

Astragaloside A

Catalog No: tcsc3710



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

83207-58-3

Formula:

$C_{41}H_{68}O_{14}$

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

H2O :

Alternative Names:

Astramembrannin I;Astragalin A

Observed Molecular Weight:

784.97

Product Description

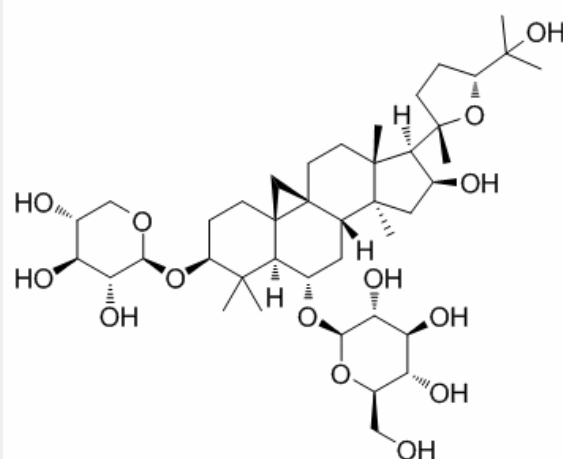
Astragaloside A is one of the major active constituents of *Astragalus membranaceus* in Traditional Chinese Medicine; has been widely used to treat ischemic diseases.

IC50 value:

Target:

in vitro: AS-IV treatment promotes umbilical vein endothelial cells (HUVEC) proliferation, migration, and tube formation. AS-IV treatment also activates JAK2/STAT3 and ERK1/2 signaling pathways, and up-regulates endothelial nitric oxide synthase (eNOS) expression and nitric oxide (NO) production [1]. Administration of astragaloside IV (16, 32, and 64 μ M) 1 h prior to lipopolysaccharide stimulation dose-dependently attenuated cardiac hypertrophy induced by lipopolysaccharide. Further studies demonstrated that astragaloside IV inhibited the increment of the resting intracellular free Ca^{2+} , and its effect was similar to verapamil [2]. ASI could inhibit cells apoptosis induced by high glucose (25mmol/L) in dose-dependent and time-dependent manners. ASI also inhibited high glucose-induced expression of TGF- β 1 and activation of p38 MAPK pathway at the protein level. Furthermore, ASI increased HGF production in human tubular epithelial cells [3].

in vivo: the growth of tumor was suppressed by AS-IV treatment in vivo. AS-IV also could down-regulate regulatory T cells (Tregs) and up-regulate cytotoxic T lymphocytes (CTLs) in vivo and in vitro[4]. As an in vivo model, mice subjected to unilateral ureteral obstruction (UUO) were administered AS-IV (20 mg/kg) by intraperitoneal injection for 7 days. AS-IV significantly alleviated renal mass loss and reduced the expression of α -smooth muscle actin, fibronectin, and collagen IV both in vitro and in vivo [5].



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