

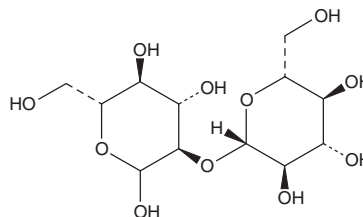
PRODUCT INFORMATION



Sophorose

Item No. 14717

CAS Registry No.: 20429-79-2
Formal Name: 2-O-β-D-glucopyranosyl-D-glucose
MF: C₁₂H₂₂O₁₁
FW: 342.3
Purity: ≥98%
Supplied as: A powder
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Sophorose is supplied as a powder. A stock solution may be made by dissolving the sophorose in the solvent of choice. Sophorose is soluble in DMSO, which should be purged with an inert gas. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Sophorose is a disaccharide component of the microbial glycolipids produced by yeast termed sophorolipids. Due to their hydrophobic nature, sophorolipids are often employed as biosurfactants.¹ Sophorolipids also demonstrate antibacterial, antifungal, spermicidal, virucidal, and anti-cancer activities.²⁻³ Sophorose has been identified as a potent inducer of cellulase gene expression in studies of *T. reesei* fermentation.⁴

References

1. Nguyen, T.T. and Sabatini, D.A. Characterization and emulsification properties of rhamnolipid and sophorolipid biosurfactants and their applications. *Int. J. Mol. Sci.* **12(2)**, 1232-1244 (2011).
2. Shah, V., Doncel, G.F., Seyoum, T., et al. Sophorolipids, microbial glycolipids with anti-human immunodeficiency virus and sperm-immobilizing activities. *Antimicrob. Agents Chemother.* **49(10)**, 4093-4100 (2005).
3. Shah, V., Shah, S., Shah, H., et al. Antibacterial activity of polymer coated cerium oxide nanoparticles. *PLoS One* **7(10)**, 47827 (2012).
4. Sternberg, D. and Mandels, G.R. Induction of cellulolytic enzymes in *Trichoderma reesei* by sophorose. *J. Bacteriol.* **139(3)**, 761-769 (1979).

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.

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