# Product data sheet

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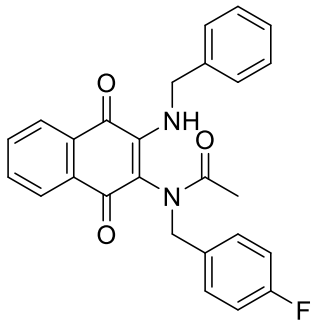
|---|---|
| MedKoo Cat#: 558683<br>Name: RIPGBM<br>CAS#: 355406-76-7<br>Chemical Formula: $C_{26}H_{21}FN_2O_3$<br>Exact Mass: 428.1536<br>Molecular Weight: 428.46 |  |
| Product supplied as: | Powder |
| Purity (by HPLC): | ≥ 98% |
| Shipping conditions | Ambient temperature |
| Storage conditions: | Powder: -20°C 3 years; 4°C 2 years. |
| | In solvent: -80°C 3 months; -20°C 2 weeks. |

**1. Product description:**
RIPGBM is a cell type-selective apoptosis inducer in glioblastoma multiforme (GBM) cancer stem cells (CSCs).

**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 | 33.33 | 77.79 |

**4. Stock solution preparation table:**

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.33 mL | 11.67 mL | 23.34 mL |
| 5 mM | 0.47 mL | 2.33 mL | 4.67 mL |
| 10 mM | 0.23 mL | 1.17 mL | 2.33 mL |
| 50 mM | 0.05 mL | 0.23 mL | 0.47 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

To be determined

In vivo study


1. West TJ, Bi J, Martínez-Peña F, Curtis EJ, Gazaniga NR, Mischel PS, Lairson LL. A Cell Type Selective YM155 Prodrug Targets Receptor-Interacting Protein Kinase 2 to Induce Brain Cancer Cell Death. J Am Chem Soc. 2023 Apr 5. doi: 10.1021/jacs.2c11715. Epub ahead of print. PMID: 37017374.
2. Lucki NC, Villa GR, Vergani N, Bollong MJ, Beyer BA, Lee JW, Anglin JL, Spangenberg SH, Chin EN, Sharma A, Johnson K, Sander PN, Gordon P, Skirboll SL, Wurdak H, Schultz PG, Mischel PS, Lairson LL. A cell type-selective apoptosis-inducing small molecule for the treatment of brain cancer. Proc Natl Acad Sci U S A. 2019 Mar 26;116(13):6435-6440. doi: 10.1073/pnas.1816626116. Epub 2019 Mar 7. PMID: 30846550; PMCID: PMC6442583.


**7. Bioactivity**
Biological target:

RIPGBM is a selective inducer of apoptosis in GBM CSCs with an EC50 of ≤500 nM.

In vitro activity

To be determined

# Product data sheet

In vivo activity

In an orthotopic intracranial GBM CSC tumor xenograft mouse model, RIPGBM significantly suppressed tumor formation in vivo.

Reference: Proc Natl Acad Sci U S A. 2019 Mar 26;116(13):6435-6440. https://pubmed.ncbi.nlm.nih.gov/30846550/