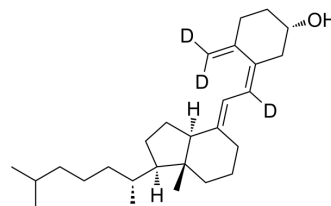


Vitamin D3-d3

Cat. No.:	HY-15398S3
CAS No.:	80666-48-4
Molecular Formula:	C ₂₇ H ₄₁ D ₃ O
Molecular Weight:	387.66
Target:	Bacterial; Endogenous Metabolite; VD/VDR
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Vitamin D Related
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Vitamin D3-d3 is the deuterium labeled Vitamin D3. Vitamin D3 (Cholecalciferol; Colecalciferol) is a naturally occurring form of vitamin D. Vitamin D3 induces cell differentiation and prevents proliferation of cancer cells.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Nazik Al-Hashimi, et al. Cholecalciferol; Laura Bergadà, et al. Role of local bioactivation of vitamin D by CYP27A1 and CYP2R1 in the control of cell growth in normal endometrium and endometrial carcinoma. *Lab Invest*. 2014 Jun;94(6):608-22; Hiroki Yoshioka,

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

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