Natural Products



Timosaponin Bll Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Timosaponin BII

Catalog No.: CFN98150

Cas No.: 136656-07-0

Purity: >=98%

M.F: C45H76O19

M.W: 920.08

Physical Description: Powder

Synonyms:(25S)-26-(β-D-Glucopyranosyloxy)-3β-[(2-O-β-D-glucopyranosyl-β-D-

HO

galactopyranosyl)oxy]-5β-furostan-22-ol.

[Intended Use]

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

[<u>Source</u>]

The rhizomes of Anemarrhena asphodeloides Bunge.

[Biological Activity or Inhibitors]

Timosaponin-BII, a purified extract originating from Chinese medical herb Rhizoma Anemarrhenae, is characterized as an antioxidant, it can remarkably inhibit the up-regulation of β -amyloid precursor protein cleavage enzyme-1 (BACE1) and reduced the over-production of β -CTF and A β in rat retina, which was induced by FeCI3, the mechanism of timosaponin-BII on BACE1 expression may be related to its antioxidant property.^[1]

Timosaponin BII can improve the neurological symptoms of cerebral ischemic rat, reduce infarct size, relieve brain water edema, improve hemorheology, reduce inflammatory injury of cerebral ischemia; it could be used in the preparation of a medicament or product for the prevention and treatment of stroke.^[2]

Timosaponin BII can significantly reduce the neurotoxicity induced by beta amyloid peptide 25-35 in primary neurons, the mechanism of which may be related with resisting oxidative damage and regulating the cholinergic system.^[3]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[4]

HPLC-CAD Mobile phase: Acetonitrile- H2O=25:75; Flow rate: 1.0 ml/min; Column temperature: 30 °C; Carrier gas: N2; Pressure of gas:241.3 kPa.

[Storage]

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

[References]

[1] Huang J F, Shang L, Liu P, et al. Bmc Complem. Altern. M., 2012, 12(1):1-8.
[2]Ma B, Xu Q, Zhao Y, et al., US20090075912[P]. 2009.
[3]Deng Y, Ma B P, Cong Y W, et al. Chinese Pharmacological Bulletin, 2009, 25(2):244-7.
[4] Wu Y, Gao H, Song Z B, et al. Drugs & Clinic, 2014, 29(7):737-41.

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