

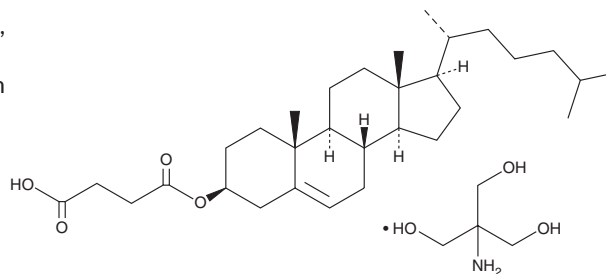
PRODUCT INFORMATION



Cholesteryl Hemisuccinate (tris salt)

Item No. 45505

CAS Registry No.: 102601-49-0
Formal Name: (3β)-cholest-5-en-3-ol 3-(hydrogen butanedioate),
2-amino-2-(hydroxymethyl)-1,3-propanediol
Synonyms: Cholesterol Hemisuccinate, Cholesterol Hydrogen
Succinate, Cholesterol Monosuccinate, Succinate
Cholesterol Monoester
MF: C₃₁H₅₀O₄ • C₄H₁₁NO₃
FW: 607.9
Purity: ≥98%
Supplied as: A crystalline 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

Cholesteryl hemisuccinate (tris salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the cholesteryl hemisuccinate (tris salt) in the solvent of choice, which should be purged with an inert gas.

Description

Cholesteryl hemisuccinate is a cholesterol ester with anticancer activity.¹ It inhibits the growth of murine C1498 myeloid and L1210 lymphocytic leukemia cells when used at concentrations of 50 and 150 μM, respectively. Cholesteryl hemisuccinate acts as an ionizable anionic detergent and is commonly used to stabilize unilamellar vesicles and liposomes.² It has also been used as an emulsifying agent in various vesicular drug delivery systems for anticancer drugs, antibiotics, and oligonucleotides and to solubilize various proteins, including chemokine receptor 1, as well as erythrocyte ghosts.³⁻⁵

References

1. Fariss, M.W., Fortuna, M.B., Everett, C.K., *et al.* The selective antiproliferative effects of alpha-tocopheryl hemisuccinate and cholesteryl hemisuccinate on murine leukemia cells result from the action of the intact compounds. *Cancer Res.* **54(13)**, 3346-3351 (1994).
2. Ding, W.X., Qi, X.R., Li, P., *et al.* Cholesteryl hemisuccinate as a membrane stabilizer in dipalmitoylphosphatidylcholine liposomes containing saikosaponin-d. *Int. J. Pharm.* **300(1-2)**, 38-47 (2005).
3. Simões, S., Moreira, J.N., Fonseca, C., *et al.* On the formulation of pH-sensitive liposomes with long circulation times. *Adv. Drug Deliv. Rev.* **56(7)**, 947-965 (2004).
4. Ding, W.X., Qi, X.R., Li, P., *et al.* Cholesteryl hemisuccinate as a membrane stabilizer in dipalmitoylphosphatidylcholine liposomes containing saikosaponin-d. *Int. J. Pharm.* **300(1-2)**, 38-47 (2005).
5. Grodecka, M., Bertrand, O., Karolak, E., *et al.* One-step immunopurification and lectinochemical characterization of the Duffy atypical chemokine receptor from human erythrocytes. *Glycoconj. J.* **29(2-3)**, 93-105 (2012).

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

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