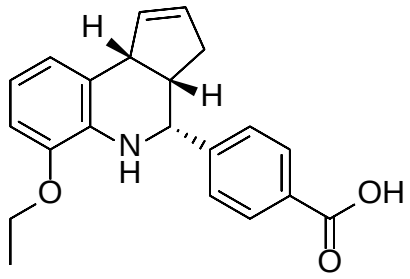
Product data sheet

MedKoo Cat#: 555829 Name: LIN28 inhibitor LI71 CAS: 1357248-83-9 Chemical Formula: $C_{21}H_{21}NO_3$ Exact Mass: 335.1521 Molecular Weight: 335.403	
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:
LIN28 inhibitor LI71 is a potent, cell-permeable inhibitor of LIN28 that abolishes LIN28-mediated oligouridylation. LIN28 inhibitor LI71 binds the cold shock domain to suppress LIN28's activity against let-7 in leukemia cells and embryonic stem cells.

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	100.0	298.15

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.98 mL	14.91 mL	29.82 mL
5 mM	0.60 mL	2.98 mL	5.96 mL
10 mM	0.30 mL	1.49 mL	2.98 mL
50 mM	0.06 mL	0.30 mL	0.60 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. Wang L, Rowe RG, Jaimes A, Yu C, Nam Y, Pearson DS, Zhang J, Xie X, Marion W, Heffron GJ, Daley GQ, Sliz P. Small-Molecule Inhibitors Disrupt let-7 Oligouridylation and Release the Selective Blockade of let-7 Processing by LIN28. Cell Rep. 2018 Jun 5;23(10):3091-3101. doi: 10.1016/j.celrep.2018.04.116. PMID: 29874593; PMCID: PMC6511231.

In vivo study

TBD

7. Bioactivity
Biological target:

LIN28 inhibitor LI71 is a potent and cell-permeable LIN28 inhibitor, which abolishes LIN28-mediated oligouridylation with an IC_{50} of 7 uM.

In vitro activity

LI71 could significantly reduce the relative Renilla luciferase activity in cells expressing LIN28A and LIN28B at 50–100 μM (Figures 6B and 6C). Together, these results demonstrate that, consistent with in vitro data, LI71 inhibits LIN28's activity on let-7 micro-RNAs in LIN28-dependent cancer and embryonic stem cells.

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Reference: Cell Rep. 2018 Jun 5;23(10):3091-3101. https://pubmed.ncbi.nlm.nih.gov/29874593/

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.