Web: www.taiclone.com
Tel: +886-2-2735-9682
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# 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

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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 μM) 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 Ca2+, 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-β1 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].