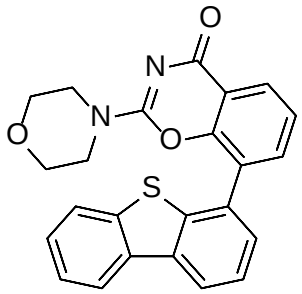
Product data sheet

MedKoo Cat#: 112158 Name: LTURM 34 CAS: 1879887-96-3 Chemical Formula: $C_{24}H_{18}N_2O_3S$ Exact Mass: 414.1038 Molecular Weight: 414.479	
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:
LTURM 34 is an inhibitor of DNA protein kinase and inhibits the growth of HOP-92, SNB-75, and UO-31 cancer 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	73.5	177.33
Ethanol	4.0	9.65

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.41 mL	12.06 mL	24.13 mL
5 mM	0.48 mL	2.41 mL	4.83 mL
10 mM	0.24 mL	1.21 mL	2.41 mL
50 mM	0.05 mL	0.24 mL	0.48 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. Morrison R, Al-Rawi JM, Jennings IG, Thompson PE, Angove MJ. Synthesis, structure elucidation, DNA-PK and PI3K and anti-cancer activity of 8- and 6-aryl-substituted-1-3-benzoxazines. Eur J Med Chem. 2016 Mar 3;110:326-39. doi: 10.1016/j.ejmech.2016.01.042. Epub 2016 Jan 27. PMID: 26854431.

In vivo study

TBD

7. Bioactivity
Biological target:

LTURM34 is a specific DNA-PK inhibitor (IC_{50}=34 nM).

In vitro activity

From this series, compound 20k (LTURM34) (dibenzo[b,d]thiophen-4-yl) (IC_{50} = 0.034 μM) was identified as a specific DNA-PK inhibitor, 170 fold more selective for DNA-PK activity compared to PI3K activity.

Reference: Eur J Med Chem. 2016 Mar 3;110:326-39. https://pubmed.ncbi.nlm.nih.gov/26854431/

Product data sheet

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.