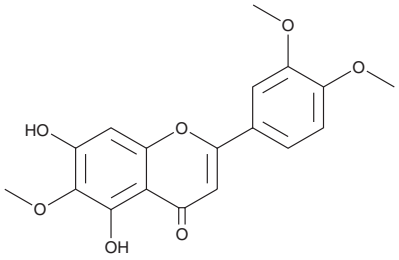
PRODUCT INFORMATION

Eupatilin

Item No. 19601

CAS Registry No.:	22368-21-4
Formal Name:	2-(3,4-dimethoxyphenyl)-5,7-dihydroxy-6-methoxy-4H-1-benzopyran-4-one
Synonym:	NSC 122413
MF:	$C_{18}H_{16}O_7$
FW:	344.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 214, 242, 274, 337 nm
Supplied as:	A powder
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Eupatilin is supplied as a powder. A stock solution may be made by dissolving the eupatilin in the solvent of choice, which should be purged with an inert gas. Eupatilin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of eupatilin in these solvents is approximately 33 and 50 mg/ml, respectively.

Description

Eupatilin is a flavonoid that has been found in *Artemisia* and has diverse biological activities.[1-5] It inhibits cell growth in A375 melanoma cells when used at concentrations ranging from 25 to 800 µM.[1] Eupatilin binds to peroxisome proliferator-activated receptor α (PPARα; IC_{50} = 1.18 µM) and induces reporter gene expression in CV-1 cells expressing human PPARα, but not PPARγ, when used at concentrations ranging from 10 to 300 µM.[2] It prevents hydrogen peroxide-induced disruption of the F-actin cytoskeleton and inhibition of cell migration in AGS gastric epithelial cells.[6] Eupatilin also inhibits 5-lipoxygenase (5-LO) activity in cultured mastocytoma cells (IC_{50} = 14 µM).[3] *In vivo*, eupatilin (5, 10, and 15 mg/kg) reduces pulmonary edema and levels of the lung injury markers surfactant protein A (SPA) and SPD in a rat model of LPS-induced acute lung injury.[4] It reduces serum levels of histamine and increases survival in a mouse model of allergic anaphylactic shock induced by compound 48/80 (Item No. 22173).[5]

References

1. Shawi, A.A., Rasul, A., Khan, M., *et al. Afr. J. Pharm. and Pharmacol.* **5(5)**, 582-588 (2011).
2. Choi, Y., Jung, Y. and Kim, S.N. *Molecules* **20(8)**, 13753-13763 (2015)..
3. Koshihara, Y., Neichi, T., Murota, S.i., *et al. FEBS Letters* **158(1)**, 41-44 (1983).
4. Liu, H., Hao, J., Wu, C., *et al. Med. Sci Monit.* **25**, 8289-8296 (2019).
5. Song, E.-H., Chung, K.-S., Kang, Y.-M., *et al. Phytomedicine* **42**, 1-8 (2018).
6. Choi, E.J., Oh, H.M., Na, B.R., *et al. Pharmaceutical Research* **25(6)**, 1355-1364 (2008).

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