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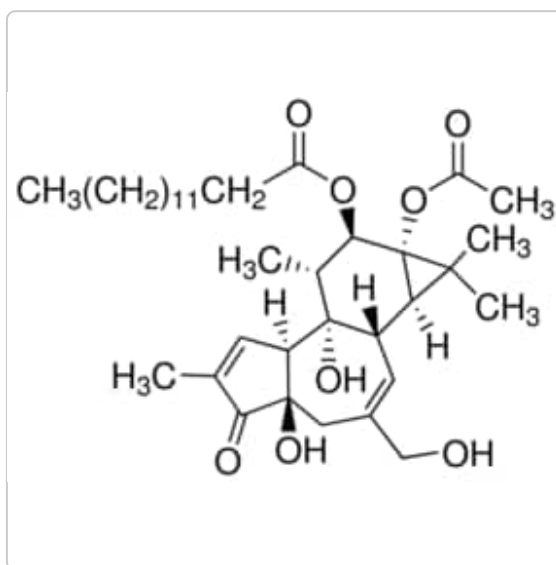
Saisir le nom du produit, le numéro de lot, etc.

**79346** ▶ **Sigma-Aldrich®**

Phorbol 12-myristate 13-acetate

★★★★★ (0)

synthetic, ≥98.0% (TLC)

[Toutes les photos](#) (1)**Synonyme(s):**

12-O-Tetradecanoylphorbol 13-acetate, 4β,9α,12β,13α,20-Pentahydroxytiglic-1,6-dien-3-one 12-tetradecanoate 13-acetate, PMA, TPA

Empirical Formula (Hill Notation):C₃₆H₅₆O₈**Numéro CAS:****16561-29-8****Poids moléculaire:**

616.83

Beilstein:

2407201

Numéro MDL:

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NACRES:

NA.25

Select an Option

Référence

79346-1MG



1 MG

143,00 €



Disponible pour expédition le 10 octobre 2022 - **De**

—

1

+

Ajouter au panier

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Documents

[↓ FDS](#)

[🔍 COO/COA](#)

[📄 Fiche des caractéristiques](#)

[Plus de documents »](#)

PRODUITS RECOMMANDÉS

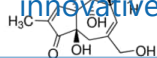


Sigma-Aldrich

P8139

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PROPRIÉTÉS

Niveau de qualité

200

Essai/Dosage

≥98.0% (TLC)

Forme

film

Qualité

synthetic

Solubilité

chloroform: 10 mg/mL, clear, colorless to light yellow

Temp. de stockage

-20°C

SMILES string

```
CCCCCCCCCCCCC(=O)O[C@@H]1[C@@H](C)[C@@]2(O)C(C=C(CO)C[C@@]3(O)C2C=C(C)C3=O)C4C(C)(C)[C@]14OC(C)=O
```

InChI

1S/C36H56O8/c1-7-8-9-10-11-12-13-14-15-16-17-18-29(39)43-32-24(3)35(42)27(30-33(5,6)36(30,32)44-25(4)38)20-26(22-37)21-34(41)28(35)19-23(2)31(34)40/h19-20,24,27-28,30,32,37,41-42H,7-18,21-22H2,1-6H3/t24-,27+,28-,30-,32-,34-,35-,36-/m1/s1

InChI key

PHEDXBVPIONUQT-RGYGYFBISA-N

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

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Application

Phorbol 12-myristate 13-acetate has been used to stimulate the *in vitro* production of interleukin (IL)-18, IL-10 and macrophages. It has also been used to induce protein kinase C activity.

Conditionnement

1, 5, 25 mg in glass bottle

Actions biochimiques/physiologiques

Phorbol 12-myristate 13-acetate is a potent tumor promoter and activates protein kinase C *in vivo* and *in vitro*. It is a phorbol ester that is associated with many cellular responses including gene transcription, cell division and differentiation, apoptosis and immune response. It is also involved in protein kinase C (PKC) mediated receptor desensitization. Phorbol 12-myristate 13-acetate induces PKC localization from the cytosol, enabling the enzyme association with the cell membrane.

Potent tumor promoter; activates protein kinase C *in vivo* and *in vitro*.

Autres remarques

Activates protein kinase C *in vivo* and *in vitro* at nanomolar concentrations; Highly potent tumor promotor and mitogen: active principle of croton oil. Review

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS05,GHS06,GHS08

Mention d'avertissement

Danger

Mentions de danger

H300 + H310 + H330 - H314 - H317 - H334 - H351

Conseils de prudence

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Acute Tox. 1 Dermal - Acute Tox. 1 Inhalation - Acute Tox. 2 Oral - Carc. 2 - Eye Dam. 1 - Resp. Sens. 1 - Skin Corr. 1B - Skin Sens. 1

Code de la classe de stockage

6.1A - Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

WGK

WGK 3

Équipement de protection individuelle

dust mask type N95 (US), Eyeshields, Gloves

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COA)

Rechercher

Certificat d'origine

Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COO)

Rechercher

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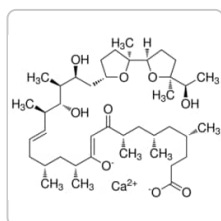
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FDS

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LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

I3909

Ionomycin calcium salt

Ready Made Solution, from *Streptomyces conglobatus*, 1 mM in DMSO

[Consulter le prix et la disponibilité](#)

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QUESTIONS FRÉQUEMMENT POSÉES (FAQ)

Which document(s) contains shelf-life or expiration date information for a given product?

If available for a given product, the recommended re-test date or the expiration date can be found on the Certificate of Analysis.

How do I get lot-specific information or a Certificate of Analysis?

The lot specific COA document can be found by entering the lot number above under the "Documents" section.

How should Product 79346, Phorbol 12-myristate 13-acetate - synthetic, be dissolved?

PMA is soluble in acetone, DMSO, ethyl acetate, ethanol and methylene chloride, but is practically insoluble in water. The solubility of 79346 has been tested in chloroform at a concentration of 10 mg/mL. Stock solutions of 20 mM can be prepared in DMSO and diluted into aqueous buffers.

Why do I not see any solid in the bottle of Product 79346, Phorbol 12-myristate 13-acetate - synthetic?

Phorbol 12-myristate 13-acetate may be an invisible film in the bottle.

What is the difference between product 79346, Phorbol 12-myristate 13-acetate - synthetic, and molecular biology grade product P1585?

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How can I store the Product 79346, Phorbol 12-myristate 13-acetate - synthetic (PMA), solution solution? How long?

Stock solutions in DMSO can be stored protected from light as aliquots at -20°C for at least 6 months, or at 2-8°C for up to 3 months.

How do I find price and availability?

There are several ways to find pricing and availability for our products. Once you log onto our website, you will find the price and availability displayed on the product detail page. You can contact any of our Customer Sales and Service offices to receive a quote. USA customers: 1-800-325-3010 or view [local office numbers](#).

What is the Department of Transportation shipping information for this product?

Transportation information can be found in Section 14 of the product's (M)SDS. To access the shipping information for this material, use the link on the product detail page for the product.

My question is not addressed here, how can I contact Technical Service for assistance?

Ask a Scientist [here](#).

ARTICLES REVUS PAR DES PAIRS

Phorbol 12-myristate 13-acetate upregulates cyclooxygenase-2 expression in human pulmonary epithelial cells via Ras, Raf-1, ERK, and NF-kappaB, but not p38 MAPK, pathways

Chang MS, et al.

Cellular Signalling, 17(3), 299-310 (2005)

Adipose tissue-derived mesenchymal stem cells are more potent suppressors of dendritic cells differentiation compared to bone marrow-derived mesenchymal stem cells

Ivanova-Todorova E, et al.

Immunology Letters, 126(1-2), 37-42 (2009)

Differential effect of bryostatin 1 and phorbol 12-myristate 13-acetate on HOP-92 cell proliferation is mediated by down-regulation of protein kinase Cdelta

Choi SH, et al.

Cancer Research, 66(14), 7261-7269 (2006)

Fate of immunoprecipitable protein kinase C in GH3 cells treated with phorbol 12-myristate 13-acetate.

Ballester Roymarie and Rosen OM

The Journal of Biological Chemistry, 260(28), 15194-15199 (1985)

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Tumor promoters act on carcinogen-initiated tissues to cause phenotypic expression of malignancy. Phorbol ester tumor promoters, like hormones, act on cells and tissues at nanomolar concentrations, often producing "physiological" effects. These promoters also act on cells to produce what appear

[Afficher tous les articles scientifiques apparentés](#)

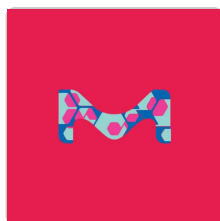
PROTOCOLES ET ARTICLES SCIENTIFIQUES

Articles

Carcinogenesis and Epigenetics

Cancer research has revealed that the classical model of carcinogenesis, a three step process consisting of initiation, promotion, and progression, is not complete.

PRODUITS CONSULTÉS RÉCEMMENT



Sigma-Aldrich

79302

Esterase from *Bacillus stearothermophilus*
recombinant, expressed in *E. coli*, ≥4.0 U/mg

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Évaluations



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SERVICE TECHNIQUE

Notre équipe de scientifiques dispose d'une expérience dans tous les secteurs de la recherche, notamment en sciences de la vie, science des matériaux, synthèse chimique, chromatographie, analyse et dans de nombreux autres domaines..

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