PRODUCT INFORMATION



4'-O-Methylresveratrol

Item No. 29106

CAS Registry No.:	33626-08-3	
Formal Name:	5-[(1E)-2-(4-methoxyphenyl)ethenyl]-	
	1,3-benzenediol	~ 0
Synonyms:	Deoxyrhapontigenin,	
	<i>trans</i> -3,5-Dihydroxy-4'-methoxystilbene,	
	4-Methoxyresveratrol	HO
MF:	$C_{15}H_{14}O_{3}$	
FW:	242.3	
Purity:	≥98%	\uparrow
UV/Vis.:	λ _{max} : 216, 305, 319 nm	
Supplied as:	A crystalline solid	011
Storage:	-20°C	
Stability:	≥4 years	
Item Origin:	Synthetic	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

4'-O-Methylresveratrol is supplied as a crystalline solid. A stock solution may be made by dissolving the 4'-O-methylresveratrol in the solvent of choice, which should be purged with an inert gas. 4'-O-Methylresveratrol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4'-O-methylresveratrol in these solvents is approximately 10, 25, and 30 mg/ml, respectively.

4'-O-Methylresveratrol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4'-O-methylresveratrol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 4'-O-Methylresveratrol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

4'-O-Methylresveratrol is a stilbene that has been found in *Rumex* and has diverse biological activities.¹⁻⁴ It inhibits growth of A549, SKOV3, SK-MEL-2, XF498, and HCT15 cancer cells (IC₅₀s = 3.8, 5.7, 3.2, 5.6, and 6.7 μg/ml, respectively).¹ 4'-O-Methylresveratrol (0.05-0.2 mM) inhibits rabbit platelet aggregation induced by collagen or arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).² It scavenges free radicals in a Trolox equivalent antioxidant capacity (TEAC) assay.³ 4'-O-Methyresveratrol suppresses RANKL-induced osteoclastic differentiation of murine bone marrow-derived macrophages (BMDMs) and reduces LPS-induced bone loss in mice when administered at a dose of 50 mg/kg.⁴

References

- 1. Ryu, S.Y., Choi, S.U., Lee, C.O., et al. Antitumor activity of some phenolic components in plants. Arch. Pharm. Res. 17, 42-44 (1994).
- 2. Ko, S.K., Lee, S.M., and Whang, W.K. Anti-platelet aggregation activity of stilbene derivatives from Rheum Undulatum. Arch. Pharm. Res. 22(4), 401-403 (1999).
- 3. Kerem, Z., Regev-Shoshani, G., Flaishan, M.A., et al. Resveratrol and two monomethylated stilbenes from Israeli Rumex bucephalophorus and their antioxidant potential. J. Nat. Prod. 66(9), 1270-1272 (2003).
- 4. Tran, P.T., Park, D.-H., Kim, O., et al. Desoxyrhapontigenin inhibits RANKL-induced osteoclast formation and prevents inflammation-mediated bone loss. Int. J. Mol. Med. 42(1), 569-578 (2018).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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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