# **PRODUCT** INFORMATION



**OH-Chol** 

Item No. 26586

CAS Registry No.: Formal Name:	191173-82-7 N-[2-[(2-hydroxyethyl)amino]ethyl]-(3β) cholest-5-ene-3-carboxamide	· · · · · · · · · · · · · · · · · · ·
MF:	C <sub>32</sub> H <sub>56</sub> N <sub>2</sub> O <sub>2</sub>	
FW:	500.8	
Purity:	≥95%	
Supplied as:	A crystalline solid	HO
Storage:	-20°C	Ŭ O
Stability:	≥2 years	Π

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

# Laboratory Procedures

OH-Chol is supplied as a crystalline solid. A stock solution may be made by dissolving the OH-chol in the solvent of choice, which should be purged with an inert gas. OH-Chol is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of OH-chol in these solvents is approximately 10 mg/ml.

OH-Chol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, OH-chol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. OH-Chol has a solubility of approximately 0.14 mg/ml in a 1:6 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

OH-Chol is a cationic cholesterol derivative.<sup>1</sup> OH-Chol, as a component of lipoplexes with DOPE (Item No. 15091), has been used for siRNA delivery and gene silencing in MCF-7 cells, as well as in mice via intravenous injection, resulting in lipoplex accumulation in the liver. It has also been used in cationic nanoparticles in combination with Tween 80 to transfect pDNA and siRNA into PC3 mouse xenografts via intratumoral injection and with Tween 80 and folate-PEG<sub>2000</sub>-DSPE in a KB mouse xenograft model for intratumoral gene delivery.<sup>2</sup>

# References

- 1. Hattori, Y., Nakamura, M., Takeuchi, N., et al. Effect of cationic lipid in cationic liposomes on siRNA delivery into the lung by intravenous injection of cationic lipoplex. J. Drug. Target 27(2), 217-227 (2019).
- 2. Hattori, Y. Development of non-viral vector for cancer gene therapy. Yakugaku Zasshi 130(7), 917-923 (2010).

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

## SAFFTY 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

uyer 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, 10/14/2019

# 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