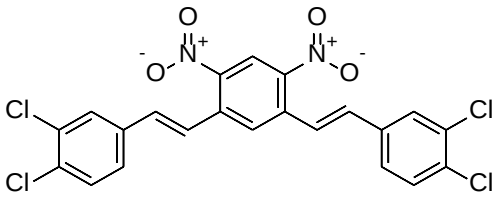
Product data sheet

MedKoo Cat#: 527664 Name: NSC-636819 CAS: 1618672-71-1 Chemical Formula: $C_{22}H_{12}Cl_4N_2O_4$ Exact Mass: 507.9551 Molecular Weight: 510.148	
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:
NSC-636819 is a novel KDM4A/KDM4B inhibitor.

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	5.1	10.0

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.96 mL	9.80 mL	19.60 mL
5 mM	0.39 mL	1.96 mL	3.92 mL
10 mM	0.20 mL	0.98 mL	1.96 mL
50 mM	0.04 mL	0.20 mL	0.39 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

Chu CH, Wang LY, Hsu KC, Chen CC, Cheng HH, Wang SM, Wu CM, Chen TJ, Li LT, Liu R, Hung CL, Yang JM, Kung HJ, Wang WC. KDM4B as a target for prostate cancer: structural analysis and selective inhibition by a novel inhibitor. J Med Chem. 2014 Jul 24;57(14):5975-85. doi: 10.1021/jm500249n. Epub 2014 Jul 9. PMID: 24971742; PMCID: PMC4216216.

In vivo study

TBD

7. Bioactivity
Biological target:

NSC636819 is a competitive and selective inhibitor of KDM4A/KDM4B.

In vitro activity

Further kinetic inhibition characterization of compound 4 (NSC636819) demonstrated a competitive inhibitory mode against $H3_{3-17}$K9me3 for KDM4A [IC_{50} = 6.4 μM; K_i (H3K9me3) = 5.5 ± 1.6 μM; Figure 3B). This study further characterized the methylated status of H3 in LNCaP cells treated with compound 4. As shown in Figure S4B, only the level of H3K9me3 was significantly increased in compound 4-treated LNCaP cells as opposed to essentially comparable signals of H3K4me2, H3K27me3, H3K27me2, H3K36me3, H3K36me2, and H3K79me2 between control and treated cells.

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Reference: J Med Chem. 2014 Jul 24;57(14):5975-85. https://pubmed.ncbi.nlm.nih.gov/24971742/

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.