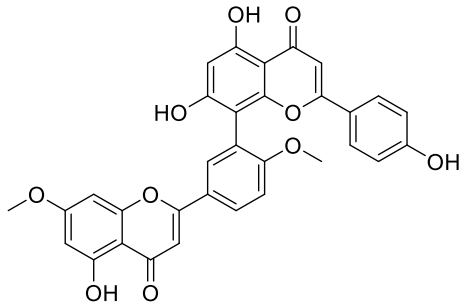


Product data sheet



MedKoo Cat#: 584464 Name: Ginkgetin CAS#: 481-46-9 Chemical Formula: C ₃₂ H ₂₂ O ₁₀ Exact Mass: 566.1213 Molecular Weight: 566.518		
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:

Ginkgetin is a biflavonoid that has been isolated from *G. biloba* and has diverse biological activities, including pro-apoptotic, antiproliferative, anti-inflammatory, anti-atherosclerosis, and neuroprotective properties.

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	64.0	112.97
DMSO:PBS (pH 7.2) (1:7)	0.12	0.21

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.77 mL	8.83 mL	17.65 mL
5 mM	0.35 mL	1.77 mL	3.53 mL
10 mM	0.18 mL	0.88 mL	1.77 mL
50 mM	0.04 mL	0.18 mL	0.35 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

- Liu X, Bian H, Dou QL, Huang XW, Tao WY, Liu WH, Li N, Zhang WW. Ginkgetin Alleviates Inflammation, Oxidative Stress, and Apoptosis Induced by Hypoxia/Reoxygenation in H9C2 Cells via Caspase-3 Dependent Pathway. *Biomed Res Int.* 2020 Nov 4;2020:1928410. doi: 10.1155/2020/1928410. PMID: 33204684; PMCID: PMC7661124.
- Bai Y, Wang W, Shi M, Wei X, Zhou X, Li B, Zhang J. Novel Antibiofilm Inhibitor Ginkgetin as an Antibacterial Synergist against *Escherichia coli*. *Int J Mol Sci.* 2022 Aug 8;23(15):8809. doi: 10.3390/ijms23158809. PMID: 35955943; PMCID: PMC9369100.

In vivo study

- Pan J, Li X, Guo F, Yang Z, Zhang L, Yang C. Ginkgetin attenuates cerebral ischemia-reperfusion induced autophagy and cell death via modulation of the NF-κB/p53 signaling pathway. *Biosci Rep.* 2019 Sep 6;39(9):BSR20191452. doi: 10.1042/BSR20191452. PMID: 31420372; PMCID: PMC6732367.
- Lou JS, Bi WC, Chan GKL, Jin Y, Wong CW, Zhou ZY, Wang HY, Yao P, Dong TTX, Tsim KW. Ginkgetin induces autophagic cell death through p62/SQSTM1-mediated autolysosome formation and redox setting in non-small cell lung cancer. *Oncotarget.* 2017 Oct 16;8(54):93131-93148. doi: 10.18632/oncotarget.21862. PMID: 29190983; PMCID: PMC5696249.

7. Bioactivity

Product data sheet



Biological target:

Ginkgetin is a potent inhibitor of Wnt signaling, with an IC_{50} of 5.92 μ M

In vitro activity

Extensive apoptotic cells were observed after cells were subjected to H/R, whereas ginkgetin successfully reduced the number of apoptotic cells (Figure 2(e)). Determinations of apoptosis-related proteins Bcl-2, Bax, and caspase-9 validated the antiapoptotic effect of ginkgetin (Figure 2(f)). Collectively, ginkgetin could alleviate H/R-induced oxidative stress and apoptosis.

Reference: Biomed Res Int. 2020 Nov 4;2020:1928410. <https://pubmed.ncbi.nlm.nih.gov/33204684/>

In vivo activity

To further explore the anticancer activity of ginkgetin, this study established a xenograft nude mouse model. A robust decrease in body weight (> 20%) was observed after cisplatin treatment (Figure (Figure6A).6A). The tumor size and tumor weight were markedly decreased in groups treated with ginkgetin and cisplatin (Figure 6B-6D). The tumor inhibitory rates of ginkgetin and cisplatin groups were 50% and 48%, respectively (Figure (Figure6E).6E). These results indicated that ginkgetin exhibited promising anticancer effects without obvious toxicity.

Reference: Oncotarget. 2017 Oct 16;8(54):93131-93148. <https://pubmed.ncbi.nlm.nih.gov/29190983/>

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.