

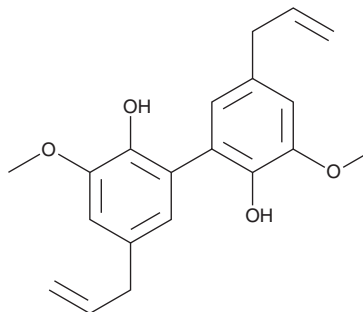
PRODUCT INFORMATION



Dieugenol

Item No. 27557

CAS Registry No.: 4433-08-3
Formal Name: 3,3'-dimethoxy-5,5'-di-2-propen-1-yl-[1,1'-biphenyl]-2,2'-diol
Synonyms: Bis-Eugenol, Dehydrodieugenol
MF: C₂₀H₂₂O₄
FW: 326.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Dieugenol is supplied as a solid. A stock solution may be made by dissolving the dieugenol in the solvent of choice, which should be purged with an inert gas. Dieugenol is soluble in organic solvents such as methanol, DMSO, and acetonitrile.

Description

Dieugenol is a neolignan that has been found in *N. leucantha* and has antioxidative and antiprotozoal activities.^{1,2} It inhibits the formation of thiobarbituric acid reactive substances (TBARS) and scavenges superoxide anions, but not hydroxyl radicals, in cell-free assays.¹ It has anti-trypanosomal activity against *T. cruzi* amastigotes and trypomastigotes (IC₅₀s = 15.1 and 11.5 μM, respectively) but is cytotoxic to NCTC L-929 fibroblasts with a 50% cytotoxic concentration (CC₅₀) value of 58.2 μM.² Dieugenol (15 μM) disrupts the integrity of the *T. cruzi* trypomastigote plasma membrane but does not induce the production of reactive oxygen species (ROS) in trypomastigotes or LPS-stimulated and unstimulated isolated mouse peritoneal macrophages.

References

1. Ogata, M., Hoshi, M., Urano, S., *et al.* Antioxidant activity of eugenol and related monomeric and dimeric compounds. *Chem. Pharm. Bull. (Tokyo)* **48(10)**, 1467-1469 (2000).
2. Grecco, S.S., Costa-Silva, T.A., Jerz, G., *et al.* Antitrypanosomal activity and evaluation of the mechanism of action of dehydrodieugenol isolated from *Nectandra leucantha* (Lauraceae) and its methylated derivative against *Trypanosoma cruzi*. *Phytomedicine* **24**, 62-67 (2017).

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.

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