



## Certificate of Analysis

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### LudgerTag Sialic Acid DMB Labeling Kit

Cat. #: LT-KDMB-A1

Batch #: B64M-01

Size: 1 set of labeling reagents per kit

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This kit conforms to the specifications given in Ludger document # LT-KDMB-A1-Guide.

Each kit contains the following components:

| Quantity per Kit | Catalogue number | Batch number | Component Name              |
|------------------|------------------|--------------|-----------------------------|
| 2                | LT-ACETIC2M-01   | B62A-01      | AceticAcid 2Molar           |
| 1                | LT-MERCAPTO-01   | B62C-01      | Mercaptoethanol             |
| 1                | LT-DITHIO-01     | B62B-01      | Sodium Dithionite           |
| 1                | LT-DMB-01        | B629-01      | DMB Dye                     |
| 1                | CM-SRP-01        | B61Q-03      | Sialic Acid Reference Panel |
| 1                | CM-NEUAC-01      | B61P-01      | N-Acetyl Neuraminic acid    |
| 1                | CM-NEUGC-01      | B61R-02      | N-Glycolyl Neuraminic acid  |

Expiry Date: 09 February 2018

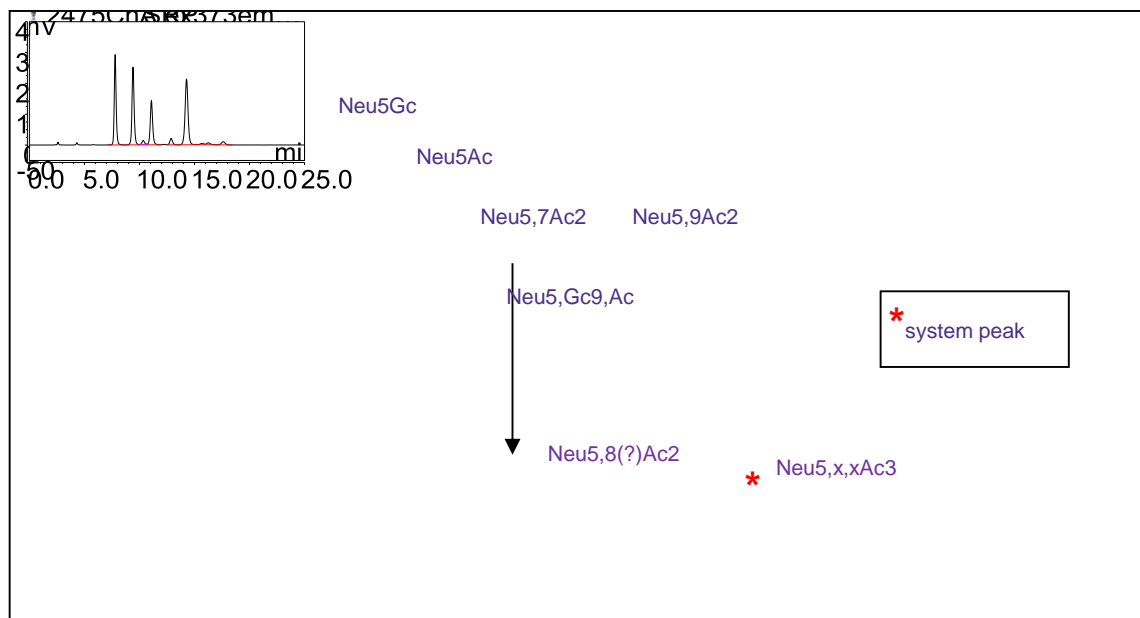
## Sialic Acid Reference Panel

Cat. #: CM-SRP-01

Batch: B61Q-03

Size: approx. 1.25 nmols

The sialic acid reference panel is a mixture of different sialic acids forms (as detailed on chromatogram below) sourced from bovine submaxillary mucin.



**Figure 1:** LudgerSep R1 HPLC profile of DMB labeled Sialic acid Reference Panel (Cat. #: CM-SRP-01, Batch B61Q-03).

***DMB labeled SRP peaks seen above eluted under the following HPLC conditions:***

Column: LudgerSep R1 (LS-R1-4.6X150, B43I-04)

Flow: 0.5 ml/min.

Temperature: 30 °C

Solvent: Methanol:Acetonitrile:Water (7:9:84 v/v)

Fluorescence detector: Waters 2475 Excitation wavelength: 373 nm Emission wavelength: 448 nm

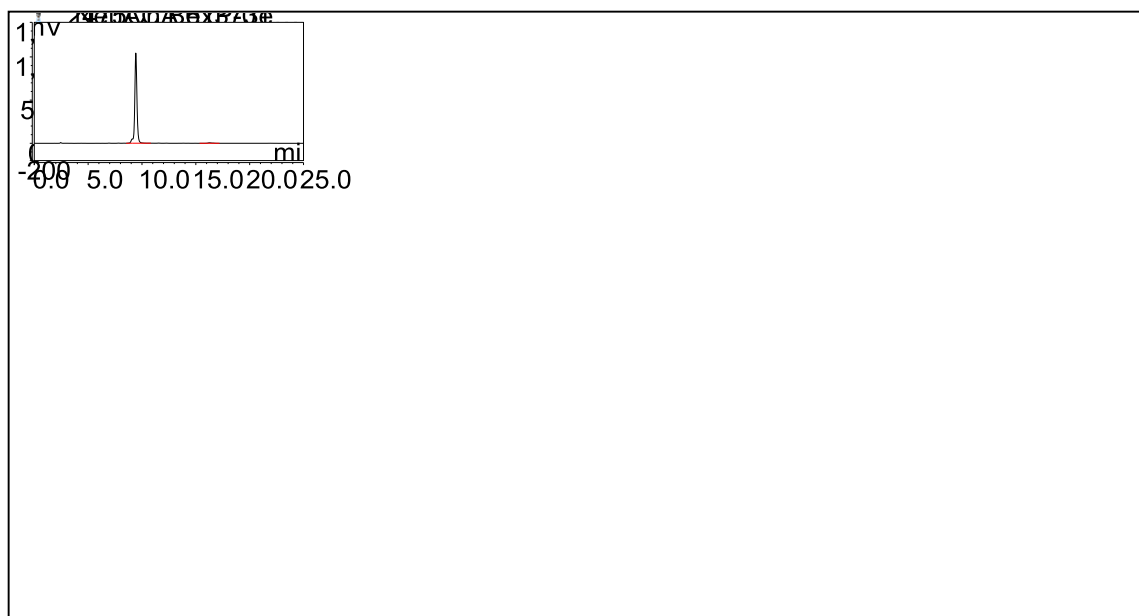
## NeuAc Standard

Cat. #: CM-NEUAC-01

Batch: B61P-01

Size:  $1.00 \pm 0.04$  nmol

The N-acetylneuraminic acid standard is a quantitative standard of NIST-F and USP traceable Neu5Ac monosaccharide.



**Figure 1:** LudgerSep-R1 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuAc standard (Cat. #: CM-NEUAC-01, Batch B61P-01).

**Accuracy:** This analysis was performed on 12 vials of CM-NEUAC-01.

**The dispensed amount was determined as  $1.00 \pm 0.04$  nmol NeuAc per vial.**

Values are in nmols  $\pm 95\%$  confidence interval.



***DMB labeled sialic acid standards eluted under the following HPLC conditions:***

Column: LudgerSep R1 (Cat. #: LS-R1-4.6x150) B43I-04

Flow: 0.5 ml/min.

Temperature: 30 °C

Solvent A: methanol:acetonitrile:water (7:9:84)

Gradient: 0-10 min: 100% Solvent A

HPLC: Waters 2

Detector: Waters 2 FD

Excitation wavelength: 373 nm

Emission wavelength: 448 nm

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## NeuGc Standard

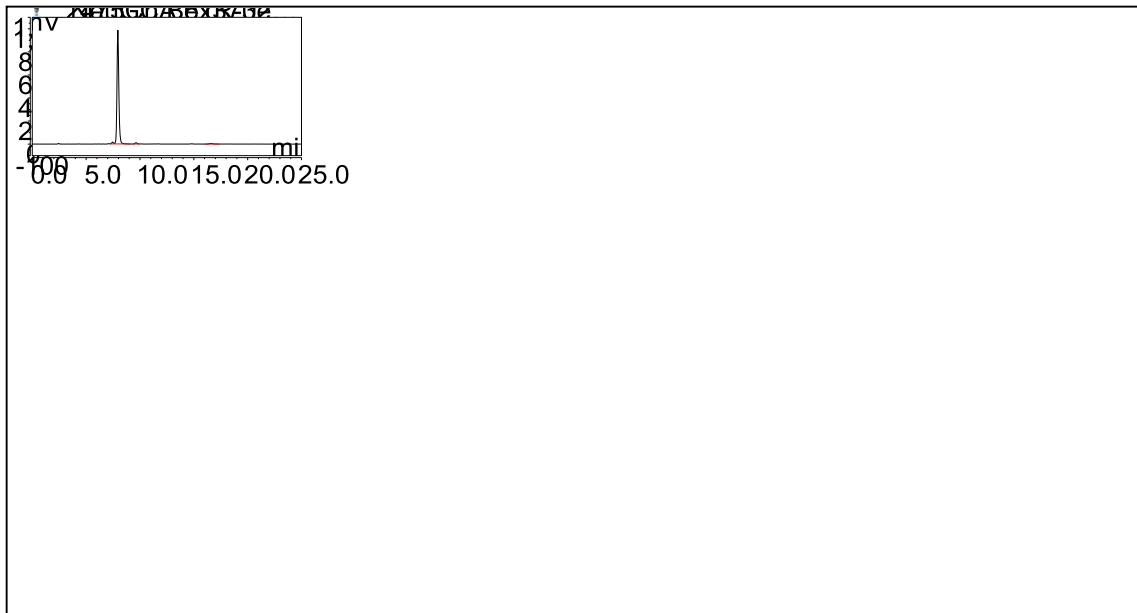
Cat. #: CM-NEUGC-01

Batch: B61R-02

Size:  $1.11 \pm 0.07$  nmol

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The N-glycolylneuraminic acid standard is a quantitative standard of NIST-F and USP traceable Neu5Gc monosaccharide.



**Figure 1:** LudgerSep-R1 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuGc standard (Cat. #: CM-NEUGC-01, Batch B61R-02 ).

**Accuracy:** This analysis was performed on 12 vials of CM-NEUGC-01.

**The dispensed amount was determined as  $1.11 \pm 0.07$  Nmol NeuGc per vial.**

Values are in Nmols  $\pm 95\%$  confidence interval.



***DMB labeled sialic acid standards eluted under the following HPLC conditions:***

Column: LudgerSep R1 (Cat. #: LS-R1-4.6x150) B43I-04

Flow: 0.5 ml/min.

Temperature: 30 °C

Solvent A: methanol:acetonitrile:water (7:9:84)

Gradient: 0-10 min: 100% Solvent A

HPLC: Waters 2

Detector: Waters 2 FD

Excitation wavelength: 373 nm

Emission wavelength: 448 nm