

PRODUCT INFORMATION



25-NBD Cholesterol

Item No. 24617

Formal Name: 10,13-dimethyl-17-(6-(methyl(7-nitrobenzo[c][1,2,5]oxadiazol-4-yl)amino)heptan-2-yl)-2,3S,4,7,8S,9S,10R,11,12,13R,14S,15,16,17R-tetradecahydro-1H-cyclopenta[a]phenanthren-3-ol

MF: C₃₃H₄₈N₄O₄

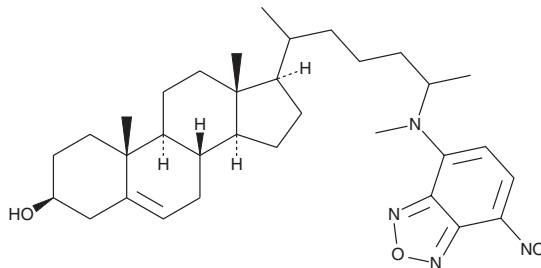
FW: 564.8

Purity: ≥98%

Supplied as: A 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

25-NBD cholesterol is supplied as a solid. A stock solution may be made by dissolving the 25-NBD cholesterol in the solvent of choice, which should be purged with an inert gas. 25-NBD cholesterol is slightly soluble (0.1-1 mg/ml) in chloroform and methanol.

Description

25-NBD cholesterol is a fluorescently labeled form of cholesterol. NBD has excitation/emission maxima of 465/535 nm, respectively. Fluorescently labeled cholesterol has been used to study cholesterol uptake, metabolism, and membrane distribution *in vitro* and cholesterol absorption in hamsters.¹⁻⁴

References

1. Faletrov, Y., Brzostek, A., Plocinska, R., *et al.* Uptake and metabolism of fluorescent steroids by mycobacterial cells. *Steroids* **117**, 29-37 (2017).
2. Frolov, A., Petrescu, A., Atshaves, B.P., *et al.* High density lipoprotein-mediated cholesterol uptake and targeting to lipid droplets in intact L-cell fibroblasts. A single- and multiphoton fluorescence approach. *J. Biol. Chem.* **275**(17), 12769-12780 (2000).
3. Ramirez, D.M.C., Ogilvie, W.W., and Johnston, L.J. NBD-cholesterol probes to track cholesterol distribution in model membranes. *Biochim. Biophys. Acta* **1798**(3), 558-568 (2010).
4. Sparrow, C.P., Patel, S., Baffic, J., *et al.* A fluorescent cholesterol analog traces cholesterol absorption in hamsters and is esterified *in vivo* and *in vitro*. *J. Lipid Res.* **40**(10), 1747-1757 (1999).

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, 10/23/2026

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