

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:

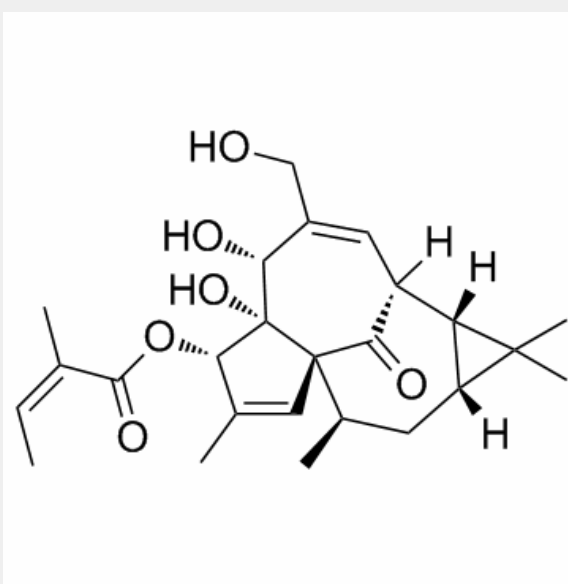
430.53

Product Description

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: K_i: 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 EC₅₀s of 13 $\pm$ 2.4 nM (PKC- α), 4.37 $\pm$ 0.4 nM (PKC- β I), 10.5 $\pm$ 2.2 nM (PKC- β II), 38.6 $\pm$ 2.9 nM (PKC- δ), 1.08 $\pm$ 0.01 nM (PKC- ϵ), 0.9 $\pm$ 0.13 nM (PKC- μ) in WEHI-231 cells, 198 $\pm$ 12.5 nM (PKC- α), 69.1 $\pm$ 8.2 nM (PKC- β I), 4.6 $\pm$ 0.4 nM (PKC- ϵ) and 1 nM (PKC- μ) in HOP-92 cells, 635 $\pm$ 245 nM (PKC- α), 146 $\pm$ 35 nM (PKC- β I), 4.7 $\pm$ 0.7 nM (PKC- δ), 1.1 $\pm$ 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 IC₅₀s of 1.41 $\pm$ 0.255 nM, 3.24 $\pm$ 2.01 nM, and 11.9 $\pm$ 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 PKC δ and inhibits PKC α . Colo205-R cells (IC₅₀: >10 μ M) are >300-fold more resistant to Ingenol Mebutate than parental Colo205-S cells^[3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!