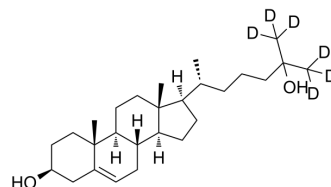


## 25-Hydroxycholesterol-d<sub>6</sub>

<b>Cat. No.:</b>	HY-113134S		
<b>CAS No.:</b>	88247-69-2		
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>40</sub> D <sub>6</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	408.69		
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds		
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

Ethanol : 14.29 mg/mL (34.97 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.4468 mL	12.2342 mL	24.4684 mL
5 mM	0.4894 mL	2.4468 mL	4.8937 mL
10 mM	0.2447 mL	1.2234 mL	2.4468 mL

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

### BIOLOGICAL ACTIVITY

#### Description

25-Hydroxycholesterol-d<sub>6</sub> (25-OHC-d<sub>6</sub>) is the deuterium labeled 25-Hydroxycholesterol. 25-Hydroxycholesterol is a metabolite of cholesterol that is produced and secreted by macrophages in response to Toll-like receptor (TLR) activation. 25-hydroxycholesterol is a potent (EC<sub>50</sub>≈65 nM) and selective suppressor of IgA production by B cells[1][2].

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

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

### REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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