

Product data sheet



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| MedKoo Cat#: 408044 Name: SGC2085 free base CAS#: 1821908-48-8 (free base) Chemical Formula: C ₁₉ H ₂₄ N ₂ O ₂ Exact Mass: 312.1838 Molecular Weight: 312.41 | | |
| 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:

SGC2085 is a Potent and Selective Coactivator Associated Arginine Methyltransferase 1 (CARM1) Inhibitor with an IC₅₀ of 50 nM and more than undred-fold selectivity over other PRMTs. CARM1 is an important positive modulator of Wnt/β-catenin transcription and neoplastic transformation in colorectal cancer as well as a critical factor in estrogen-stimulated breast cancer growth, and its depletion results in decreased proliferation of myeloid leukemia cells in vivo.

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 |
|------------------|------------------|------------------|
| To be determined | To be determined | To be determined |

4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---------------------------------------|---------|----------|----------|
| 1 mM | 3.20 mL | 16.00 mL | 32.01 mL |
| 5 mM | 0.64 mL | 3.20 mL | 6.40 mL |
| 10 mM | 0.32 mL | 1.60 mL | 3.20 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. Ferreira de Freitas R, Eram MS, Smil D, Szewczyk MM, Kennedy S, Brown PJ, Santhakumar V, Barsyte-Lovejoy D, Arrowsmith CH, Vedadi M, Schapira M. Discovery of a Potent and Selective Coactivator Associated Arginine Methyltransferase 1 (CARM1) Inhibitor by Virtual Screening. J Med Chem. 2016 Jul 28;59(14):6838-47. doi: 10.1021/acs.jmedchem.6b00668. Epub 2016 Jul 8. Erratum in: J Med Chem. 2016 Aug 25;59(16):7698. PMID: 27390919.

In vivo study

To be determined

7. Bioactivity

Biological target:

SGC2085 is a potent and selective inhibitor of CARM1 with an IC₅₀ of 50 nM. SGC2085 also selectively inhibits PRMT6 with an IC₅₀ value of 5.2 μM, but not other PRMT proteins.

In vitro activity

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Two structure-based rounds of optimization produced SGC2085, a CARM1 inhibitor with an IC₅₀ of 50 nM and more than hundred-fold selectivity over other PRMTs.

Reference: J Med Chem. 2016 Jul 28;59(14):6838-47. <https://pubmed.ncbi.nlm.nih.gov/27390919/>

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.