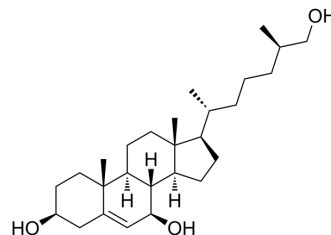


## 7 $\beta$ ,27-Dihydroxycholesterol

Cat. No.:	HY-138115		
CAS No.:	240129-43-5		
Molecular Formula:	C <sub>27</sub> H <sub>46</sub> O <sub>3</sub>		
Molecular Weight:	418.65		
Target:	ROR		
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	7 $\beta$ ,27-Dihydroxycholesterol (7 $\beta$ , 27-OHC) is a potent and selective activator of ROR $\gamma$ t (K <sub>i</sub> =120 nM). 7 $\beta$ ,27-Dihydroxycholesterol promotes the differentiation of mouse and human CD4 <sup>+</sup> Th17 cells. 7 $\beta$ ,27-Dihydroxycholesterol also increases the production of IL-17 depended on CYP27A1 <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	ROR $\gamma$ t 120 nM (K <sub>i</sub> )
<b>In Vitro</b>	7 $\beta$ ,27-Dihydroxycholesterol (0.3 $\mu$ M or 6 $\mu$ M; 2 h) induces IL-17 production in human and mouse Th17 cells, respectively, in vitro <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	7 $\beta$ ,27-Dihydroxycholesterol (60 mg/kg; s.c.; twice daily for 3 d) induces IL-17 production in mice in vivo <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Soroosh P, et al. Oxysterols are agonist ligands of ROR $\gamma$ t and drive Th17 cell differentiation. Proc Natl Acad Sci U S A. 2014 Aug 19;111(33):12163-8.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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