Calcifediol-d_3

Cat. No.: HY-32351S

CAS No.: 140710-94-7

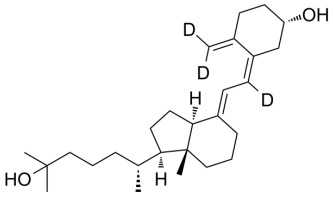
Molecular Formula: $C_{27}H_{41}D_3O_2$

Molecular Weight: 403.66

Target: VD/VDR; Endogenous Metabolite

Pathway: Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease

Storage: 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 (247.73 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration / Solvent / Mass	1 mg	5 mg	10 mg
	1 mM	2.4773 mL	12.3867 mL	24.7733 mL
	5 mM	0.4955 mL	2.4773 mL	4.9547 mL
	10 mM	0.2477 mL	1.2387 mL	2.4773 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.19 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.19 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Calcifediol-d_3 is a deuterium labeled Calcifediol. Calcifediol, a major circulating metabolite of vitamin D3, is a potent VDR ligand[1][2].

REFERENCES

[1]. Castoldi A, et al. Calcifediol-loaded liposomes for local treatment of pulmonary bacterial infections. Eur J Pharm Biopharm. 2016 Nov 22.

[2]. Wei Zheng, et al. Vitamin D-induced vitamin D receptor expression induces tamoxifen sensitivity in MCF-7 stem cells via suppression of Wnt/β-catenin signaling. Biosci Rep. 2018 Dec 7;38(6):BSR20180595.

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

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