## PRODUCT INFORMATION

## trans-trismethoxy Resveratrol

Item No. 10188

CAS Registry No.: 22255-22-7
Formal Name: 1,3-dimethoxy-5-[(1E)-2-(4-methoxyphenyl)ethenyl]-benzene
Synonyms:
(E)-5-[2-(4-hydroxyphenyl) ethenyl]-1,3-benzene diol, TMS, trans-3,5,4'-trimethoxystilbene
MF: $\quad \mathrm{C}_{17} \mathrm{H}_{18} \mathrm{O}_{3}$
FW:
Purity:
270.3

298\%
UV/Vis.: $\quad \lambda_{\max }: 218,306,319 \mathrm{~nm}$
Supplied as: A crystalline solid


Storage:
$-20^{\circ} \mathrm{C}$
Stability: $\quad \geq 4$ years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

trans-trismethoxy Resveratrol is supplied as a crystalline solid. A stock solution may be made by dissolving the trans-trismethoxy resveratrol in an organic solvent purged with an inert gas. trans-trismethoxy Resveratrol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of trans-trismethoxy resveratrol in these solvents is approximately $10 \mathrm{mg} / \mathrm{ml}$ in ethanol and 50 mg / ml in DMSO and DMF.

Description
trans-trismethoxy Resveratrol is a polyketide synthase-derived stilbene originally isolated from Virola cuspidata that has diverse biological activities. ${ }^{1-4}$ It is cytotoxic to several cancer cell lines, including PC3, KB, HT-29, SW480, and HL-60 cells (IC50s $=3.6,10.2,16.1,54$, and $2.5 \mu \mathrm{M}$, respectively). ${ }^{2}$ trans-trismethoxy Resveratrol ( $15 \mu \mathrm{M}$ ) inhibits TNF-a-induced activation of NF-кB in HEK293T cells in a reporter assay. ${ }^{3}$ It inhibits angiogenesis in zebrafish embryos when used at a concentration of $0.1 \mu \mathrm{M} .{ }^{4}$

## References

1. Austin, M.B. and Noel, J.P. The chalcone synthase superfamily of type III polyketide synthases. Nat. Prod. Rep. 20(1), 79-110 (2003).
2. Aldawsari, F.S. and Velázquez-Martínez, C.A. 3,4,5-trans-Trimethoxystilbene; a natural analogue of resveratrol with enhanced anticancer potency. Invest. New Drugs 33(3), 775-786 (2015).
3. Heynekamp, J.J., Weber, W.M., Hunsaker, L.A., et al. Subsitituted trans-stilbenes, including analogues of the natural product resveratrol, inhibit the human tumor necrosis factor alpha-induced activation of transcription factor nuclear factor kappaB. J. Med. Chem. 49(24), 7182-7189 (2006).
4. Belleri, M., Ribatti, D., Nicoli, S., et al. Antiangiogenic and vascular-targeting activity of the microtubule-destabilizing trans-resveratrol derivative 3,5,4'-trimethoxystilbene. Mol. Pharmacol. 67(5), 1451-1459 (2005).
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[^0]:    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

