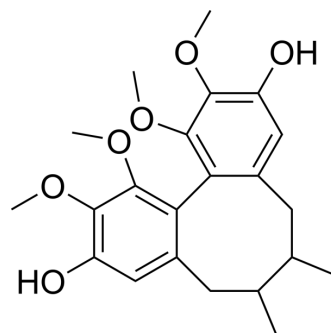


## Gomisin J

Cat. No.:	HY-N0385
CAS No.:	66280-25-9
Molecular Formula:	C <sub>22</sub> H <sub>28</sub> O <sub>6</sub>
Molecular Weight:	388.45
Target:	AMPK; Calcium Channel
Pathway:	Epigenetics; PI3K/Akt/mTOR; Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (257.43 mM; Need ultrasonic)					
		Solvent Concentration	Mass			
	Preparing Stock Solutions			1 mg	5 mg	10 mg
		1 mM		2.5743 mL	12.8717 mL	25.7433 mL
		5 mM		0.5149 mL	2.5743 mL	5.1487 mL
	10 mM		0.2574 mL	1.2872 mL	2.5743 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.44 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.44 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.44 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	Gomisin J is a small molecular weight lignan found in <i>Schisandra chinensis</i> and has been demonstrated to have vasodilatory activity <sup>[1]</sup> . Gomisin J suppresses lipid accumulation by regulating the expression of lipogenic and lipolytic enzymes and inflammatory molecules through activation of AMPK, LKB1 and Ca <sup>2+</sup> /calmodulin-dependent protein kinase II and inhibition of fetuin-A in HepG2 cells. gomisin J has potential benefits in treating nonalcoholic fatty liver disease <sup>[2]</sup> .
IC <sub>50</sub> & Target	AMPK

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## CUSTOMER VALIDATION

- Biochem Bioph Res Co. 2020 Aug 13;529(1):15-22.
- Animals (Basel). 2022 Sep 19;12(18):2474.
- Bioengineered. 2022 Mar;13(3):6908-6918.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Ye BH, et al. Preventive effect of gomisin J from Schisandra chinensis on angiotensin II-induced hypertension via an increased nitric oxide bioavailability. Hypertens Res. 2015 Mar;38(3):169-77.

[2]. Kim M, et al. Gomisin J Inhibits Oleic Acid-Induced Hepatic Lipogenesis by Activation of the AMPK-Dependent Pathway and Inhibition of the Hepatokine Fetuin-A in HepG2 Cells. J Agric Food Chem. 2015 Nov 11;63(44):9729-39.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA