

# PRODUCT INFORMATION



## 4 $\alpha$ -Phorbol 12,13-didecanoate

Item No. 20446

CAS Registry No.: 27536-56-7

Formal Name: decanoic acid,  
1,1'-[(1aR,1bS,4aS,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  
4 $\alpha$ -PDD, 4 $\alpha$ -Phorbol 12,13-dicaprinat

Synonyms:

MF: C<sub>40</sub>H<sub>64</sub>O<sub>8</sub>

FW: 672.9

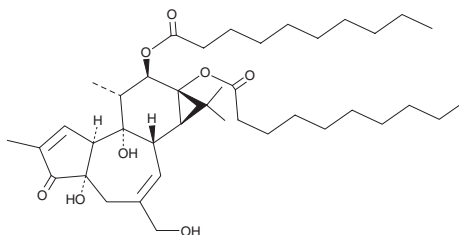
Purity:  $\geq 99\%$

Supplied as: A film

Storage: -20°C

Stability:  $\geq 4$  years

Special Conditions: Light sensitive



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

### Laboratory Procedures

4 $\alpha$ -Phorbol 12,13-didecanoate is supplied as a film. A stock solution may be made by dissolving the 4 $\alpha$ -phorbol 12,13-didecanoate in the solvent of choice, which should be purged with an inert gas. 4 $\alpha$ -Phorbol 12,13-didecanoate is soluble in organic solvents such as ethanol and DMSO.

### Description

4 $\alpha$ -Phorbol 12,13-didecanoate is a negative control for phorbol esters, phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) and phorbol 12,13-didecanoate (PDD). Though inactive for signaling through PKC, 4 $\alpha$ -phorbol 12,13-didecanoate has been shown to activate transient receptor potential vanilloid 4 (TRPV4) channels.<sup>1</sup>

### Reference

1. Watanabe, H., Davis, J.B., Smart, D., *et al.* Activation of TRPV4 channels (hVRL-2/mTRP12) by phorbol derivatives. *J. Biol. Chem.* **277**(16), 13569-13577 (2002).

#### 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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#### 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