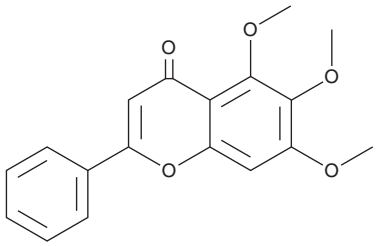
PRODUCT INFORMATION

5,6,7-Trimethoxyflavone

Item No. 40289

CAS Registry No.:	973-67-1
Formal Name:	5,6,7-trimethoxy-2-phenyl-4H-1-benzopyran-4-one
Synonym:	Baicalein 5,6,7-trimethyl ether
MF:	$C_{18}H_{16}O_5$
FW:	312.3
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



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

Laboratory Procedures

5,6,7-Trimethoxyflavone is supplied as a crystalline solid. A stock solution may be made by dissolving the 5,6,7-trimethoxyflavone in the solvent of choice, which should be purged with an inert gas. 5,6,7-Trimethoxyflavone is soluble in acetonitrile.

Description

5,6,7-Trimethoxyflavone is a flavonoid that has been found in *S. baicalensis* and has diverse biological activities.[1-3] It reduces the viability of HepG2 and Hep3B hepatocellular carcinoma cells when used at a concentration of 50 µM.[1] 5,6,7-Trimethoxyflavone decreases herpes simplex virus 1 (HSV-1) and poliovirus replication in HSV-1- or poliovirus-infected Vero cells, as well as decreases cytomegalovirus (CMV) replication in CMV-infected MRC-5 cells (IC_{50}s = 3.2, 32, and 8 mg/L, respectively).[2] It inhibits LPS-induced nitric oxide (NO), prostaglandin E_2 (PGE_2; Item No. 14010), Tnf-α, Il-1β, and Il-6 production in RAW 264.7 macrophages when used at concentrations of 20 or 40 µM.[3] *In vivo*, 5,6,7-trimethoxyflavone (40 mg/kg) increases survival in a mouse model of LPS-induced sepsis.

References

1. Liao, H.-L. and Hu, M.-K. Synthesis and anticancer activities of 5,6,7-trimethylbaicalein derivatives. *Chem. Pharm. Bull. (Tokyo)* **52(10),** 1162-1165 (2004).
2. Hayashi, K., Hayashi, T., Otsuka, H., *et al.* Antiviral activity of 5,6,7-trimethoxyflavone and its potentiation of the antiherpes activity of acyclovir. *J. Antimicrob. Chemother.* **39(6),** 821-824 (1997).
3. Rim, H.-K., Yun, C.H., Shin, J.-S., *et al.* 5,6,7-trimethoxyflavone suppresses pro-inflammatory mediators in lipopolysaccharide-induced RAW 264.7 macrophages and protects mice from lethal endotoxin shock. *Food. Chem. Toxicol.* **62,** 847-855 (2013).

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