



## Kaempferol 3-neohesperidoside Datasheet

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

### [ Product Information ]

**Name:** Kaempferol 3-neohesperidoside

**Catalog No.:** CFN98415

**Cas No.:** 32602-81-6

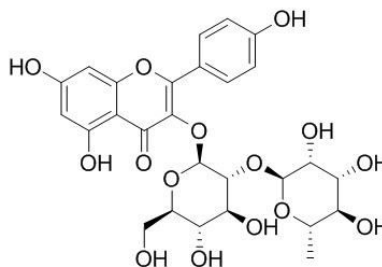
**Purity:** > 95%

**M.F:** C<sub>27</sub>H<sub>30</sub>O<sub>15</sub>

**M.W:** 594.5

**Physical Description:** Yellow powder

**Synonyms:**



### [ Intended Use ]

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

### [ Source ]

The herbs of *Delphinium grandiflorum* L.

### [ Biological Activity or Inhibitors ]

Kaempferol 3-neohesperidoside is one of the several compounds that have been reported

to have insulin-like properties in terms of glucose lowering, kaempferol 3-neohesperidoside stimulates glycogen synthesis in rat soleus muscle by approximately 2.38-fold. the stimulatory effect of kaempferol 3-neohesperidoside on glycogen synthesis was inhibited by wortmannin, the phosphatidylinositol 3-kinase (PI3K) inhibitor, and enhanced by lithium chloride, a glycogen synthase kinase 3 (GSK-3) inhibitor; was also nullified by PD98059, a specific inhibitor of mitogen-activated protein kinase (MEK) and by calyculin A, an inhibitor of protein phosphatase 1 (PP1) activity; concluded that the PI3K–GSK-3 pathway and MAPK–PP1 pathway are involved in the stimulatory kaempferol 3-neohesperidoside effect on glycogen synthesis in rat soleus muscle. [1]

Kaempferol 3-neohesperidoside possesses not only a significant anticancer effect against HepG2 cells, but also an effective and a dose dependent hepatoprotective and antioxidant activities due to the presence of flavonoids content.[2]

### **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

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

Mobile phase: Acetonitrile-H<sub>2</sub>O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 280 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Cazarolli L H, Folador P, Pizzolatti M G, *et al. Biochimie*, 2009, 91(91):843-9.

[2] Azab S S, Abdel-Daim M, Eldahshan O A. *Med.Chem. Res.* 2013, 22(9):4269-77.

[3] Fernandes F, Valentão P, Sousa C, *et al.* *Food Chem*, 2007, 105(3):1003-10.

## **[ Contact ]**

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