# Data Sheet

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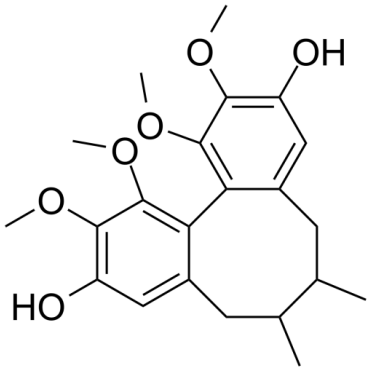
| **Product Name:** | Gomisin J |
| **Cat. No.:** | CS-0008925 |
| **CAS No.:** | 66280-25-9 |
| **Molecular Formula:** | $C_{22}H_{28}O_6$ |
| **Molecular Weight:** | 388.45 |
| **Target:** | AMPK; Calcium Channel |
| **Pathway:** | Epigenetics; Membrane Transporter/Ion Channel; Neuronal Signaling; PI3K/Akt/mTOR |
| **Solubility:** | DMSO : 100 mg/mL (257.43 mM; Need ultrasonic) |




## BIOLOGICAL ACTIVITY:

Gomisin J is a small molecular weight lignan found in Schisandra chinensis and has been demonstrated to have vasodilatory activity [1]. Gomisin J suppresses lipid accumulation by regulating the expression of lipogenic and lipolytic enzymes and inflammatory molecules through activation of **AMPK, LKB1** and **$Ca^{2+}$/calmodulin-dependent protein kinase II** and inhibition of **fetuin-A** in HepG2 cells. gomisin J has potential benefits in treating nonalcoholic fatty liver disease[2]. IC50 & Target: AMPK, LKB1, $Ca^{2+}$ /calmodulin-dependent protein kinase II, fetuin-A[2]

## 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.

## CAIndexNames:

Dibenzo[a,c]cyclooctene-3,10-diol, 5,6,7,8-tetrahydro-1,2,11,12-tetramethoxy-6,7-dimethyl-, (6R,7S,12aS)-

## SMILES:

OC1=C(OC)C(OC)=C(C2=C(OC)C(OC)=C(O)C=C2CC(C)C(C)C3)C3=C1



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