PRODUCT INFORMATION



Cholesteryl Hemisuccinate

Item No. 25698

CAS Registry No.: Formal Name:	1510-21-0 (3β)-cholest-5-en-3-ol 3-(hydrogen butanedioate)	- ``
Synonym:	Cholesteryl hydrogen succinate	
MF:	C ₃₁ H ₅₀ O ₄	
FW:	486.7	
Purity:	≥95%	
Supplied as:	A crystalline solid	\downarrow \checkmark 0^{\bullet} \checkmark \checkmark
Storage:	-20°C	0
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

Cholesteryl hemisuccinate is supplied as a crystalline solid. A stock solution may be made by dissolving the cholesteryl hemisuccinate in the solvent of choice, which should be purged with an inert gas. Cholesteryl hemisuccinate is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

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.¹ 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 α -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. Simoes, 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).
- Allen, S.J., Ribeiro, S., Horuk, R., et al. Expression, purification and in vitro functional reconstitution of the 4 chemokine receptor CCR1. Protein Expr. Purif. 66(1), 73-81 (2009).
- 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.

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

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