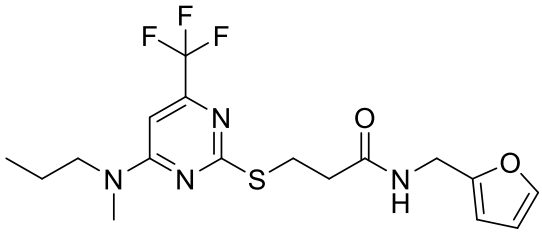
Product data sheet

MedKoo Cat#: 463662 Name: SET2 CAS#: 2313525-20-9 Chemical Formula: $C_{17}H_{21}F_3N_4O_2S$ Exact Mass: 402.1337 Molecular Weight: 402.44	
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:
SET2 is a novel selective TRPV2 antagonist. SET2 blocks the TRP channel and suppresses prostate cancer cells migration. SET2 reduces the lysophosphatidic acid (LPA, a TRPV2 activator)-induced cytoplasmic calcium increases.

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	248.49

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.48 mL	12.42 mL	24.85 mL
5 mM	0.50 mL	2.48 mL	4.97 mL
10 mM	0.25 mL	1.24 mL	2.48 mL
50 mM	0.05 mL	0.25 mL	0.50 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

1. Chai H, Cheng X, Zhou B, Zhao L, Lin X, Huang D, Lu W, Lv H, Tang F, Zhang Q, Huang W, Li Y, Yang H. Structure-Based Discovery of a Subtype-Selective Inhibitor Targeting a Transient Receptor Potential Vanilloid Channel. J Med Chem. 2019 Feb 14;62(3):1373-1384. doi: 10.1021/acs.jmedchem.8b01496. Epub 2019 Jan 16. PMID: 30620187.

In vivo study

To be determined

7. Bioactivity
Biological target:

SET2 is a selective TRPV2 antagonist (IC50=0.46 μM).

In vitro activity

This study describes the discovery of SET2, which was then employed as a chemical probe. SET2 inhibited TRPV2, which reduced prostate cancer migration, highlighting TRPV2 as a potential antimetastasis therapeutic target. Functional assays indicated the coupling of TRPV2 to the metastasis mediator LPAR1. The discovery of this potent inhibitor opens new avenues for pharmacological applications and therapeutic development targeting the TRPV2 channel.

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Reference: J Med Chem. 2019 Feb 14;62(3):1373-1384. https://pubmed.ncbi.nlm.nih.gov/30620187/

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.