[Product Information]

Name: Morroniside
Catalog No.: CFN98161
Cas No.: 25406-64-8
Purity: > 98%
M.F: C_{17}H_{26}O_{11}
M.W: 406.38

Physical Description: White powder

Synonyms: (1S,3R,4aS,8S,8aS)-3-hydroxy-1-methyl-8-[(2S,3R,4S,5S,6R)-3,4,5-trihydr oxy-6-(hydroxymethyl)-2-oxanyl]oxy]-1,3,4,4a,8,8a-hexahydropyrano[3,4-c]pyran-5-carbo xylic acid methyl ester.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Cosmetic research;
5. Synthetic precursor compounds;
6. Intermediates & Fine Chemicals;
7. Ingredient in supplements, beverages;
8. Others.
[Source]
The herbs of *Lonicera morrowii*.

[Biological Activity or Inhibitors]
Morroniside, an iridoid glycoside isolated from *Cornus officinalis* Sieb. Et Zucc., has shown potent antioxidant properties, it can protect human neuroblastoma SH-SY5Y cells against hydrogen peroxide-induced cytotoxicity, suggests that morroniside has protective effects against oxidative stress-induced neurotoxic processes.[1]
Morroniside exhibits protective effects against diabetic renal damage by inhibiting hyperglycemia and oxidative stress, indicates that morroniside is one component partly responsible for the protective effects of *Corni Fructus* and *Hachimi-jio-gan* against diabetic renal damage.[2]
Administration of morroniside significantly increases hepatic peroxisome proliferator activated receptor alpha expression, morroniside would act as a regulator of hepatic inflammatory reactions and lipid metabolism in db/db mice; it may inhibit abnormal lipid metabolism and inflammation due to reactive oxygen species in the kidneys in type 2 diabetes.[3,4]
Morroniside and loganin have protective effects on rat mesangial cell proliferation exposed to advanced glycation end products by preventing oxidative stress.[5]
Morroniside can improve microvascular functional integrity of the neurovascular unit after cerebral ischemia, it may offer a novel therapeutic approach for promoting microvascular integrity recovery and provide a thoroughly new direction for stroke therapy.[6]
Morroniside can promote bone marrow mesenchymal stem cell proliferation in rats.[7]
Morroniside can decrease the level of cyclooxygenase(Cox) and it may be the mechanism of morroniside on inhibiting the platelet aggregation induced by ADP in rabbits.[8]

[Solvent]
Pyridine, Methanol, Ethanol, etc.
[**HPLC Method**][9]

Mobile phase: Acetonitrile–Methanol–0.1% Formic acid =10:10:80 ;
Flow rate: 1.0 ml/min;
Column temperature: 25 ℃;
The wavelength of determination: 239 nm.

[**Storage**]

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

[**References**]


[**Contact**]

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