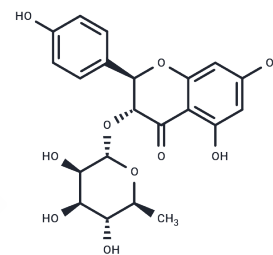


Engeletin

Chemical Properties

CAS No. :	572-31-6
Formula:	C ₂₁ H ₂₂ O ₁₀
Molecular Weight:	434.39
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	1. Engeletin (Dihydrokaempferol 3-rhamnoside) may serve as a potential anti-inflammatory agent. 2. Engeletin possesses potent inhibition of PGE ₂ release with IC ₅₀ values of 19.6 µg/ml. 3. Engeletin inhibits a recombinant human aldose reductase (IC ₅₀ value=1.16 µM).
Targets(IC ₅₀)	NF-κB, Reductase

Solubility Information

Solubility	Pyridine, Methanol, etc.: Soluble, DMSO: 250 mg/mL (575.52 mM), Sonication is recommended. Ethanol: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.6 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3021 mL	11.5104 mL	23.0208 mL
5 mM	0.4604 mL	2.3021 mL	4.6042 mL
10 mM	0.2302 mL	1.151 mL	2.3021 mL
50 mM	0.046 mL	0.2302 mL	0.4604 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Huang H , Cheng Z , Shi H , et al. Isolation and Characterization of Two Flavonoids, Engeletin and Astilbin, from the Leaves of Engelhardia roxburghiana and Their Potential Anti-inflammatory Properties[J]. Journal of Agricultural and Food Chemistry, 2011, 59(9):4562-4569.

Feng M, Liu L, Wang J, et al. The Molecular Mechanisms Study of Engeletin Suppresses RANKL-Induced Osteoclastogenesis and Inhibits Ovariectomized Murine Model Bone Loss. Journal of Inflammation Research. 2023: 2255-2270.

Chen W, Zhang L, Zhong G, et al. Regulation of microglia inflammation and oligodendrocyte demyelination by Engeletin via the TLR4/RRP9/NF- κ B pathway after spinal cord injury. Pharmacological Research. 2024: 107448.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481