

**Product Name** : Gomisin J

**Synonyms** : —

**Cat No.** : M22077

**CAS Number** : 66280-25-9

**Molecular Formula** : C<sub>22</sub>H<sub>28</sub>O<sub>6</sub>

**Formula Weight** : 388.46

**Chemical Name** : —

**Description** : Gomisin J is a natural product and have vasodilatory activity. 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 attenuated lipid accumulation in OA-induced HepG2 cells. It also suppressed the expression of lipogenic enzymes and inflammatory mediators and increased the expression of lipolytic enzymes in OA-induced HepG2 cells. Furthermore, the use of specific inhibitors and fetuin-A siRNA and liver kinase B1 (LKB1) siRNA transfected cells demonstrated that gomisin J regulated lipogenesis and lipolysis via inhibition of fetuin-A and activation of an AMP-activated protein kinase (AMPK)-dependent pathway in HepG2 cells.

**Pathway** : Membrane Transporter/Ion Channel

**Target** : AMPK

**Receptor** : AMPK; Calcium Channel

**Solubility** : —

**SMILES** : COc1c(O)cc2C[C@H](C)[C@H](C)Cc3cc(O)c(OC)c(OC)c3-c2c1OC

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1. 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 Nov2. 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.