

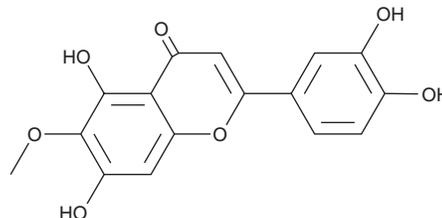
PRODUCT INFORMATION



Eupafolin

Item No. 40138

CAS Registry No.: 520-11-6
Formal Name: 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-6-methoxy-4H-1-benzopyran-4-one
Synonyms: 6-Methoxyluteolin, Nepetin
MF: C₁₆H₁₂O₇
FW: 316.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Salvia plebeia* R. Br.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Eupafolin is supplied as a solid. A stock solution may be made by dissolving the eupafolin in the solvent of choice, which should be purged with an inert gas. Eupafolin is soluble in DMSO and slightly soluble in methanol.

Eupafolin is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Eupafolin is a flavonoid that has been found in *E. adenophorum* and has diverse biological activities.¹⁻⁴ It inhibits iron-dependent lipid peroxidation in a cell-free assay (IC₅₀ = 7.9 μM).¹ Eupafolin (50-150 μM) inhibits prion protein 106-126 (PrP106-126) aggregation in a cell-free assay and reduces PrP106-126-induced cell death in SH-SY5Y cells.² It inhibits the production of hemolysin and leukocidin by methicillin-susceptible *S. aureus* (MSSA) and methicillin-resistant *S. aureus* (MRSA) and reduces *S. aureus*-induced hemolysis of erythrocytes in isolated rabbit whole blood when used at a concentration of 100 μM.³ *In vivo*, eupafolin (100 mg/kg) reduces the number of lung colony-forming units (CFUs) and increases survival in a mouse model of MRSA infection. It also reduces angiogenesis and tumor volume in a Hep3B hepatocellular carcinoma (HCC) mouse xenograft model when administered at a dose of 60 mg/kg.⁴

References

1. Sanz, M.J., Ferrandiz, M.L., Cejudo, M., *et al.* Influence of a series of natural flavonoids on free radical generating systems and oxidative stress. *Xenobiotica* **24(7)**, 689-699 (1994).
2. Huo, Y., Wang, Y., Wang, S., *et al.* Roles of apigenin and nepetin in the assembly behavior and cytotoxicity of prion neuropeptide PrP106-126. *ACS Chem. Neurosci.* **15(2)**, 245-257 (2024).
3. Jing, S., Ren, X., Wang, L., *et al.* Nepetin reduces virulence factors expression by targeting ClpP against MRSA-induced pneumonia infection. *Virulence* **13(1)**, 578-588 (2022).
4. Jiang, H., Wu, D., Xu, D., *et al.* Eupafolin exhibits potent anti-angiogenic and antitumor activity in hepatocellular carcinoma. *Int. J. Biol. Sci.* **13(6)**, 701-711 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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