

Product data sheet



MedKoo Cat#: 561835 Name: PS432 CAS: 2083630-26-4 Chemical Formula: C ₂₅ H ₁₉ ClN ₂ O ₅ S Exact Mass: 494.0703 Molecular Weight: 494.94	
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:

PS432 is an allosteric inhibitor of atypical PKCs. It has been shown to target the PIF-pocket and significantly reduce tumor growth without side effects in mouse xenograft model.

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	202.04

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.02 mL	10.10 mL	20.20 mL
5 mM	0.40 mL	2.02 mL	4.04 mL
10 mM	0.20 mL	1.01 mL	2.02 mL
50 mM	0.04 mL	0.20 mL	0.40 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

- Arencibia JM, Fröhner W, Krupa M, Pastor-Flores D, Merker P, Oellerich T, Neimanis S, Schmithals C, Köberle V, Süß E, Zeuzem S, Stark H, Piiper A, Odadzic D, Schulze JO, Biondi RM. An Allosteric Inhibitor Scaffold Targeting the PIF-Pocket of Atypical Protein Kinase C Isoforms. ACS Chem Biol. 2017 Feb 17;12(2):564-573. doi: 10.1021/acscchembio.6b00827. Epub 2017 Jan 13. PMID: 28045490.
- Arentz G, Chataway T, Condina MR, Price TJ, Hoffmann P, Hardingham JE. Increased Phospho-Keratin 8 Isoforms in Colorectal Tumors Associated with EGFR Pathway Activation and Reduced Apoptosis. ISRN Mol Biol. 2012 Jan 31;2012:706545. doi: 10.5402/2012/706545. PMID: 27398237; PMCID: PMC4908239.

In vivo study

To be determined

7. Bioactivity

Biological target:

PS432 is a PKC inhibitor with IC₅₀s of 16.9 μM (PKC_ι) and 18.5 μM (PKC_ζ), respectively.

In vitro activity

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In this study, researchers utilized 2D difference gel electrophoresis to identify three isoforms of K8 significantly increased in colon tumors compared to normal tissue. There were elevated levels of PS24, PS432, and PS74 in tumors. Blocking EGFR signaling led to a substantial reduction in PS74 and PS432 levels, resulting in increased apoptosis in Caco2 cells.

Reference: ISRN Mol Biol. 2012 Jan 31;2012:706545. <https://pubmed.ncbi.nlm.nih.gov/27398237/>

In vivo activity

To be determined

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.