

## Sinensetin Datasheet

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

### [ Product Information ]

**Name:** Sinensetin

**Catalog No.:** CFN99599

**Cas No.:** 2306-27-6

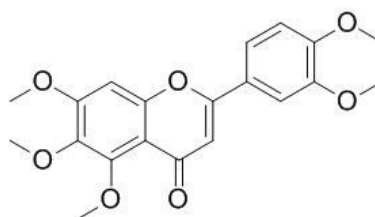
**Purity:** 95%

**M.F:** C<sub>20</sub>H<sub>20</sub>O<sub>7</sub>

**M.W:** 372.37

**Physical Description:** Yellow powder

**Synonyms:** Pedalitin-permethyl-ether; 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy-chromone; 5,6,7,3',4'-Pentamethoxyflavone; 3',4',5,6,7-Pentamethoxyflavone.



### [ Intended Use ]

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

### [ Source ]

The fruit of *Citrus aurantium* L..

### [ Biological Activity or Inhibitors ]

Sinensetin is a polymethoxylated flavonoids in citrus fruit, as a novel antiangiogenesis agent, has potential for anti-carcinogenesis, antitumor, and cardiovascular protective activity.<sup>[1]</sup>

Sinensetin has antioxidative effect and has anti-inflammatory by regulating the protein level of inhibitor $\kappa$ B- $\alpha$ , which may be utilized in the development of novel anti-inflammatory treatments.<sup>[2-4]</sup>

Sinensetin enhances activation of protein kinase A and increases intracellular cAMP levels in 3T3-L1 preadipocytes, it stimulates lipolysis via a cAMP pathway in mature 3T3-L1 adipocytes, suggests that sinensetin enhances adipogenesis and lipolysis by increasing cAMP levels in adipocytes.<sup>[5]</sup>

### **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, Acetone, DMSO.

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

Mobile phase: Acetonitrile- Isopropyl alcohol-20mM Phosphate buffer (pH 3.5) =30:15:55;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 340 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Lam I K, Alex D, Wang Y H, *et al. Mol.Nutr.Food Res.*, 2012, 56(6):945-56.

[2] M. Amzad Hossain, S.M. Salehuddin, M.J. Kabir, *et al. Food Chem.*, 2009, 113(1): 185-90.

[3] Laavola M, Nieminen R, Yam M F, *et al. Planta Med.*, 2012, 78(8):779-86.

[4] Shin H S, Kang S I, Yoon S A, *et al.* *Biosci. Biotech. Biochem.*, 2012, 76(4):847-9.

[5] Kang S I, Shin H S, Kim S J. *Biol. Pharm. Bull.*, 2015, 38(4):552-8.

[6] Mun F Y, Elsnoussi Ali Hussin Mohamed, Lee Fung Ang, *et al.* *J. Acupuncture Meridian Studies*, 2012, 5(4):176-82.

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