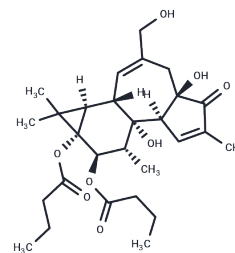


## Phorbol 12,13-dibutyrate

## Chemical Properties

|                   |  |
|-------------------|--|
| CAS No. :         | 37558-16-0   |
| Formula:          | C <sub>28</sub> H <sub>40</sub> O <sub>8</sub>           |
| Molecular Weight: | 504.61   |
| Appearance:       | no data available  |
| Storage:          | keep away from direct sunlight,store at low temperature  |
|                   | Powder: -20°C for 3 years   In solvent: -80°C for 1 year |



## Biological Description

|                            |   |
|----------------------------|---|
| Description                | Phorbol 12,13-dibutyrate (Phorbol dibutyrate) is a PKC activator that inhibits $\alpha$ 1-adrenoceptor-mediated positive inotropic effects in a concentration-dependent manner, induced by contraction of isolated rabbit vascular smooth muscle. |
| Targets(IC <sub>50</sub> ) | PKC   |
| In vitro                   | Phorbol 12,13-dibutyrate (1 $\mu$ M) activated PKC and inhibited Na/K-ATPase transporter activity in OK cells but not in LLC-PK1 cells [3].   |

## Solubility Information

|            |   |
|------------|---|
| Solubility | DMSO: 100 mg/mL (198.17 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

## Preparing Stock Solutions

|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.9817 mL | 9.9086 mL | 19.8173 mL |
| 5 mM  | 0.3963 mL | 1.9817 mL | 3.9635 mL  |
| 10 mM | 0.1982 mL | 0.9909 mL | 1.9817 mL  |
| 50 mM | 0.0396 mL | 0.1982 mL | 0.3963 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

- Singh J, et al. Immunocytochemical evidence for PDBu-induced activation of RhoA/ROCK in human internal anal sphincter smooth muscle cells. *Am J Physiol Gastrointest Liver Physiol*. 2011 Aug;301(2):G317-25.
- Szallasi Z, et al. Dissociation of phorbol esters leads to immediate redistribution to the cytosol of protein kinases C alpha and C delta in mouse keratinocytes. *J Biol Chem*. 1994 Nov 4;269(44):27159-62.
- Middleton JP, et al. Heterogeneity of protein kinase C-mediated rapid regulation of Na/K-ATPase in kidney epithelial cells. *J Biol Chem*. 1993 Jul 25;268(21):15958-64.

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