

## Phorbol 12-Myristate 13-Acetate

货号: P1701

储存条件: 粉末-20°C可保存3年; 液体-80°C可保存12月。

### 产品描述

Protein kinase C (PKC) is a key molecule involved in cell growth, apoptosis, and differentiation. Phorbol 12-Myristate 13-Acetate (PMA) is an activator of certain types of PKC, including group A and group B isoforms. Stimulation with 1  $\mu$ M PMA for 3 min resulted in promoted nucleotide exchange activity in 293T cells. In differentiated Caco-2 cells, pretreatment with 100 nM PMA for 5 min followed by 2h incubation with 10 nM 1,25(OH)<sub>2</sub>D<sub>3</sub> resulted in a 2.6-fold increase in hCYP24A1 mRNA level compared to cells treated by 1,25(OH)<sub>2</sub>D<sub>3</sub> alone. Incubation with 100 nM PMA for 30 min resulted in the activation of ERK1/2 and p38 kinase in Caco-2 cells, whereas pretreatment with the MEK inhibitor U0126 at 10, 20 or 100  $\mu$ M completely inhibited ERK1/2 activation by PMA and partially suppressed PMA-induced p38 kinase activation. Cells pre-treated with 10  $\mu$ M U0126 or 8  $\mu$ M p38 kinase inhibitor SB202190 showed reduced enhancing effect of PMA on 1,25(OH)<sub>2</sub>D<sub>3</sub>-induced hCYP24A1 promoter activity. In both *W/W<sup>o</sup>* genetically mast cell-deficient mice and congenic normal mice, repeated administration of PMA (5  $\mu$ g, 3 times per week for 6 weeks) to the ear skin remarkably increased the number of dermal mast cells.

### 作用机制

PMA is a phorbol ester structurally analogous to diacylglycerol. It activates PKC isoforms by associating with their C1 domains.

### 产品信息

CAS号	16561-29-8	
分子式	C36H56O8	
分子量	616.83	
溶解度	DMSO	380.0 mg/mL(616.1 mM)
	Water	insoluble
	Ethanol	25.0 mg/mL (40.5 mM)

