(24S)-24,25-Dihydroxyvitamin D3

Cat. No.: HY-15439

CAS No.: 55700-58-8

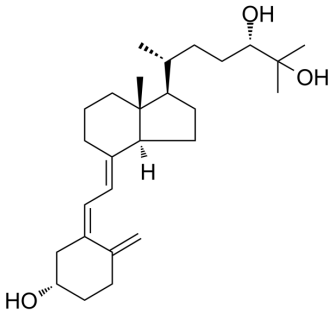
Molecular Formula: $C_{27}H_{44}O_3$

Molecular Weight: 416.64

Target: VD/VDR

Pathway: Vitamin D Related/Nuclear Receptor

Storage: -20°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)

Preparing Stock Solutions	Mass / Solvent / Concentration	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.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (6.00 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(24S)-24,25-Dihydroxyvitamin D3 ((24S)-24,25-Dihydroxycholecalciferol) is an inactive form of vitamin D3 which undergoes various levels of hydroxylation to form active vitamin D3 analogs.

In Vitro

(24S)-24,25-Dihydroxyvitamin D3 ((24S)-24,25-Dihydroxycholecalciferol) is a isomer of 24,25-dihydroxyvitamin D3. Vitamin D is metabolized in the liver to 25-hydroxyvitamin D3, and in the kidney to 1,25-dihydroxyvitamin D3 and 24,25-dihydroxyvitamin D3[5].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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[2]. Kobayashi N, Higashi T, Saito K et al. Specificity of polyclonal antibodies raised against a novel 24,25-dihydroxyvitamin D3-bovine serum albumin conjugant linked through the C-11alpha or C-3 position. J Steroid Biochem Mol Biol. 1997 May;62(1):79-87.

[3]. Larsson D, Nemere I, Sundell K. Putative basal lateral membrane receptors for 24,25-dihydroxyvitamin D(3) in carp and Atlantic cod enterocytes: characterization of binding and effects on intracellular calcium regulation. J Cell Biochem. 2001 Aug 1-9;83(2)

[4]. Nemere I, Yazzie-Atkinson D, Johns DO, Larsson D. Biochemical characterization and purification of a binding protein for 24,25-dihydroxyvitamin D3 from chick intestine. J Endocrinol. 2002 Jan;172(1):211-9.

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