Natural Products



Ginkgolic acid C13:0 Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Ginkgolic acid C13:0

Catalog No.: CFN98507

Cas No.: 20261-38-5

Purity: >=98%

M.F: C₂₀H₃₂O₃

M.W: 320.47

HO OH

Physical Description: Powder

Synonyms: 6-Tridecylsalicylic acid; 2-Hydroxy-6-tridecylbenzoic acid.

[Intended Use]

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

[Source]

The leaves of Ginkgo biloba L.

[Biological Activity or Inhibitors]

Ginkgolic acid C13:0 and C15:1 exhibit potential inhibition aganist Pseudodactylogyrus and can be explored as plant-derived antiparasitic for the control of Pseudodactylogyrus.^[1] Ginkgolic acid C13:0 has a wide antimicrobial spectrum against E.coli and bacillus subtilis who are bacterias, and penicillium, penicillum purpurogenum, penicillium camemberti and aspergillus niger who are fungis, and the MIC of it against E.coli, bacillus subtilis and penicillium is 7.5, 15, 25 mg/mL seperately.^[2]

Ginkgolic acid (C13:0) exhibits the high α-glucosidase inhibitory activity. ^[3]

Ginkgolic acid C13:0 represents a new kind of molluscicide agent, it has a pronounced effect on snail mitochondria with gross ultrastructural changes, it can inhibit the gene expression of four mitochondrial enzymes including cytochrome c oxidase, adenosine triphosphate (ATP) synthase, cytochrome b and dihydronicotinamide adenine dinucleotide (NADH) dehydrogenase, suggests that snail mitochondria is a potential target for the molluscicidal activity of ginkgolic acid C13:0.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Methanol-0.1% Formic acid in water =93:7 ; Flow rate: 1.0 ml/min; Column temperature: 30 ℃; The wave length of determination:311 nm.

[Storage]

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

[References]

[1] Wang G X, Jiang D X, Zhou Z, et al. Aquaculture, 2009, 297(1-4):38-43.

[2] Wu H, Wu C, Liu J, et al. Journal of Chinese Institute of Food Science and Technology.
2015, 15(3):207-15.
[3] Sukito A, Tachibana S. Pak. J. Biol. Sci., 2014, 17(11):1170-8.

[4] Li X, Deng F, Shan X, et al. Pestic. Biochem. Phys., 2012, 103(2):115-20.

[5] Beek T A V, Wintermans M S. J. Chromatogr. A, 2001, 930(1-2):109-17.

[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