Natural Products

ChemFaces

Bisdemethoxycurcumin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Bisdemethoxycurcumin

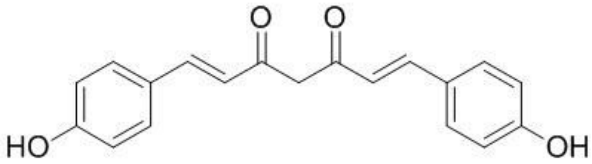
Catalog No.: CFN99186

Cas No.: 33171-05-0

Purity: > 98%

M.F: $C_{19}H_{16}O_4$

M.W: 308.33



Physical Description: Yellow powder

Synonyms:(E,E)-1,7-Bis(4-hydroxyphenyl)-1,6-heptadiene-3,5-dione;Didemethoxycurcumin; Diferuloylmethane.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Aromatics;
8. Others.

[Source]

The rhizome of *Curcuma longa L.*

[Biological Activity or Inhibitors]

Bisdemethoxycurcumin can regulate anti-inflammatory and anti-proliferative responses through a ROS-independent mechanism, also suppresses MCF-7 cells proliferation by inducing ROS accumulation and modulating senescence-related pathways.[1]

Bisdemethoxycurcumin directly accelerates gastric ulcer healing with potency equal to curcumin, its antiulcer effect might be due to its properties of decreasing gastric acid secretion and enhancing the mucosal defensive mechanism through suppression of iNOS-mediated inflammation.[2]

Bisdemethoxycurcumin differentially inhibit cancer cell invasion through the down-regulation of MMPs and uPA.[3]

Bisdemethoxycurcumin induces apoptosis in activated HSCs, but not in hepatocytes, by impairing cellular energetics and causing a downregulation of cytoprotective proteins, likely through a mechanism that involves CBR2.[4]

Bisdemethoxycurcumin has effects on 12-O-tetradecanoylphorbol-13-acetate-induced tumor promotion.[5]

Bisdemethoxycurcumin has antioxidant activities, inhibits ovarian cancer via reducing oxidative stress mediated MMPs expressions.[6,7]

[Solvent]

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

[HPLC Method][8]

Mobile phase: Acetonitrile:0.1% Trifluro-acetic acid =50:50;

Flow rate: 1.5 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 420 nm.

[Storage]

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

[References]

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[3] Li Y B, Gao J L, Zhong Z F, *et al. Pharmacol. Rep. Pr., 2013, 65(3):700-9.*

[4]Yodkeeree S, Chaiwangyen W, Garbisa S, *et al. J. Nutr.Biochem., 2009, 20(20):87-95.*

[5] Lee P J, Woo S J, Jee J G, *et al. Molecules, 2015, 20(1):1277-92*.

Jayaprakasha G K, Rao L J, Sakariah K K. *Food Chem., 2006, 98(4):720-4.*

[6]Huang M T, Ma W, Lu Y P, *et al. Carcinogenesis, 1995, 16(10):2493-7.*

[7] Pei H, Yang Y, Lin C, *et al. Sci. Rep., 2016, 6,28773.*

[8] Jadhav B K, Mahadik K R, Paradkar A R. *Chromatographia, 2007, 65(7):483-8.*

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