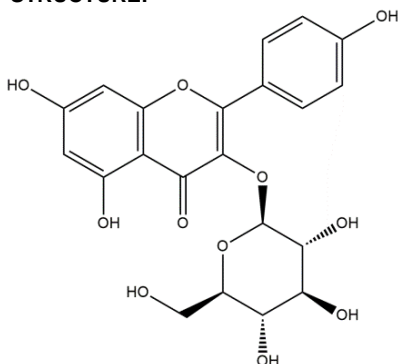


Astragalin

ALTERNATE NAMES: 5,7-dihydroxy-2-(4-hydroxyphenyl)-3-[(2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)oxan-2-yl]oxychromen-4-one; kaempferol-3-glucoside; 3-(β-D-glucopyranosyloxy)-5,7-dihydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one; Kaempferol 3-β-D-glucopyranoside; 3,4',5,7-Tetrahydroxyflavone 3-glucoside

CATALOG #: B2964-1 1 mg
B2964-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₁H₂₀O₁₁

MOLECULAR WEIGHT: 448.38

CAS NUMBER: 480-10-4

APPEARANCE: Solid

PURITY: 95%

SOLUBILITY: ~30 mg/ml in DMSO and DMF

DESCRIPTION: Astragalin is a flavonoid isolated from leaves of persimmon, green tea seeds, wine and American pokeweed. It shows anti-inflammatory and anti-oxidant activity. It dose-dependently (20-80 μg/ml) inhibits IL-1β-stimulated nitric oxide and prostaglandin E2 (PGE2) production in patient-derived osteoarthritis chondrocytes. It also inhibits IL-1β-stimulated expression of nitric oxide synthase (NOS), COX-2 and activation of MAPK and NF-κB signaling. It (1-20 μM) dose-dependently prevents the loss of E-cadherin, expression of vimentin, and production of collagen type-1 in hydrogen peroxide-exposed human bronchial epithelial cells in vitro. It (10-20 mg/kg, p.o.) also reduces reactive oxygen species (ROS) production, collagen fiber deposition, and autophagosome formation in the epithelial lung tissue of ovalbumin-challenged mice.

STORAGE TEMPERATURE: -20°C

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Cho, I.-H., Choi, Y.-J., Gong, J.-H., et al. Astragalin inhibits autophagy-associated airway epithelial fibrosis. *Respir. Res.* 16:51, (2015).
2. Ma, Z., Piao, T., Wang, Y., et al. Astragalin inhibits IL-1β-induced inflammatory mediators production in human osteoarthritis chondrocyte by inhibiting NF-κB and MAPK activation. *Int. Immunopharmacol.* 25(1), 83-87 (2015).

RELATED PRODUCTS:

Wogonoside (Cat. No. B2953)
 (-)-Epigallocatechin gallate (Cat. No. 1841)
 Flavopiridol (Cat. No. 2090)
 Astilbin (Cat. No. B2616)
 Chrysin (Cat. No. B2608)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**