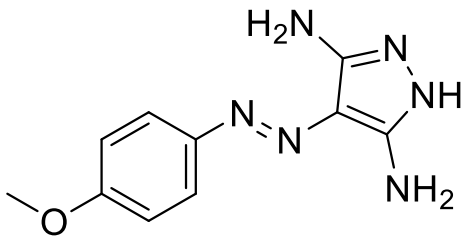
Product data sheet

MedKoo Cat#: 565003 Name: QLT0267 CAS: 6975-75-3 Chemical Formula: $C_{10}H_{12}N_6O$ Exact Mass: 232.1073 Molecular Weight: 232.25	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
QLT0267 is an orally active integrin linked kinase (ILK) inhibitor with antitumor activity.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	46	198.07
Ethanol	2	8.61

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.31	21.53	43.06
5 mM	0.86	4.31	8.61
10 mM	0.43	2.15	4.31
50 mM	0.09	0.43	0.86

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Kalra J, Warburton C, Fang K, Edwards L, Daynard T, Waterhouse D, Dragowska W, Sutherland BW, Dedhar S, Gelmon K, Bally M. QLT0267, a small molecule inhibitor targeting integrin-linked kinase (ILK), and docetaxel can combine to produce synergistic interactions linked to enhanced cytotoxicity, reductions in P-AKT levels, altered F-actin architecture and improved treatment outcomes in an orthotopic breast cancer model. Breast Cancer Res. 2009;11(3):R25. doi: 10.1186/bcr2252. Epub 2009 May 1. PMID: 19409087; PMCID: PMC2716491.
2. Edwards LA, Woo J, Huxham LA, Verreault M, Dragowska WH, Chiu G, Rajput A, Kyle AH, Kalra J, Yapp D, Yan H, Minchinton AI, Huntsman D, Daynard T, Waterhouse DN, Thiessen B, Dedhar S, Bally MB. Suppression of VEGF secretion and changes in glioblastoma multiforme microenvironment by inhibition of integrin-linked kinase (ILK). Mol Cancer Ther. 2008 Jan;7(1):59-70. doi: 10.1158/1535-7163.MCT-07-0329. PMID: 18202010.

In vivo study

1. Chen T, Zheng LY, Xiao W, Gui D, Wang X, Wang N. Emodin ameliorates high glucose induced-podocyte epithelial-mesenchymal transition in-vitro and in-vivo. Cell Physiol Biochem. 2015;35(4):1425-36. doi: 10.1159/000373963. Epub 2015 Mar 12. PMID: 25791065.
2. Kalra J, Dragowska WH, Bally MB. Using Pharmacokinetic Profiles and Digital Quantification of Stained Tissue Microarrays as a Medium-Throughput, Quantitative Method for Measuring the Kinetics of Early Signaling Changes

Product data sheet

Following Integrin-Linked Kinase Inhibition in an In Vivo Model of Cancer. J Histochem Cytochem. 2015 Sep;63(9):691-709. doi: 10.1369/0022155415587978. Epub 2015 May 4. PMID: 25940338; PMCID: PMC4804727.

7. Bioactivity

Biological target:

ILK-IN-3 is an orally active integrin linked kinase (ILK) inhibitor. ILK-IN-3 improves the anticancer efficacy of Docetaxel (HY-B0011) in orthotopic LCC6 model.

In vitro activity

Mice treated with QLT0267 exhibited significant delays in tumor growth. In situ analysis of U87MG tumor cell proliferation from QLT0267-treated mice was significantly lower relative to untreated mice. VEGF and HIF-1alpha expression decreased in QLT0267-treated tumors as did the percentage of blood vessel mass and numbers of Hoechst 33342 perfused tumor vessels compared with control tumors.

Reference: Mol Cancer Ther. 2008 Jan;7(1):59-70. https://pubmed.ncbi.nlm.nih.gov/18202010/

In vivo activity

Using medium-throughput IHC quantitation, this study showed that ILK targeting by QLT0267 in vivo influences tumor physiology through transient changes in pathways involving AKT, GSK-3 and TWIST accompanied by the translocation of the pro-apoptotic protein BAD and an increase in Caspase-3 activity.

Reference: J Histochem Cytochem. 2015 Sep;63(9):691-709. https://pubmed.ncbi.nlm.nih.gov/25940338/