7α,25-Dihydroxycholesterol

Cat. No.: HY-113962

CAS No.: 64907-22-8

Molecular Formula: $C_{27}H_{46}O_3$

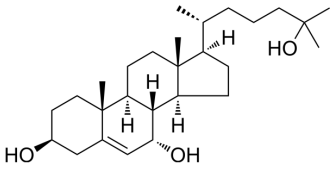
Molecular Weight: 418.65

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 : 4.55 mg/mL (10.87 mM; Need ultrasonic)

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

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3886 mL	11.9432 mL	23.8863 mL
	5 mM	0.4777 mL	2.3886 mL	4.7773 mL
	10 mM	0.2389 mL	1.1943 mL	2.3886 mL

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

BIOLOGICAL ACTIVITY

Description

7α, 25-dihydroxycholesterol (7α,25-OHC) is a potent and selective agonist and endogenous ligand of the orphan GPCR receptor EBI2 (GPR183). 7α, 25-dihydroxycholesterol is highly potent at activating EBI2 (EC_{50}=140 pM; K_d=450 pM). 7α, 25-dihydroxycholesterol can serve as a chemokine directing migration of B cells, T cells and dendritic cells[1][2].

IC_{50} & Target

Human Endogenous Metabolite

In Vitro

□□□□7α,25-Dihydroxycholesterol (7α,25-OHC) □□□□ EBI2 □□□ B □□□ T □□□□□□□□□□□□□□□□□□ 500 pM□□□ EBI2 □□□□ □□□□[1]□

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

In Vivo

7α,25-Dihydroxycholesterol (1 μM□1.5 □□) □□□□ EBI2 □□□ B □□□□□ B □□□□□□□□□□□□□□□□□□□[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.

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