Product Data Sheet

Calcitriol-d₆

Cat. No.: HY-76814 CAS No.: 78782-99-7 Molecular Formula: $C_{27}H_{38}D_6O_3$ Molecular Weight: 422.67 VD/VDR Target:

Pathway: Vitamin D Related/Nuclear Receptor

Storage: -20°C Powder 3 years 4°C 2 years

* The compound is unstable in solutions, freshly prepared is recommended.

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (118.30 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3659 mL	11.8296 mL	23.6591 mL
	5 mM	0.4732 mL	2.3659 mL	4.7318 mL
	10 mM	0.2366 mL	1.1830 mL	2.3659 mL

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

BIOLOGICAL ACTIVITY

Description

Calcitriol-d₆ is the deuterium labeled Calcitriol. Calcitriol is the active metabolite of vitamin D3 that activates the vitamin D receptor (VDR)[1].

REFERENCES

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- [3]. Nijenhuis et al (2006) The novel vitamin D analog ZK191784 as an intestine-specific vitamin D antagonist. FASEB J. 20 1589.
- [4]. Krishnan AV, Swami S, Feldman D. Equivalent anticancer activities of dietary vitamin D and calcitriol in an animal model of breast cancer: Importance of mammary CYP27B1 for treatment and prevention. J Steroid Biochem Mol Biol. 2012 Aug 23.
- [5]. Alkharfy KM, Al-Daghri NM, Yakout SM, Ahmed M.Calcitriol Attenuates Weight-Related Systemic Inflammation and Ultrastructural Changes of the Liver in a Rodent Model.Basic Clin Pharmacol Toxicol. 2012 Aug 21.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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