

PRODUCT INFORMATION



Cerebroside C

Item No. 28590

CAS Registry No.: 98677-33-9
Formal Name: (2R,3E)-N-[(1S,2R,3E,7E)-1-[(β-D-glucopyranosyloxy)methyl]-2-hydroxy-8-methyl-3,7-heptadecadien-1-yl]-2-hydroxy-3-octadecenamide

MF: C₄₃H₇₉NO₉

FW: 754.1

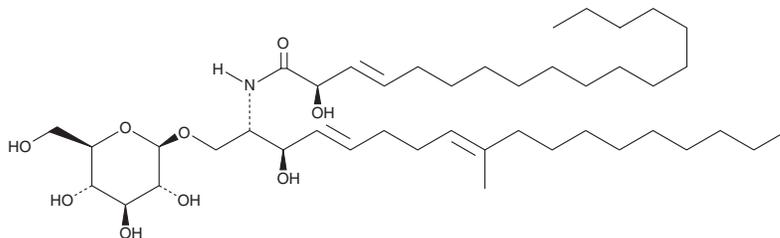
Purity: ≥70%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/*Stachybotrys* sp.



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

Laboratory Procedures

Cerebroside C is supplied as a solid. A stock solution may be made by dissolving the cerebroside C in the solvent of choice. Cerebroside C is soluble in organic solvents such as ethanol, methanol, and DMSO, which should be purged with an inert gas.

Description

Cerebroside C is a fungal metabolite and glycosphingolipid that has been found in the rice pathogenic fungus *M. grisea*.¹ It induces production of the phytoalexin momilactone A when applied to wounded rice leaves, indicating that cerebroside C is an elicitor of the hypersensitive response in rice. Cerebroside C increases germination rate and reduces germination time in wheat seeds in a concentration-dependent manner at 4°C.² It also increases root length, fresh weight, and dry weight of wheat seedlings when used at a concentration of 20 µg/ml at 4°C, indicating increased chilling tolerance.

References

1. Koga, J., Yamuchi, T., Shimura, M., *et al.* Cerebroside A and C, sphingolipid elicitors of hypersensitive cell death and phytoalexin accumulation in rice plants. *J. Biol. Chem.* **273**(48), 31985-31991 (1998).
2. Li, H.-X., Xiao, Y., Cao, L.-L., *et al.* Cerebroside C increases tolerance to chilling injury and alters lipid composition in wheat roots. *PLoS One* **8**(9), e73380 (2013).

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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