

Product data sheet



MedKoo Cat#: 556005 Name: OUN10989 CAS#: 915410-98-9 (free base) Chemical Formula: C ₁₉ H ₁₅ N ₃ O Exact Mass: 301.1215 Molecular Weight: 301.349	
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:

OUN10989, an analogue compound of LP-261, is a Potent Antimitotic Agent. OUN10989 exhibited potent inhibition of mitosis at the G2/M stage. OUN10989 was first reported in J. Med. Chem 54(1), 179-200; 2011 (compound 7). This product has no formal name at the moment. For the convenience of communication, a temporary code name was therefore proposed according to MedKoo Chemical Nomenclature (see web page: <https://www.medkoo.com/page/naming>).

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

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.32 mL	16.59 mL	33.18 mL
5 mM	0.66 mL	3.32 mL	6.64 mL
10 mM	0.33 mL	1.66 mL	3.32 mL
50 mM	0.07 mL	0.33 mL	0.66 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

Shetty RS, Lee Y, Liu B, Husain A, Joseph RW, Lu Y, Nelson D, Mihelcic J, Chao W, Moffett KK, Schumacher A, Flubacher D, Stojanovic A, Bukhtiyarova M, Williams K, Lee KJ, Ochman AR, Saporito MS, Moore WR, Flynn GA, Dorsey BD, Springman EB, Fujimoto T, Kelly MJ. Synthesis and pharmacological evaluation of N-(3-(1H-indol-4-yl)-5-(2-methoxyisonicotinoyl)phenyl)methanesulfonamide (LP-261), a potent antimitotic agent. J Med Chem. 2011 Jan 13;54(1):179-200. doi: 10.1021/jm100659v. Epub 2010 Dec 2. PMID: 21126027.

In vivo study

TBD

7. Bioactivity

Biological target:

OUN10989, an analogue compound of LP-261, is a Potent Antimitotic Agent.

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In vitro activity

The synthesis and optimization of a series of orally bioavailable 1-(1H-indol-4-yl)-3,5-disubstituted benzene analogues as antimetabolic agents are described. A functionalized dibromobenzene intermediate was used as a key scaffold, which when modified by sequential Suzuki coupling and Buchwald-Hartwig amination provided a flexible entry to 1,3,5-trisubstituted phenyl compounds. A 1H-indol-4-yl moiety at the 1-position was determined to be a critical feature for optimal potency. The compounds have been shown to induce cell cycle arrest at the G2/M phase and demonstrate efficacy in both cell viability and cell proliferation assays. The primary site of action for these agents is revealed by their colchicine competitive inhibition of tubulin polymerization, and a computational model has been developed for the association of these compounds to tubulin. An optimized lead LP-261 significantly inhibits growth of a human non-small-cell lung tumor (NCI-H522) in a mouse xenograft model.

Reference: Shetty RS, Lee Y, Liu B, Husain A, Joseph RW, Lu Y, Nelson D, Mihelcic J, Chao W, Moffett KK, Schumacher A, Flubacher D, Stojanovic A, Bukhtiyarova M, Williams K, Lee KJ, Ochman AR, Saporito MS, Moore WR, Flynn GA, Dorsey BD, Springman EB, Fujimoto T, Kelly MJ. Synthesis and pharmacological evaluation of N-(3-(1H-indol-4-yl)-5-(2-methoxyisonicotinoyl)phenyl)methanesulfonamide (LP-261), a potent antimetabolic agent. *J Med Chem.* 2011 Jan 13;54(1):179-200. doi: 10.1021/jm100659v. Epub 2010 Dec 2. PMID: 21126027.

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.