

Product data sheet



MedKoo Cat#: 406429 Name: PYZD-4409 CAS: 423148-78-1 Chemical Formula: C ₁₄ H ₇ ClFN ₃ O ₅ Exact Mass: 351.0058 Molecular Weight: 351.67		
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:

PYZD-4409 is an inhibitor of ubiquitin-activating enzyme UBA1 (E1).

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	10	28.44

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.84 mL	14.22 mL	28.44 mL
5 mM	0.57 mL	2.84 mL	5.69 mL
10 mM	0.28 mL	1.42 mL	2.84 mL
50 mM	0.06 mL	0.28 mL	0.57 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

To be determined

In vivo study

- Xu GW, Ali M, Wood TE, Wong D, Maclean N, Wang X, Gronda M, Skrtic M, Li X, Hurren R, Mao X, Venkatesan M, Beheshti Zavareh R, Ketela T, Reed JC, Rose D, Moffat J, Batey RA, Dhe-Paganon S, Schimmer AD. The ubiquitin-activating enzyme E1 as a therapeutic target for the treatment of leukemia and multiple myeloma. Blood. 2010 Mar 18;115(11):2251-9. doi: 10.1182/blood-2009-07-231191. Epub 2010 Jan 14. PMID: 20075161; PMCID: PMC2920204.

7. Bioactivity

Biological target:

PYZD-4409 blocks the degradation of p53 and cyclin D3. PYZD-4409 inhibits NF-κB activation and induces cell death associated with ER stress.

In vitro activity

To be determined

In vivo activity

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In a mouse model of leukemia, intraperitoneal administration of PYZD-4409 decreased tumor weight and volume compared with control without untoward toxicity. PYZD-4409 induced cell death in malignant cells and preferentially inhibited the clonogenic growth of primary acute myeloid leukemia cells compared with normal hematopoietic cells.

Reference: Blood. 2010 Mar 18;115(11):2251-9. <https://pubmed.ncbi.nlm.nih.gov/20075161/>

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.