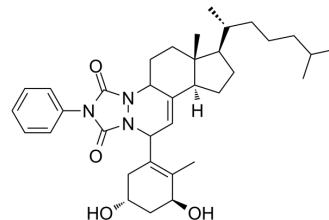


## Impurity C of Alfacalcidol

<b>Cat. No.:</b>	HY-13294
<b>CAS No.:</b>	82266-85-1
<b>Molecular Formula:</b>	C <sub>35</sub> H <sub>49</sub> N <sub>3</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	575.78
<b>Target:</b>	VD/VDR
<b>Pathway:</b>	Vitamin D Related
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 6.67 mg/mL (11.58 mM; ultrasonic and warming and heat to 80°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.7368 mL	8.6839 mL	17.3677 mL
5 mM	0.3474 mL	1.7368 mL	3.4735 mL
10 mM	0.1737 mL	0.8684 mL	1.7368 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Impurity of Alfacalcidol. 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

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- [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, Pisutikul K, Deekajorndech T, Tepmongkol S, Suphapeetiporn K. Prevention of bone loss in children receiving long-term glucocorticoids with calcium

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

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