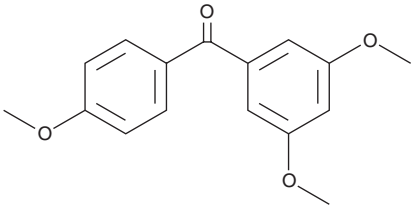
PRODUCT INFORMATION

3,4',5-Trismethoxybenzophenone

Item No. 10004185

CAS Registry No.:	94709-12-3
Formal Name:	(3,5-dimethoxyphenyl) (4-methoxyphenyl)-methanone
MF:	$C_{16}H_{16}O_4$
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-Trismethoxybenzophenone is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,4',5-trismethoxybenzophenone in the solvent of choice, which should be purged with an inert gas. 3,4',5-Trismethoxybenzophenone is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of 3,4',5-trismethoxybenzophenone in these solvents is approximately 20 and 30 mg/ml, respectively.

3,4',5-Trismethoxybenzophenone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 3,4',5-trismethoxybenzophenone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 3,4',5-Trismethoxybenzophenone 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-Trismethoxybenzophenone is an analog of trismethoxy 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM