

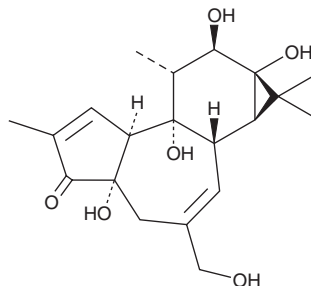
PRODUCT INFORMATION



4 α -Phorbol

Item No. 40905

CAS Registry No.: 26241-63-4
Formal Name: 1,1aR,1bS,4,4aS,7aS,7bS,8R,9R,9aS-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: Isophorbol, PDD
MF: C₂₀H₂₈O₆
FW: 364.4
Purity: $\geq 98\%$
Supplied as: A 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

4 α -Phorbol is supplied as a solid. A stock solution may be made by dissolving the 4 α -phorbol in the solvent of choice, which should be purged with an inert gas. 4 α -Phorbol is sparingly soluble (1-10 mg/ml) in methanol and slightly soluble (0.1-1 mg/ml) in acetonitrile.

4 α -Phorbol is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

4 α -Phorbol is a derivative of the PKC activator phorbol 12-myristate 13-acetate (PMA; Item No. 10008014).¹ It induces chromosomal damage in mouse bone marrow erythroblasts *ex vivo* after administration of a 616 ng/ml dose, an effect that can be inhibited by prostaglandin E₁ (PGE₁; Item No. 13010).

Reference

1. Das, U.N. and Rao, K.P. Effect of γ -linolenic acid and prostaglandins E₁ on gamma-radiation and chemical-induced genetic damage to the bone marrow cells of mice. *Prostaglandins Leukot. Essent. Fatty Acids* **74(3)**, 165-173 (2006).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/13/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM