Product Name: Phorbol 12,13-dibutyrate
Catalog No.: 4153  Batch No.: 4
CAS Number: 37558-16-0
IUPAC Name: (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1a,1b,4,4a,5,7a,7b,8,9,9a-Decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9,9a-diyi butanoic acid ester

1. PHYSICAL AND CHEMICAL PROPERTIES
   
   Batch Molecular Formula: \( \text{C}_{28}\text{H}_{40}\text{O}_{8} \)
   
   Batch Molecular Weight: 504.61
   
   Physical Appearance: White lyophilised solid
   
   Solubility: DMSO to 50 mM
   
   Storage: Store at -20°C

2. ANALYTICAL DATA
   
   HPLC: Shows 99.3% purity
   
   \(^1\text{H NMR:}\) Consistent with structure
Description:
Protein kinase C activator. Induces contraction of vascular smooth muscle and inhibits MLC phosphatase (MLCP) in vascular smooth muscle. Activity does not alter intracellular Ca²⁺ concentration. Also inhibits the activity of Na⁺,K⁺ ATPase in OK cells.

Physical and Chemical Properties:
Batch Molecular Formula: C₂₆H₄₀O₈
Batch Molecular Weight: 504.61
Physical Appearance: White lyophilised solid
Minimum Purity: >98%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 50 mM
This product is supplied in a sealed glass ampoule as a lyophilized solid, please refer to the Tocris catalogue for opening instructions. Lyophilized solids can be hard to visualize therefore solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath). Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: