

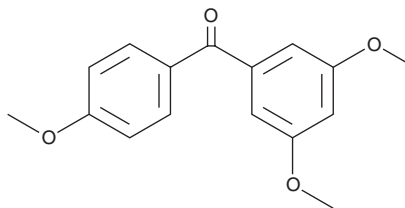
PRODUCT INFORMATION



3,4',5-Trimethoxybenzophenone

Item No. 10004185

CAS Registry No.: 94709-12-3
Formal Name: (3,5-dimethoxyphenyl)
(4-methoxyphenyl)-methanone
MF: C₁₆H₁₆O₄
FW: 272.3
Purity: ≥95%
UV/Vis.: λ_{max}: 222, 290 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

3,4',5-Trimethoxybenzophenone is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,4',5-trimethoxybenzophenone in the solvent of choice, which should be purged with an inert gas. 3,4',5-Trimethoxybenzophenone is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of 3,4',5-trimethoxybenzophenone in these solvents is approximately 20 and 30 mg/ml, respectively.

3,4',5-Trimethoxybenzophenone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 3,4',5-trimethoxybenzophenone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 3,4',5-Trimethoxybenzophenone has a solubility of approximately 0.1 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Resveratrol is a potent phenolic antioxidant found in natural sources that has antiproliferative activity.¹ When the three phenolic hydroxyl groups of resveratrol are converted to methyl ethers, the inhibition of cell growth is enhanced.² 3,4',5-Trimethoxybenzophenone is an analog of trimethoxy resveratrol. It inhibits the growth of a variety of human tumor cell lines at concentrations from 0.4 to 2 µg/ml, which is 5-6 times more potent than resveratrol.³

References

1. Rotondo, S., Rajtar, G., Manarini, S., *et al.* Effect of trans-resveratrol, a natural polyphenolic compound, on human polymorphonuclear leukocyte function. *Br. J. Pharmacol.* **123(8)**, 1691-1699 (1998).
2. Nam, K.A., Kim, S., Heo, Y.H., *et al.* Resveratrol analog, 3,5,2',4'-tetramethoxy-trans-stilbene, potentiates the inhibition of cell growth and induces apoptosis in human cancer cells. *Arch. Pharm. Res.* **24(5)**, 441-445 (2001).
3. Pettit, G.R., Grealish, M.P., Jung, M.K., *et al.* Antineoplastic agents. 465. Structural modification of resveratrol: Sodium resverastatin phosphate. *J. Med. Chem.* **45(12)**, 2534-2542 (2002).

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.

WARRANTY AND LIMITATION OF REMEDY

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