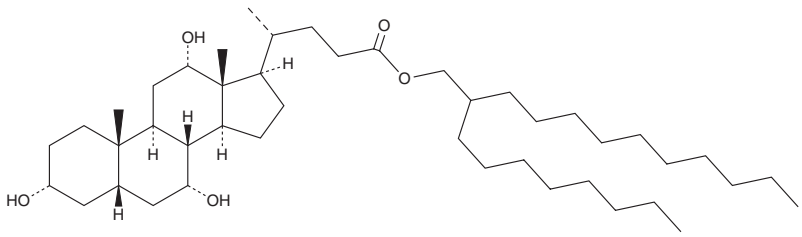
PRODUCT INFORMATION

CA-20

Item No. 46476

Formal Name: 2-octyldodecyl 4R-((5S,8R,9S,10S,13R,14S,17R)-3R,7R,12S-trihydroxy-10,13-dimethylhexadecahydro-1H-cyclopenta[a]phenanthren-17-yl) pentanoate
MF: $C_{44}H_{80}O_5$
FW: 689.1
Purity: ≥95%
Supplied as: A 25 mg/ml solution in methyl acetate
Storage: -20°C
Stability: ≥4 years



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

Description

CA-20 is a derivative of the primary bile acid cholic acid (Item Nos. 20250 | 44008).[1] It has been used in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vivo*. LNPs containing CA-20 accumulate in the spleen after intravenous or intramuscular administration in mice. LNPs containing CA-20 and encapsulating hemagglutinin A (HA) mRNA elicit higher influenza A HA-inhibiting titers and humoral responses than those containing cholesterol (Item Nos. 9003100 | 39088 | 39448) in mice.

Reference

1. Jeon, S., Bae, S.H., Ji, J., *et al.* Molecular dynamics-guided sterol engineering of mRNA-Lipid nanoparticles reprograms biodistribution and enhances spleen-selective immunity. *Adv. Sci. (Weinh)* e76671 (2026).

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/06/2026

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