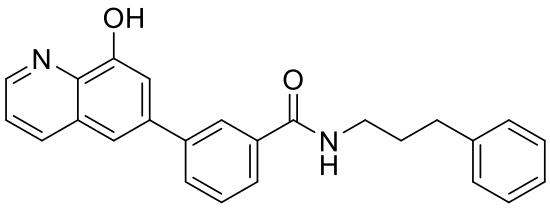
Product data sheet

MedKoo Cat#: 561403 Name: NCGC00244536 CAS#: 2003260-55-5 Chemical Formula: $C_{25}H_{22}N_2O_2$ Exact Mass: 382.1681 Molecular Weight: 382.46	
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:

KDM4B-IN-B3, also know as NCGC00244536, is a novel KDM4 inhibitor. KDM4B-IN-B3 inhibits the in vivo growth of tumors derived from PC3 cells and ex vivo human PCa explants. Histone lysine demethylase KDM4/JMJD2s are overexpressed in many human tumors including prostate cancer (PCa).

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	30.0	78.44
DMF:PBS (pH 7.2) (1:2)	0.33	0.86
DMSO	44.22	115.63
Ethanol	1.5	3.92

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.61 mL	13.07 mL	26.15 mL
5 mM	0.52 mL	2.61 mL	5.23 mL
10 mM	0.26 mL	1.31 mL	2.61 mL
50 mM	0.05 mL	0.26 mL	0.52 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. Duan L, Rai G, Roggero C, Zhang QJ, Wei Q, Ma SH, Zhou Y, Santoyo J, Martinez ED, Xiao G, Raj GV, Jadhav A, Simeonov A, Maloney DJ, Rizo J, Hsieh JT, Liu ZP. KDM4/JMJD2 Histone Demethylase Inhibitors Block Prostate Tumor Growth by Suppressing the Expression of AR and BMYB-Regulated Genes. Chem Biol. 2015 Sep 17;22(9):1185-96. doi: 10.1016/j.chembiol.2015.08.007. Epub 2015 Sep 10. PMID: 26364928; PMCID: PMC4578295.

In vivo study

N/A

7. Bioactivity

Biological target:

NCGC00244536 is a potent KDM4B inhibitor with an IC50 of 10 nM.

Product data sheet

In vitro activity

This study tested the effect of these compounds on the growth of LNCaP cells (Fig. S1A) and selected NCGC00247751 (A1), NCGC00244536 (B3), and NCGC00247743 (I9), which inhibited LNCaP cell growth with IC50s in the μM range (Fig. 1A). These inhibitors suppressed the catalytic activity of KDM4B effectively and among them B3 was the most potent, with an IC50 of ca. 10 nM (Fig. 1B).

Reference: Chem Biol. 2015 Sep 17;22(9):1185-96. https://pubmed.ncbi.nlm.nih.gov/26364928/

In vivo activity

N/A

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.