PRODUCT INFORMATION



Protodioscin

Item No. 11887

CAS Registry No.: 55056-80-9

Formal Name: (3β,22α,25R)-26-(β-D-

> glucopyranosyloxy)-22-hydroxyfurost-5en-3-yl O-6-deoxy-α-L-mannopyranosyl- $(1\rightarrow 2)$ -O-[6-deoxy- α -L-mannopyranosyl-

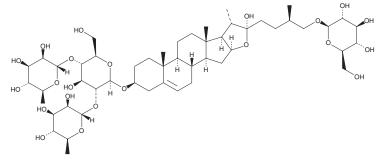
 $(1\rightarrow 4)$]- β -D-glucopyranoside

Synonym: NSC 698796 MF: $C_{51}H_{84}O_{22}$ FW: 1,049.2 **Purity:** ≥95%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Protodioscin is supplied as a crystalline solid. A stock solution may be made by dissolving the protodioscin in the solvent of choice, which should be purged with an inert gas. Protodioscin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of protodioscin in these solvents is approximately 10, 20, and 5 mg/ml, respectively.

Protodioscin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, protodioscin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Protodioscin has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Protodioscin is a steroidal saponin first isolated from plants used in herbal remedies. It displays cytotoxicity against a range of cancer cells in vitro, including leukemia, colon cancer, and prostate cancer cells $(GI_{50} \le 2 \mu M)$. Protodioscin, as a part of an extract from the plant T. terrestris, also improves sexual behavior parameters in rats.²

References

- 1. Hu, K. and Yao, X. Protodioscin (NSC-698 796): Its spectrum of cytotoxicity against sixty human cancer cell lines in an anticancer drug screen panel. Planta Med. 68(4), 297-301 (2002).
- 2. Gauthaman, K., Adaikan, P.G., and Prasad, R.N. Aphrodisiac properties of Tribulus terrestris extract (Protodioscin) in normal and castrated rats. Life Sci. 71(12), 1385-1396 (2002).

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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