Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Ingenol Mebutate

Catalog No: tcsc2971

Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Specifications

CAS No:
75567-37-2

Formula:
$C_{25}H_{34}O_6$

Pathway:
TGF-beta/Smad;Epigenetics

Target:
PKC;PKC

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
Ingenol 3-angelate;PEP005

Observed Molecular Weight:
430.53

Product Description

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Ingenol Mebutate is an active ingredient in *Euphorbia peplus*, acts as a potent **PKC** modulator, with **K_i**s of 0.3, 0.105, 0.162, 0.376, and 0.171 nM for PKC-α, PKC-β, PKC-γ, PKC-δ, and PKC-ε, respectively, and has antiinflammatory and antitumor activity.

IC50 & Target: Ki: 0.3 nM (PKC-α), 0.105 nM (PKC-β), 0.162 nM (PKC-γ), 0.376 nM (PKC-δ), 0.171 nM (PKC-ε)[1]

In Vitro: Ingenol Mebutate (Ingenol 3-angelate) is an active ingredient in *Euphorbia peplus*, acting as a potent PKC activator, with K_is of 0.3, 0.105, 0.162, 0.376, and 0.171 nM for PKC-α, PKC-β, PKC-γ, PKC-δ, and PKC-ε, respectively. Ingenol Mebutate also EC_{50}s of 13 ± 2.4 nM (PKC-α), 4.37 ± 0.4 nM (PKC-βI), 10.5 ± 2.2 nM (PKC-βII), 38.6 ± 2.9 nM (PKC-δ), 1.08 ± 0.01 nM (PKC-ε), 0.9 ± 0.13 nM (PKC-μ) in WEHI-231 cells, 198 ± 12.5 nM (PKC-α), 69.1 ± 8.2 nM (PKC-βI), 4.6 ± 0.4 nM (PKC-ε) and 1 nM (PKC-μ) in HOP-92 cells, 635 ± 245 nM (PKC-α), 146 ± 35 nM (PKC-βI), 4.7 ± 0.7 nM (PKC-δ), 1.1 ± 0.5 nM (PKC-ε), and 30 nM (PKC-μ) in Colo-205 cells. Ingenol Mebutate sensitizes WEHI-231 cells, HOP-92 and Colo-205 cells, with IC_{50}s of 1.41 ± 0.255 nM, 3.24 ± 2.01 nM, and 11.9 ± 1.307 nM, respectively[1]. Ingenol Mebutate (PEP005; 20 nM) actions are PKC-δ dependent, induces apoptosis in primary AML marrow blasts but not in normal myeloblasts[2]. Ingenol Mebutate (PEP005) activates PKCδ and inhibits PKCα. Colo205-R cells (IC_{50}: >10 μM) are >300-fold more resistant to Ingenol Mebutate than parental Colo205-S cells[3].