PRODUCT INFORMATION



EB 1089

Item No. 21579

CAS Registry No.: 134404-52-7

Formal Name: (1R,3S,5Z)-5-[(2E)-2-[(1R,3aS,7aR)-1-[(1R,2E,4E)-

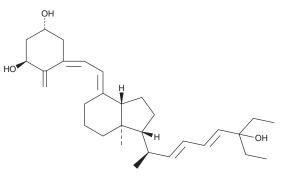
> 6-ethyl-6-hydroxy-1-methyl-2,4-octadien-1-yl] octahydro-7a-methyl-4H-inden-4-ylidene] ethylidene]-4-methylene-1,3-cyclohexanediol

Synonym: Seocalcitol $C_{30}H_{46}O_3$ MF: FW: 454.7 **Purity:** ≥98%

 λ_{max} : 233, 264 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: Stability: ≥5 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

EB 1089 is supplied as a crystalline solid. A stock solution may be made by dissolving the EB 1089 in the solvent of choice, which should be purged with an inert gas. EB 1089 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of EB 1089 in ethanol and DMSO is approximately 30 mg/ml and approximately 25 mg/ml in DMF.

EB 1089 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EB 1089 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. EB 1089 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

EB 1089 is a synthetic vitamin D analog that is 50-200 times more potent than calcitriol (Item No. 71820) at inhibiting cell proliferation and differentiation, yet displays reduced calcemic activity compared to that of calcitriol. It has been shown to promote tumor regression in vitro by inducing apoptosis. 2

References

- 1. Hansen, C.M., Hamberg, K.J., Binderup, E., et al. Seocalcitol (EB 1089): A vitamin D analogue of anti-cancer potential. Background, design, synthesis, pre-clinical and clinical evaluation. Curr. Pharm. Des. 6(7), 803-828 (2000).
- 2. James, S.Y., Mercer, E., Brady, M., et al. EB1089, a synthetic analogue of vitamin D, induces apoptosis in breast cancer cells in vivo and in vitro. Br. J. Pharmacol. 125(5), 953-962 (1998).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 02/16/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM