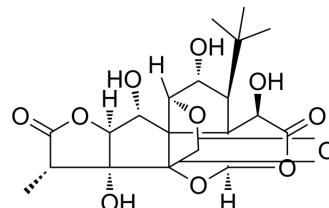


Ginkgolide C

Cat. No.:	HY-N0785		
CAS No.:	15291-76-6		
Molecular Formula:	C ₂₀ H ₂₄ O ₁₁		
Molecular Weight:	440.4		
Target:	AMPK; Sirtuin; MMP; Endogenous Metabolite		
Pathway:	Epigenetics; PI3K/Akt/mTOR; Cell Cycle/DNA Damage; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (567.67 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2707 mL	11.3533 mL	22.7066 mL
		5 mM	0.4541 mL	2.2707 mL	4.5413 mL
10 mM		0.2271 mL	1.1353 mL	2.2707 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Ginkgolide C is a flavone isolated from Ginkgo biloba leaves, possessing multiple biological functions, such as decreasing platelet aggregation and ameliorating Alzheimer disease.		
IC₅₀ & Target	AMPK	MMP-9	Sirtuin
In Vitro	Ginkgolide C (3-100?μM) has no significant effect on 3T3-L1 cell viability, but suppresses adipogenesis in 3T3-L1 cells following 24?h treatment. Ginkgolide C (10-100?μM) significantly suppresses lipid accumulation compared with the control		

group and also significantly promotes glycerol release in 3T3-L1 adipocytes. Ginkgolide C suppresses PPAR- α and PPAR- γ expression and decreases C/EBP α , C/EBP β , and SREBP-1c expression in differentiated 3T3-L1 adipocytes. In addition, Ginkgolide C (3-100 μ M) suppress adipogenesis-related protein (FAS, LPL, and aP2) and mRNA expression in a dose-dependent manner in differentiated 3T3-L1 adipocytes. Ginkgolide C (3-100 μ M) also significantly promotes Sirt1 production and increases phosphorylation of AMPK α and ACC-1 in a concentration-dependent manner^[1]. Ginkgolide C (1, 10, 50, 100, 500 mM) significantly reduces the collagen (10 mg/mL)-stimulated rat platelet aggregation in a dose-dependent manner. Ginkgolide C (50, 100 mM) causes pro-MMP-9 (92-kDa) to form an activated MMP-9 (86-kDa) in collagen-stimulated platelets [2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay ^[1]

3T3-L1 cells are treated with various concentrations of ginkgolide C in 96-well plates for 24 h. Cell viability is analyzed by the MTT assay. The culture medium is removed, and the cells are incubated with 100 μ L MTT solution (5 mg/mL) for 4 h at 37°C. After plates are washed, isopropanol is added to dissolve formazone crystals, followed by absorbance detection with a spectrophotometer at 570 nm^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Liou CJ, et al. Ginkgolide C Suppresses Adipogenesis in 3T3-L1 Adipocytes via the AMPK Signaling Pathway. *Evid Based Complement Alternat Med.* 2015;2015:298635.
- [2]. Ginkgolide C, et al. Ginkgolide C inhibits platelet aggregation in cAMP- and cGMP-dependent manner by activating MMP-9. *Biol Pharm Bull.* 2007 Dec;30(12):2340-4.

Caution: Product has not been fully validated for medical applications. For research use only.

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