

Product Data Sheet

Product Name: 25-Hydroxy VD2-D6

Cat. No.: GC35082

Chemical Properties

Cas. No. 1262843-46-8

SMILES O[C@@H](CCC/C=C)CC1=C\C=C2[C@@](CC[C@@H]3[C@@H](/C=C/[C@H](C)C(C([2H])([2H])[2H])(C([2H])([2H])[2H])O)C)([H])[C@]3(C)CCC\2

Formula $C_{28}H_{38}D_6O_2$ M.Wt 418.68

Solubility DMSO : 100 mg/mL (238.85 mM; Need ultrasonic) Storage Store at -20°C, protect from light, stored under nitrogen

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

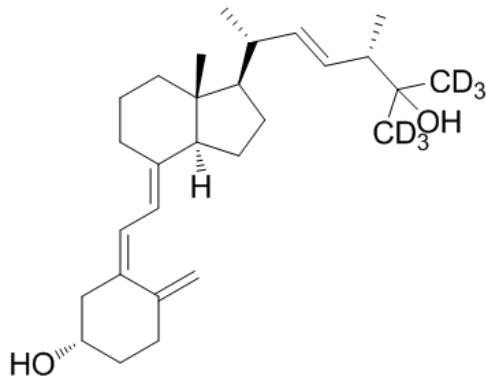
Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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Structure



Background

25-Hydroxy VD₂-D₆ is used as an internal standard for the quantification of 25-Hydroxy VD₂ (Ergocalcidiol, GC13804) by GC- or LC-MS. 25-Hydroxy VD₂ is a metabolite of vitamin D₂ that reflects the nutritional status of vitamin D in the body.^[1] 25-Hydroxy VD₂-D₆ can be used as a tracer. In vivo, 25-Hydroxy VD₂ is formed from vitamin D₂ by the cytochrome P450 (CYP) isoforms CYP2R1 and CYP27A1, and is bound to vitamin D binding protein (DBP) and albumin in the liver, then 25-Hydroxy VD₂ is secreted into the bloodstream is transported to the kidney ^[2]. The serum level of 25-Hydroxy VD₂ have been used as a marker to assess the vitamin D status ^[3].

References:

[1]. Tugcu, Gulcin, Mohammad Charehsaz, and Ahmet Aydın. "Toxicological evaluation of ergocalciferol, cholecalciferol, and their metabolites by a category approach." Drug and Chemical

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Toxicology 44.6 (2021): 661-667.

[2]. Bikle, D. "Vitamin D: production, metabolism, and mechanisms of action. MDText. com." Inc.: South Dartmouth, MA, USA (2000).

[3]. Saenger, Amy K., et al. "Quantification of serum 25-hydroxyvitamin D2 and D3 using HPLC–Tandem Mass Spectrometry and examination of reference intervals for diagnosis of vitamin D deficiency." American journal of clinical pathology 125.6 (2006): 914-920.

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