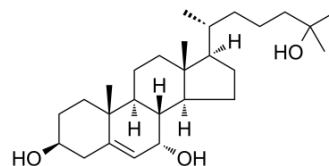


7 α ,25-Dihydroxycholesterol

Cat. No.:	HY-113962	
CAS No.:	64907-22-8	
Molecular Formula:	C ₂₇ H ₄₆ O ₃	
Molecular Weight:	418.65	
Target:	EBI2/GPR183; Endogenous Metabolite	
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 1 mg/mL (2.39 mM; Need ultrasonic)
 Ethanol : < 1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3886 mL	11.9432 mL	23.8863 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

7 α , 25-dihydroxycholesterol (7 α ,25-OHC) is a potent and selective agonist and endogenous ligand of the orphan GPCR receptor EBI2 (GPR183). 7 α , 25-dihydroxycholesterol is highly potent at activating EBI2 (EC₅₀=140 pM; K_d=450 pM). 7 α , 25-dihydroxycholesterol can serve as a chemokine directing migration of B cells, T cells and dendritic cells^{[1][2]}.

IC₅₀ & Target

Human Endogenous Metabolite

In Vitro

In vitro, 7 α , 25-dihydroxycholesterol (7 α ,25-OHC) stimulates the migration of EBI2-expressing mouse B and T cells with half-maximum effective concentration values around 500 pM, but had no effect on EBI2-deficient cells^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

EBI2-deficient B cells or normal B cells desensitized by 7 α ,25-Dihydroxycholesterol (1 μ M; 1.5 hours) pre-treatment shows reduced homing to follicular areas of the spleen^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Liu C, et al. Oxysterols direct B-cell migration through EBI2. Nature. 2011 Jul 27;475(7357):519-23.

[2]. Hannedouche S, et al. Oxysterols direct immune cell migration via EBI2. Nature. 2011 Jul 27;475(7357):524-7.

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