

## Byakangelicol Datasheet

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

### [ Product Information ]

**Name:** Byakangelicol

**Catalog No.:** CFN98167

**Cas No.:** 26091-79-2

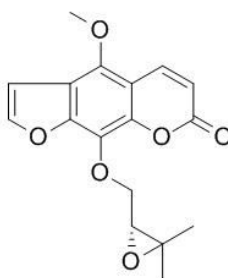
**Purity:** >=98%

**M.F:** C<sub>17</sub>H<sub>16</sub>O<sub>6</sub>

**M.W:** 316.31

**Physical Description:** White cryst.

**Synonyms:** 9-[[[(R)-3,3-Dimethyloxiranyl]methoxy]-4-methoxy-7H-furo[3,2-g][1]benzopyran-7-one.



### [ Intended Use ]

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

### [ Source ]

The roots of *Angelica dahurica*.

### [ Biological Activity or Inhibitors ]

Byakangelicol inhibits IL-1beta-induced PGE2 release in A549 cells, this inhibition may be mediated by suppression of COX-2 expression and the activity of COX-2 enzyme, the inhibitory mechanism of byakangelicol on IL-1beta-induced COX-2 expression may be, at least in part, through suppression of NF-kappaB activity; therefore, byakangelicol may have therapeutic potential as an anti-inflammatory drug on airway inflammation.<sup>[1]</sup>

(+/-)-Byakangelicol exhibits hepatoprotective activities on tacrine-induced cytotoxicity in Hep G2 cells, with EC(50) values of 112.7 +/- 5.35 microM.<sup>[2]</sup>

Byakangelicol exhibits a significant inhibition on the proliferation of cultured human tumor cells such as A549 (non small cell lung), SK-OV-3 (ovary), SK-MEL-2 (melanoma), XF498 (central nervous system) and HCT-15 (colon) in a dose-dependent manner. <sup>[3]</sup>

### **[ Solvent ]**

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

### **[ HPLC Method ]<sup>[4]</sup>**

Mobile phase: Methanol- H2O-Tetrahydrofuran, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 320 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Lin C H, Chang C W, Wang C C, *et al. J. Pharm. Pharmacol.*, 2002, 54(9):1271-8.

[2] Oh H, Lee H S, Kim T, *et al. Planta Med.*, 2002, 68(5):463-4.

[3] Kim Y K, Kim Y S, Ryu S Y. *Phytother. Res. Ptr*, 2007, 21(3):288-90.

[4] Lu X L, Ma Y Y , Zheng G Y, *et al. West China Journal of Pharmaceutical Sciences*,

2013, 28(4):398-400.

## **[ 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)