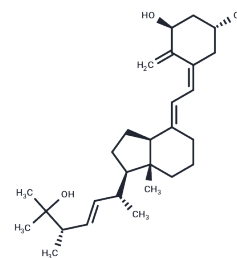


## Ercalcitriol

## Chemical Properties

CAS No. :	60133-18-8
Formula:	C <sub>28</sub> H <sub>44</sub> O <sub>3</sub>
Molecular Weight:	428.65
Storage:	Store at low temperature
	Powder: -20°C for 3 years
	Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Ercalcitriol (1 $\alpha$ ,25-Dihydroxy Vitamin D <sub>2</sub> ) is an active metabolite of vitamin D <sub>2</sub> that strengthens immunity by regulating cathelicidin antimicrobial peptide (CAMP) and defensin $\beta$ -4 (DEFB4) genes in normal and transformed cells, combating pathogenic infections.
Targets(IC <sub>50</sub> )	Endogenous Metabolite,Vitamin,Drug Metabolite
In vivo	Ercalcitriol binds to vitamin D receptor (VDR), a nuclear receptor, activates the interaction between VDR and retinol X receptor (RXR) to form VDR/RXR/ cofactor complex, which binds to Vitamin D response elements in the promoter region of target genes to regulate gene transcription[3].

## Solubility Information

Solubility	DMSO: 45 mg/mL (104.98 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.67 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3329 mL	11.6645 mL	23.3291 mL
5 mM	0.4666 mL	2.3329 mL	4.6658 mL
10 mM	0.2333 mL	1.1665 mL	2.3329 mL
50 mM	0.0467 mL	0.2333 mL	0.4666 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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Nakane M, et al. Differential effects of Vitamin D analogs on bone formation and resorption. J Steroid Biochem Mol Biol. 2006 Jan;98(1):72-7.

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