

# Product data sheet



MedKoo Cat#: 407354 Name: FH535 CAS#: 108409-83-2 Chemical Formula: C <sub>13</sub> H <sub>10</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>4</sub> S Exact Mass: 359.9738 Molecular Weight: 361.193	
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:

FH535 is a  $\beta$ -catenin pathway inhibitor. FH535 represses pancreatic cancer xenograft growth and angiogenesis. FH535 increases the radiosensitivity and reverses epithelial-to-mesenchymal transition of radioresistant esophageal cancer cell line KYSE-150R. FH535 inhibited metastasis and growth of pancreatic cancer cells. FH535 selectively inhibits cell proliferation and potentiates imatinib-induced apoptosis in myeloid leukemia cell lines.

## 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	35.61	98.59
DMF	25.0	69.22
DMF:PBS (pH 7.2) (1:1)	0.5	1.38

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.77 mL	13.84 mL	27.69 mL
5 mM	0.55 mL	2.77 mL	5.54 mL
10 mM	0.28 mL	1.38 mL	2.77 mL
50 mM	0.06 mL	0.28 mL	0.55 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. Tu X, Hong D, Jiang Y, Lou Z, Wang K, Jiang Y, Jin L. FH535 inhibits proliferation and migration of colorectal cancer cells by regulating CyclinA2 and Claudin1 gene expression. *Gene*. 2019 Mar 30;690:48-56. doi: 10.1016/j.gene.2018.12.008. Epub 2018 Dec 12. PMID: 30552982.
2. Shi M, Cheng J, He Y, Jiang Z, Bodinga BM, Liu B, Chen H, Li Q. Effect of FH535 on in vitro maturation of porcine oocytes by inhibiting WNT signaling pathway. *Anim Sci J*. 2018 Apr;89(4):631-639. doi: 10.1111/asj.12982. Epub 2017 Dec 28. PMID: 29284185.

### In vivo study

1. Chen Y, Rao X, Huang K, Jiang X, Wang H, Teng L. FH535 Inhibits Proliferation and Motility of Colon Cancer Cells by Targeting Wnt/ $\beta$ -catenin Signaling Pathway. *J Cancer*. 2017 Sep 12;8(16):3142-3153. doi: 10.7150/jca.19273. PMID: 29158786; PMCID: PMC5665030.

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2. Liu L, Zhi Q, Shen M, Gong FR, Zhou BP, Lian L, Shen B, Chen K, Duan W, Wu MY, Tao M, Li W. FH535, a  $\beta$ -catenin pathway inhibitor, represses pancreatic cancer xenograft growth and angiogenesis. *Oncotarget*. 2016 Jul 26;7(30):47145-47162. doi: 10.18632/oncotarget.9975. PMID: 27323403; PMCID: PMC5216931.

## 7. Bioactivity

### Biological target:

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FH535 is an inhibitor of Wnt/ $\beta$ -catenin and PPAR, with anti-tumor activities.

### In vitro activity

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FH535 could significantly suppress the growth of DLD-1 and SW620 cells in a concentration-dependent and time-dependent manner. The results of cell cycle tests showed that FH535 could significantly induce G2/M arrest in colorectal cancer cells.

Reference: *Gene*. 2019 Mar 30;690:48-56. <https://pubmed.ncbi.nlm.nih.gov/30552982/>

### In vivo activity

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To investigate whether FH535 has inhibitory effect on colon cancer growth in vivo, this study evaluated the effect of this chemical on HT29 nude mice xenografts. 12 days after the initiation of FH535 treatment, the calculated tumor volume of the FH535-treated group reached statistical significance as compared to the control group (Figure 2A). At the end of the experiment, the tumor size and weight of FH535-treated group was significantly smaller than the control group (Figure 2B-C).

Reference: *J Cancer*. 2017; 8(16): 3142–3153. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5665030/>

*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.*