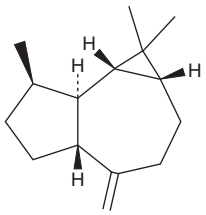
PRODUCT INFORMATION

Aromadendrene

Item No. 33829

CAS Registry No.:	489-39-4
Formal Name:	(1aR,4aR,7R,7aR,7bS)-decahydro-1,1,7-trimethyl-4-methylene-1H-cycloprop[e]azulene
Synonyms:	(+)-Aromadendrene, 10(14)-Aromadendrene
MF:	$C_{15}H_{24}$
FW:	204.4
Purity:	≥80%
Supplied as:	A liquid
Storage:	-20°C
Stability:	≥2 years
Item Origin:	Plant/*Eucalyptus globulus*



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

Laboratory Procedures

Aromadendrene is supplied as a liquid. A stock solution may be made by dissolving the aromadendrene in the solvent of choice, which should be purged with an inert gas. Aromadendrene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of aromadendrene in these solvents is approximately 30 mg/ml.

Description

Aromadendrene is a sesquiterpene that has been found in *E. globulus* and has diverse biological activities.[1-3] It is active against various strains of methicillin-resistant *S. aureus* (MRSA) and vancomycin-resistant enterococci (VRE; MICs = 0.25-1 mg/ml).[1] Aromadendrene (1 mM) inhibits *tert*-butyl hydroperoxide-induced formation of thiobarbituric acid reactive substances (TBARS) in isolated rat liver hepatocytes.[2] It inhibits the proliferation of HepG2 liver and PC3 prostate cancer cells (IC_{50}s = 20 and 9.3 µM, respectively).[3]

References

1. Mulyaningsih, S., Sporer, F., Reichling, J., *et al*. Antibacterial activity of essential oils from *Eucalyptus* and of selected components against multidrug-resistant bacterial pathogens. *Pharm. Biol.* **49(9)**, 893-899 (2011).
2. Vinholes, J., Rudnitskaya, A., Gonçalves, P., *et al*. Hepatoprotection of sesquiterpenoids: a quantitative structure-activity relationship (QSAR) approach. *Food Chem.* **146**, 78-84 (2014).
3. Al-Lihaibi, S.S., Alarif, W.M., Abdel-Lateff, A., *et al*. Three new cembranoid-type diterpenes from Red Sea soft coral *Sarcophyton glaucum*: isolation and antiproliferative activity against HepG2 cells. *Eur. J. Med. Chem.* **81**, 314-322 (2014).

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