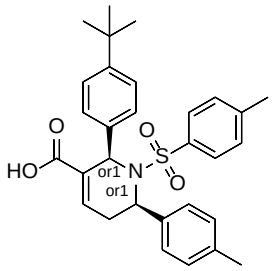
Product data sheet

MedKoo Cat#: 562552 Name: PAFAH1b2 CAS: 942285-55-4 Chemical Formula: $C_{30}H_{33}NO_4S$ Exact Mass: 503.213 Molecular Weight: 503.657	
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:
PAFAH1b2 is a selective inhibitor of platelet-activating factor acetylhydrolases 1b2 and 1b3. It acts by impairing cancer cell survival.

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
DMF	30.0	59.56
DMSO	30.0	59.56
DMSO:PBS (pH 7.2) (1:1)	0.5	0.99

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.99 mL	9.93 mL	19.85 mL
5 mM	0.40 mL	1.99 mL	3.97 mL
10 mM	0.20 mL	0.99 mL	1.99 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

Chang JW, Zuhl AM, Speers AE, Niessen S, Brown SJ, Mulvihill MM, Fan YC, Spicer TP, Southern M, Scampavia L, Fernandez-Vega V, Dix MM, Cameron MD, Hodder PS, Rosen H, Nomura DK, Kwon O, Hsu KL, Cravatt BF. Selective inhibitor of platelet-activating factor acetylhydrolases 1b2 and 1b3 that impairs cancer cell survival. ACS Chem Biol. 2015 Apr 17;10(4):925-32. doi: 10.1021/cb500893q. Epub 2015 Jan 20. PMID: 25602368; PMCID: PMC4402257.

In vivo study

TBD

7. Bioactivity
Biological target:

PAFAH1b2 is a selective inhibitor of platelet-activating factor acetylhydrolases 1b2 and 1b3.

In vitro activity

Here, this study reports a class of tetrahydropyridine reversible inhibitors of PAFAH1b2/3 discovered using a fluorescence polarization-activity-based protein profiling (fluopol-ABPP) screen of the NIH 300,000+ compound library. The most potent of these

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agents, P11, exhibited IC50 values of ~40 and 900 nM for PAFAH1b2 and 1b3, respectively. This study confirms selective inhibition of PAFAH1b2/3 in cancer cells by P11 using an ABPP protocol adapted for in situ analysis of reversible inhibitors and show that this compound impairs tumor cell survival, supporting a role for PAFAH1b2/3 in cancer.

Reference: ACS Chem Biol. 2015 Apr 17;10(4):925-32. https://pubmed.ncbi.nlm.nih.gov/25602368/

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.