

## Ophiopogonin B Datasheet

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

### [ Product Information ]

**Name:** Ophiopogonin B

**Catalog No.:** CFN98555

**Cas No.:** 38971-41-4

**Purity:** > 98%

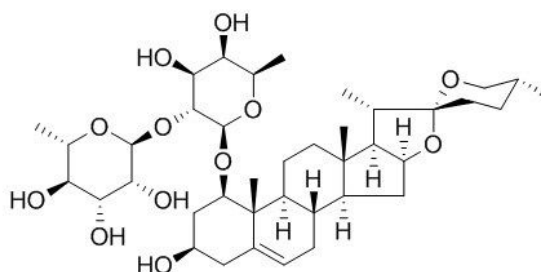
**M.F:** C<sub>39</sub>H<sub>62</sub>O<sub>12</sub>

**M.W:** 722.91

**Physical Description:** Powder

**Synonyms:**

beta-D-Galactopyranoside, (1beta,3beta,25R)-3-hydroxyspirost-5-en-1-yl 6-deoxy-2-O-(6-deoxy-alpha-L-mannopyranosyl)-;  
(1beta,3beta,14xi,25R)-3-hydroxyspirost-5-en-1-yl 6-deoxy-2-O-(6-deoxy-alpha-L-mannopyranosyl)-beta-D-glucopyranoside.



### [ Intended Use ]

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

### [ Source ]

The tubers of *Ophiopogon japonicus* Ker-Gawler cv. *Nanus*.

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

Ophiopogonin B (OP-B) is a bioactive component of Radix Ophiopogon Japonicus, which is often used in Chinese traditional medicine to treat pulmonary disease, it is a prospective inhibitor of PI3K/Akt and may be used as an alternative compound to treat NSCLC, it also induces apoptosis, mitotic catastrophe and autophagy, has inhibitory effect on adhesion, invasion and migration of A549 cells in vitro.<sup>[1-3]</sup>

Ophiopogonin B increases the protein expression levels of caspase-3 and B-cell lymphoma 2 (Bcl-2)-associated X protein, whereas the expression levels of Bcl-2 and the phosphorylation levels of extracellular signal-regulated kinases 1/2 and c-Jun N-terminal kinases 1/2 were decreased suggests that it may be considered a potential inhibitor of gastric cancer progression, and may be used as an alternative compound for its treatment.<sup>[4]</sup>

### **[ Solvent ]**

Pyridine, Methanol, Ethanol, Hot water, etc.

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

HPLC-ELSD:

Mobile phase: Acetonitrile- Tetrahydrofuran- H<sub>2</sub>O=45.6:2.9:51.5 ;

Flow rate: 0.7 ml/min;

Column temperature: Room Temperature;

Drift tube temperature: 93.18 °C;

Flow rate of gas : 2.47L/min.

### **[ Storage ]**

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

## **[ References ]**

- [1] Chen M, Du Y, Qui M, *et al. Oncol. Rep.*, 2013, 29(2):430-6.
- [2] Chen M, Guo Y, Zhao R, *et al. Int. J. Oncol.*, 2016,49(1):316-24.
- [3] Chen M J, Zhao R L, Guo Y Y, *et al. Chinese Pharmacol. Bull.*, 2015, 31(5):660-4.
- [4] Zhang W, Zhang Q, Jiang Y, *et al. Mol. Med .Rep.*, 2016, 13(6):4981-6.
- [5] Wu T, Yu B Y, Cheng Z H , *et al. Chinese herbal medicine*, 2000, 31 (03): 175-7.

## **[ Contact ]**

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