[Product Information]

Name: Chikusetsusaponin IVa
Catalog No.: CFN92516
Cas No.: 51415-02-2
Purity: >98%
M.F: C_{42}H_{68}O_{14}
M.W: 386.40

Physical Description: Powder
Synonyms: 28-(β-D-Glucopyranosyloxy)-28-oxoolean-12-en-3β-yl β-D-glucopyranosiduronic acid; Calenduloside F; Glycoside D2; Momordin IIb; Silphioside G; β-D-Glucopyranosiduronic acid, (3b)-28-(b-D-glucopyranosyloxy)-28-oxoolean-12-en-3-yl.

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

[Source]
The herbs of Hemsleya amabilis Diels.
Biological Activity or Inhibitors

Chikusetsusaponin IVa, isolated from the whole plant of Alternanthera philoxeroides (Mart.) Griseb (Amaranthaceae), it shows antiviral activities against HSV-1, HSV-2, human cytomegalovirus, measles virus, and mumps virus with selectivity indices (CC (50)/IC (50)) of 29, 30, 73, 25, and 25, respectively; it also provides in vivo efficacy in a mouse model of genital herpes caused by HSV-2; demonstrate that chikusetsusaponin IVa may be a candidate of antiherpetic agents.[1]

Chikusetsusaponin IVa can inhibit thrombus formation in a stasis model of venous thrombosis, although it does not induce a significant bleeding effect; it also prolongs the ex vivo activated partial thromboplastin time, suggests that chikusetsusaponin IVa exerts antithrombotic effects, including minor hemorrhagic events..[2]

Chikusetsusaponin IVa has anti-inflammatory effects, it suppresses the production of inducible nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), interleukin-1 beta (IL-1β), interleukin-6 (IL-6), and tumor necrosis factor-α (TNF-α) in LPS-stimulated THP-1 cells likely by inhibiting NF-κB activation and ERK, JNK, and p38 signal pathway phosphorylation. [3]

Chikusetsusaponin IVa has immunomodulating activity, it increases splenocyte proliferation in dose-dependent manner and at a concentration of 25 µg/ml the compound significantly increases splenocyte proliferation.[4]

Chikusetsusaponin IVa has hepatoprotective activity.[5]

Solvent

Pyridine, Methanol, Ethanol, etc.

HPLC Method

Mobile phase: Acetonitrile-0.2%Phosphoric acid H2O=35:65 ;
Flow rate: 1.0 ml/min;
Column temperature: 30 °C;
The wave length of determination: 203 nm.

[ Storage ]

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

[ References ]


[ Contact ]

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