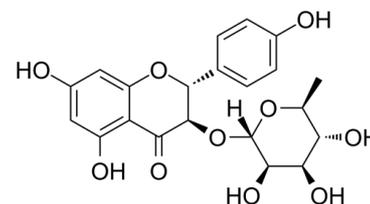


Data Sheet

Product Name:	Engeletin
Cat. No.:	CS-0008955
CAS No.:	572-31-6
Molecular Formula:	C ₂₁ H ₂₂ O ₁₀
Molecular Weight:	434.39
Target:	NF-κB
Pathway:	NF-κB
Solubility:	DMSO : ≥ 100 mg/mL (230.21 mM)



BIOLOGICAL ACTIVITY:

Engeletin is a flavanone glycoside isolated from *hymenaea martiana*, inhibits **NF-κB** signaling-pathway activation, and possesses anti-inflammatory, analgesic, diuresis, detumescence, and antibiosis effects. IC₅₀ & Target: NF-κB^[1] **In Vitro:** Engeletin is a flavanone glycoside isolated from *hymenaea martiana*, inhibits NF-κB signaling-pathway activation^[1]. **In Vivo:** Engeletin (25, 50, 100 mg/kg, i.p.) markedly reduces LPS-increased myeloperoxidase activity in mice, activates NF-κB-pathway activation, decreases the production of inflammatory mediators (iNOS and COX-2), and suppresses the expression of TLR4-signaling downstream molecules such as MyD88, IRAK1, TRAF6, and TAK1 proteins^[1].

PROTOCOL (Extracted from published papers and Only for reference)

Animal Administration: Engeletin is solubilized by heated normal saline^{[1],[1]}Mice^[1]

The **mice** are classified at random into the following six groups of 10 mice each to cause the endometritis model: blank group, LPS group, **Engeletin (25, 50, and 100 mg/kg) + LPS** groups, and **Engeletin (100 mg/kg)** group. **Engeletin** is solubilized by **heated normal saline** to give the final concentrations of **25, 50, and 100 mg/kg**. Briefly, each uterus is infused with 50 μL of LPS (1 mg/mL) to induce endometritis. At 24 h after the instillation, Engeletin groups receive an intraperitoneal injection of diverse Engeletin concentrations (25, 50, and 100 mg/kg) three times (once every 6 h). The Engeletin group is given an intraperitoneal injection of Engeletin (100 mg/kg). The blank group receive the normal saline. Afterward, the mice are killed by CO₂ inhalation. Uterus tissues are harvested and kept in -80°C^[1].

References:

[1]. Wu H, et al. Engeletin Alleviates Lipopolysaccharide-Induced Endometritis in Mice by Inhibiting TLR4-mediated NF-κB Activation. *J Agric Food Chem.* 2016 Aug 10;64(31):6171-8.

CAIndexNames:

4H-1-Benzopyran-4-one, 3-[(6-deoxy-α-L-mannopyranosyl)oxy]-2,3-dihydro-5,7-dihydroxy-2-(4-hydroxyphenyl)-, (2R,3R)-

SMILES:

OC1=CC(O)=C(C([C@H](O[C@@]2([H])[C@H](O)[C@H](O)[C@@H](O)[C@H](CO2)[C@@H](C3=CC=C(O)C=C3)O4)=O)C4=C1

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

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