

PRODUCT INFORMATION

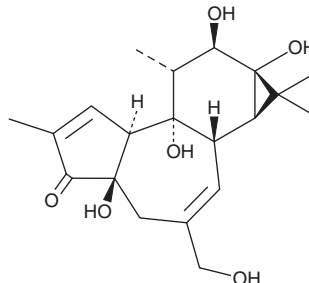


Phorbol

Item No. 24479

CAS Registry No.: 17673-25-5
Formal Name: (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,7a,7b,8,9,9a-decahydro-4a,7b,9,9a-tetrahydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5H-cyclopropa[3,4]benz[1,2-e]azulen-5-one
Synonyms: NSC 154778, (+)-Phorbol

MF: C₂₀H₂₈O₆
FW: 364.4
Purity: ≥98%
UV/Vis.: λ_{max}: 230 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

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

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of phorbol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of phorbol in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Phorbol is a diterpene originally isolated from croton oil.¹ It is used as a starting material for the semisynthesis of various phorbol diesters, which are structurally analogous to diacylglycerol and activate PKC isoforms by associating with their C1 domains.²

References

1. Bohm, R., Flaschentrager, B. and Lendle, L. The activity of substances from croton oil. *Archiv fuer Experimentelle Pathologie und Pharmakologie* **177**, 212-220 (1935).
2. Hurley, J.H., Newton, A.C., Parker, P.J., *et al.* Taxonomy and function of C1 protein kinase C homology domains. *Protein Sci.* **6(2)**, 477-480 (1997).

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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