

Product Name: Calcipotriol

Catalog No.: 2700

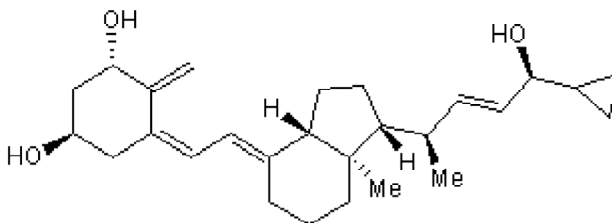
Batch No.: 8

CAS Number: 112965-21-6

IUPAC Name: (1 α ,3 β ,5Z,7E,22E,24S)-24-Cyclopropyl-9,10-secochola-5,7,10(19),22-tetraene-1,3,24-triol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₄₀O₃.
Batch Molecular Weight: 412.6
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.0% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	78.6	9.77	0
Found	78.2	9.71	0

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Calcipotriol is a vitamin D₃ analog that displays minimal effects on calcium homeostasis. Regulates cell differentiation and proliferation; exhibits antiproliferative activity against human HL-60, HL60/MX2, keratinocytes, MCF-7, T47D, SCC-25, and mouse WEHI-3 cancer cell lines. Calcipotriol suppresses skin cancer development in mice in a thymic stromal lymphopoietin (TSLP)-dependent manner. Calcipotriol promotes the differentiation of keratinocytes. In human T cells and in psoriatic skin, Calcipotriol increases IL-10 secretion, induces secretion of type 2 cytokines by T cells and modulates the differentiation of dendritic cells and T cells. Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

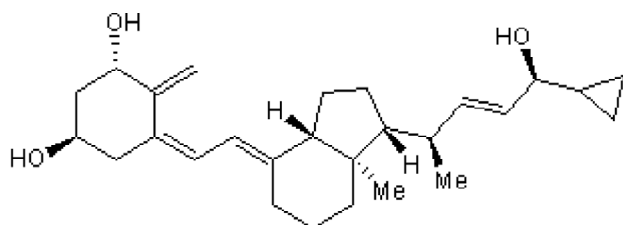
Batch Molecular Formula: C₂₇H₄₀O₃.

Batch Molecular Weight: 412.6

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Cunningham et al (2017) Randomized trial of calcipotriol combined with 5-fluorouracil for skin cancer precursor immunotherapy. *J.Clin.Invest.* **127** 106. PMID: 27869649.

Lovato et al (2016) Calcipotriol and betamethasone dipropionate exert additive inhibitory effects on the cytokine expression of inflammatory dendritic cell-Th17 cell axis in psoriasis. *J.Dermatol.Sci.* **81** 153. PMID: 26794805.

Wietrzyk et al (2007) Antitumor properties of diastereomeric and geometric analogs of vitamin D₃. *Anticancer Drugs* **18** 447. PMID: 17351397.

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