

Epicatechin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Epicatechin

Catalog No.: CFN98781

Cas No.: 490-46-0

Purity: >=98%

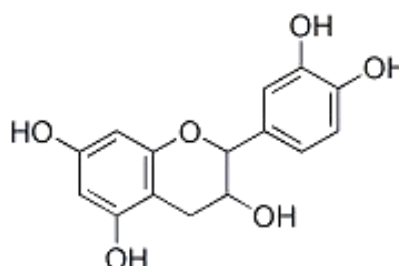
M.F: C₁₅H₁₄O₆

M.W: 290.27

Physical Description: Powder

Synonyms:

L-Epicatechin; 2-(3,4-Dihydroxyphenyl)-3,4-dihydro-2H-1-benzopyran-3,5,7-triol.



[Intended Use]

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

[Source]

The wood of *Acacia catechu* (L.F.) Willd.

[Biological Activity or Inhibitors]

Plant-derived flavanol (-)epicatechin enhances angiogenesis and retention of spatial memory in mice.^[1]

Oral administration of chemically pure (-)-epicatechin to humans closely emulates acute vascular effects of flavanol-rich cocoa, suggests that (-)-epicatechin mediates beneficial effects of flavanol-rich cocoa on vascular function in humans.^[2]

Epicatechin exerts antioxidative effects, it has protective effect on lipid peroxidation in phospholipid bilayers. ^[3]

Epicatechin has antinociceptive effect, it may be effective to treat nociceptive hypersensitivity in diabetic patients.^[4]

(-)-Epicatechin has the potential to increase CREB-regulated gene expression and increase GluR2 levels and thus modulate neurotransmission, plasticity and synaptogenesis.^[5]

[Solvent]

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

[HPLC Method]^[2]

Mobile phase: Methanol - 0.1%Phosphoric acid H₂O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 280 nm.

[Storage]

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

[References]

[1] Van Praag H, Lucero MJ, Yeo GW, *et al. J. Neurosci.*, 2007, 27(22):5869-78.

- [2] Schroeter H, Kelm M. *P. Natl. Acad. Sci.*, 2006, 103(4):1024-9.
- [3] Terao J, Piskula M, Yao Q. *Arch.Biochem. Biophys.*, 1994, 308(1):278-84.
- [4] Quiñonez-Bastidas G N, Cervantes-Durán C, Rocha-González H I, *et al. Life Sci.*, 2013, 93(17):637-45.
- [5] Schroeter H, Bahia P, Spencer J P E, *et al. J. Neurochem.*, 2007, 101(6):1596-606.
- [6] Myounggun C, Minseuk L. *Korean J.Crop Sci.*, 2008,53(2):224-32.

[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