

## Herbacetin Datasheet

5<sup>th</sup> Edition (Revised in January, 2017)

### [ Product Information ]

**Name:** Herbacetin

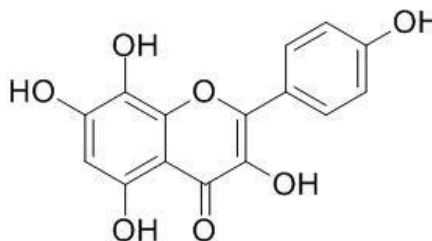
**Catalog No.:** CFN99778

**Cas No.:** 527-95-7

**Purity:** >=98%

**M.F:** C<sub>15</sub>H<sub>10</sub>O<sub>7</sub>

**M.W:** 302.24



**Physical Description:** Yellow powder

**Synonyms:** 3,5,7,8-Tetrahydroxy-2-(4-hydroxyphenyl)chromen-4-one;

3,4',5,7,8-Pentahydroxyflavone.

### [ Intended Use ]

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

### [ Source ]

The herbs of *Equisetum hyemale* L.

## **[ Biological Activity or Inhibitors ]**

Herbacetin and gossypetin as taxonomic markers in higher plants.<sup>[1]</sup>

Herbacetin induces HepG2 apoptosis in a ROS-mediated mitochondria-dependent manner that correlate with the inactivation of the PI3K/Akt pathway.<sup>[2]</sup>

Herbacetin, a novel Met inhibitor with a potential utility in cancer therapeutics, suppresses the HGF-induced motility of human breast cancer MDA-MB-231 cells by inhibiting c-Met and Akt phosphorylation. <sup>[3]</sup>

Herbacetin exerts an anti-inflammatory effect through suppression of LPS-induced JNK and NF- $\kappa$ B signaling pathways and diminished production of proinflammatory cytokines and mediators.<sup>[4]</sup>

Herbacetin has a strong ability to scavenge free radical and inhibit oxidative protein damage.<sup>[5]</sup>

## **[ Solvent ]**

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

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

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

Flow rate: 1.0 ml/min;

Column temperature: 35 °C;

The wave length of determination: 382 nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Harborne J B. *Phytochemistry*, 1969, 8(1):177-83.

- [2] Yan Q, Xiang Q, Li Y, *et al. Food Chem. Toxicol.*, 2013, 51(1):426-33.
- [3] Hyuga S, Hyuga M, Yoshimura M, *et al. Planta Med.*, 2013, 79(16):1525-30.
- [4] Li L, Sapkota M, Kim S W, *et al. Eur. J. Pharmacol.*, 2015, 765:115-23.
- [5] Qiao Y, Liu X B. *Food Science*, 2013, 34(17):106-10.
- [6] Zhang J, Jin S X, Geng B, *et al. Chinese Traditional and Herbal Drugs*, 2016, 47(23): 4253-6.

## **[ Contact ]**

**Address:**

S5-3 Building, No. 111, Dongfeng Rd.,  
Wuhan Economic and Technological Development Zone,  
Wuhan, Hubei 430056,  
China

**Email:** [info@chemfaces.com](mailto:info@chemfaces.com)

**Tel:** +86-27-84237783

**Fax:** +86-27-84254680

**Web:** [www.chemfaces.com](http://www.chemfaces.com)

**Tech Support:** [service@chemfaces.com](mailto:service@chemfaces.com)