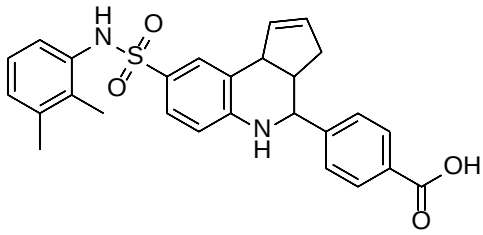
Product data sheet

MedKoo Cat#: 407438 Name: MX69 CAS: 1005264-47-0 Chemical Formula: $C_{27}H_{26}N_2O_4S$ Exact Mass: 474.1613 Molecular Weight: 474.575	
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:
MX69 is a Dual Inhibitor of MDM2 and XIAP for Cancer Treatment.

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	97.5	205.45
Ethanol	41.0	86.39

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.11 mL	10.54 mL	21.07 mL
5 mM	0.42 mL	2.11 mL	4.21 mL
10 mM	0.21 mL	1.05 mL	2.11 mL
50 mM	0.04 mL	0.21 mL	0.42 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. Faruq O, Zhao D, Shrestha M, Vecchione A, Zacksenhaus E, Chang H. Targeting an MDM2/MYC Axis to Overcome Drug Resistance in Multiple Myeloma. Cancers (Basel). 2022 Mar 21;14(6):1592. doi: 10.3390/cancers14061592. PMID: 35326742; PMCID: PMC8945937.

2. Gu L, Zhang H, Liu T, Zhou S, Du Y, Xiong J, Yi S, Qu CK, Fu H, Zhou M. Discovery of Dual Inhibitors of MDM2 and XIAP for Cancer Treatment. Cancer Cell. 2016 Oct 10;30(4):623-636. doi: 10.1016/j.ccell.2016.08.015. Epub 2016 Sep 22. PMID: 27666947; PMCID: PMC5079537.

In vivo study

1. Zhao W, Yang J, Xie X, Li C, Zhang W, Chen E, Guo Y, Yan L, Fang F, Yao H, Liu X. A MDM2 inhibitor MX69 inhibits adipocytes adipogenesis and differentiation. Biochem Biophys Res Commun. 2022 Oct 15;625:9-15. doi: 10.1016/j.bbrc.2022.07.115. Epub 2022 Aug 2. PMID: 35944364.

7. Bioactivity
Biological target:
MX69 is an inhibitor of MDM2/XIAP, used for cancer treatment.

Product data sheet

In vitro activity

MX69 exhibited a significant cytotoxic effect on both ALL and NB lines, particularly those lines with MDM2 overexpression and a WT-p53 phenotype (Figure 6A and B). Figure 6C shows representative photomicrographs indicating cell growth inhibition and/or cell death in NB-1691 cells following treatment by MX69.

Reference: Cancer Cell. 2016 Oct 10;30(4):623-636. https://pubmed.ncbi.nlm.nih.gov/27666947/

In vivo activity

Here, this study administered MX69 intraperitoneally to high-fat diet-induced obesity (DIO) wild type C57BL/6 mice and found that MX69 could promote the body weight and white adipose tissue weight of DIO mice. Moreover, MX69 had no effects on glucose tolerance and insulin sensitivity in DIO mice. And MX69 treatment decreased the size of adipocytes and fat deposition in adipose tissue and inhibited 3T3-L1 preadipocytes differentiation. Mechanistically, MX69 inhibited the protein levels of MDM2 and the mRNA levels of genes related to adipogenesis and differentiation.

Reference: Biochem Biophys Res Commun. 2022 Oct 15;625:9-15. https://pubmed.ncbi.nlm.nih.gov/35944364/