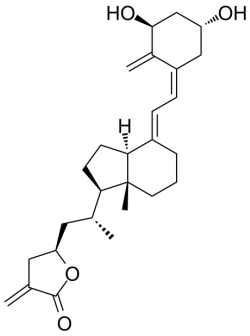
TEI-9648



Cat. No.:	HY-12398A
CAS No.:	173388-21-1
Molecular Formula:	$C_{27}H_{38}O_4$
Molecular Weight:	426.59
Target:	VD/VDR
Pathway:	Vitamin D Related/Nuclear Receptor
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (117.21 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3442 mL	11.7209 mL	23.4417 mL
	5 mM	0.4688 mL	2.3442 mL	4.6883 mL
	10 mM	0.2344 mL	1.1721 mL	2.3442 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

TEI-9648, a Vitamin D_3 Lactone analogue, is a potent and specific vitamin D receptor (VDR) antagonist. TEI-9648 inhibits VDR/VDRE-mediated genomic actions of 1α,25$(OH)_2D_3$. TEI-9648 also inhibits HL-60 cell differentiation induced by of 1α,25$(OH)_2D_3$. TEI-9648 has the potential for bone metabolism research[1][2].

In Vitro

TEI-9648 (10-1000 nM) dose-dependently blocks the reciprocal changes of CD11b and CD71 expression associated with HL-60 cell differentiation induced by 1α,25$(OH)_2D_3$[1].

TEI-9648 has consistently weaker suppressive effect than TEI-9647[1].

TEI-9648 can not induce cell differentiation even after treatment at 1 μM in HL-60 cell[1].

TEI-9648 alone can not induce activation of NBT-reducing activity or α-NB esterase activity. In contrast, TEI-9648 markedly suppresses the up-regulation induced by 1α,25$(OH)_2D_3$ (0.1 nM) in HL-60 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Miura D, et al. Antagonistic action of novel 1α,25-dihydroxyvitamin D_3-26, 23-lactone analogs on differentiation of human leukemia cells (HL-60) induced by 1α,25-

dihydroxyvitamin D_3. J Biol Chem. 1999 Jun 4;274(23):16392-9.

[2]. Kazuya Takenouchi, et al. Synthesis and structure-activity relationships of TEI-9647 derivatives as Vitamin D_3 antagonists. J Steroid Biochem Mol Biol. 2004 May;89-90(1-5):31-4.

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