

Product Name: Calcifediol

Catalog No.: 4036

Batch No.: 4

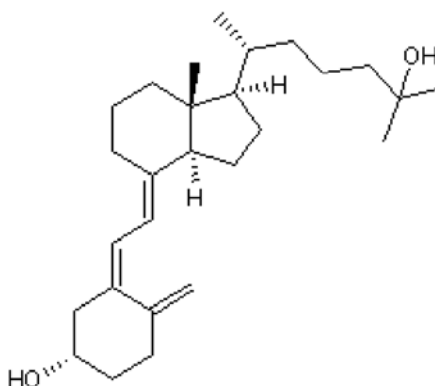
CAS Number: 19356-17-3

EC Number: 242-990-9

IUPAC Name: (εR,1R,3aS,4E,7aR)-4-[(2Z)-2-[(5S)-5-hydroxy-2-methylenecyclohexylidene]ethylidene]octahydro-α,α,ε,7a-tetramethyl-1H-indene-1-pentanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₄₄O₂
Batch Molecular Weight: 400.64
Physical Appearance: White solid
Solubility: Soluble in DMSO
 Soluble in ethanol
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.9% purity
Mass Spectrum: Consistent with structure

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

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Description:

Prohormone of calcitriol (Cat. No. 2551). Major circulating form of vitamin D. Suppresses PTH synthesis and secretion in bovine parathyroid cells (ED₅₀ = 2 nM).

Physical and Chemical Properties:

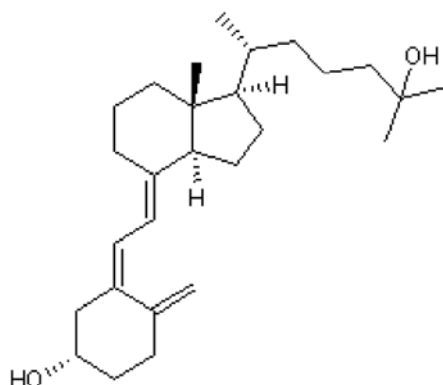
Batch Molecular Formula: C₂₇H₄₄O₂

Batch Molecular Weight: 400.64

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

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:

Soluble in DMSO

Soluble in ethanol

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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. Our standard recommendations are:

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:

Fedirko et al (2010) Blood 25-hydroxyvitamin D₃ concentrations and incident sporadic colorectal adenoma risk: a pooled case-control study. *Am.J.Epidemiol.* **172** 489. PMID: 20650953.

Ritter et al (2006) 25-hydroxyvitamin D₃ suppresses PTH synthesis and secretion by bovine parathyroid cells. *Kidney Int.* **70** 654. PMID: 16807549.

Rowling et al (2006) Megalin-mediated endocytosis of vitamin D binding protein correlates with 25-hydroxycholecalciferol actions in human mammary cells. *J.Nutr.* **136** 2754. PMID: 17056796.

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