

RPM0015

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## PMA (佛波酯) (PKC激活剂)

Catalog No.: RPM0015

### Sequence Information

**Species** Gene ID Swiss Prot  
C36H56O8

### 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  
> 98%

### Endotoxin

PKC: 11.7 nM

### Formulation

DMSO : 60 mg/mL (97.27 mM); H2O :  
不溶.

### Reconstitution

### Contact



[www.abclonal.com](http://www.abclonal.com)

### 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 (佛波酯) (PKC激活剂)

#### 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 ( 100-500 μg/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

The product is shipped at ambient temperature. 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°C.store at low temperature,store under nitrogen

Powder: -20°C for 3 years

In solvent: -80°C for 1 year

Shipping with blue ice/Shipping at ambient temperature.keep away from direct  
sunlight,store under nitrogen,store at low temperature

Powder: -20°C for 3 years

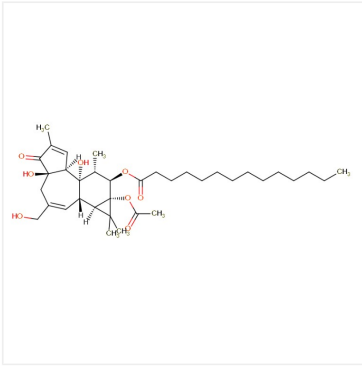
In solvent: -80°C for 1 year

Shipping with blue ice/Shipping at ambient temperature.

Avoid repeated freeze/thaw cycles.

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

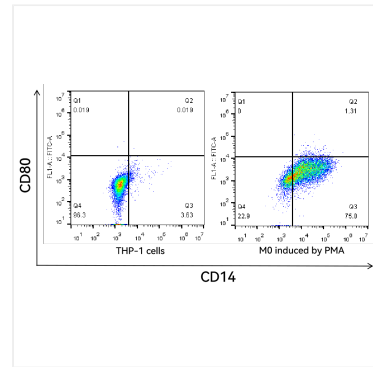
## Validation Data



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



RPM0015产品图



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.