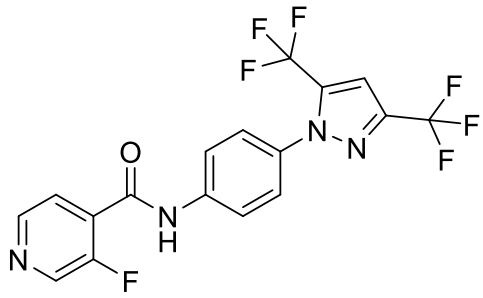
Product data sheet

MedKoo Cat#: 564055 Name: Pyr6 CAS#: 245747-08-4 Chemical Formula: $C_{17}H_9F_7N_4O$ Exact Mass: 418.0665 Molecular Weight: 418.27	
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:
Pyr6 is an inhibitor of Ca2+ entry, which displays higher potency to inhibit Ca2+ entry mediated by CRAC channel than by TRPC3.

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	20	47.82

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.39 mL	11.95 mL	23.91 mL
5 mM	0.48 mL	2.39 mL	4.78 mL
10 mM	0.24 mL	1.20 mL	2.39 mL
50 mM	0.05 mL	0.24 mL	0.48 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer to 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. Silva JDPD, Ballejo G. Pharmacological characterization of the calcium influx pathways involved in nitric oxide production by endothelial cells. Einstein (Sao Paulo). 2019 Jun 3;17(3):eAO4600. doi: 10.31744/einstein_journal/2019AO4600. PMID: 31166411; PMCID: PMC6550436.
2. Schleifer H, Doleschal B, Lichtenegger M, Oppenrieder R, Derler I, Frischauf I, Glasnov TN, Kappe CO, Romanin C, Groschner K. Novel pyrazole compounds for pharmacological discrimination between receptor-operated and store-operated Ca(2+) entry pathways. Br J Pharmacol. 2012 Dec;167(8):1712-22. doi: 10.1111/j.1476-5381.2012.02126.x. PMID: 22862290; PMCID: PMC3525873.

In vivo study

To be determined

7. Bioactivity
Biological target:

Pyr6 blocks SOCE in thapsigargin treated, calcium depleted BRL-2H3 cells (IC50 = 0.49 μM), but has poor activity against carbachol-induced, TRPC3-mediated calcium entry in TRPC3-transfected HEK293 cells (IC50 = 18.46 μM).

In vitro activity

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Pyr6 exhibited a 37-fold higher potency to inhibit Orai1-mediated Ca(2+) entry as compared with TRPC3-mediated Ca(2+) entry and potently suppressed mast cell activation. Pyr6 is able to distinguish between TRPC and Orai-mediated Ca(2+) entry and may serve as useful tools for the analysis of cellular functions of the underlying Ca(2+) channels.

Reference: Br J Pharmacol. 2012 Dec;167(8):1712-22. https://pubmed.ncbi.nlm.nih.gov/22862290/

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.