

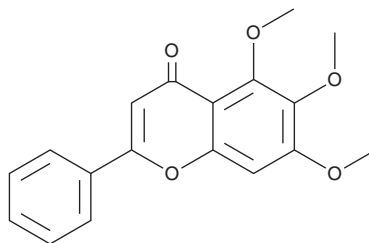
PRODUCT INFORMATION



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: C₁₈H₁₆O₅
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 (IC₅₀s = 3.2, 32, and 8 mg/L, respectively).² It inhibits LPS-induced nitric oxide (NO), prostaglandin E₂ (PGE₂; 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).

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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