

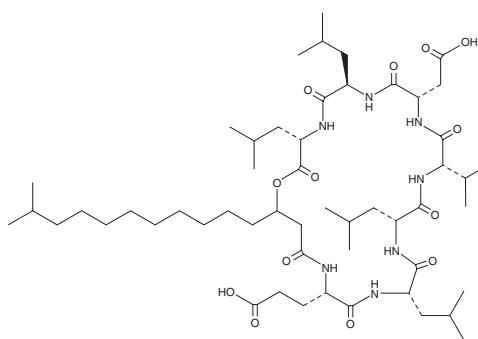
PRODUCT INFORMATION



Surfactin

Item No. 31620

CAS Registry No.: 252023-70-4
MF: C₅₃H₉₃N₇O₁₃ (for C1)
FW: 1,036.3
Purity: ≥95% (mixture of surfactants)
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Bacillus subtilis*



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

Laboratory Procedures

Surfactin is supplied as a solid. A stock solution may be made by dissolving the surfactin in the solvent of choice, which should be purged with an inert gas. Surfactin is soluble in methanol and DMSO.

Description

Surfactin is a cyclic lipopeptide biosurfactant produced by various strains of *Bacillus*.¹ It is composed of a variable heptapeptide and a β -hydroxy fatty acid that ranges in length from 12- to 15 carbons, which generates several isoforms.² Surfactins interact with and destabilize biological membranes, resulting in a variety of diverse biological activities, including antibacterial, anti-inflammatory, and anticancer activities.¹ This surfactin isoform contains the heptapeptide L-Glu-L-Leu-D-Leu-L-Val-L-Asp-D-Leu-L-Leu and is linked to a 15-carbon β -hydroxy fatty acid with the *iso* branching configuration.

References

1. Wu, Y.-S., Ngai, S.-C., Goh, B.-H., *et al.* Anticancer activities of surfactin and potential application of nanotechnology assisted surfactin delivery. *Front. Pharmacol.* **8**, 761 (2017).
2. Kowall, M., Kluge, J.V., Stein, T., *et al.* Separation and characterization of surfactin isoforms produced by *Bacillus subtilis* OKB 105. *J. Colloid Interface Sci.* **204(1)**, 1-8 (1998).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/11/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM