

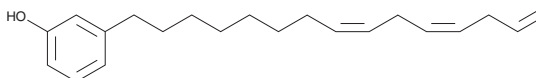
PRODUCT INFORMATION



Cardanol triene

Item No. 23155

CAS Registry No.: 79353-39-2
Formal Name: 3-(8Z,11Z)-8,11,14-pentadecatrien-1-yl-phenol
MF: C₂₁H₃₀O
FW: 298.5
Purity: ≥95%
UV/Vis.: λ_{max}: 276 nm
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

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

Cardanol triene is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cardanol triene should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Cardanol 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

Cardanol triene is a phenol found in cashew nut shell liquid that reversibly inhibits tyrosinase with an IC₅₀ value of 40.5 μM *in vitro*.¹ A mixture of cardanol mono-, di-, and triene is used to synthesize cardanol-metal complexes that inhibit uropathogenic *E. coli* biofilm formation.²

References

1. Yu, X.-P., Su, W.-C., Wang, Q., *et al.* Inhibitory mechanism of cardanols on tyrosinase. *Proc. Biochem.* **51(12)**, 2230-2237 (2016).
2. Lalitha, K., Sandeep, M., Prasad, Y.S., *et al.* Intrinsic hydrophobic antibacterial thin film from renewable resources: Application in the development of anti-biofilm urinary catheters. *ACS Sus. Chem. Eng. (Univ. of Berlin)* **5(1)**, 436-449 (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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