

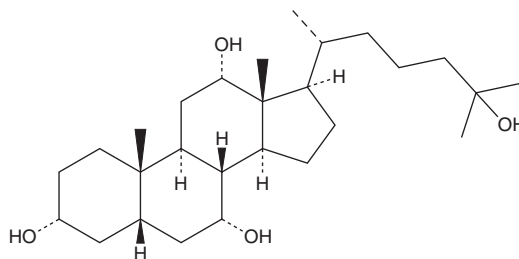
PRODUCT INFORMATION



5 β -Cholestane-3 α ,7 α ,12 α ,25-tetrol

Item No. 42577

CAS Registry No.: 18866-87-0
Synonyms: 3 α ,7 α ,12 α ,25-Tetrahydroxycoprostan
MF: C₂₇H₄₈O₄
FW: 436.7
Purity: $\geq$ 95%
Supplied as: A solid
Storage: -20°C
Stability: $\geq$ 4 years
Special Conditions: Light sensitive



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

Laboratory Procedures

5 β -Cholestane-3 α ,7 α ,12 α ,25-tetrol is supplied as a solid. A stock solution may be made by dissolving the 5 β -cholestane-3 α ,7 α ,12 α ,25-tetrol in the solvent of choice, which should be purged with an inert gas. 5 β -Cholestane-3 α ,7 α ,12 α ,25-tetrol is soluble ($\geq$ 10 mg/ml) in ethanol and DMSO.

Description

5 β -Cholestane-3 α ,7 α ,12 α ,25-tetrol is a bile acid alcohol.¹⁻³ It induces activation of G protein-coupled bile acid receptor 1 (GPBAR1), also known as TGR5, in HEK293 cells expressing the human receptor when used at concentrations ranging from 0.1 to 10 μ M.¹ Blood, fecal, and bile levels of 5 β -cholestane-3 α ,7 α ,12 α ,25-tetrol are increased in patients with cerebrotendinous xanthomatosis (CTX), a progressive metabolic leukodystrophy.¹⁻³

References

1. Iguchi, Y., Yamaguchi, M., Sato, H., *et al.* Bile alcohols function as the ligands of membrane-type bile acid-activated G protein-coupled receptor. *J. Lipid Res.* **51**(6), 1432-1441 (2010).
2. DeBarber, A.E., Kalfon, L., Fedida, A., *et al.* Newborn screening for cerebrotendinous xanthomatosis is the solution for early identification and treatment. *J. Lipid Res.* **59**(11), 2214-2222 (2018).
3. Dayal, B., Shefer, S., Tint, G.S., *et al.* Synthesis of 5 β -cholestane-3 α , 7 α , 12 α , 25-tetrol and 5 β -cholestane-3 α , 7 α , 24 ξ , 25-pentol. *J. Lipid Res.* **17**(1), 74-77 (1976).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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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