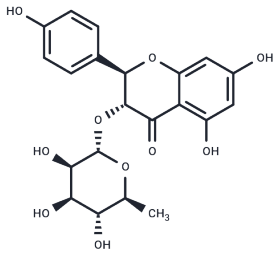
# Data Sheet (Cat.No.T6S0840)

TargetMol

## Engeletin

### Chemical Properties



CAS No. : 572-31-6

Formula: C21H22O10

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 PGE2 release with IC5 values of 19.6 μg/ml. 3. Engeletin inhibits a recombinant human aldose reductase (IC5 value=1.16 microM). |
| Targets(IC50) | NF-κB,Reductase |

### Solubility Information

| | |
|---|---|
| Solubility | Pyridine, Methanol, etc.: Soluble,<br>DMSO: 250 mg/mL (575.52 mM),Sonication is recommended.<br>Ethanol: Soluble,<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+90% Saline: 10 mg/mL (23.02 mM),Solution.<br>10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.6 mM),Sonication is recommended.<br>*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.* |

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-κB pathway after spinal cord injury.Pharmacological Research.2024: 107448.