

## **Narirutin Datasheet**

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

#### [ Product Information ]

Name: Narirutin

Catalog No.: CFN99543

Cas No.: 14259-46-2

Purity: 98%

**M.F:**  $C_{27}H_{32}O_{14}$ 

M.W: 580.53

Physical Description: White powder

**Synonyms:** Naringenin-7-O-rutinoside; Isonaringin;

(2S)-5-hydroxy-2-(4-hydroxyphenyl)-4-oxo-3,4-dihydro-2H-chromen-7-yl-6-O-(6-deoxy-al pha-L-mannopyranosyl)-beta-D-glucopyrano- side;

HO'

4H-1-benzopyran-4-one,7-[[6-O-(6-deoxy-alpha-L-mannopyranosyl)-beta-D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(4-hydroxyphenyl)-, (2S)-.

#### [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Food and cosmetic research;
- 4. Synthetic precursor compounds;
- 5. Others field.

### [Source]

The young fruit of Citrus grandis (L.) Osbeck.

[ Biological Activity or Inhibitors]

Narirutin has anti-inflammatory effect in a murine model of allergic eosinophilic airway

inflammation, the mechanism is likely to be associated with a reduction in the

OVA-induced increases of IL-4 and IgE, suggests that narirutin may be an effective new

tool in the treatment of bronchial asthma.[1]

Citrus narirutin fraction (CNF), contained 75% of narirutin, co-administration of CNF with

alcohol can alleviate alcohol induced liver damage through preventing lipid formation,

protecting antioxidant system and suppressing productions of pro-inflammatory

cytokines.[2]

Narirutin has inhibition on cuprizone-induced apoptosis of oligodendrocyte. [3]

[Solvent]

Acetone, Methanol, Ethanol, Hot water.

[ HPLC Method ][4]

Mobile phase: Methanol -H2O, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 284nm.

[Storage]

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

[References]

[1] Funaguchi N, Ohno Y, Bu L B L, et al. Clin. Exp. Pharm. P., 2007, 34(8):766-70.

[2] Park H Y, Sang K H, Eom H, et al. Food Chem. Toxicol., 2013, 55(3):637-44.

[3] Zhan R, Watanabe K.. Neurosci. Res., 2011, 71(3):e323.

[4] Lee S, Khoo C S, Pearson J L, et al. J. Aoac. Int., 2009, 92(3):789-96.

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