

Furanodienone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Furanodienone

Catalog No.: CFN92028

Cas No.: 24268-41-5

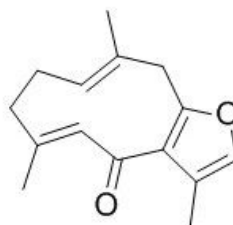
Purity: > 95%

M.F: C₁₅H₁₈O₂

M.W: 230.3

Physical Description: Powder

Synonyms: (5E,9E)-8,11-Dihydro-3,6,10-trimethylcyclodeca[b]furan-4(7H)-one; (1E,4E)-8,12-Epoxygermacra-1(10),4,7,11-tetraen-6-one.



[Intended Use]

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

[Source]

The rhizoma of *Curcuma zedoaria*.

[Biological Activity or Inhibitors]

Furanodienone has potent free radical scavenging activity, it also shows potent activity against *E. coli* and *S. enterica enterica* (IZ = 18.0 ± 0.14 and 16.0 ± 0.10 respectively).^[1]

Furanodienone treatment can inhibit E2-stimulation of estrogen response element (ERE)-driven reporter plasmid activity and ablated E2-targeted gene (e.g., c-Myc, Bcl-2, and cyclin D1) expression which results in the inhibition of cell cycle progression and cell proliferation, and in the induction of apoptosis.^[2]

Furanodienone can induce cell cycle arrest and apoptosis by suppressing EGFR/HER2 signaling in HER2-overexpressing human breast cancer cells. ^[3]

Furanodienone shows pronounced toxicity against neonate larvae of *S. littoralis*.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Acetonitrile-H₂O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C ;

The wave length of determination: 214 nm.

[Storage]

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

[References]

[1] Joshi S C, Mathela C S. *Pharmacognosy Research*, 2012, 4(4):80-4.

[2] Li Y W, Zhu G Y, Shen X L, *et al. J. Cell. Biochem.*, 2011, 112(1):217-24.

[3] Li Y W, Zhu G Y, Shen X L, *et al. Cancer Chemoth. Pharm.*, 2011, 68(5):1315-23.

[4] Pandji C, Grimm C, Wray V, *et al. Phytochemistry*, 1993, 34(2):415-9.

[5] Yang F Q, Wang Y T, Li S P. *J. Chromatogr. A*, 2006, 1134(1-2):226-31.

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