

# **Rhoifolin Datasheet**

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

# [ Product Information ]

Name: Rhoifolin

Catalog No.: CFN99814

Cas No.: 17306-46-6

**Purity: >=98%** 

M.F: C<sub>27</sub>H<sub>30</sub>O<sub>14</sub>

M.W: 578.52

Physical Description: Yellow powder

**Synonyms:** Apigenin-7-O-neohesperidoside; Apigenin-7-O-rhamnoglucoside;

7-((2-O-(6-Deoxy-alpha-L-mannopyranosyl)-beta-D-glucopyranosyl)oxy)-5-hydroxy-2-(4-

hydroxyphenyl)-4H-benzopyran-4-one; NSC 649413; Rhoifoloside;

5-Hydroxy-2-(4-hydroxyphenyl)-4-oxo-4H-chromen-7-yl-2-O-(6-deoxy-alpha-L-mannopyr anosyl)-beta-D-glucopyranoside; 5-Hydroxy-2-(4-hydroxyphenyl)-4-oxo-4H-chromen-7-yl 2-O-(6-deoxyhexopyranosyl)hexopyranoside;5-Hydroxy-2-(4-hydroxyphenyl)-4-oxo-4H-chromen-7-yl (3xi)-2-O-(6-deoxy-alpha-L-mannopyranosyl)-beta-D-ribo-hexopyranoside.

## [ Intended Use ]

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

[Source]

The leaves of Turpinia arguya Seem.

[ Biological Activity or Inhibitors]

Rhoifolin and cosmosiin from red wendun leaves may be beneficial for diabetic

complications through their enhanced adiponectin secretion, tyrosine phosphorylation of

insulin receptor-β and GLUT4 translocation.[1]

Rhoifolin has anti-inflammatory activity and increases the total antioxidant capacity in a

reverse dose order, it can cause a time and reverse dose dependent reduction of

carrageenin-induced rat paw oedema, significantly abrogate prostaglandin E2 level,

significantly diminish the TNF-a release in the inflammatory exudates.<sup>[2]</sup>

Rhoifolin could be used as an ideal anticancer agent, it discriminates between

cancerous and non cancerous cell as it kills only the former one, so the side effects which

may appear during chemotherapy could be overcome. [3]

Rhoifolin has a radioprotective effect against radiation-induced decrease of blood

platelets and cardiac biochemical lesions in whole body irradiated mice.[4]

Rhoifolin has protective effect against hepatic injury induced by triptolide. [5]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[ HPLC Method ]<sup>[6]</sup>

Mobile phase: Methanol- H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 324 nm.

### [Storage]

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

#### [References]

- [1] Rao Y, Lee M, Chen K, et al. Evid.-Based Compl. Alt. M., 2011, 2011(1741-427X):1-9.
- [2] Eldahshan O A, Azab S S. J. Appl. Pharmaceut. Sci., 2012, 2(8):74-9.
- [3] Eldahshan O. Brit. J. Pharmaceut. Res., 2013, 3(1):46-53.
- [4] Omayma A. Eldahshan, Omama El-Shawi. *Arab Journal of Nuclear Science and Applications*, 2014,47(1):198-204.
- [5] Gao S L, Lu YY, An LJ, et al. Pharmacology & Clinics of Chinese Materia Medica, 2012(6):18-20.
- [6] Yu X X, Liu Q D, Wu J W, et al. Acta Chromatogr., 2016,28(1):129-43.

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