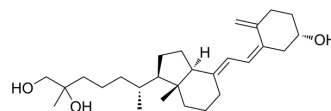


## 25,26-Dihydroxyvitamin D3

<b>Cat. No.:</b>	HY-15830
<b>CAS No.:</b>	29261-12-9
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>44</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	416.64
<b>Target:</b>	VD/VDR; Endogenous Metabolite
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (240.02 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
1 mM		2.4002 mL	12.0008 mL	24.0015 mL
5 mM		0.4800 mL	2.4002 mL	4.8003 mL
10 mM		0.2400 mL	1.2001 mL	2.4002 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

25,26-Dihydroxyvitamin D3(25,26-dihydroxycholecalciferol) is a metabolite of vitamin D3 with intestinal calcium transport activity. IC50 value: Target: VD metabolite The biological activity of synthetic 24,25 and 25,26 diOHD3 was studied in vitamin D-deficient rats. The purpose of this study was to investigate the influence of small doses of both metabolites (0.125-0.250 mug) upon intestinal calcium transport and bone calcium mobilization. Both metabolites were able to increase calcium absorption in rats maintained on a calcium-deficient diet, but failed to do it in rats on a normal calcium diet. Bilateral nephrectomy suppressed this effect. The "bone calcium mobilization" of both derivatives was measured in vitamin D and calcium- or phosphorus-deprived rats after one intravenous dose. When serum calcium was initially low, 24,25 and 25,26 diOHD3 increased serum calcium moderately, but the increment was only significant with 24,25 diOHD3.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

### REFERENCES

[1]. DeLuca HF, et al. 25,26-dihydroxycholecalciferol, a metabolite of vitamin D3 with intestinal calcium transport activity. Biochemistry. 1970 Nov 24;9(24):4776-80.

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[2]. Miravet L, et al. The biological activity of synthetic 25,26-dihydroxycholecalciferol and 24,25-dihydroxycholecalciferol in vitamin D-deficient rats. *Calcif Tissue Res.* 1976 Dec 2;21(3):145-52.

[3]. Fraher LJ, et al. Determination of circulating 25,26-dihydroxycholecalciferol in man by radioimmunoassay. *Clin Sci (Lond).* 1980 Oct;59(4):257-63.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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