

Theaflavin-3-gallate Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Theaflavin-3-gallate

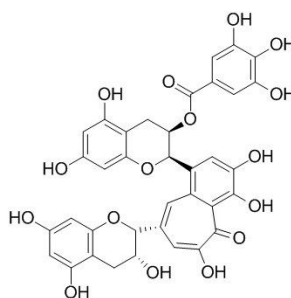
Catalog No.: CFN90170

Cas No.: 30462-34-1

Purity: >=98%

M.F: C₃₆H₂₈O₁₆

M.W: 716.60



Physical Description: Yellow powder

Synonyms: 3,4,6-Trihydroxy-1-[(2S,3S)-3,5,7-trihydroxychroman-2-yl]-8-[(2R,3R)-5,7-dihydroxy-3-(3,4,5-trihydroxybenzoyloxy)chroman-2-yl]-5H-benzocyclohepten-5-one;

Theaflavin 2A; Theaflavin gallate A.

[Intended Use]

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

[Source]

The leaves of *Black tea*.

[Biological Activity or Inhibitors]

Theaflavins from black tea, especially theaflavin-3-gallate, can play a role in decreased intestinal cholesterol absorption via inhibition of micelle formation.^[1]

Theaflavin-3-gallate and theaflavin-3'-gallate act as prooxidants and induce oxidative stress, with carcinoma cells more sensitive than normal fibroblasts.^[2]

Theaflavin-3-gallate has anticancer and apoptotic effects in non-small cell lung carcinoma.^[3]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[4]

Mobile phase: Acetonitrile- 20mM KH₂PO₄, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 280 nm.

[Storage]

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

[References]

[1] Vermeer M A, Mulder T P J, Molhuizen H O F. *J. Agr. Food Chem.*, 2009, 56(24):12031-6.

[2] Harvey Babich, Reena T. Gottesman, Emily J. Liebling, *et al. Basic Clin.Pharmacol.* , 2008, 103(1):66-74.

[3] Li D W, Meng L, Zhang K X, *et al. Bangl. J. Pharmacol.*, 2015, 10(4):3047-53.

[4] Friedman M, Levin C E, Choi S H, *et al. J. Food Sci.*, 2006, 71(6):C328-37.

[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