

Coptisine Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Coptisine

Catalog No.: CFN99563

Cas No.: 3486-66-6

Purity: > =98%

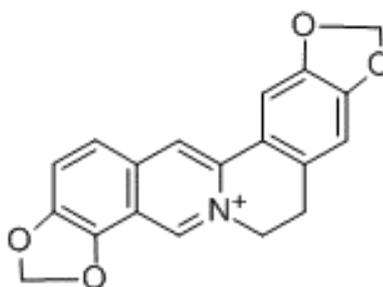
M.F: C₁₉H₁₄NO₄

M.W: 320.32

Physical Description: Powder

Synonyms:

Coptisin;5,6-Dihydro-2,3:9,10-bis(methylenedioxy)dibenzo[a,g]quinolizinium;6,7-Dihydrobis[1,3]benzodioxolo[5,6-a:4',5'-g]quinolizinium;Coptisine Sulfate;Coptisine(P); Bis[1,3]benzodioxolo[5,6-a:4',5'-g]quinolizinium,6,7-dihydro-.



[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[Source]

The herbs of *Chelidonium majus* L.

[Biological Activity or Inhibitors]

Coptisine has strong anti-fungal activity, at a low concentration (45 microg ml⁻¹) begins to inhibit the growth of and at a high concentration (500 microg ml⁻¹) completely inhibits growth.^[1]

Coptisine possesses active anti-hepatoma and anti-leukaemia activities, it shows a strong inhibition on the proliferation of both hepatoma and leukaemia cell lines, with IC₅₀ values varying from 0.6 to 14.1ug/mL.^[2]

Coptisine exerts cardioprotective effect through anti-oxidative and inhibition of RhoA/Rho kinase pathway on isoproterenol-induced myocardial infarction in rats; it protects rat heart against myocardial ischemia/reperfusion injury by suppressing myocardial apoptosis and inflammation. ^[3,4]

Coptisine has antispasmodic and relaxant activity on a guinea-pig ileum.^[5]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method]^[6]

Mobile phase: Acetonitrile-30 mM Ammonium bicarbonate solution(including 0.7% ammonia and 0.1% triethylamine), gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 270 nm.

[Storage]

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

[References]

[1] Kong W J, Zhao Y L, Xiao X H, *et al. J. Appl. Microbiol.*, 2009, 107(4):1072–80.

- [2] Lin C C, Ng L T, Hsu F F, *et al.* *Clin. Exp. Pharmacol. Physiol.*, 2004, 31(1-2):65–9.
- [3] Gong L L, Fang L H, Wang S B, *et al.* *Atherosclerosis*, 2012, 222(1):50-8.
- [4] Guo J, Wang S B, Yuan T Y, *et al.* *Atherosclerosis*, 2013, 231(2):384-91.
- [5] Hiller K O, Ghorbani M, Schilcher H. *Planta Med.* 1998, 64(8):758-60.
- [6] Geng Z, Zheng H, Zhang Y, *et al.* *China Journal of Chinese Materia Medica*, 2010, 35(19):2576-80.

[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