

PRODUCT INFORMATION

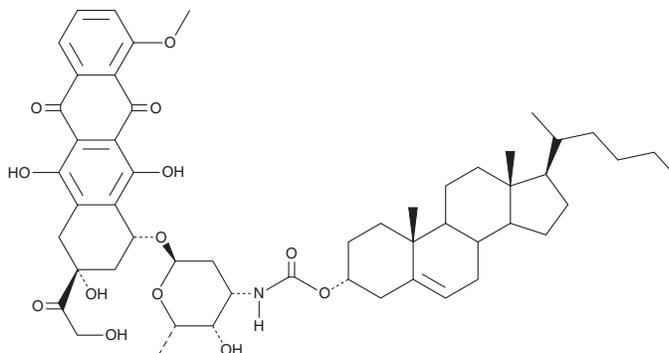


Cholesterol-Doxorubicin

Item No. 9004198

Formal Name: (3R,10R,13R,17R)-10,13-dimethyl-17-((R)-6-methylheptan-2-yl)-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyclopenta[a]phenanthren-3-yl ((2S,3S,4S,6R)-3-hydroxy-2-methyl-6-(((1R,3R)-3,5,12-trihydroxy-3-(2-hydroxyacetyl)-10-methoxy-6,11-dioxo-1,2,3,4,6,11-hexahydrotetracen-1-yl)oxy)tetrahydro-2H-pyran-4-yl)carbamate

Synonym: Chol-DOX
MF: C₅₅H₇₃NO₁₃
FW: 956.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Cholesterol-doxorubicin (Chol-DOX) is supplied as a solid. A stock solution may be made by dissolving the chol-DOX in the solvent of choice, which should be purged with an inert gas. Chol-DOX is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of chol-DOX in DMSO is approximately 2 mg/ml and approximately 25 mg/ml in DMF. Chol-DOX is slightly soluble in ethanol.

Description

Chol-DOX is a prodrug form of the anticancer agent doxorubicin (DOX; Item No. 15007).¹ Chol-DOX, when combined with tocopherol polyethylene glycol succinate/tocofersolan (TPGS; Item No. 34661) in nanoassemblies, reduces MCF-7 and MDA-MB-231 breast cancer cell viability.

Reference

1. Olim, F., Neves, A.R., Vieira, M., *et al.* Self-assembly of cholesterol-doxorubicin and TPGS into prodrug-based nanoparticles with enhanced cellular uptake and lysosome-dependent pathway in breast cancer cells. *Eur. J. Lipid Sci. Technol.* **123**(5), 2000337 (2021).

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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