



## 3-O-(2'E,4'Z-Decadienoyl)ingenol Datasheet

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

### [ Product Information ]

**Name:** 3-O-(2'E,4'Z-Decadienoyl)ingenol

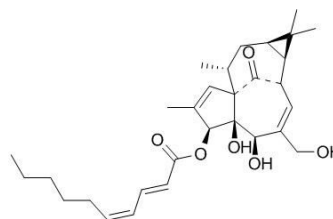
**Catalog No.:** CFN92867

**Cas No.:** 84680-59-1

**Purity:** >=95%

**M.F:** C<sub>30</sub>H<sub>42</sub>O<sub>6</sub>

**M.W:** 498.7



**Physical Description:** Powder

**Synonyms:** 2,4-Decadienoic acid, 1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-ylester, [1aR-[1aa,2b,5b,5ab,6b(2E,4Z),8aa,9a,10aa]]-; 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, 2,4-decadienoic acid deriv.; Euphorbia factor E1.

### [ Intended Use ]

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

### [ Source ]

The roots of *Euphorbia kansui* T. N. Liou ex S. B. Ho.

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

20-O-(2'E,4'Z-decadienoyl)ingenol, one toxic terpenoid from raw *Gansui*.<sup>[1]</sup>

Kansuiphorin C and 3-O-(2'E,4'Z-decadienoyl)-ingenol exhibit significant anticomplement activity with respective 50% inhibitory concentration values of  $44.1 \pm 3.8$  and  $89.5 \pm 5.5$   $\mu\text{M}$ .<sup>[2]</sup>

20-O-acetyl-[3-O-(2'E,4'Z)-decadienoyl]-ingenol and 3-O-(2'E,4'Z)-decadienoylingenol show the same antinematodal activity against the nematode, *Bursaphelenchus xylophilus*, at a minimum effective dose (MED) of 5 microg/cotton ball. <sup>[3]</sup>

## **[ Solvent ]**

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

## **[ HPLC Method ]<sup>[1]</sup>**

UPLC-MS:

Mobile phase: 0.1% Formic acid in water- 0.1% Formic acid in acetonitrile, gradient elution ;

Flow rate: 0.4 ml/min;

Column temperature: 40 °C;

Capillary voltage: 4.5 kV;

Flow rate of sheath gas: 8 L/min;

Temperature of sheath gas: 350 °C;

Flow rate of drying gas: 8 L/min;

Temperature of drying gas: 300 °C;

Pressure of nebulizer gas: 40 psi;

Fragmentor voltage : 175 V;

Mass scan range: 100 to 1700 (m/z).

## **[ Storage ]**

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

## **[ References ]**

[1] Shu X, Jiang X W, Cheng B C, *et al. BMC Complem. Altern. M.*, 2016, 16(1):1-8.

[2] Li G, Kim J H, Shen G, *et al. Appl. Biol. Chem.*, 2011, 54(2):159-62.

[3] Shi J X, Li Z X, Nitoda T, *et al. Biosci. Biotech. Biochem.*, 2007, 71(4):1086-9.

## **[ 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)