

Product Data Sheet

Impurity F of Calcipotriol

 Cat. No.:
 HY-15265

 CAS No.:
 112875-61-3

 Molecular Formula:
 C₃₉H₆₈O₃Si₂

 Molecular Weight:
 641.13

 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 Vitro

DMSO: 25 mg/mL (38.99 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|-----------|------------|
| | 1 mM | 1.5597 mL | 7.7987 mL | 15.5975 mL |
| | 5 mM | 0.3119 mL | 1.5597 mL | 3.1195 mL |
| | 10 mM | 0.1560 mL | 0.7799 mL | 1.5597 mL |

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (1.95 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (1.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Impurity F 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]. Binderup (1993) Comparison of calcipotriol with selected metabolites and analogues of vitamin D3: effects on cell growth regulation in vitro and calcium metabolism in vivo. Pharmacol. Toxicol. 72 240.

[2]. Knutson et al (1997) Pharmacokinetics and systemic effect on calcium homeostasis of 1a,24-dihydroxyvitamin D2 in rats. Biochem. Pharmacol. 53 829.

[3]. Wietrzyk et al (2007) Antitumor properties of diastereomeric and geometric analogs of vitamin D3. Anticancer Drugs 18 447.111 [4]. Lise Binderup,, Erik Bramm. Effects of a novel vitamin D analogue MC 903 on cell proliferation and differentiation in vitro and on calcium metabolism in vivo. Biochemical Pharmacology. Volume 37, Issue 5, 1 March 1988, Pages 889-895 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

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