

Chikusetsusaponin Iva

Catalog No: tcsc3821



Available Sizes

Size: 5mg

Size: 10mg



Specifications

CAS No:

51415-02-2

Formula:

$C_{42}H_{66}O_{14}$

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Calendulose F

Observed Molecular Weight:

794.97

Product Description

Chikusetsusaponin IVa a major active ingredient of triterpenoid saponins, exerts antithrombotic effects, including minor hemorrhagic events. This appears to be important for the development of new therapeutic agents. a novel AMPK activator that is capable of

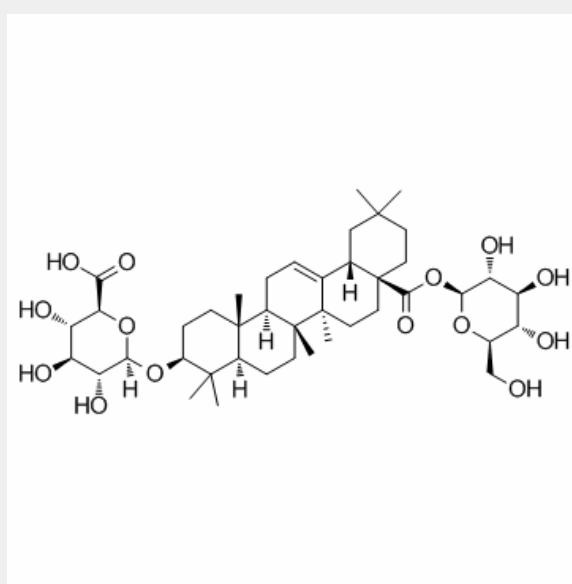
bypassing defective insulin signalling and could be useful for the treatment of T2DM or other metabolic disorders.

IC50 Value: $199.4 \pm 9.1 \mu\text{M}$ (inhibiting thrombin-induced fibrinogen clotting)

Target:

In vitro: Using biochemical and pharmacological methods, it proves that chikusetsusaponin IVa prolongs the recalcification time, prothrombin time, activated partial thromboplastin time, and thrombin time of normal human plasma in a dose-dependent manner; inhibits the amidolytic activity of thrombin and factor Xa upon synthetic substrates S2238 and S2222; inhibits thrombin-induced fibrinogen clotting (50% inhibition concentration, $199.4 \pm 9.1 \mu\text{M}$); inhibits thrombin- and collagen-induced platelet aggregation. Chikusetsusaponin IVa can also preferentially inhibits thrombin in a competitive manner ($K(i)=219.6 \mu\text{M}$) [1]. Chikusetsusaponin IVa suppresses the production of iNOS, COX-2, IL-1 β , IL-6, and TNF- α in LPS-stimulated THP-1 cells likely by inhibiting NF- κB activation and ERK, JNK, and p38 signal pathway phosphorylation [2].

In vivo: Studies were performed on type 2 diabetic mellitus (T2DM) rats given CHS for 28 days to test the antihyperglycemic activity. Oral administration of CHS dose-dependently increased the level of serum insulin and decreased the rise in blood glucose level [3].



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