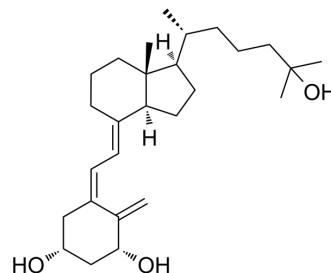


Impurity B of Calcitriol

Cat. No.:	HY-13292
CAS No.:	66791-71-7
Molecular Formula:	C ₂₇ H ₄₄ O ₃
Molecular Weight:	416.64
Target:	VD/VDR
Pathway:	Vitamin D Related
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (240.02 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4002 mL	12.0008 mL	24.0015 mL
	5 mM	0.4800 mL	2.4002 mL	4.8003 mL
	10 mM	0.2400 mL	1.2001 mL	2.4002 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Impurity B of Calcitriol, Calcitriol(1,25-Dihydroxyvitamin D₃; Rocaltrol) is the hormonally active form of vitamin D, Calcitriol is the active metabolite of vitamin D₃ that activates the vitamin D receptor (VDR).IC50 value:Target: vitamin D receptorCalcitriol(1,25-Dihydroxyvitamin D₃; Rocaltrol) displays calcemic actions. Calcitriol stimulates intestinal and renal Ca²⁺ absorption and regulates bone Ca²⁺ turnover. Calcitriol (1,25-Dihydroxyvitamin D₃; Rocaltrol)exhibits antitumor activity; Calcitriol(1,25-Dihydroxyvitamin D₃; Rocaltrol) inhibits in vivo and in vitro cell proliferation in a wide range of cells including breast, prostate, colon, skin and brain carcinomas and myeloid leukemia cells.

REFERENCES

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- [4]. Alkharfy KM, Al-Daghri NM, Yakout SM, Ahmed M. Calcitriol Attenuates Weight-Related Systemic Inflammation and Ultrastructural Changes of the Liver in a Rodent Model.Basic Clin Pharmacol Toxicol. 2012 Aug 21.
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Caution: Product has not been fully validated for medical applications. For research use only.

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