



## beta-Eudesmol Datasheet

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

### [ Product Information ]

**Name:** beta-Eudesmol

**Catalog No.:** CFN99537

**Cas No.:** 51317-08-9

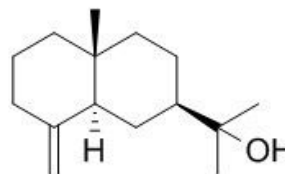
**Purity:** > 98%

**M.F:** C<sub>15</sub>H<sub>26</sub>O

**M.W:** 222.37

**Physical Description:** White cryst.

**Synonyms:** 2-[(2R,4aR,8aS)-4a-methyl-8-methylene-1,2,3,4,5,6,7,8a-octahydronaphthalen-2-yl]-2-propanol.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Spice flavor;
8. Others.

### [ Source ]

The rhizome of *Atractylodes lancea* (Thunb.) DC..

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

Beta-eudesmol, a sesquiterpenoid alcohol isolated from *Atractylodes lancea* rhizome, can inhibit angiogenesis, at least in part, through the blockade of the ERK signaling pathway, suggests that it may aid the development of drugs to treat angiogenic diseases.<sup>[1]</sup>

Beta-eudesmol induces neurite outgrowth in rat pheochromocytoma cells accompanied by an activation of mitogen-activated protein kinase, it may be a promising lead compound for potentiating neuronal function, and the drug may be useful in helping to clarify the mechanisms underlying neuronal differentiation.<sup>[2]</sup>

Beta-eudesmol has potential anti-angiogenic and anti-tumour activities, it inhibits angiogenesis by suppressing CREB activation in growth factor signalling pathway, is an inhibitor of tumour growth.<sup>[3]</sup>

Beta-eudesmol induces apoptosis is accompanied by cleavage of caspase-3, caspase-9, and poly (ADP-ribose) polymerase; downregulation of Bcl-2 expression; release of cytochrome c from mitochondria; and decrease in mitochondrial membrane potential (MMP), suggests it induces apoptosis in HL60 cells via the mitochondrial apoptotic pathway, which is controlled through JNK signaling. <sup>[4]</sup>

### **[ Solvent ]**

Chloroform, Dichloromethane, DMSO, Acetone.

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

Mobile phase: Acetonitrile -H<sub>2</sub>O=68:32 ;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 200 nm.

## **[ Storage ]**

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

## **[ References ]**

- [1] Tsuneki H, Ma E L, Kobayashi S, *et al. Eur. J. Pharmacol.*, 2005, 512(2-3):105-15.
- [2] Obara Y, Aoki T, Kusano M, *et al. J. Pharmacol. Exp. Ther.*, 2002, 301(3):803-11.
- [3] Tsuneki H. *J. Asian Nat .Prod. Res.*, 2008, 10(1-2):159-67.
- [4] Li, Yanchun, Li, *et al. Phytother. Res.*, 2012, 27(3):338-43.
- [5] Chen Y M, Chou G X, Wang Z T. *China Journal of Chinese Materia Medica*, 2007, 32(21):2265-7.

## **[ 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)