

Ludger BioQuant™ Chitotriose Standard for Glycan Quantitation

A fast, reliable method
for quantifying your glycans

 Ludger



Ludger

Chitotriose Standard

Size: 5nmol

Cat # BQ-CHITC

Batch # B29E-01

Store at -20°C

Highlights of the Chitotriose Standard System for Glycan Quantification

Regulatory Submissions

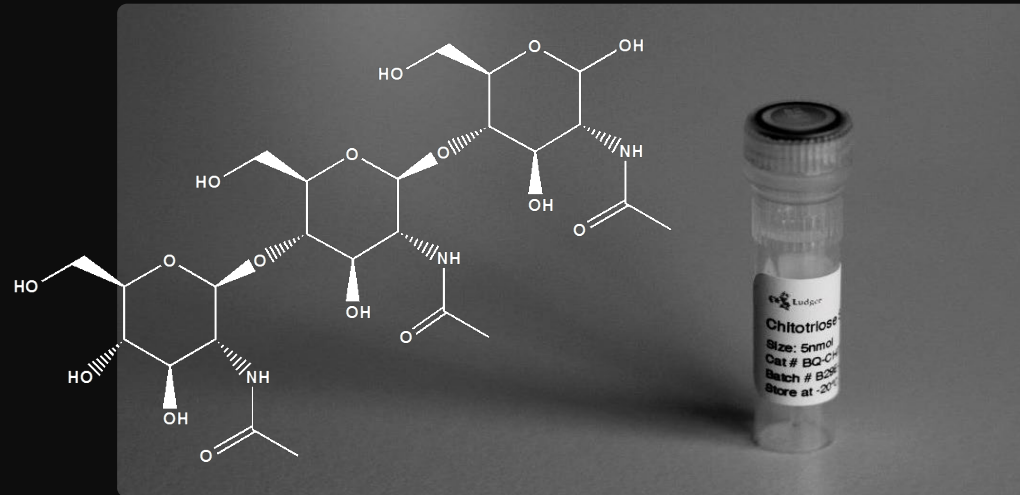
Support system suitability and drugs regulatory submission by demonstrating consistent and reproducible glycosylation levels

Reliable quantification method

*Follows established glycan analysis techniques.
Provides data comparable to gold-standard glycoprofiling methods based on Monosaccharide analysis*

Part of the BioQuant Standard Range

Quantity of Chitotriose standard accurately determined using qNMR



Quick and Easy

Used in QC routine in-house to determine quantity of both bulk and dispensed glycans

Use as Internal or External Quantitative Standard

The Chitotriose standard can be spiked directly into your glycan sample or run in parallel

Integrates Easily With Fluorescent Labeling Workflows (eg. 2-AA and 2-AB)

Adds into your existing labeling workflow, without requiring any extra steps.

BQ-Chitotriose-01

Ludger BioQuant Chitotriose

Linear tri-N-acetylglucosamine quantitative standard

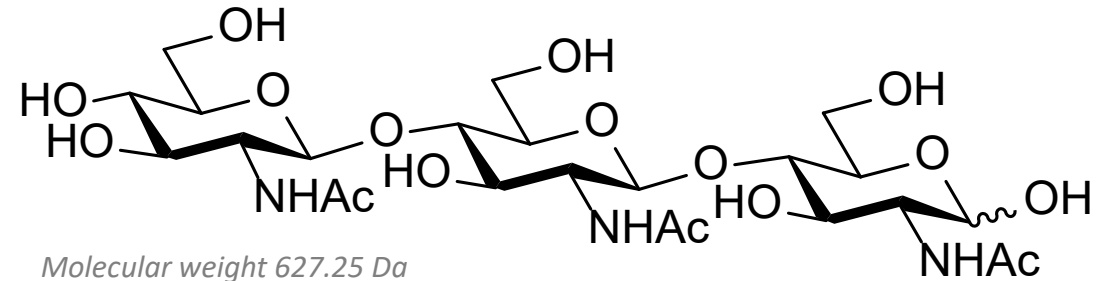
Accurate Quantity

Determined by quantitative NMR using BioQuant metrology

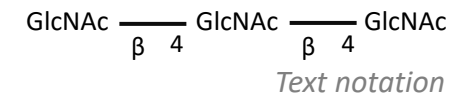
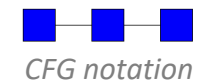
5nmols of the lyophilised standard supplied in a 0.5mL vial.

Ready for LudgerTag

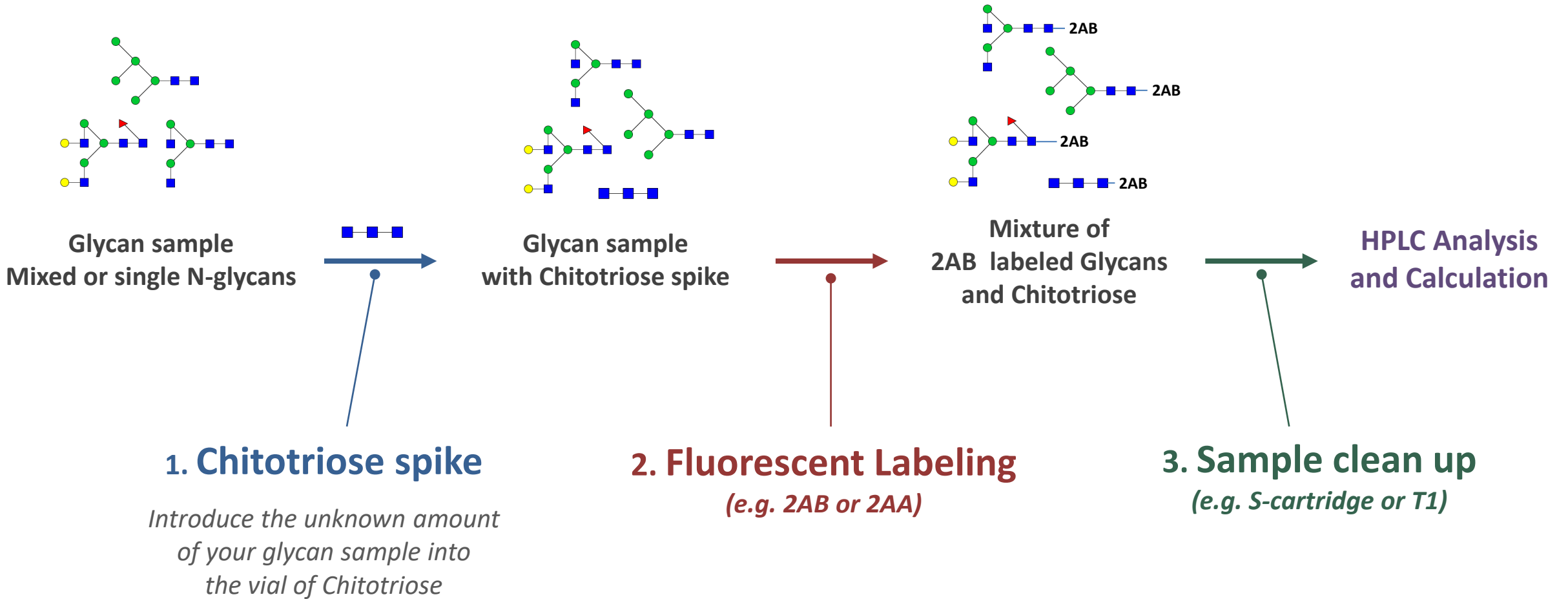
The sugar has a free reducing end that readily accepts a fluorescent tag



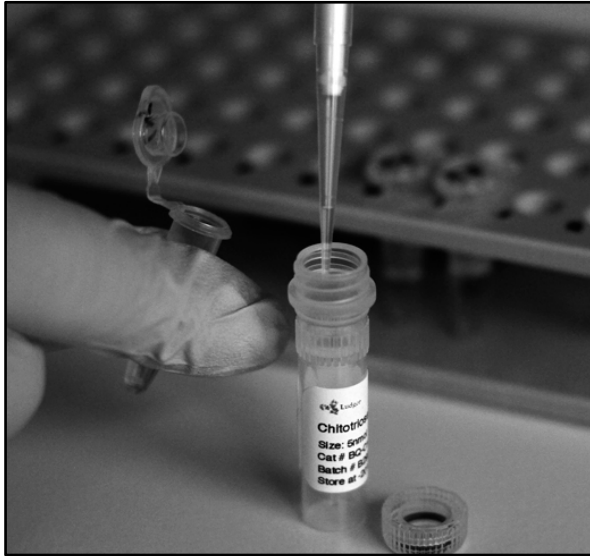
Structure of BQ-Chitotriose-01 Standard



BioQuant Chitotriose Workflow



BioQuant Chitotriose Workflow - Components



1. Transfer your glycan sample into Chitotriose standard vial

*Cat #. BQ-Chitotriose-01
Ludger BioQuant Chitotriose*



2. Fluorescently label the Chitotriose sample mixture

*Cat #. LT-KAB-A2
LudgerTag 2-AB labeling kit
LT-KAA-A2
LudgerTag 2-AA labeling kit*



3. Clean up samples using LC-S-A6 or LC-T1-A6

*Cat #. LC-S-A6
LudgerClean S Cartridges
LC-T1-A6
LudgerClean T1 Cartridges*

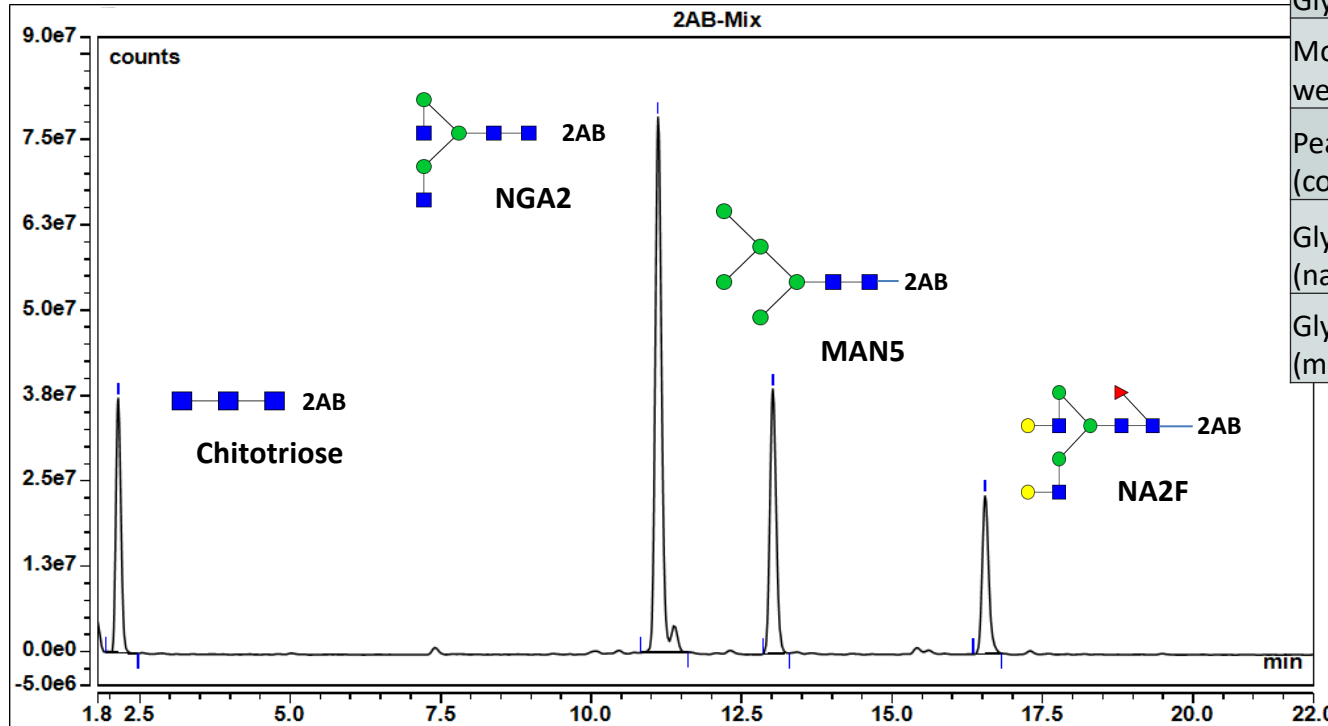


Analysis using HPLC/UHPLC

*Cat #. LS-N2-4.6x150 and
LS-N2-2.0x150
LudgerSep™ N2 High Resolution
Amide HPLC Columns*

BioQuant Chitotriose Data Analysis

UHPLC Quantitation



Peak Number	1	2	3	4
Glycan	BQ-Chitotriose	NGA2	MAN5	NA2F
Molecular weight (Da)	627	1317	1235	1788
Peak area (counts/min)	3241146	9416731	4301987	2685867
Glycan quantity (nanomoles)	5.00	14.53	6.64	4.14
Glycan quantity (micrograms)	3.1	19.1	8.2	7.4

Glycan quantitation using the peak area of the BQ-Chitotriose and the glycans

$$\frac{\text{Peak area of Glycan}}{\text{Peak area of Chitotriose}} \times \text{Chitotriose quantity (nmol)} = \text{Glycan quantity (nmol)}$$

Example of calculation used to determine glycan quantity of the 3 analytes

UHPLC profiles of mixed glycan sample with BQ-Chitotriose internal standard.

Mixture of 3 labeled glycan analytes with the BQ-Chitotriose used as an Internal standard. The quantities are then determined by a comparison of the peak areas in the chromatogram

Next Steps...

Request a quotation



CLICK
to contact
Sales

Sales Team

Quotations: info@ludger.com

Orders: sales@ludger.com