Natural Products



Marmesin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Marmesin

Catalog No.: CFN92712

Cas No.: 13710-70-8

Purity: >98%

M.F: $C_{14}H_{14}O_4$

M.W: 246.3

Physical Description: Powder

Synonyms: 2,3-Dihydro-2-(1-hydroxy-1-methylethyl)-7H-furo[3,2-g][1]benzopyran-7-one.

HC

0

[Intended Use]

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

[Source]

The roots of Notopterygium incisum.

[Biological Activity or Inhibitors]

Marmesin, a new phytoalexin associated with resistance of parsley to pathogens after harvesting.^[1]

Marmesin and demethylsuberosin have significant behavioral (feeding deterrence) effects against both first and third instars of *S. exigua*.^[2]

Marmesin has much greater antifungal activity in vitro than psoralens. [3]

Marmesin is a novel angiogenesis inhibitor, it has regulatory effect on endothelial cell fate and angiogenesis, and warrant further evaluation and development as a potential therapeutic agent for the treatment and prevention of angiogenesis-related diseases including cancer.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Methanol-H2O,gradient elution ; Flow rate: 1.0 ml/min; Column temperature: 25 °C; The wave length of determination: 254 nm.

[Storage]

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

[<u>References</u>]

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- [2] And J T T, Millar J G. J. Agr. Food Chem., 1996, 44(9):2859-64.
- [3] U. Afek, J. Orenstein, N. Aharoni. Can.J. Plant Pathol., 2002, 24(1):61-4.
- [4] Kim J H, Kim J K, Ahn E K, et al. Cancer Lett., 2015, 369(2):323-30.
- [5] Zhao B, Yang X B, Yang X W, et al. Chinese Journal of Pharmaceutical Analysis, 2013,

33(3):382-7.

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