

PRODUCT INFORMATION



C16 α -Glucosylceramide (d18:1/16:0) (synthetic)

Item No. 40274

Formal Name: N-[(1S,2R,3E)-1-[(α -D-glucopyranosyloxy)methyl]-2-hydroxy-3-heptadecen-1-yl]-hexadecanamide

Synonyms: α -GluCer(d18:1/16:0), N- ω -CD₃-Hexadecanoyl-glucopsychosine

MF: C₄₀H₇₇NO₈

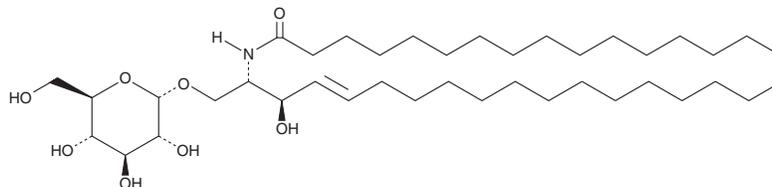
FW: 700.0

Purity: \geq 98%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years



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

Laboratory Procedures

C16 α -Glucosylceramide (d18:1/16:0) (synthetic) is supplied as a solid. A stock solution may be made by dissolving the C16 α -glucosylceramide (d18:1/16:0) (synthetic) in the solvent of choice, which should be purged with an inert gas. C16 α -Glucosylceramide (d18:1/16:0) (synthetic) is sparingly soluble (1-10 mg/ml) in the organic solvent methanol.

Description

C16 α -Glucosylceramide (d18:1/16:0) is an α -linked glycosphingolipid containing a 16:0 fatty acid chain. It is an α -anomeric analog of the endogenous sphingolipid β -glucosylceramide. α -Linked hexosylceramides are minor endogenous lipids, with certain species capable of activating mammalian invariant natural killer T (iNKT) cells.^{1,2} This product is fully synthetic and has no variations in the fatty acyl chain or sphingoid backbone.

References

1. Brennan, P.J., Tatituri, R.V., Heiss, C., *et al.* Activation of iNKT cells by a distinct constituent of the endogenous glucosylceramide fraction. *Proc. Natl. Acad. Sci. U S A* **111**(37), 13433-13438 (2014).
2. Brennan, P.J., Cheng, T.Y., Pellicci, D.G., *et al.* Structural determination of lipid antigens captured at the CD1d-T-cell receptor interface. *Proc. Natl. Acad. Sci. U S A* **114**(31), 8348-8353 (2017).

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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