Product Name: EB 1089  
Catalog No.: 3993  
Batch No.: 1  
CAS Number: 134404-52-7  
IUPAC 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-7α-methyl-4H-inden-4-ylidene]ethylidene]-4-methylene-1,3-cyclohexanediol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{30}H_{46}O_3 \)  
Batch Molecular Weight: 454.68  
Physical Appearance: White lyophilised solid  
Solubility: Soluble in DMSO  
Soluble in ethanol  
Storage: Store at -20°C  
Batch Molecular Structure:

![Molecular Structure](image)

2. ANALYTICAL DATA

HPLC: Shows 98.3% purity  
Mass Spectrum: Consistent with structure
**Product Information**

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**Catalog No.:** 3993  
**Batch No.:** 1

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**Description:**  
Vitamin D receptor (VDR) agonist; analog of calcitriol (Cat. No. 2551). Exhibits anti-tumor and anti-proliferative activity with reduced hypercalcemic effects. 60 times more potent in inhibiting MCF-7 cell growth in vitro; also shown to induce autophagy in MCF-7 cells. Reverses the effects of parathyroid hormone-related protein (PTHrP).

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C_{32}H_{48}O_{3}  
- **Batch Molecular Weight:** 454.68  
- **Physical Appearance:** White lyophilised solid  
- **Minimum Purity:** >98%

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.  
**CAUTION -** This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**
- Soluble in DMSO  
- Soluble in ethanol  
**CAUTION -** This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).  
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:  
**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.  
**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**