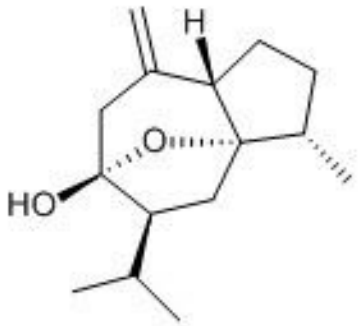
Natural Products

ChemFaces

Curcumol Datasheet

4th Edition (Revised in July, 2016)

[Product Information]



Name: Curcumol

Catalog No.: CFN99187

Cas No.: 4871-97-0

Purity: > 98%

M.F: $C_{15}H_{24}O_2$

M.W: 236.35

Physical Description: White needle cryst.

Synonyms:(3S,5S,6S,8aS)-3-methyl-8-methylidene-5-(propan-2-yl)octahydro-6H-3a,6-epoxyazulen-6-ol.

[Intended Use]

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

[Source]

The rhizomes of *Curcuma longa L.*

[Biological Activity or Inhibitors]

Curcumol isolated from Rhizoma Curcumae, a common traditional Chinese medicine, has been reported to possess antitumor effects, the anti-cancer activity of curcumol, which was related to a significant inhibition of IGF-1R and activation of p38 MAPKs, indicating that curcumol may be a potential anti-tumor agent for colorectal carcinoma therapy;it induces cell death in a dominant apoptotic fashion via the caspases-independent mitochondrial pathway in ASTC-a-1 cells; it has inhibitory effect on women cancer cells and synthesis of RNA.[1-3]

Curcumol exhibits anti-inflammatory properties by interfering with the JNK-mediated AP-1 pathway in lipopolysaccharide-activated RAW264.7 cells, it may be a potential lead compound for a novel anti-inflammatory drug because of its inhibitory activity on the production of various inflammatory mediators.[4]

Curcumol is a novel anti-seizure agent which inhibited neuronal excitability through enhancing GABAergic inhibition, it has inhibitory effects on the excitability of hippocampal neurons in culture, the basal locomotor activity of freely moving animals, and the chemically induced seizure activity in vivo.[5]

[Solvent]

Chloroform, Dichloromethane, Diethyl ether, DMSO, Acetone, etc.

[HPLC Method][6]

Mobile phase: Acetonitrile-1%Phosphoric acid H2O, gradient eiution ;

Flow rate: 1.0 ml/min;

Column temperature: 35 ℃;

The wave length of determination: 213 nm.

[Storage]

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

[References]

[1] Zhang W, Wang Z, Chen T. *Med. Oncol., 2011, 28(1):307-14.*

[2] Wang J, Huang F, Bai Z, *et al. Int. J. Mol .Sci., 2015, 16(8):19851-67.*

[3] Lichuni X U, Bian K, Liu Z, *et al. Tumor, 2005, 25(6):570-2.*

[4] Xi C, Zong C, Yuan G, *et al. Eur. J. Pharmacol., 2013, 723(1):339-45.*

[5] Ding J, Wang J J, Huang C, *et al. Neuropharmacology, 2014, 81(6):244-55.*

[6] Sun Y T, Liu S C, Zhang Z Q. *Chinese Archives of Traditional Chinese Medicine, 2010(2):391-2.*

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