Product data sheet



MedKoo Cat#: 555455			
Name: GK187			
CAS: 1071001-50-7			
Chemical Formula: C ₁₄ H ₁₅ F ₅ O ₂		O F F	
Exact Mass: 310.0992			
Molecular Weight: 310.264			
Product supplied as:	Powder]	
Purity (by HPLC):	≥ 98%		
Shipping conditions	Ambient temperature	7 0	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.		
_	In solvent: -80°C 3 months; -20°C 2 weeks.		

1. Product description:

GK187 is a potent and selective polyfluoroalkyl ketone inhibitors of GVIA calcium-independent phospholipase A2.

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	10.0	32.23
DMSO	30.0	96.69
Ethanol	10.0	32.23
Ethanol:PBS (pH 7.2)	0.3	0.97
(1:2)		

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.22 mL	16.12 mL	32.23 mL
5 mM	0.64 mL	3.22 mL	6.45 mL
10 mM	0.32 mL	1.61 mL	3.22 mL
50 mM	0.06 mL	0.32 mL	0.64 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. Magrioti V, Nikolaou A, Smyrniotou A, Shah I, Constantinou-Kokotou V, Dennis EA, Kokotos G. New potent and selective polyfluoroalkyl ketone inhibitors of GVIA calcium-independent phospholipase A2. Bioorg Med Chem. 2013 Sep 15;21(18):5823-9. doi: 10.1016/j.bmc.2013.07.010. Epub 2013 Jul 16. PMID: 23916152; PMCID: PMC3883354.

In vivo study

TBD

7. Bioactivity

Biological target:

GK187 is a potent and selective Group VIA calcium-independent phospholipase A2 (GVIA iPLA2) inhibitor with an XI(50) value of 0.0001.

In vitro activity

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Especially, compound 6d (GK187) is the most potent, but also the most selective $iPLA_2$ inhibitor presented, since it shows less that 25% inhibition against GIVA $cPLA_2$ and 32.8% against GV $sPLA_2$ at 0.091 mol fraction.

Reference: Bioorg Med Chem. 2013 Sep 15;21(18):5823-9. https://pubmed.ncbi.nlm.nih.gov/23916152/

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.