Gomisin A Datasheet

4th Edition (Revised in July, 2016)

[ Product Information ]

Name: Gomisin A
Catalog No.: CFN98990
Cas No.: 58546-54-6
Purity: > 98%
M.F: C_{23}H_{28}O_{7}
M.W: 416.5

Physical Description: Powder

Synonyms:
- Besigomsin; Schisantherinol B; Schizandrol B; Wuweizi alcohol B; Wuweizichun B;
- Wuweizisu B; 3,3',4,5-Tetramethoxy-4',5'-methylenedioxy-2,2'-cyclocligenan-8-ol.

[ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Cosmetic research;
5. Synthetic precursor compounds;
6. Intermediates & Fine Chemicals;
7. Ingredient in supplements, beverages;
8. Others.
[ Source ]

The fruits of Schizandra chinensis.

[ Biological Activity or Inhibitors ]

Gomisin A (GA), a dibenzocyclooctadiene compound isolated from Schisandra chinensis, reverses multidrug resistance (MDR) in Pgp-overexpressing HepG2-DR cells; it is relatively non-toxic but without altering Pgp expression, it restores the cytotoxic actions of anticancer drugs such as vinblastine and doxorubicin that are Pgp substrates but may act by different mechanisms; suggests that gomisin A alters Pgp-substrate interaction but itself is neither a Pgp substrate nor competitive inhibitor.\[1\] Gomisin A improves hepatic cell degeneration, vasodilatory activity and insulin sensitivity. These effects also impact the immune system, including various inflammatory mediators and cytokines; the anti-inflammatory properties of GA potentially result from the inhibition of COX-2, iNOS, IL-6, TNF-\(\alpha\) and NO through the down-regulation of RIP2 and NF-\(\kappa\)B activation. \[2\] Gomisin A has anti-apoptotic and hepatoprotective effects on fulminant hepatic failure induced by D-galactosamine and lipopolysaccharide in mice.\[3\] Gomisin A protects the liver from injury after administration of acetaminophen through the suppression of lipid peroxidation.\[4\] Gomisin A inhibits tumor promotion by 12-O-tetradecanoylphorbol-13-acetate in two-stage carcinogenesis in mouse skin.\[5\] Gomisin A induces Ca\(^{2+}\)-dependent activation and translocation of eNOS in HCAEC, events linked to NO production and thereby endothelial-dependent vasorelaxation.\[6\] Gomisin A has antihypertensive effect on angiotensin II-induced hypertension via preservation of nitric oxide bioavailability.\[7\]

[ Solvent ]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.
[HPLC Method][8]

Mobile phase: Acetonitrile-0.03%Phosphoric acid H2O, gradient elution;
Flow rate: 1.0 ml/min;
Column temperature: 35 °C;
The wavelength of determination: 280 nm.

[Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

[References]


[Contact]

Address:  
S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China

Email: info@chemfaces.com  
Tel: +86-27-84237783
Fax: +86-27-84254680
Web: www.chemfaces.com
Tech Support: service@chemfaces.com