

# **Ophiopogonin D Datasheet**

5<sup>th</sup> Edition (Revised in January, 2017)

#### [ Product Information ]

Name: Ophiopogonin D

Catalog No.: CFN98156

Cas No.: 41753-55-3

**Purity: >=98%** 

M.F: C<sub>44</sub>H<sub>70</sub>O<sub>16</sub>

M.W: 855.02

Physical Description: Powder

HO, OH OH H H H H H H H

**Synonyms:**beta-D-xylopyranosyl-6-deoxy-alpha-L-mannopyranosyl-(1->2)-6-deoxy-1-C-[ (8xi,9xi,14xi,22xi,25R)-3-hydroxyspirost-5-en-1-yl]-beta-D-gulopyranoside.

## [ Intended Use ]

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

## [Source]

The roots of Ophiopogon japonicus.

## [ Biological Activity or Inhibitors]

Ophiopogonin D plays a protective role as an effective antioxidant in H2O2-induced

endothelial injury, it can be therefore developed as a novel drug for the therapy of

cardiovascular disorders.[1]

Ophiopogonin D can attenuate doxorubicin-induced autophagic cell death by relieving

mitochondrial damage in vitro and in vivo.[2]

Ophiopogonin D and spicatoside A can increase mucin production and secretion, by

directly acting on airway epithelial cells, they could be as expectorants in diverse

inflammatory pulmonary diseases. [3]

Ophiopogonin D inhibits MCF-7 cell growth via the induction of cell cycle arrest at the

G2/M phase.[4]

#### [Solvent]

Pyridine, Methanol, Ethanol, etc.

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

HPLC-ELSD:

Mobile phase: Acetonitrile- H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

Atomization temperature: 70 °C;

Evaporation temperature: 90 °C;

Flow rate of gas: 1.5 SLM.

## [Storage]

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

### [References]

[1] Qian J, Jiang F, Wang B, et al. J. Ethnopharmacol., 2010, 128(2):438-45.

- [2] Zhang Y Y, Meng C, Zhang X M, et al. J. Pharmacol. Exp. Ther. 2014, 352(1):166-74.
- [3] Park S H, Lee H J, Ryu J, et al. Phytomedicine., 2014, 21(2):172-6.
- [4] Zang QQ, Zhang L, Gao N, et al. J.Integr. Med., 2016, 14(1):51-9.
- [5] Wu X R, Xu DS, Yi F, et al. Chinese Traditional Patent Medicine, 2006, 28(11):1638-40.

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