
Product Data Sheet

Product Name: Calcifediol-D6

Cat. No.: GC35582

Chemical Properties

Cas. No. 78782-98-6

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

Formula	C ₂₇ H ₃₈ D ₆ O ₂	M.Wt	406.67
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Solubility	Soluble in DMSO	Storage	Store at -20°C
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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.

Structure **Background**

Calcifediol-D6 is the deuterated form of Calcifediol(25-hydroxy Vitamin D3), which is a prehormone that is produced in the liver by hydroxylation of vitamin D3 (cholecalciferol) by the enzyme cholecalciferol 25-hydroxylase IC50 value:Target: This metabolite is being measured by physicians worldwide to determine a patient's vitamin d status. Calcifediol is then converted in the kidneys (by the enzyme 25(OH)D-1 α -hydroxylase) into calcitriol (1,25-(OH)2D3), a secosteroid hormone that is the active form of vitamin D. It can also be converted into 24-hydroxycalcidiol in the kidneys via 24-hydroxylation.

[1]. Teitelbaum SL. Calcifediol (25-hydroxyvitamin D3) in the treatment of uremic bone disease. *Ann Intern Med.* 1981 Mar;94(3):404-5. [2]. Kleinman LM, Letteri JM, Asad SN, Ellis KJ, Cohn SH. Effects of calcifediol on calcified tissue in uremia. *Arch Intern Med.* 1978 May 15;138 Spec No:864-5. [3]. Recker R, Schoenfeld P, Letteri J, Slatopolsky E, Goldsmith R, Brickman A. The efficacy of calcifediol in renal osteodystrophy. *Arch Intern Med.* 1978 May 15;138 Spec No:857-63. [4]. Teitelbaum SL, Bone JM, Stein PM, Gilden JJ, Bates M, Boisseau VC, Avioli LV. Calcifediol in chronic renal insufficiency. *Skeletal*

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

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response. JAMA. 1976 Jan 12;235(2):164-7.

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