Natural Products



(-)-Epigallocatechin-3-(3"-O-methyl) gallate Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: (-)-Epigallocatechin-3-(3"-O-methyl) gallate

Catalog No.: CFN92081

Cas No.: 83104-87-4

Purity: > 95%

M.F: C₂₃H₂₀O₁₁

M.W: 472.4



Physical Description: Powder

Synonyms: 3,4-Dihydroxy-5-methoxybenzoic-acid(2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,

4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester; Catechin E.

[Intended Use]

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

[Source]

The leaves of Camellia sinensis.

[Biological Activity or Inhibitors]

(-)-Epigallocatechin-3-(3"-O-methyl)gallate shows a strong antioxidative activity, it also has a strong cytotoxic activity.^[1]

(-)-Epigallocatechin-3-O-(3-O-methyl)-gallate has potent antiallergic activity, it can negatively regulate basophil activation through the suppression of FcepsilonRI expression.^[2]

(-)-Epicatechin 3-(3-O-methylgallate) has anti-inflammatory effect, it can suppress the 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced inflammation of mouse ears, its activity is stronger than those of indomethacin and glycyrrhetinic acid, the normally used anti-inflammatory agents. ^[3]

Epigallocatechin-3-(3"-O-methyl)gallate has the function for cold preservation of primary rat hepatocytes.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: 0.05 M H₃PO₄ -- 40% Acetonitrile in 0.05 M H₃PO₄ ,gradient elution ; Flow rate: 1.0 ml/min; Column temperature: 30 $^{\circ}$ C; The wave length of determination: 280 nm.

[Storage]

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

[References]

[1] Kawase M, Wang R, Shiomi T, et al. Agr. Biol. Chem., 2000, 64(10):2218-20.

[2] Fujimura Y, Tachibana H, Maedayamamoto M, et al. J. Agr. Food Chem., 2002, 50(20):5729-34.

[3] Iijima T, Mohri Y, Hattori Y, et al. Chem. Biodivers., 2009, 6(4):520-6.

[4] Kagaya N, Hara Y, Saijo R, et al. J. Biosci. Bioeng., 2003, 96(96):559-63.

[5] Saijo R, Takeda Y. J Jpn. Soc. Food Sci., 1999, 46(3):138-47.

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