

Calcipotriol (monohydrate)

Catalog No: tcsc0812



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

147657-22-5

Formula:

$C_{27}H_{42}O_4$

Pathway:

Vitamin D Related

Target:

VD/VDR

Purity / Grade:

>98%

Solubility:

DMSO : 100 mg/mL (232.22 mM; Need ultrasonic)

Observed Molecular Weight:

430.62

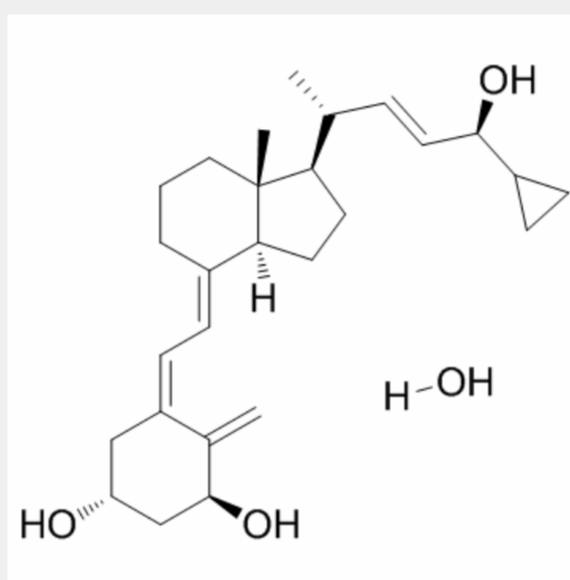
Product Description

Calcipotriol monohydrate is a synthetic VitD3 analogue with a high affinity for the **vitamin D** receptor.

IC50 & Target: vitamin D receptor^[1]

In Vitro: When NHEK cells are not stimulated with IL-17A or IL-22, Calcipotriol slightly enhances (0.2 nM) IL-8 mRNA expression or has no effect (2-20 nM). The addition of IL-17A and IL-22 markedly increased the mRNA expression of IL-8, confirming our previous study. This enhanced IL-8 mRNA expression is suppressed by Calcipotriol at 2, 20 and 40 nM in a dose dependent manner^[1]. Treatment of natural killer (NK) cells with drugs modulates their expression of NK cytotoxicity receptors or KIR. Human NK cells are pre-treated with 100, 10 or 1 ng/mL of 1,25(OH)₂D₃, Calcipotriol or FTY720 for 4 h. All three concentrations of 1,25(OH)₂D₃, Calcipotriol and FTY720 significantly up-regulate the expression of NKp30 on the surface of NK cells after 4 h incubation^[2].

In Vivo: One out of the 32 animals in each of the groups has died, except for the Diclofenac plus DFMO plus Calcipotriol group, where all animals survived. Survival is equally distributed between the groups. The weight gain is significantly smaller in the groups treated with Diclofenac plus Calcipotriol (p=0.018) and Diclofenac plus DFMO plus Calcipotriol (p=0.002) compare with placebo (linear regression model)^[3].



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