

Product data sheet



| | | |
|---|---|--|
| MedKoo Cat#: 555757 Name: SJ000291942 CAS#: 425613-09-8 Chemical Formula: C ₁₆ H ₁₅ FN ₂ O ₄ Exact Mass: 318.1016 Molecular Weight: 318.30 | | |
| 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:

SJ000291942 is a bone morphogenic protein (BMP) signaling activator.

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 | 30 | 94.25 |
| DMSO | 30 | 94.25 |

4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---------------------------------------|---------|----------|----------|
| 1 mM | 3.14 mL | 15.71 mL | 31.42 mL |
| 5 mM | 0.63 mL | 3.14 mL | 6.28 mL |
| 10 mM | 0.31 mL | 1.57 mL | 3.14 mL |
| 50 mM | 0.06 mL | 0.31 mL | 0.63 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

- Genthe JR, Min J, Farmer DM, Shelat AA, Grenet JA, Lin W, Finkelstein D, Vrijens K, Chen T, Guy RK, Clements WK, Roussel MF. Ventromorphins: A New Class of Small Molecule Activators of the Canonical BMP Signaling Pathway. ACS Chem Biol. 2017 Sep 15;12(9):2436-2447. doi: 10.1021/acscchembio.7b00527. Epub 2017 Aug 29. Erratum in: ACS Chem Biol. 2019 Jul 19;14(7):1673. PMID: 28787124; PMCID: PMC5676454.

7. Bioactivity

Biological target:

SJ000291942 activates BMP4 in C33A-2D2 human cervical carcinoma clonal reporter cells (EC₅₀ = ≤1 μM).

In vitro activity

To be determined

Product data sheet



In vivo activity

This study identified three compounds, one being SJ000291942, with similar chemotypes that each ventralize zebrafish embryos and stimulate increased expression of the BMP target genes, bmp2b and szl.

Reference: ACS Chem Biol. 2017 Sep 15;12(9):2436-2447. <https://pubmed.ncbi.nlm.nih.gov/28787124/>

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.