

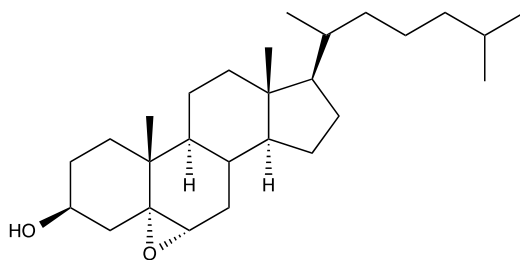
Catalog #10-4545

5 α ,6 α -Epoxycholesterol

CAS# 1250-95-9

Cholestan-5 α ,6 α -epoxy-3 β -ol

Lot # FBA3073



5 α ,6 α -Epoxycholesterol is a naturally occurring metabolite of cholesterol. It is a major oxysterol found in processed food¹ and has been implicated in atherosclerosis^{2,3}. 5 α ,6 α -Epoxycholesterol has been found to be an endogenous ligand for LXR (EC50 = 76 nM).⁴

- 1) Leonarduzzi *et al.* (2002), *Oxidized products of cholesterol: dietary and metabolic origin, and proatherosclerotic effect (review)*; J.Nutr.Biochem **13** 700
- 2) Björkhem *et al.* (1988), *Assay of unesterified cholesterol-5,6-epoxide in human serum by isotope dilution mass spectrometry. Levels in the healthy state and in hyperlipoproteinemia*; J.Lipid Res. **29** 1031
- 3) Staprans *et al.* (2005), *The role of dietary oxidized cholesterol and oxidized fatty acids in the development of atherosclerosis*; Mol.Nutr.Food Res. **49** 1075
- 4) Berrodin *et al.* (2010), *Identification of 5 α ,6 α -Epoxycholesterol as a novel modulator of Liver X Receptor*; Mol.Pharmacol. **78** 1046

PHYSICAL DATA

Molecular Weight:	402.65
Molecular Formula:	C ₂₇ H ₄₆ O ₂
Purity:	>98% by HPLC
	NMR: Conforms
Solubility:	DMSO (up to 10 mg/mL); ethanol (up to 10 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO and ethanol may be stored at -20°C for up to 2 months.

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