

## Isofuranodiene Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Isofuranodiene

**Catalog No.:** CFN98971

**Cas No.:** 57566-47-9

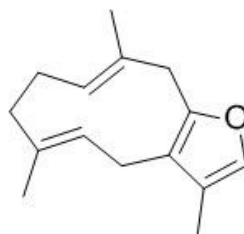
**Purity:** > 95%

**M.F:** C<sub>15</sub>H<sub>20</sub>O

**M.W:** 216.3

**Physical Description:** Oil

**Synonyms:** (3Z,7Z)-3,7,11-trimethyl-13-oxabicyclo[8.3.0]trideca-3,7,11,14-tetraene; Cyclo deca(B)furan, 4,7,8,11-tetrahydro-3,6,10-trimethyl-, (E,E)-.



### [ Intended Use ]

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

### [ Source ]

The herbs of *Chloranthus spicatus*

## **[ Biological Activity or Inhibitors ]**

Flower oil and isofuranodiene show noteworthy activity on tumor cells with IC<sub>50</sub> of 10.71 and 15.06 ug/ml, respectively, wild celery oil and isofuranodiene are able to induce apoptosis in colon cancer cells in a time and concentration-dependent manner suggesting a potential role as models for the development of chemopreventive agents.<sup>[1]</sup>

Isofuranodiene has antiproliferative activity on breast and prostate cancer cell lines.<sup>[2]</sup>

Isofuranodiene at concentrations of 25 and 12.5 IM alone, or in combination with 50 nM nerve growth factor (NGF) , shows a marked stimulation of neuritogenesis, but it is more effective at 12.5 IM with or without NGF; it has neuritogenic effects , which appears to be a promising neurotrophic and neuroprotective agent. <sup>[3]</sup>

Isofuranodiene can protect d-galactosamine/lipopolysacchride (GalN/LPS)-induced liver injury in SD rats and suggests that it may be a potential functional food ingredient for the prevention and treatment of liver diseases.<sup>[4]</sup>

## **[ Solvent ]**

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

## **[ HPLC Method ]<sup>[5]</sup>**

Mobile phase: Acetonitrile- H<sub>2</sub>O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 40 °C;

The wave length of determination: 230 nm.

## **[ Storage ]**

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

## **[ References ]**

[1]Quassinti L, Maggi F, Barboni L, *et al. Fitoterapia*, 2014, 97(17):133-41.

[2] Buccioni M, Dal B D, Lambertucci C, *et al. Scientific World J.*, 2014, 2014(3):246-61.

[3] Mustafa A M, Maggi F, Papa F, *et al. Food Chem.*, 2016, 192:782-7.

[4] Li W, Shi J, Papa F, *et al. Nat. Prod. Res.*, 2016;30(10):1162-5.

[5] Maggi F, Barboni L, Papa F, *et al. Food Chem.*, 2013, 135(4):2852- 62.

## **[ Contact ]**

**Address:**

S5-3 Building, No. 111, Dongfeng Rd.,  
Wuhan Economic and Technological Development Zone,  
Wuhan, Hubei 430056,  
China

**Email:** [info@chemfaces.com](mailto:info@chemfaces.com)

**Tel:** +86-27-84237783

**Fax:** +86-27-84254680

**Web:** [www.chemfaces.com](http://www.chemfaces.com)

**Tech Support:** [service@chemfaces.com](mailto:service@chemfaces.com)