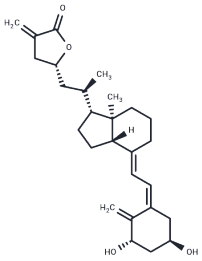
Data Sheet (Cat.No.T36593)

TargetMol

TEI-9648

Chemical Properties



CAS No. : 173388-21-1

Formula: C27H38O4

Molecular Weight: 426.597

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	TEI-9648, an analogue of Vitamin D3 Lactone, acts as a potent and specific antagonist to the vitamin D receptor (VDR). This compound effectively blocks the genomic actions mediated by VDR and the Vitamin D responsive element (VDRE) of 1α,25(OH)2D3. Furthermore, TEI-9648 prevents the differentiation of HL-60 cells induced by 1α,25(OH)2D3, indicating its utility in bone metabolism studies[1][2].
Targets(IC50)	Others,Vitamin
In vitro	TEI-9648, at concentrations ranging from 10 to 1000 nM, inhibits the alterations in CD11b and CD71 expression that are typically associated with the differentiation of HL-60 cells triggered by 1α,25(OH)2D3. Compared to TEI-9647, TEI-9648 demonstrates a consistently lesser effect in suppressing these alterations. Additionally, TEI-9648 is incapable of inducing differentiation in HL-60 cells, even when applied at a concentration of 1 μM. It does not activate NBT-reducing or α-NB esterase activity on its own. Conversely, it significantly reduces the enhancement of these activities usually caused by 1α,25(OH)2D3 at 0.1 nM in HL-60 cells.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3441 mL	11.7206 mL	23.4412 mL
5 mM	0.4688 mL	2.3441 mL	4.6882 mL
10 mM	0.2344 mL	1.1721 mL	2.3441 mL
50 mM	0.0469 mL	0.2344 mL	0.4688 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Miura D, et al. Antagonistic action of novel 1α,25-dihydroxyvitamin D3-26, 23-lactone analogs on differentiation of human leukemia cells (HL-60) induced by 1α,25-dihydroxyvitamin D3. J Biol Chem. 1999 Jun 4;274(23):16392-9.
Kazuya Takenouchi, et al. Synthesis and structure-activity relationships of TEI-9647 derivatives as Vitamin D3 antagonists. J Steroid Biochem Mol Biol. 2004 May;89-90(1-5):31-4.

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