

Velutin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Velutin

Catalog No.: CFN98290

Cas No.: 25739-41-7

Purity: 98%

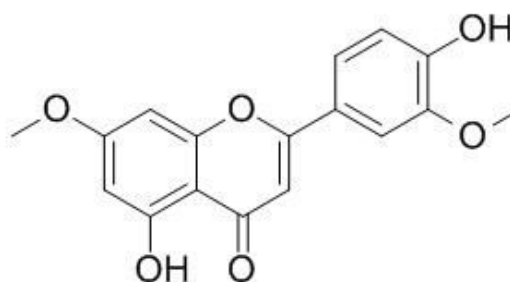
M.F: C₁₇H₁₄O₆

M.W: 314.3

Physical Description: Yellow powder

Synonyms: 4',5-Dihydroxy-3',7-dimethoxyflavone; Flavoyadorigenin B;

5-Hydroxy-2-(4-hydroxy-3-methoxyphenyl)-7-methoxy-4H-1-benzopyran-4-one.



[Intended Use]

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

[Source]

The leaves of *Vernonia flexuosa*.

[Biological Activity or Inhibitors]

Velutin, a unique flavone isolated from the pulp of açai fruit (*Euterpe oleracea* Mart.), has strong anti-inflammatory, can effectively inhibit the expression of proinflammatory cytokines TNF- α and IL-6 in low micromole levels by inhibiting NF- κ B activation and p38 and JNK phosphorylation.^[1]

Velutin exhibits the strongest effects in reducing both TNF- α and IL-6 dose-dependently in the two type cells, it also strongly inhibits NF- κ B activation, suggests that it effectively inhibits proinflammatory cytokine production in low micromole levels by inhibiting NF- κ B activation through blocking the degradation of I κ B. ^[2]

Velutin controls HIF-1 α activity during PgLPS-activated osteoclastogenesis probably through modulation of the NF- κ B pathway, perhaps it could be used therapeutically to prevent bone loss seen in periodontitis.^[3]

Velutin and betulinic acid can induce apoptosis in tumor cells.^[4]

[Solvent]

Chloroform, Dichloromethane, Acetone, DMSO.

[HPLC Method]^[5]

Mobile phase: 2.2% SDS-1.5% n-Octane-7.75% n-Butanol -0.5% Triethylamine -88%

Water (with H₃PO₄ adjusted pH3.7);

Flow rate: 1.0 ml/min;

Column temperature: 30 °C;

The wave length of determination: 350 nm.

[Storage]

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

[References]

- [1] Xie C, Kang J, Li Z, *et al.* *J. Nutr. Biochem.*, 2011, 23(9):1184-91.
- [2] Xie C, Kang J, Zhimin L, *et al.* *Faseb Journal*, 2011, 25(1):772.
- [3] C.H.L. BRITO JR, G. NOGUEIRA-FILHO. *Aadr Meeting & Exhibition*. 2014.
- [4] Yoo Y C, Lee K B. *Korea Society of Laboratory Animals*, 2003,6: 101-101.
- [5] Zhu L C, Liu Z H, Li G, *et al.* *Chinese Journal of Modern Applied Pharmacy*, 2013 (6): 651-4.

[Contact]

Address:

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

Email: info@chemfaces.com

Tel: +86-27-84237783

Fax: +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com