Natural Products



Araloside X Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Araloside X

Catalog No.: CFN90323

Cas No.: 344911-90-6

Purity: >=98%

M.F: C₆₀H₉₈O₂₈

M.W: 1267.42



Physical Description: Powder

Synonyms:3-O-{[β -D-glucopyranosyl(1 \rightarrow 2)]-[β -D-glucopyranosyl(1 \rightarrow 3)- β -D-glucopyrano syl(1 \rightarrow 3)] β -D-glucopyranosyl}hederagenin-28-O- β -D-glucopyranosyl-ester;CongMunosid e X.

[Intended Use]

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

[Source]

The roots of Aralia elata.

[Biological Activity or Inhibitors]

Aralosides possess protective effect against experimental myocardial ischemia and infarction, the mechanism of myocardial protection may be attributed to the amelioration of FFA metabolic deterioration and membrane peroxidation induced by oxygen free radicals.^[1]

Total aralosides of Aralia elata (Miq) Seem (TASAES) can prevent diabetes-induced cardiac dysfunction and pathological damage through up-regulating I(Ca(2+)-L) in cardiac cells and decreasing connective tissue growth factor (CTGF) expression.^[2]

Aralosides have anti-inflammatory effect, it can suppress significantly the swelling of rat hind paw induced by carrageenin in both intact and adrenalectomized rats, the swelling induced by PGE2, histamine, 5-HT, formaldehyde and mycostatin and the scald oedema induced by scalding rat's hind paw; it also has marked inhibitory effect on the increas sed permeability of capillaries caused by id PGE2, histamine, 5-HT, on the proliferation of granulation and exudation of air granuloma induced by croton oiland on the leukocytic migratory response. ^[3]

Aralosides can effectively prevent acute alcoholic liver injury,which may be due to its effects in prevention of lipid peroxidation.^[4]

Aralosides exert protective effects against H2O2-induced injury in myocardial cells in dose-and time-dependent manners, the mechanism of these protective effects may be due to its scavenging free radicals and increasing the activities of antioxidant enzymes, as well as decreasing myocardial performance and oxygen consumption and increasing the stabilization of myocardial cells.^[5]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[6]

Mobile phase: Acetonitrile-0.05% Phosphoric acid H2O=35:65 ;

Flow rate: 0.8 ml/min;

Column temperature: 30 °C;

The wave length of determination: 203 nm.

[Storage]

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

[References]

[1] Deng H, Li Y, Shen N, et al. Chin.J.Pharmacol. Toxicol., 1988(1).

[2] Xi S, Zhou G, Zhang X, et al. Exp. Mol. Med., 2009, 41(8):538-47.

[3] Zhou C C, Sun X B, Wei L, et al. Chin. J. Pharmacol. Toxicol., 1991(1):30-3.

[4] Du S L, Zhang Y P, Yao C L, et al. J. Chin. Clin. Med., 2010, 17(6):847-8.

[5] Sun G B, Wang M, Gao M M, et al. Chin. Pharm. Bull., 2013, 29(6):773-7.

[6] Liu Y, He B , Xiong W, et al. Med. Plant, 2013(9).

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