

PRODUCT INFORMATION



Methylcardol triene

Item No. 23404

CAS Registry No.: 50423-15-9
Formal Name: 2-methyl-5-(8Z,11Z)-8,11,14-

MF: C₂₂H₃₂O₂

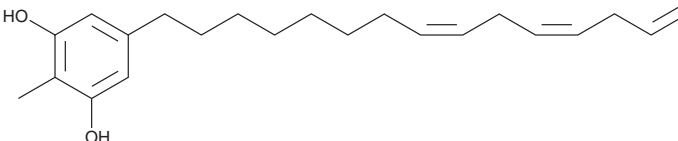
FW: 328.5

Purity: ≥95%

Supplied as: A neat oil

Storage: -20°C

Stability: ≥1 year



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

Laboratory Procedures

Methylcardol triene is supplied as a neat oil. A stock solution may be made by dissolving the methylcardol triene in the solvent of choice. Methylcardol triene is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of methylcardol triene in these solvents is approximately 22, 15, and 20 mg/ml, respectively.

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

Description

Methylcardol triene is a phenol found in cashew nut shell liquid that inhibits α -glucosidase (IC₅₀ = 39.6 μ M).¹ It is schistosomicidal, killing 100% of adult *S. mansoni* worms after 24 hours when used at concentrations of 100 and 200 μ M.² It has been used as a starting material for the synthesis of mono- and bis-benzoxazines.³

References

1. Toyomizu, M., Sugiyama, S., Jin, R.L., *et al.* α -Glucosidase and aldoser reductase inhibitors: Constituents of cashew, *Anacardium occidentale*, nut shell liquids. *Phytother. Res.* **7**, 252-254 (1993).
2. Alvarenga, T.A., de Oliveira, P.F., de Souza, J.M., *et al.* Schistosomicidal activity of alkyl-phenols from the cashew *Anacardium occidentale* against *Schistosoma mansoni* adult worms. *J. Agric. Food Chem.* **64**(46), 8821-8827 (2016).
3. Attanasi, O.A., Behalo, M.S., Favi, G., *et al.* Solvent free synthesis of novel mono- and bis-benzoxazines from cashew nut shell liquid components. *Curr. Org. Chem.* **16**(21), 2613-2621 (2012).

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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