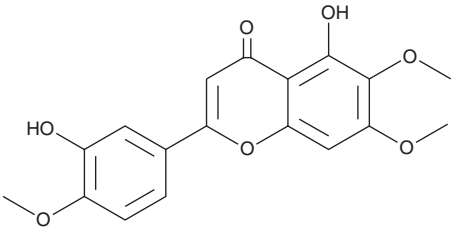
PRODUCT INFORMATION

Eupatorin

Item No. 29599

CAS Registry No.:	855-96-9
Formal Name:	5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-6,7-dimethoxy-4H-1-benzopyran-4-one
Synonym:	NSC 106402
MF:	$C_{18}H_{16}O_7$
FW:	344.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 216, 242, 276, 343 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Orthosiphon aristatus*



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

Laboratory Procedures

Eupatorin is supplied as a crystalline solid. A stock solution may be made by dissolving the eupatorin in the solvent of choice, which should be purged with an inert gas. Eupatorin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of eupatorin in these solvents is approximately 10 mg/ml.

Eupatorin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, eupatorin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Eupatorin has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Eupatorin is a flavonoid that has been found in *L. camara* and has diverse biological activities.[1-4] It inhibits the growth of HeLa, MK-1, and B16/F10 tumor cells (GI_{50}s = 15, 58, and 44 µM, respectively).[1] Eupatorin is active against *T. cruzi* epimastigotes and trypomastigotes (IC_{50}s = 0.2 and 61.8 µg/ml, respectively) without inducing cytotoxicity in Vero cells (IC_{50} = >500 µg/ml).[2] It induces vasorelaxation in isolated rat thoracic aortic rings precontracted with phenylephrine (pD_2 = 6.66).[3] Eupatorin (10 and 100 µM) reduces nuclear translocation of NF-κB and STAT1α in J774 murine macrophages and reduces paw edema in a mouse model of carrageenan-induced paw inflammation when administered at a dose of 50 mg/kg.[4]

References

1. Nagao, T., Abe, F., Kinjo, J., *et al.* Antiproliferative constituents in plants 10. Flavones from the leaves of *Lantana montevidensis* BRIQ. and consideration of structure-activity relationship. *Biol. Pharm. Bull.* **25(7)**, 875-879 (2002).
2. Beer, M.F., Frank, F.M., Germán Elso, O., *et al.* Trypanocidal and leishmanicidal activities of flavonoids isolated from *Stevia satureiifolia* var. *satureiifolia*. *Pharm. Biol.* **54(10)**, 2188-2195 (2016).
3. Yam, M.F., Tan, C.S., Ahmad, M., *et al.* Mechanism of vasorelaxation induced by eupatorin in the rats aortic ring. *Eur. J. Pharmacol.* **789**, 27-36 (2016).
4. Laavola, M., Nieminen, R., Yam, M.F., *et al.* Flavonoids eupatorin and sinensetin present in *Orthosiphon stamineus* leaves inhibit inflammatory gene expression and STAT1 activation. *Planta Med.* **78(8)**, 779-786 (2012).

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