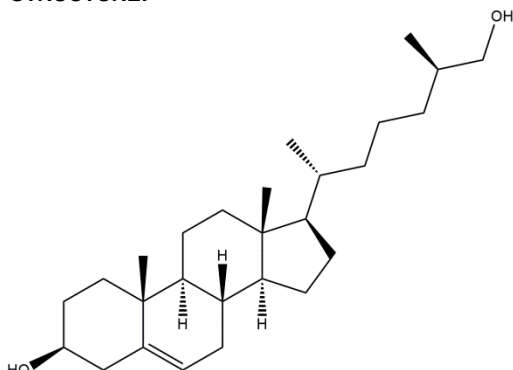


27-Hydroxycholesterol

ALTERNATE NAMES: (3S,8S,9S,10R,13R,14S,17R)-17-[(2R,6R)-7-hydroxy-6-methylheptan-2-yl]-10,13-dimethyl-2,3,4,7,8,9,11,12,14,15,16,17-dodecahydro-1H-cyclopenta[a]phenanthren-3-ol; (25R)-26-hydroxy Cholesterol; (3 β ,25R)-Cholest-5-ene-3,26-diol; 25(R)-27-hydroxy Cholesterol

CATALOG #: B2988-1 1 mg
B2988-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₇H₄₆O₂

MOLECULAR WEIGHT: 402.65

CAS NUMBER: 20380-11-4

APPEARANCE: White Solid

PURITY: 98%

SOLUBILITY: ~2 mg/ml in DMF
~20 mg/ml in Ethanol
~0.1 mg/ml in DMSO

DESCRIPTION: 27-Hydroxycholesterol is a hydroxylation product of cholesterol which is produced by the activity of the enzyme sterol 27-hydroxylase. It activates LXR α and LXR β in vitro with EC₅₀ values of 85 and 71 nM, respectively, and is a potent suppressor of cholesterol biosynthesis. The levels of 27-hydroxycholesterol are elevated in patients with Alzheimer's disease and mild cognitive impairment.

STORAGE TEMPERATURE: -20°C

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Shafaati, M., Marutle, A., Pettersson, H., et al. Marked accumulation of 27-hydroxycholesterol in the brains of Alzheimer's patients with the Swedish APP 670/671 mutation. *J Lipid Res.* 52(5):1004-10 (2011).
2. Fu, X., Menke, J.G., Chen, Y., et al. 27-Hydroxycholesterol is an endogenous ligand for liver X receptor in cholesterol-loaded cells. *The Journal of Biological Chemistry* 276(42), 38378-38387 (2001).
3. Javitt, N.B. 26-Hydroxycholesterol: Synthesis, metabolism, and biologic roles. *Journal of Lipid Research* 31, 1527-1533 (1990).

RELATED PRODUCTS:

Rosuvastatin (Cat. No. 1955)
 Probuco (Cat. No. B2968)
 24(S)-Hydroxycholesterol (Cat. No. 2411)
 Lovastatin (Cat. No. 1692)
 EZSolution™ Anacetrapib (Cat. No. 2531)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**