

Schizandrin A Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Schizandrin A

Catalog No.: CFN99922

Cas No.: 61281-38-7

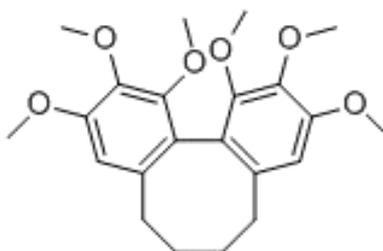
Purity: >=98%

M.F: C₂₄H₃₂O₆

M.W: 416.51

Physical Description: Powder

Synonyms: Dibenzo(a,c)cyclooctene,5,6,7,8-tetrahydro-6,7-dimethyl-1,2,3,10,11,12-hexamet;R(+) Dedoxyschisandrin A;R(+) Schizandrin A ; WUWEIZISU A.



[Intended Use]

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

[Source]

The seeds of *Schisandra chinensis* (Turcz.) Baill.

[Biological Activity or Inhibitors]

Schizandrin A has neuroprotective effect on oxygen and glucose deprivation/ Reperfusion-induced cell injury in primary culture of rat cortical neurons, it may act as a candidate therapeutic target drug used for brain ischemia and related diseases.^[1]

Schizandrin A has the reversal effect of drug resistance in different mechanisms of the two cell lines of K562/ADR and HL60/ADR, it increases the concentration of the drug resistant cells mainly by inhibiting the function and expression of P-gp,MRP1 protein and reducing *mdr1*,*mrp1* gene expression and GSH content,and then it enhances the sensitivity and reversal effects of resistant cell lines.^[2]

Schizandrin A can exert anti-inflammatory and neuroprotective effects by alleviating microglia-mediated neuroinflammation injury through inhibiting the TRAF6-IKK β -NF- κ B and Jak2-Stat3 signaling pathways. ^[3]

Schizandrin A is able to inhibit CYP3A activity in rat liver microsomes, the inhibition is mixed type,non-competitive and anti-competitive inhibition.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Acetonitrile-0.1%Phosphoric acid H₂O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 40 °C;

The wave length of determination: 254 nm.

[Storage]

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

[References]

[1] Wang C P, Li G C, Shi Y W, *et al.* *J. Physiol. Biochem.*, 2014, 70(3):735-47.

[2] Qin X Q, Liang Y G, Gao H Z, *et al. Chinese Pharmacological Bulletin*, 2011, 27(3): 329-34.

[3] Song F J, Zeng K W, Liao L X, *et al. Plos One*, 2016, 11(2): e0149991.

[4] Su M W, Li W L, Liu H M, *et al. Chinese Journal of Clinical Pharmacology & Therapeutics*, 2009, 14(11):1275-80.

[5] He H Y, Zhang Y, Liu H M. *J. Pharmaceut. Res.*, 2015(11):642-4.

[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