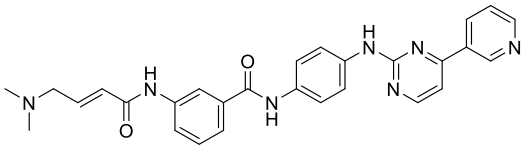


Product data sheet



MedKoo Cat#: 581024 Name: JNK-IN-7 CAS: 1408064-71-0 Chemical Formula: C ₂₈ H ₂₇ N ₇ O ₂ Exact Mass: 493.2226 Molecular Weight: 493.571	
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:

JNK-IN-7 is a relatively selective JNKs inhibitor (IC₅₀= 1.54/1.99/0.75 for JNK1/2/3); also bound to IRAK1, PIK3C3, PIP5K3 and PIP4K2C.

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	20.26
DMSO	31.11	63.03
DMSO:PBS (pH 7.2) (1:2)	0.3	0.61

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.03 mL	10.13 mL	20.26 mL
5 mM	0.41 mL	2.03 mL	4.05 mL
10 mM	0.20 mL	1.01 mL	2.03 mL
50 mM	0.04 mL	0.20 mL	0.41 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. Wu W, Song Y, He C, Liu C, Wu R, Fang L, Cong Y, Miao Y, Liu Z. Divalent metal-ion transporter 1 is decreased in intestinal epithelial cells and contributes to the anemia in inflammatory bowel disease. *Sci Rep.* 2015 Nov 17;5:16344. doi: 10.1038/srep16344. PMID: 26572590; PMCID: PMC4648093.
2. Zhang T, Inesta-Vaquera F, Niepel M, Zhang J, Ficarro SB, Machleidt T, Xie T, Marto JA, Kim N, Sim T, Laughlin JD, Park H, LoGrasso PV, Patricelli M, Nomanbhoy TK, Sorger PK, Alessi DR, Gray NS. Discovery of potent and selective covalent inhibitors of JNK. *Chem Biol.* 2012 Jan 27;19(1):140-54. doi: 10.1016/j.chembiol.2011.11.010. PMID: 22284361; PMCID: PMC3270411.

In vivo study

TBD

7. Bioactivity

Biological target:

JNK-IN-7 is a potent JNK inhibitor with IC₅₀ of 1.5, 2 and 0.7 nM for JNK1, JNK2 and JNK3, respectively.

Product data sheet



In vitro activity

As shown in Fig. 5B, co-incubation of JNK signaling inhibitor (JNK-IN-7) significantly suppressed the down-regulation of the DMT1 mRNA expression ($P < 0.05$), while TNF alone or co-incubation with NF- κ B and caspase-3/8 inhibitors significantly down-regulated DMT1 mRNA expression compared to controls ($P < 0.05$). Thus, these results prove that TNF could down-regulate DMT1 expression through the JNK pathway.

Reference: Sci Rep. 2015 Nov 17;5:16344. <https://pubmed.ncbi.nlm.nih.gov/26572590/>

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.