

# Product data sheet



MedKoo Cat#: 558248 Name: K-756 CAS: 130017-40-2 Chemical Formula: C <sub>24</sub> H <sub>27</sub> N <sub>5</sub> O <sub>3</sub> Exact Mass: 433.2114 Molecular Weight: 433.512	
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:

K-756 is a selective Wnt/ $\beta$ -catenin pathway inhibitor. K-756 is also a tankyrase (TNKS) inhibitor. K-756 binds to the induced pocket of TNKS and inhibits its enzyme activity. could be a leading compound in the development of anticancer agents.

## 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	4.55	10.50

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.31 mL	11.53 mL	23.07 mL
5 mM	0.46 mL	2.31 mL	4.61 mL
10 mM	0.23 mL	1.15 mL	2.31 mL
50 mM	0.05 mL	0.23 mL	0.46 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. Okada-Iwasaki R, Takahashi Y, Watanabe Y, Ishida H, Saito J, Nakai R, Asai A. The Discovery and Characterization of K-756, a Novel Wnt/ $\beta$ -Catenin Pathway Inhibitor Targeting Tankyrase. *Mol Cancer Ther.* 2016 Jul;15(7):1525-34. doi: 10.1158/1535-7163.MCT-15-0938. Epub 2016 Apr 25. PMID: 27196752.

### In vivo study

1. Okada-Iwasaki R, Takahashi Y, Watanabe Y, Ishida H, Saito J, Nakai R, Asai A. The Discovery and Characterization of K-756, a Novel Wnt/ $\beta$ -Catenin Pathway Inhibitor Targeting Tankyrase. *Mol Cancer Ther.* 2016 Jul;15(7):1525-34. doi: 10.1158/1535-7163.MCT-15-0938. Epub 2016 Apr 25. PMID: 27196752.

## 7. Bioactivity

### Biological target:

K-756 is a direct and selective tankyrase (TNKS) inhibitor, which inhibits the ADP-ribosylation activity of TMS1 and TMS2 with IC<sub>50</sub>s of 31 and 36 nM, respectively.

### In vitro activity

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K-756 binds to the induced pocket of TNKS and inhibits its enzyme activity. Moreover, PARP family enzyme assays showed that K-756 is a selective TNKS inhibitor. K-756 inhibited the cell growth of APC-mutant colorectal cancer COLO 320DM and SW403 cells by inhibiting the Wnt/ $\beta$ -catenin pathway.

Reference: Mol Cancer Ther. 2016 Jul;15(7):1525-34. <https://pubmed.ncbi.nlm.nih.gov/27196752/>

## In vivo activity

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An in vivo study showed that the oral administration of K-756 inhibited the Wnt/ $\beta$ -catenin pathway in colon cancer xenografts in mice.

Reference: Mol Cancer Ther. 2016 Jul;15(7):1525-34. <https://pubmed.ncbi.nlm.nih.gov/27196752/>

*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.*