

# **Eleutheroside E Datasheet**

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

# [ Product Information ]

Name: Eleutheroside E

Catalog No.: CFN99984

Cas No.: 39432-56-9

**Purity: >=98%** 

**M.F:** C<sub>34</sub>H<sub>46</sub>O<sub>18</sub>

M.W: 742.73

Physical Description: Powder

Synonyms:

(2R, 3S, 4R, 5R, 6S) - 2 - [4 - [4 - [3, 5 - Dimethoxy - 4 - [(2S, 3R, 4S, 5S, 6R) - 3, 4, 5 - trihydroxy - 6 - (hydroxy - 6

xymethyl)oxan-2-yl]oxyphenyl]-1,3,3a,4,6,6a-hexahydrofuro[4,3-c]furan-1-yl]-2,6-dimetho

xyphenoxy]-6-(hydroxymethyl)oxane-3,4,5-triol;

4-{4-[4-(beta-L-glucopyranosyloxy)-3,5-dimethoxyphenyl]tetrahydro-1H,3H-furo[3,4-c]fura

n-1-yl}-2,6-dimethoxyphenyl beta-D-glucopyranoside.

# [ Intended Use ]

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

[Source]

The roots of Eleutherococcus senticosus.

[ Biological Activity or Inhibitors]

Eleutheroside E (EE), a principal active constituent of Acanthopanax senticosus, is

reported to have anti-inflammatory effect by inhibiting NF- k B activities, EE attenuates

the severity of arthritis by reducing the mean arthritis score and arthritis incidence, it also

significantly decreases the inflammatory cell infiltration, pannus formation, cartilage

damage, and bone erosion of CIA mice, it causes a marked decrease of the production of

TNF- a and IL-6 in vivo and in vitro, suggests that EE is a potential therapeutic agent for

rheumatoid arthritis.[1]

Eleutheroside E (EE) and Eleutheroside B (EB) exhibit weak inhibition against the activity

of CYP2C9 and CYP2E1, they may inhibit the metabolism of drugs metabolized via

CYP2C9 and CYP2E1, and have the potential to increase the toxicity of the drugs. [2]

Eleutheroside E has protective effects in ischemia heart, the beneficial effect of EE may

provide an effective and powerful strategy to alleviate behavioral alterations induced by

sleep deprivation. [3]

Eleutheroside E may influence to immune-enhancing through increasing the physical

endurance capacity and immune cell activation.[4]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[ HPLC Method ]<sup>[5]</sup>

Mobile phase: Acetonitrile -H2O, gradient elution;

Flow rate: 0.8 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 220 nm.

### [Storage]

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

### [References]

[1] He C, Chen X, Zhao C, et al. Inflammation, 2014, 37(5):1533-43.

[2] Guo S, Liu Y, Lin Z, et al. Bmc Complem. Altern. M., 2014, 14(1):1-7.

[3] Huang L Z, Wei L, Zhao H F, et al. Eur. J. Pharmacol., 2011, 658(2-3):150-5.

[4] Kim N H, Kim K Y, Kim J A, et al. Oriental Pharmacy & Experimental Medicine, 2010, 10(3):191-9.

[5] Shi L F, Fang D H, Jian X Z, et al. Eur. J. Pharm. Biopharm., 2006, 62(3):315-20.

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