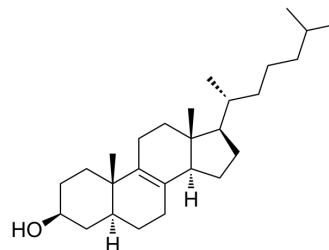


Zymostenol

Cat. No.:	HY-113345		
CAS No.:	566-97-2		
Molecular Formula:	C ₂₇ H ₄₆ O		
Molecular Weight:	386.65		
Target:	Endogenous Metabolite; 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



SOLVENT & SOLUBILITY

In Vitro

DMF : 3 mg/mL (7.76 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.5863 mL	12.9316 mL	25.8632 mL
5 mM	0.5173 mL	2.5863 mL	5.1726 mL
10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Zymostenol (5a-Cholest-8-en-3b-ol) is a late-stage precursor in the biosynthesis of cholesterol. Zymostenol is a ROR γ agonist (EC₅₀: 1 μ M)^{[1][2][3]}.

IC₅₀ & Target

Human Endogenous Metabolite	ROR γ 1 μ M (EC ₅₀)
-----------------------------	---

In Vitro

Zymostenol (12-104 μ M) enhances the formation of myelin basic protein-positive (MBP+) oligodendrocytes from mouse epiblast stem cell-derived oligodendrocyte progenitor cells^[2].

Zymostenol (20 μ M, 3 days) arrest MCF-7 cell cycle in the G₀-G₁ phase^[3].

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

Cell Cycle Analysis^[2]

Cell Line:	MCF-7 cells
------------	-------------

Concentration:	20 μ M
----------------	------------

Incubation Time:	3 days
Result:	Induced 67 ± 1% accumulation of cells in the G0-G1 phase of the cell cycle.

REFERENCES

- [1]. Hu X, et al. Sterol metabolism controls T(H)17 differentiation by generating endogenous ROR γ agonists. *Nat Chem Biol.* 2015 Feb;11(2):141-7.
- [2]. Hubler Z, et al. Accumulation of 8,9-unsaturated sterols drives oligodendrocyte formation and remyelination. *Nature.* 2018 Aug;560(7718):372-376.
- [3]. Payré B, et al. Microsomal antiestrogen-binding site ligands induce growth control and differentiation of human breast cancer cells through the modulation of cholesterol metabolism. *Mol Cancer Ther.* 2008 Dec;7(12):3707-18.
-

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA