

PRODUCT INFORMATION

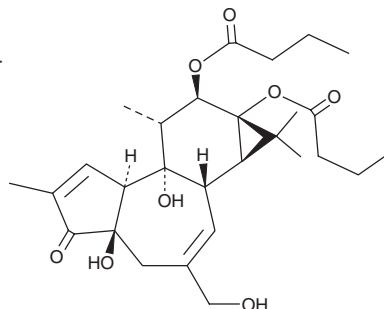


Phorbol 12,13-dibutyrate

Item No. 27785

CAS Registry No.: 37558-16-0
Formal Name: Butanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,5,7a,7b,8,9-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-9aH-cyclopropa[3,4]benz[1,2-e]azulene-9,9a-diyl ester

Synonym: PDBu
MF: C₂₈H₄₀O₈
FW: 504.6
Purity: ≥95%
UV/Vis.: λ_{max}: 232 nm
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

Phorbol 12,13-dibutyrate is supplied as a solid. A stock solution may be made by dissolving the phorbol 12,13-dibutyrate in the solvent of choice, which should be purged with an inert gas. Phorbol 12,13-dibutyrate is soluble in ethanol and DMSO.

Description

Phorbol 12,13-dibutyrate is a phorbol ester and an activator of PKC, including group A (α and γ) and group B (δ, ε, η) PKC isoforms.¹ It promotes tumor formation to a lesser degree than phorbol 12-myristate 13-acetate (TPA; Item No. 10008014).² Phorbol 12,13-dibutyrate induces papilloma formation in mice with a total dose of 9.7 μmol required to produce papillomas in 50% of survivors after eight weeks.³ It also induces inflammation in 50% of mice when administered topically to the ear at a dose of 0.067 μmol/ear.

References

1. Geiges, D., Meyer, T., Marte, B., *et al.* Activation of protein kinase C subtypes α, γ, δ, ε, ζ, and η by tumor-promoting and nontumor-promoting agents. *Biochem. Pharmacol.* **53(6)**, 865-875 (1997).
2. Rippmann, F. Hydrophobicity and tumor promoting activity of phorbol esters. *Quant. Struct.-Act. Relat.* **9(1)**, 1-5 (1990).
3. Scribner, J.D. and Boutwell, R.K. Inflammation and tumor promotion: Selective protein induction in mouse skin by tumor promoters. *Eur. J. Cancer* **8(6)**, 617-621 (1972).

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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