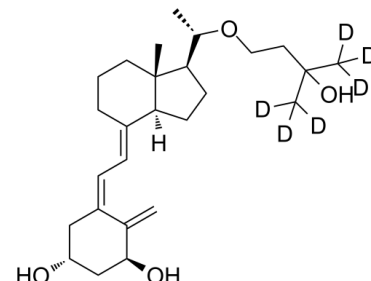


Data Sheet

Product Name:	Maxacalcitol-D6
Cat. No.:	CS-0815
Molecular Formula:	C ₂₆ H ₃₆ D ₆ O ₄
Molecular Weight:	424.65
Target:	VD/VDR
Pathway:	Vitamin D Related
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

Maxacalcitol-D6 is the deuterated form of Maxacalcitol (22-Oxacalcitriol), which is a non-calcemic vitamin D₃ analog and VDR ligand of VDR-like receptors. IC₅₀ value: Target: Maxacalcitol (22-Oxacalcitriol) suppresses parathyroid hormone (PTH) mRNA expression in vitro and in vivo. Maxacalcitol exhibits similar effects to calcitriol in osteoblast-like cells. Maxacalcitol (22-Oxacalcitriol) inhibits tumor growth of osteosarcoma in vitro in combination with all-trans retinoic acid.

References:

- [1]. Monier-Faugere et al 22-Oxacalcitriol suppresses secondary hyperparathyroidism without inducing low bone turnover in dogs with renal failure. *Kidney Int.* (1999)55 821.
- [2]. Barroga et al Inhibitory effects of 22-oxa-calcitriol and all-trans retinoic acid on the growth of a canine osteosarcoma derived cell-line in vivo and its pulmonary metastasis in vivo. *Res.Vet.Sci.* (2000)68 79.
- [3]. Inoue K, Matsui I, Hamano T, Fujii N, Shimomura A, Nakano C, Kusunoki Y, Takabatake Y, Hirata M, Nishiyama A, Tsubakihara Y, Isaka Y, Rakugi H. Maxacalcitol ameliorates tubulointerstitial fibrosis in obstructed kidneys by recruiting PPM1A/VDR complex to pSmad3. *Lab Invest.* 2012 Aug 27.
- [4]. Karashima T, Hashikawa K, Ono F, Eguchi H, Hamada T, Ishii N, Dainichi T, Yasumoto S, Tsuruta D, Hashimoto T. Successful Treatment of Bowen's Disease with Topical Maxacalcitol. *Acta Derm Venereol.* 2012 Jan 26.

SMILES:

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

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

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