

Nothofagin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Nothofagin

Catalog No.: CFN92888

Cas No.: 11023-94-2

Purity: >=95%

M.F: $C_{21}H_{24}O_{10}$

M.W: 436.4

Physical Description: Powder

Synonyms: 2',4,4',6'-Tetrahydroxy-3-C-β-D-glucopyranosyldihydrochalcone.

HO OH OH OH

[Intended Use]

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

[Source]

The heartwood of Nothofagus fusca.

[Biological Activity or Inhibitors]

Nothofagin is a major antioxidant of redbush herbal tea and represents a class of

bioactive flavonoid-like C-glycosidic natural products.[1]

Nothofagin and aspalathin possess antithrombotic activities, they inhibit thrombin-

catalyzed fibrin polymerization and platelet aggregation, also elicit anticoagulant effects in

mice, and they offer a basis for development of a novel anticoagulant. [2]

Nothofagin and aspalathin can inhibit high glucose (HG)-mediated vascular

hyperpermeability, adhesion of monocytes toward HUVECs, and expression of cell

adhesion molecules (CAMs), they suppress the formation of reactive oxygen species

(ROS) and the activation of nuclear factor (NF)-kB; since vascular inflammation induced

by HG is critical in the development of diabetic complications, our results suggest that

nothofagin and aspalathin may have significant benefits in the treatment of diabetic

complications.[3]

[Solvent]

Pyridine, Methanol, Ethanol, DMSO, etc.

[HPLC Method]^[4]

Mobile phase: Methanol- 2% Formic acid H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 260 nm.

[Storage]

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

[References]

[1] Linda Bungaruang, Alexander Gutmann, Bernd Nidetzky, et al. Adv. Synth. Catal. 2013,

355(14-15):2757-63.

[2] Ku S K, Lee W, Kang M, et al. Arch. Pharm. Res., 2015, 38(6):1080-9.

[3] Ku S K, Kwak S, Kim Y, et al. Inflammation, 2014, 38(1):445-55.

[4] Joubert E. Food Chem., 1996, 55(4):403-11.

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