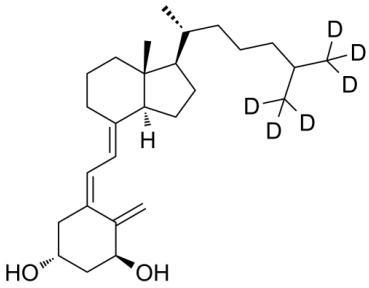
Data Sheet

Product Name:	Alfacalcidol-D6
Cat. No.:	CS-0818
CAS No.:	1641940-94-4
Molecular Formula:	C27H38D6O2
Molecular Weight:	406.67
Target:	VD/VDR
Pathway:	Vitamin D Related
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

Alfacalcidol-D6, a deuterated Alfacalcidol (1-hydroxycholecalciferol; Alpha D3; 1.alpha.-Hydroxyvitamin D3), is a non-selective VDR activator medication. IC50 value: Target: VDR activator Alfacalcidol (1-hydroxycholecalciferol; Alpha D3; 1.alpha.-Hydroxyvitamin D3) improves mechanical bone strength and bone mass; suppresses osteoclastic bone resorption in vivo.

References:

[1]. Shiraishi et al (2000) Alfacalcidol inhibits bone resorption and stmulates formation in an ovariectomized rat model of osteoporosis: Distinct actions from estrogen. Journal of Bone and Mineral Research. 15 770.

[2]. Ringe JD, Schacht E. et al. Prevention and therapy of osteoporosis: the roles of plain vitamin D and alfacalcidol. Rheumatol Int. 2004 Jul;24(4):189-97.

[3]. Ivarsen P, Povlsen JV, Christensen KL.Effect of alfacalcidol on cardiac function in patients with chronic kidney disease stage 4 and secondary hyperparathyroidism: A pilot study.Scand J Urol Nephrol. 2012 Jun 25.

[4]. Rianthavorn P,et al. Prevention of bone loss in children receiving long-term glucocorticoids with calcium and alfacalcidol or menatetrenone.J Pediatr Endocrinol Metab. 2012;25(3-4):307-12.

[5]. Ringe JD, Farahmand P, Schacht E.Alfacalcidol in men with osteoporosis: a prospective, observational, 2-year trial on 214 patients.Rheumatol Int. 2012 Apr 8.

CAIndexNames:

1,3-Cyclohexanediol, 4-methylene-5-[(2E)-2-[(1R,3aS,7aR)-octahydro-7a-methyl-1-[(1R)-1-methyl-5-(methyl-d3)hexyl-6,6,6-d3]-4H-inden-4-ylidene]ethylidene]-, (1R,3S,5Z)-

SMILES:

O[C@H](C/1=C)C[C@H](O)CC1=C\C=C2[C@@](CC[C@@H]3[C@@H](CCCC(C([2H])([2H])[2H])C([2H])([2H])[2H])C)([H])[C@]3(C)CCC\2

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA