



C16 GlcCer-d₃ (d18:1/16:0-d₃)

Cat. No.:	OB0626WX-1984
Appearance:	Solid
Purity:	≥99% (deuterated forms, d1-d3)
Identity:	Confirmed by TLC.
Size:	1 mg; 2 mg; 5 mg; 10 mg

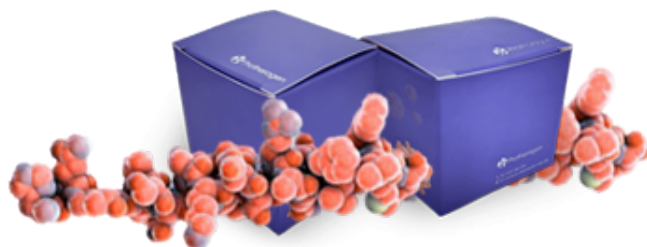
This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	C16 GlcCer-d ₃ (d18:1/16:0-d ₃) is a deuterated internal standard optimized for the precise mass spectrometric tracking and quantification of native C16 glucosylceramide. The unlabeled molecule is a key bioactive intermediate formed via glucosylceramide synthase pathways, serving as a structural precursor to advanced lactosylceramides, a plasma biomarker associated with neurodegenerative cognitive decline, and a protective lipid mediator that supports respiratory barrier defense.
Labeling	Stable isotope-labeled
Synonyms	N-((2S,3R,E)-3-hydroxy-1-(((2R,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-2-yl)oxy)octadec-4-en-2-yl)hexadecanamide-d ₃ ; N-ω-CD3-Hexadecanoyl-glucosylcholine; GlcCer(d18:1/16:0-d ₃); GluCer(d18:1/16:0-d ₃); Glucosylceramide-d ₃ (d18:1/16:0-d ₃); C16 Glucosylceramide-d ₃ (d18:1/16:0-d ₃)
Formula	C ₄₀ H ₇₄ D ₃ NO ₈
Formula Weight	703.1

Specification

InChI	InChI=1S/C40H77NO8/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-34(43)33(32-48-40-39(47)38(46)37(45)35(31-42)49-40)41-36(44)30-28-26-24-22-20-18-16-14-12-10-8-6-4-2/h27,29,33-35,37-40,42-43,45-47H,3-26,28,30-32H2,1-2H3,(H,41,44)/b29-27+/t33-,34+,35+,37+,38-,39+,40+/m0/s1/i2D3
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InChI Key	VJLLLMIZEJJZTE-LKPYDFSUSA-N
Canonical SMILES	<chem>O[C@H]1[C@H](O)[C@@H](CO)O[C@@H](OC[C@H](NC(CCCCCCCCCCCCCC([2H])([2H])[2H])=O)[C@H](O)/C=C/CCCCCCCCCCCC)[C@@H]1O</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	C16 GlcCer-d ₃ (d18:1/16:0-d ₃) serves as an internal standard for quantitative glycosylceramide analysis and supports isotope dilution lipidsomics, LC-MS/MS quantification, and analytical method validation for glucosylceramide species.