Natural Products

ChemFaces

Martynoside Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Martynoside

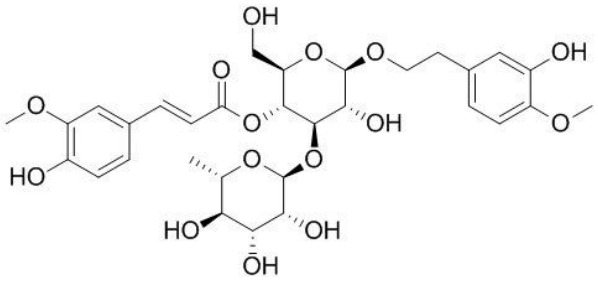
Catalog No.: CFN97159

Cas No.: 67884-12-2

Purity: > 95%

M.F: $C_{31}H_{40}O_{15}$

M.W: 652.7



Physical Description: Powder

Synonyms:2-(3-Hydroxy-4-methoxyphenyl)ethyl-3-O-(6-deoxy-alpha-L-mannopyranosyl)-4-O-[(2E)-3-(4-hydroxy-3-methoxyphenyl)prop-2-enoyl]-beta-D-glucopyranoside.

[Intended Use]

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

[Source]

The herbs of *Plantago asiatica L.*

[Biological Activity or Inhibitors]

Martynoside and verbascoside can resist muscle fatigue, which is depending on their antioxidative activities, this is in agreement with the role of reactive oxygen species (ROS) in promoting fatigue in skeletal muscle.[1]

Martynoside and acteoside are plant phenylpropanoid glycosides exhibiting anticancer, cytotoxic and antimetastatic activities; martynoside may be an important natural selective estrogen receptor modulator, it can induce nodule mineralization in osteoblasts and has antiproliferative effect on endometrial cells.[2]

Martynoside has antioxidative properties. [3]

Martynoside and verbascoside have the potential of antagonizing sports anaemia, the mechanism of this effect may be related to preventing RBC from free radical damage.[4]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method][5]

Mobile phase: Methanol -H2O,gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 220 nm.

[Storage]

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

[References]

[1] Liao F, Zheng R L, Gao J J, *et al. Phytother. Res., 2015, 13(7):621-3.*

[2] Papoutsi Z, Kassi E, Mitakou S, *et al. J. Steroid Biochem. Mol. Biol., 2006 ,98(1): 63-71.*

[3] Miao J, Wang W S, Navaratnam S, *et al. Free Radic. Res., 2003, 37(8):829-33.*

[4] Zhu M, Tan N, Zhu H, *et al. Int. J. Sports Med., 2010, 31(08):537-41.*

[5] Khodaie L, Delazar A, Lotfipour F, *et al. Rev.Bras. Farmacogn., 2012, 22(6):1268-75.*

[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