

Seocalcitol

Catalog No: tcsc0398



Available Sizes

Size: 1mg

Size: 5mg



Specifications

CAS No:

134404-52-7

Formula:

$C_{30}H_{46}O_3$

Pathway:

Vitamin D Related

Target:

VD/VDR

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 50 mg/mL (109.97 mM)

Alternative Names:

EB 1089

Observed Molecular Weight:

454.68

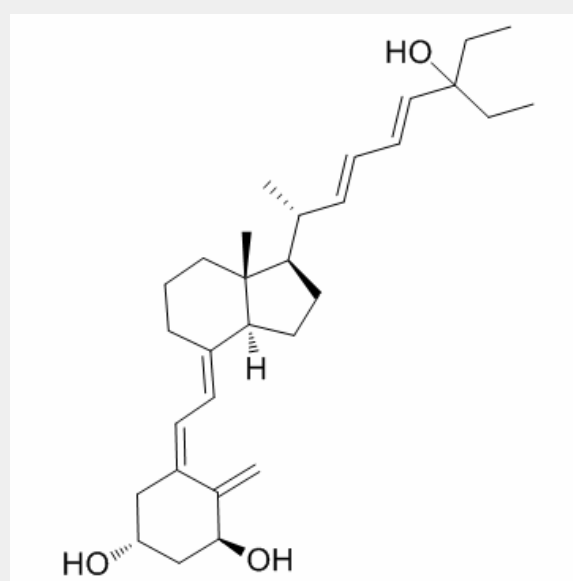
Product Description

Seocalcitol is a vitamin D analog, binds **vitamin D receptor** protein from human osteosarcoma MG-63 cells with **K_d** of 0.27 nM.

IC50 & Target: Kd: 0.27 nM (vitamin D receptor)^[1]

In Vitro: Seocalcitol (EB 1089) is a stimulators of osteoclast recruitment in murine bone marrow cultures, with EC₅₀ at 0.1 nM. Seocalcitol stimulates bone resorption with an estimated EC₅₀ at 0.03 nM^[1]. Seocalcitol (EB 1089) elicits a dose-dependent induction of 24-hydroxylase mRNA in the kidney (EC₅₀=0.4±0.13). In the kidney, K_d values for Seocalcitol is 0.48±0.04 nM. However, in the intestine, the K_d for Seocalcitol is 1.43±0.19 nM^[2]. Seocalcitol (0.1-10 nM) induces cell differentiation in a dosedependent manner. A higher differentiating activity is observed for 1 nM Seocalcitol (EB 1089) than for 1 nM VD₃.

In Vivo: Seocalcitol (EB1089), a synthetic vitamin D analog, exhibits reduced hypercalcemic activity relative to 1,25(OH)₂VD₃. In another study, long-term intraperitoneal (IP) administration of Seocalcitol at a dose of 0.5 µg/kg body weight every other day in C3H/Sy mice exertes a very strong inhibitory effect on hepatocellular carcinoma (HCC) development^[4]. Seocalcitol (EB 1089) is administered daily to postnatal rats from 4 to 12 days of age (P4 to P12) by intraperitoneal injection at either 0.38 or 1.25 µg/kg body weight (BW)/day. Only the highest dose of Seocalcitol (1.25 µg/kg BW) causes a significant reduction in weight gain when administered alone or in conjunction with Dexamethasone, all-trans retinoic acid (RA), or retinoic acid^[5].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!