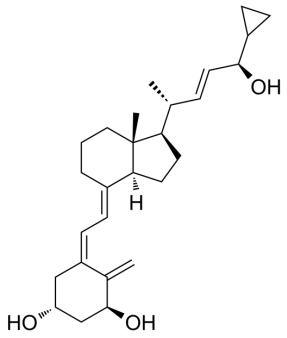
24R-Calcipotriol

Cat. No.:	HY-15266
CAS No.:	112827-99-3
Molecular Formula:	$C_{27}H_{40}O_3$
Molecular Weight:	412.6
Target:	VD/VDR
Pathway:	Vitamin D Related/Nuclear Receptor
Storage:	-20°C, protect from light, stored under nitrogen * The compound is unstable in solutions, freshly prepared is recommended.



SOLVENT & SOLUBILITY

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.06 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.06 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

24R-Calcipotriol(PRI 2202) is an impurity of Calcipotriol; Calcipotriol (MC 903; Calcipotriene) is a ligand of VDR-like receptors.IC50 value:Target: Vitamin D3 analog that displays minimal effects on calcium homeostasis. Regulates cell differentiation and proliferation; Calcipotriol (MC 903; Calcipotriene) exhibits antiproliferative activity against human HL-60, HL60/MX2, MCF-7, T47D, SCC-25 and mouse WEHI-3 cancer cell lines.

REFERENCES

[1]. Gocek, Elzbieta; Kielbinski, Marek; Baurska, Hanna et al. Different susceptibilities to 1,25-dihydroxyvitamin D3-induced differentiation of AML cells carrying various mutations. Leukemia Research (2010), 34(5), 649-657.

[2]. Gocek, Elzbieta; Kielbinski, Marek; Wylob, Paulina et al. Side-chain modified vitamin D analogs induce rapid accumulation of VDR in the cell nuclei proportionately to their differentiation-inducing potential. Steroids (2008), 73(14), 1359-1366.

[3]. Wietrzyk, Joanna; Nevozhay, Dmitry; Filip, Beata et al. The antitumor effect of lowered doses of cytostatics combined with new analogs of vitamin D in mice. Anticancer Research (2007), 27(5A), 3387-3398.

[4]. Wietrzyk, Joanna; Chodynski, Michal; Fitak, Hanna et al. Antitumor properties of diastereomeric and geometric analogs of vitamin D3. Anti-Cancer Drugs (2007), 18(4), 447-457.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA