PRODUCT INFORMATION



Digitonin

Item No. 14952

CAS Registry No.: 11024-24-1

Formal Name: $(2\alpha,3\beta,5\alpha,15\beta,25R)-2,15-$

> dihydroxyspirostan-3-yl O-β-Dglucopyranosyl- $(1\rightarrow 3)$ -O- β -Dgalactopyranosyl- $(1\rightarrow 2)$ -O- $[\beta$ -D-

xylopyranosyl- $(1\rightarrow 4)$ - β -D-galactopyranoside

Digitin, NSC 23471, NSC 237417 Synonyms:

MF: $C_{56}H_{92}O_{29}$ FW: 1,229.3

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Digitalis purpurea

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



Digitonin is supplied as a crystalline solid. A stock solution may be made by dissolving the digitonin in the solvent of choice, which should be purged with an inert gas. Digitonin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of digitonin in these solvents is approximately 30 mg/ml.

Description

Digitonin is a glycoside obtained from D. purpurea that is used as a non-ionic detergent to solubilize membrane-bound proteins, to precipitate cholesterol, and to permeabilize cell membranes.¹⁻³

References

- 1. Nazari, M., Kurdi, M., and Heerklotz, H. Classifying surfactants with respect to their effect on lipid membrane order. Biophys. J. 102(3), 498-506 (2012).
- 2. Gardner, J.A., Gainsborough, H., and Murray, R. Studies in the cholesterol content of normal human plasma: An improved macromethod for the estimation of cholesterol by digitonin. Biochem. J. 32(1), 15-18 (1938).
- 3. Knight, D.E. and Scrutton, M.C. Gaining access to the cytosol: The technique and some applications of electropermeabilization. Biochem. J. 234(3), 497-506 (1986).

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

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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