

## 3-O-Methylquercetin Datasheet

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

### [ Product Information ]

**Name:** 3-O-Methylquercetin

**Catalog No.:** CFN99616

**Cas No.:** 1486-70-0

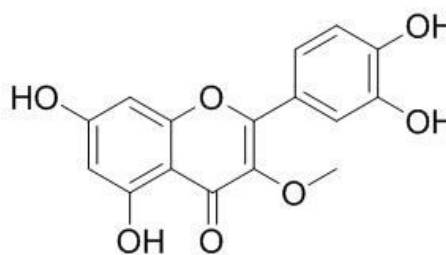
**Purity:** > 95%

**M.F:** C<sub>16</sub>H<sub>12</sub>O<sub>7</sub>

**M.W:** 316.26

**Physical Description:** Yellow powder

**Synonyms:** 3',4',5,7-Tetrahydroxy-3-methoxyflavone; 2-(3,4-Dihydroxyphenyl)-3-methoxy-5,7-dihydroxy-4H-1-benzopyran-4-one.



### [ Intended Use ]

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

### [ Source ]

The herbs of *Croton cascarilloides*.

### [ Biological Activity or Inhibitors ]

3-O-Methylquercetin(3-MQ), a main constituent of *Rhamnus nakaharai* Hayata (*Rhamnaceae*), can inhibit total cAMP- and cGMP-phosphodiesterase (PDE) of guinea pig trachealis, 3-MQ is a selective and competitive PDE3/PDE4 inhibitor, although its inhibitory effect on PDE4 is not potent, thus, 3-MQ may have a potential in the treatment of asthma beside its antiviral activity. [1]

3-O-Methylquercetin has both anti-inflammatory and bronchodilating effects, and has the potential for use in the treatment of asthma at a dose without affecting blood pressure.[2]

### **[ Solvent ]**

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

### **[ HPLC Method ]<sup>[3]</sup>**

Mobile phase: Methanol- Phosphoric acid-H<sub>2</sub>O, gradient elution ;

Flow rate: 0.8 ml/min;

Column temperature: 30 °C;

The wave length of determination: 370 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Ko W C, Chen M C, Wang S H, *et al. Planta Med.*, 2003, 69(4):310-5.

[2] Ko W C, Shih C M, Chen M C, *et al. Planta Med.*, 2004, 70(12):1123-7.

[3] Liao M D, Zhang XC. *China Pharmacist*, 2013, 16(12):1856-8.

### **[ Contact ]**

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