

# Jujuboside A Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

#### [ Product Information ]

Name: Jujuboside A

Catalog No.: CFN98101

Cas No.: 55466-04-1

**Purity:** > 98%

M.F: C<sub>58</sub>H<sub>94</sub>O<sub>26</sub>

M.W: 1207.35

Physical Description: White powder

HO HO OH HO

**Synonyms:** O-6-Deoxy-a-L-mannopyranosyl-(1(r)2)-O-[O-b-D-glucopyranosyl-(1(r)6)-O-[b-D-xylopyranosyl-(1(r)2)]-b-D-glucopyranosyl-(1(r)3)]-(3b,16b,23R)-16,23:16,30-diepox y-20-hydroxydammar-24-en-3-yl-a-L-arabinopyranoside.

## [ 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 seeds of Zizyphus jujube.

[ Biological Activity or Inhibitors]

Jujuboside A (JuA), one constituent of Chinese herbal medicine Ziziphus jujuba Mill Var

spinosa (Bunge) Hu; a high dose of JuA can inhibit the hyperactivity of hippocampal CAI

area induced by penicillin sodium.[1]

Jujuboside A possesses antianxiety, antioxidant, and anti-inflammatory effects, it can

notably reduce the damage cause by ISO via promoting the phosphorylation of PI3K, Akt,

and mTOR and inhibiting LC3 conversion, which may be a potential choice for the

treatment of heart diseases.[2]

Jujuboside A has inhibitory effects on Glu-mediated excitatory signal pathway in

hippocampus and probably acts through its anti-calmodulin action.[3]

Jujuboside A, a neuroprotective agent, can ameliorates behavioral disorders of the

dementia mouse model induced by Aß 1-42.[4]

Jujuboside A has sedative and anticonvulsant effects. [5]

Jujuboside A and Zolpidem can inhibit gamma aminobutyric acid type A receptor. [6]

Jujuboside A has inhibitory effect on proliferation of human normal liver cells, hepatic

stellate cells and human hepatoma cells.[7]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[ HPLC Method ]<sup>[8]</sup>

Mobile phase: Methanol-Acetonitrile-Buffer solution=20:30:50;

Flow rate: 1.5 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 256 nm.

#### [Storage]

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

### [References]

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[2] Han D, Wan C, Liu F, et al. Evid-Based. Compl. Alt., 2016, 2016(3):1-8.

[3] Zhang M, Ning G, Shou C, et al. Planta Med., 2003, 69(8):692-5.

[4] Zhi L, Xu Z, Bing L, et al. Eur. J. Pharmacol., 2014, 738:206-13.

[5] Feng Z Y, Guo D W, Song S U. *Journal of Zhejiang University. Medical sciences, 2002,* 31(2):103-6.

[6] Chen Y C, Lin J L, Chen K T, et al. J. Biomech., 2007, 40(07):S556.

[7] Xu J M, Zhang S, Huang Y, et al. Northwest Pharmaceutical Journal, 2013, 28(3):281-4.

[8] Wang H L, Zhang Y P, Wang C S, et al. China Pharmacy, 2013(8):739-41.

# [ 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