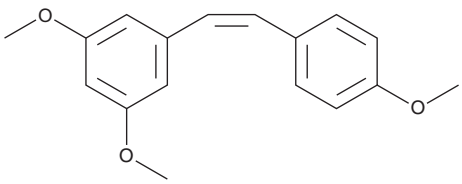
PRODUCT INFORMATION

cis-trismethoxy Resveratrol

Item No. 13199

CAS Registry No.:	94608-23-8
Formal Name:	1,3-dimethoxy-5-[(1Z)-2-(4-methoxyphenyl)ethenyl]-benzene
Synonym:	*cis*-Trimethoxy Stilbene
MF:	$C_{17}H_{18}O_3$
FW:	270.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 217, 285 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

cis-trismethoxy Resveratrol is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of *cis*-trismethoxy resveratrol in these solvents is approximately 50 mg/ml.

cis-trismethoxy Resveratrol is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Resveratrol is a potent antioxidant found in grapes and red wine that also has anti-proliferative, anti-neoplastic, and anti-angiogenic activities. In addition, resveratrol activates sirtuins and, in yeast, extends lifespan.[1,2] *cis*-trismethoxy Resveratrol is a potent anti-mitotic drug that is 100-fold more active than resveratrol at inhibiting the growth of human colon cancer Caco-2 cells.[3] It inhibits tubulin polymerization in a dose-dependent manner (IC_{50} = 4 µM) and inhibits enzymes involved in the synthesis of the polyamines, putrescine, and spermidine.[3,4] *trans*-trismethoxy Resveratrol has superior pharmacokinetic characteristics when compared with resveratrol, including greater plasma exposure, longer elimination half-life, and lower clearance.[5]

References

1. Borra, M.T., Smith, B.C., and Denu, J.M. *J. Biol. Chem.* **280(17)**, 17187-17195 (2005).
2. Howitz, K.T., Bitterman, K.J., Cohen, H.Y., *et al*. *Nature* **425**, 191-196 (2003).
3. Schneider, Y., Chabert, P., Stutzmann, J., *et al*. *Int. J Cancer* **107**, 189-196 (2003).
4. Cushman, M., Nagarathnam, D., Gopal, D., *et al*. *J. Med. Chem* **34**, 2579-2588 (1991).
5. Lin, H.-S. and Ho, P.C. *J. Pharm. Biomed. Analysis* **49**, 387-392 (2009).

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