

# **Columbianetin Datasheet**

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

## [ Product Information ]

Name: Columbianetin

Catalog No.: CFN90185

Cas No.: 3804-70-4

**Purity:** >=98%

M.F: C<sub>14</sub>H<sub>14</sub>O<sub>4</sub>

M.W: 246.26

Physical Description: White powder

**Synonyms:** (+)-Dihydrooroselol;

2H-Furo(2,3-h)-1-benzopyran-2-one, 8,9-dihydro-8-(1-hydroxy-1-methylet hyl)-, (S)-;

(8S)-8,9-Dihydro-8-(1-hydroxy-1-Methylethyl)-2H-furo[2,3-h]-1-benzopyran-2-one.

#### [ Intended Use ]

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

#### [Source]

The roots of Angelica pubescens.

#### [ Biological Activity or Inhibitors]

Columbianetin is a new phytoalexin associated with celery (Apium graveolens) resistance to pathogens during storage, it also has antifungal activity.<sup>[1]</sup>

Columbianetin can inhibit expression of COX-2, it also can inhibit the histamine release by substance P, indicates that Columbianetin may be helpful in regulating mast cell-mediated allergic inflammatory responses.<sup>[2]</sup>

(2'S)-columbianetin can be effectively used to protect keratinocytes from UVB induced damage. [3]

#### [Solvent]

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

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

Mobile phase: Methanol -Acetonitrile- 0.025 M Phosphoric acid =32:20:48;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 320 nm.

#### [Storage]

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

## [ References ]

[1] Afek U, Carmeli S, Aharoni N. Phytochemistry, 1995, 39(6):1347-50.

[2] Jeong H J, Na H J, Kim S J, et al. Biol. Pharm. Bull., 2009, 32(6):1027-31.

[3] Ahn B N, Kim J A, Kong C S, et al. J. Photoch. Photobio. B., 2012, 109:20-27.

[4] Cai Q, Sha M, Yang S. Zhongguo Zhong Yao Za Zhi. 1999, 24(9):552-4, 575.

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