RPM0015

Leader in Biomolecular Solutions for Life Science

www.abclonal.com

PMA (佛波酯) (PKC激活剂)

Catalog No.: RPM0015 1 Publications

Sequence Information

Species **Gene ID** **Swiss Prot**

本产品仅用于科研。1. 细胞生物学研究,2. 肿瘤研究,3. 炎症研究

Tags

固体

Synonyms

PMA; Phorbol 12-myristate 13-acetate; 佛波酯; 佛波醇12-十四酸酯13-乙酸酯; 12-豆蔻酸-13-乙酸佛波醇; ERK/MAPK激活剂; PKC激活剂

Product Information

Source **Purification**

1.CAS号/CASNO.：16561-29-8|2.化学式/Formula：C36H56O8|3.分子量/M.Wt：616.83,4.外观/Appearance：固体,5.溶解度:DMSO: 60 mg/mL (97.27 mM),Sonication is recommended. H2O: Insoluble

> 98%

Endotoxin

PKC: 11.7 nM

Formulation

DMSO： 60 mg/mL (97.27 mM); H2O：不溶.

Reconstitution

1.CAS号/CASNO.：16561-29-8|2.化学式/Formula：C36H56O8|3.分子量/M.Wt：616.83|4.外观/Appearance：固体|5.溶解度:DMSO: 60 mg/mL (97.27 mM), Sonication is recommended. H2O: Insoluble

Background

Phorbol 12-myristate 13-acetate（PMA）是一种佛波酯类天然产物，可作为PKC、SphK和NF-κB的激活剂，常用于诱导THP-1细胞分化及构建皮炎模型。

Basic Information

Description

PMA（Phorbol 12-myristate 13-acetate）属于佛波酯类天然产物，是一种PKC、SphK、NF-κB的激活剂，可诱导THP-1细胞分化。

Bio-Activity

体外活性/In vitro:

1.用PMA（50 ng/mL）处理球体培养的人类黑色素瘤细胞WM系列3天，MTS法检测细胞生长情况。PMA促进黑色素瘤细胞增殖，WM35细胞的细胞数提高到265%。[1]

2.用PMA（200 ng/mL）处理人单核白血球细胞THP-1 1-5天，光学显微镜观察形态，Flow Cytometry检测靶点表达。PMA诱导THP-1细胞分化为THP-1巨噬细胞，CD11和CD14的细胞表面表达增加。[2]

3.用PMA（10-40 ng/mL）处理人静脉内皮细胞HUVECs 8 h，用Wound healing migration assay检测细胞迁移情况。短期PMA处理可增强内皮细胞迁移。[3]

体内活性/In vivo:

1.将PMA（100-500μg/kg）单次腹腔注射给药给缺乏IL-18或IRAK-4的新生大鼠和小鼠，24 h、7天或14天后处死动物，研究佛波酯对啮齿类动物大脑发育的影响。PMA在大脑中诱导炎症反应并引起广泛的神经退行性变，缺乏IL-18或IRAK-4对PMA诱导的脑损伤有保护作用。[4]

2.将PMA（20 μL 125 μg/mL PMA 丙酮溶液）局部处理CD-1小鼠双耳，风干并完全吸收，构建急性小鼠耳炎症模型。用PMA攻击的耳组织在施用约2小时开始出现炎症迹象，包括肿胀和发红。[5]

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

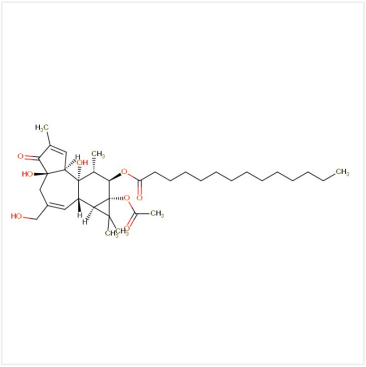
Store at -20℃
Avoid repeated freeze/thaw cycles.

Contact

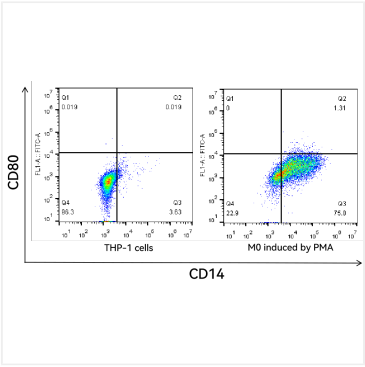
www.abclonal.com

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Chemical structure of PMA, CAS No.:16561-29-8



PMA (10 ng/mL, 24 h) induced differentiation of THP-1 cells into THP-1 macrophages, with increased expression of the cell surface marker CD14.



For research use only. Not for therapeutic or diagnostic purposes.
Please visit https://abclonal.com for a complete listing of recommended products.