

Product Data Sheet

Product Name: Gossypetin

Cat. No.: GC38917

Chemical Properties

Cas. No. 489-35-0

SMILES O=C1C(O)=C(OC2=C1C(O)=CC(O)=C2O)C3=CC(O)=C(C=C3)O

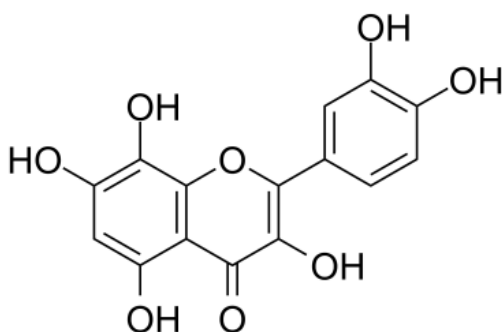
Formula $C_{15}H_{10}O_8$ M.Wt 318.24

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Gossypetin is a hexahydroxylated flavonoid and is a potent mitogen-activated protein kinase kinase (MKK)3 and MKK6 inhibitor with strongly attenuates the MKK3/6-p38 signaling pathway, has various pharmacological activities, including antioxidant, antibacterial and anticancer activities[1].

Gossypetin (20-60 μM; 48 hours; KYSE30, KYSE450 and KYSE510 cells) treatment significantly inhibits anchorage-dependent esophageal cancer cell growth in dose dependent manner. Gossypetin strongly suppresses anchorage-independent cell growth in esophageal cancer cells[1]. Gossypetin

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

(60 μ M; 3 hours; KYSE30 and KYSE410 cells) treatment strongly inhibits p38 activity in a dose-dependent manner and confirms that Gossypetin directly suppresses MKK3 or MKK6 activity[1]. Gossypetin (20-40 μ M; 48 hours; KYSE450 and KYSE510 cells) treatment reduces S phase and induces G2 phase cell cycle arrest in a dose-dependent manner[1]. Gossypetin (20-40 μ M; 72 hours; esophageal cancer cells) treatment induces intrinsic apoptosis of esophageal cancer cells[1]. Cell Proliferation Assay[1] Cell Line: KYSE30, KYSE450 and KYSE510 cells

Gossypetin (100 mg/kg; oral administration; 5 times per week; for 21 days; severe combined immunodeficiency (SCID) female mice) treatment significantly decreases the volume of esophageal tumor growth and without significant loss of body weight. The expression of Ki67 is significantly decreased by Gossypetin. There are no obvious morphological differences between tissues from treated or untreated mic. The phosphorylation of p38, the direct downstream protein of MKK3/6 strongly inhibited in the Gossypetin-treated group[1]. Animal Model: Severe combined immunodeficiency (SCID) female mice (6-9 weeks old) injection with esophageal cancer tissue[1]

[1]. Xie X, et al. Gossypetin is a novel MKK3 and MKK6 inhibitor that suppresses esophageal cancer growth in vitro and in vivo. Cancer Lett. 2019 Feb 1;442:126-136.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA