**PRODUCT INFORMATION**

**Protodioscin**

*Item No. 11887*

**CAS Registry No.:** 55056-80-9  
**Formal Name:** (3β,22α,25R)-26-(β-D-glucopyranosyloxy)-22-hydroxyfurost-5-en-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→2)-O-[6-deoxy-α-L-mannopyranosyl-(1→4)]-β-D-glucopyranoside  
**Synonym:** NSC 698796  
**MF:** C_{51}H_{84}O_{22}  
**FW:** 1,049.2  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid

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**Laboratory Procedures**

For long term storage, we suggest that protodioscin be stored as supplied at -20°C. It should be stable for at least two years.

Protodioscin is supplied as a crystalline solid. A stock solution may be made by dissolving the protodioscin in the solvent of choice. Protodioscin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. 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.

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**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 (G1_{50} ≤ 2 µM).¹ Protodioscin, as a part of an extract from the plant *T. terrestris*, also improves sexual behavior parameters in rats.²

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**References**