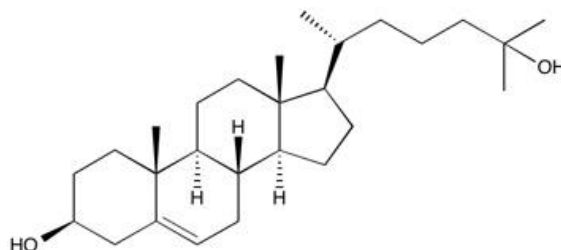


**Catalog # 10-4539**  
**25-Hydroxycholesterol**

CAS# 2140-46-7

5-Cholesten-3 $\beta$ , 25-diol

Lot # FBS2017



Metabolite resulting from the action of cholesterol 25-hydroxylase on cholesterol. However, since cholesterol 25-hydroxylase knock-out mice still have significant levels of 25-hydroxycholesterol there must be alternate pathways of generation that have yet to be determined.<sup>1</sup> Likewise, the biological role of 25-hydroxycholesterol remains somewhat unclear. 25-Hydroxycholesterol is frequently mentioned as an important regulator of cholesterol metabolism, but apparently normal cholesterol regulation in organisms with both high and low levels of the compound make this association unclear. More recent reports have linked 25-hydroxycholesterol and one of its metabolites to immunoregulatory roles<sup>2</sup>, but more information is needed before it's clear if that is indeed a primary role for the compound.

- 1) Diczialusy (2013), *On the formation and possible biological role of 25-hydroxcholesterol*; *Biochimie*, **95** 455
- 2) McDonald and Russell (2010), *25-hydroxycholesterol: a new life in immunology*; *J. Leuko. Biol.* **88** 1071

**PHYSICAL DATA**

Molecular Weight:	402.65
Molecular Formula:	C <sub>27</sub> H <sub>46</sub> O <sub>2</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO or Ethanol
Physical Description:	White or pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**