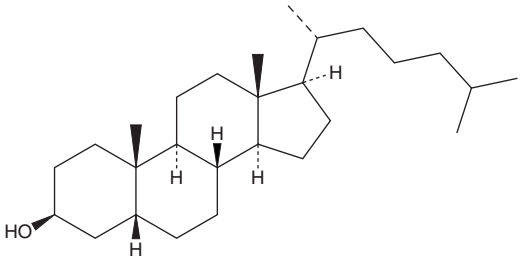
PRODUCT INFORMATION

Coprostanol

Item No. 26764

CAS Registry No.:	360-68-9
Formal Name:	(5β)-cholestan-3β-ol
Synonyms:	5β-Coprostanol, Coprosterol, NSC 5060, NSC 18175
MF:	$C_{27}H_{48}O$
FW:	388.7
Purity:	≥95%
UV/Vis.:	λ_{max}: 242 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Coprostanol is supplied as a crystalline solid. A stock solution may be made by dissolving the coprostanol in the solvent of choice, which should be purged with an inert gas. Coprostanol is soluble in organic solvents such as ethanol, DMSO, dimethyl formamide, and chloroform. The solubility of coprostanol in these solvents is approximately 20, 0.1, 2, and 30 mg/ml, respectively.

Coprostanol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, coprostanol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Coprostanol has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Coprostanol is a cholesterol derivative formed in mammals by intestinal microorganisms and is the odorous compound in feces.[1] It is formed *via* conversion of cholesterol to cholestenone (Item No. 25713) then coprostanone intermediates or by direct reduction of the 5,6 double bond. Coprostanol is commonly used as a marker of sewage contamination in soil and watersheds.[2,3]

References

1. Ren, D., Li, L., Schwabacher, A.W., *et al.* Mechanism of cholesterol reduction to coprostanol by *Eubacterium coprostanoligenes* ATCC 51222. *Steroids* **61(1)**, 33-40 (1996).
2. von der Lühe, B., Dawson, L.A., Mayes, R.W., *et al.* Investigation of sterols as potential biomarkers for the detection of pig (S. *s. domesticus*) decomposition fluid in soils. *Forensic Sci. Int.* **230(1-3)**, 68-73 (2013).
3. Nichols, P.D., Leeming, R., Rayner, M.S., *et al.* Comparison of the abundance of the fecal sterol coprostanol and fecal bacterial groups in inner-shelf waters and sediments near Sydney, Australia. *J. Chromatogr.* **643(1-2)**, 189-195 (1993).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM