[ Product Information ]

Name: Curdione

Catalog No.: CFN99146

Cas No.: 13657-68-6

Purity: > 98%

M.F: C_{15}H_{24}O_{2}

M.W: 236.34

Physical Description: Cryst.

Synonyms: (3S,6E,10S)-6,10-dimethyl-3-propan-2-ylcyclodec-6-ene-1,4-dione.

[ Intended Use ]

1. Reference standards;

2. Pharmacological research;

3. Synthetic precursor compounds;

4. Intermediates & Fine Chemicals;

5. Food research;

6. Cosmetic research;

7. Others.

[ Source ]

The rhizomes of Curcuma zedoaria (Berg.) Rosc.
**Biological Activity or Inhibitors**

Curdione, isolated from the rhizome of Curcuma zedoaria, has the inhibitory effect on the production of prostaglandin E2 in lipopolysaccharide (LPS)-stimulated mouse macrophage RAW 264.7 cells in a concentration-dependent manner (IC50 = 1.1 microM); the suppression of cyclooxygenase-2 (COX-2) mRNA expression is, at least in part, involved in this inhibitory activity of curdione; the inhibitors of prostaglandin biosynthetic enzyme cyclooxygenase (COX) have played a role of anti-inflammatory and cancer chemopreventive agents; suggests that curdione may have anti-inflammatory and cancer chemopreventive activities.[1]

Curdione can induce the apoptosis of the human breast cancer cell line MCF-7, and block the cells at G1/G0 phase, thereby inhibiting the proliferation of MCF-7 cells; and both mitochondrial pathway and death receptor pathway participate in the process to induce the apoptosis.[2]

Curdione shows significant anti-platelet aggregation and antithrombotic activities, the inhibitory mechanism of curdione on platelet aggregation may increase cAMP levels and subsequently inhibit intracellular Ca^{2+} mobilization. [3]

Curdione plays an important role in the CYP3A4 inhibitory activity of C. aromatica and curdione might inhibit the activity by accelerating the degradation of CYP3A4.[4]

**Solvent**

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

**HPLC Method**[5]

Mobile phase: Acetonitrile : H2O=32:68;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 220 nm.
[ Storage ]

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

[ References ]


[ Contact ]

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