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
MF: C30H46O3
FW: 454.7
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 233, 264 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 5 years from the QC date provided on the Certificate of Analysis, when stored properly

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. EB 1089 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. 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.\(^1\) It has been shown to promote tumor regression in vitro by inducing apoptosis.\(^2\)

References