

Product data sheet



MedKoo Cat#: 525920 Name: LP117 CAS: 1056468-55-3 Chemical Formula: C ₂₁ H ₂₃ ClN ₄ O ₂ S Exact Mass: 430.123 Molecular Weight: 430.951	
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:

LP117 is a novel drug-specific modulator of ABCB1-mediated drug transport.

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
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.32 mL	11.60 mL	23.20 mL
5 mM	0.46 mL	2.32 mL	4.64 mL
10 mM	0.23 mL	1.16 mL	2.32 mL
50 mM	0.05 mL	0.23 mL	0.46 mL

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. Michaelis M, Rothweiler F, Wurglics M, Aniceto N, Dittrich M, Zettl H, Wiese M, Wass M, Ghafourian T, Schubert-Zsilavecz M, Cinatl J. Substrate-specific effects of pirinixic acid derivatives on ABCB1-mediated drug transport. *Oncotarget*. 2016 Mar 8;7(10):11664-76. doi: 10.18632/oncotarget.7345. PMID: 26887049; PMCID: PMC4905501.

2. Werz O, Greiner C, Koeberle A, Hoernig C, George S, Popescu L, Syha I, Schubert-Zsilavecz M, Steinhilber D. Novel and potent inhibitors of 5-lipoxygenase product synthesis based on the structure of pirinixic acid. *J Med Chem*. 2008 Sep 11;51(17):5449-53. doi: 10.1021/jm800588x. Epub 2008 Aug 19. PMID: 18710209.

In vivo study

TBD

7. Bioactivity

Biological target:

LP117 is a novel and potent inhibitor of 5-Lipoxygenase (5-LO) product synthesis with an IC₅₀ of 1.1 μM.

In vitro activity

LP117, the compound that exerted the strongest effect on ABCB1, interfered in the investigated concentrations of up to 2 μM with the ABCB1-mediated transport of vincristine, vinorelbine, actinomycin D, paclitaxel, and calcein-AM but not of doxorubicin, rhodamine 123, or JC-1

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Reference: Oncotarget. 2016 Mar 8;7(10):11664-76. <https://pubmed.ncbi.nlm.nih.gov/26887049/>

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.