

Product Name : Ilexgenin A

Synonyms : —

Cat No. : M22855

CAS Number : 108524-94-3

Molecular Formula : C₃₀H₄₆O₆

Formula Weight : 502.69

Chemical Name : —

Description : Ilexgenin A is a novel pentacyclic triterpenoid, is a compound extracted from leaves of Ilex hainanensis Merr. Ilexgenin A (IA), a novel pentacyclic triterpenoid, is a compound extracted from leaves of Ilex hainanensis Merr. treatment with IA attenuated atherosclerosis in high-fat diet-induced apolipoprotein E deficient mice via a series of effects involving regulation of lipid parameters, decrease of atherosclerosis-related indexes, inhibition of inflammatory cytokines secretion and pathological changes of main organs. The underlying mechanism of IA was investigated on oxidized low-density lipoprotein (Ox-LDL)-induced THP-1 cells. Pre-treatment with IA decreased active inflammation cytokines involving interleukin-6 (IL-6), IL-1 and tumor necrosis factor- α (TNF- α) expression in a concentration-dependent manner. IA inhibited the phosphatidylinositol 3-kinase (PI3K), protein kinase B (Akt), IKK α phosphorylation and NF- κ B activity induced by Ox-LDL. Overall, these findings define IA as a novel drug candidate for anti-atherosclerotic therapy.

Pathway : Apoptosis

Target : IL Receptor

Receptor : IL Receptor; TNF- α

Solubility : —

SMILES : CC1CCC2(CCC3(C(=CCC4C3(CCC5C4(CCC(C5(C)C(=O)O)O)C)C)C2C1(C)O)C)C(=O)O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Inhibition of lipolysis by ilexgenin A via AMPK activation contributes to the prevention of hepatic insulin resistance. Eur J Pharmacol. 2017 Oct 15;813:84-93.