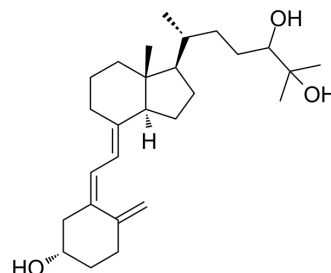


## 24, 25-Dihydroxy VD3

<b>Cat. No.:</b>	HY-76915
<b>CAS No.:</b>	40013-87-4
<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; 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 : 50 mg/mL (120.01 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	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

<b>Description</b>	24, 25-Dihydroxy VD3 is a compound closely related to 1,25-dihydroxyvitamin D3 and is the active form of vitamin D3 <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	24, 25-Dihydroxy VD3 (24R,25(OH)2D3) (0.002-202 nM) inhibits the increase in intracellular Ca <sup>2+</sup> concentration in a dose-dependent manner, with an EC <sub>50</sub> of 4.9 nM and a maximum inhibition rate of 60% in Atlantic cod of both sexes intestinal cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Takayama H. Creation of functional organic compounds and their applications Yakugaku Zasshi. 2002 Feb;122(2):127-55.
- [2]. Kim YR, Abraham NG, Lutton JD. Mechanisms of differentiation of U937 leukemic cells induced by GM-CSF and 1,25(OH)<sub>2</sub> vitamin D3. Leuk Res. 1991;15(6):409-18.

---

[3]. Dennis Wagner, Heather E. Hanwell, Kareena Schnabl et al. The ratio of serum 24,25-dihydroxyvitamin D3 to 25-hydroxyvitamin D3 is predictive of 25-hydroxyvitamin D3 response to vitamin D3 supplementation. The Journal of Steroid Biochemistry and Molecular Biology. Volume 126, Issues 3-5, September 2011, Pages 72-77

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA