



## Certificate of Conformity

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### LudgerTag Sialic Acid DMB Labeling Kit

Cat. #: LT-KDMB-A1

Batch #: B449-01

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	B43J-05	Acetic Acid 2Molar
1	LT-MERCAPTO-01	B43E-01	Mercaptoethanol
1	LT-DITHIO-01	B42H-01	Sodium Dithionite
1	LT-DMB-01	B43V-01	DMB Dye
1	CM-SRP-01	B425-01	Sialic Acid Reference Panel
1	CM-NEUAC-01	B3C5-02	N-Acetyl Neuraminic acid
1	CM-NEUGC-01	B3C9-02	N-Glycolyl Neuraminic acid

Expiry Date: 31<sup>st</sup> March 2016

## Certificate of Analysis

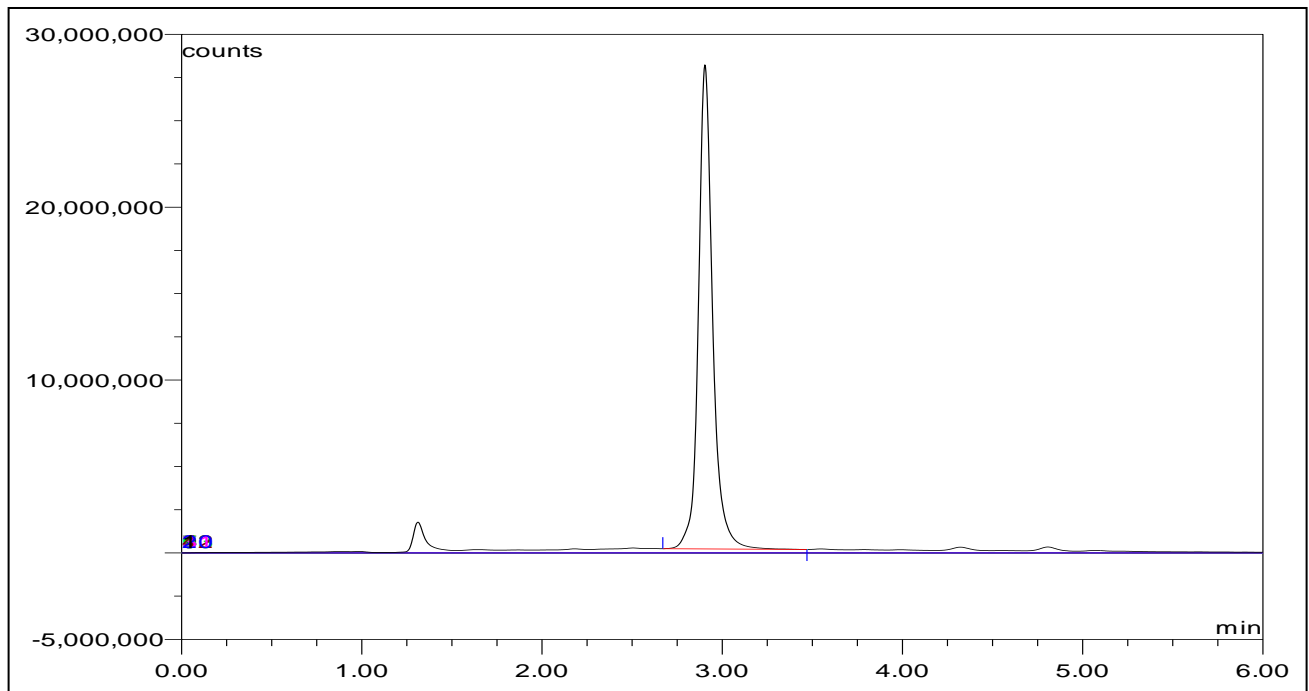
### NeuAc Standard

Cat. #: CM-NEUAC-01

Batch: B3C5-02

Size:  $1.31 \pm 0.03$  nmol

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



**Figure 1:** LudgerSep-uR2 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuAc standard (Cat. #: CM-NEUAC-01, Batch B3C5-02).

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

**The dispensed amount was determined as  $1.31 \pm 0.03$  Nmole NeuAc per vial\*.**

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



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

Column: LudgerSep uR2 (Cat. #: LS-uR2-2.1x100)

Flow: 0.25 ml/min.

Temperature: 30 °C

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

Gradient: 0-10 min: 100% Solvent A

HPLC: Dionex U3000 UHPLC Detector: U3000 FD

Excitation wavelength: 373 nm Emission wavelength: 448 nm

## Certificate of Analysis

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### NeuGc Standard

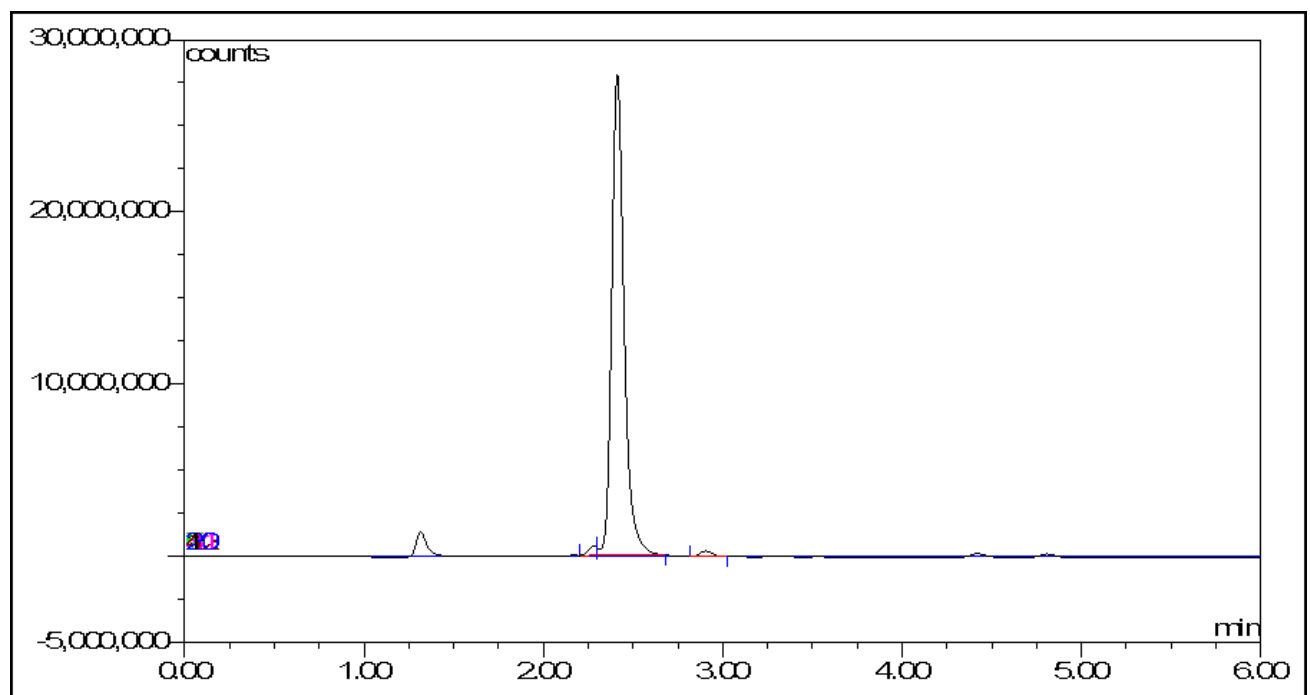
Cat. #: CM-NEUGC-01

Batch: B3C9-02

Size:  $1.13 \pm 0.02$  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-uR2 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuGc standard (Cat. #: CM-NEUGC-01, Batch B3C9-02).

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

**The dispensed amount was determined as  $1.13 \pm 0.02$  Nmole NeuGc per vial.**

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



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

Column: LudgerSep uR2 (Cat. #: LS-uR2-2.1x100)

Flow: 0.25 ml/min.

Temperature: 30 °C

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

Gradient: 0-10 min: 100% Solvent A

HPLC: Dionex U3000 UHPLC Detector: U3000 FD

Excitation wavelength: 373 nm Emission wavelength: 448 nm

## Certificate of Analysis

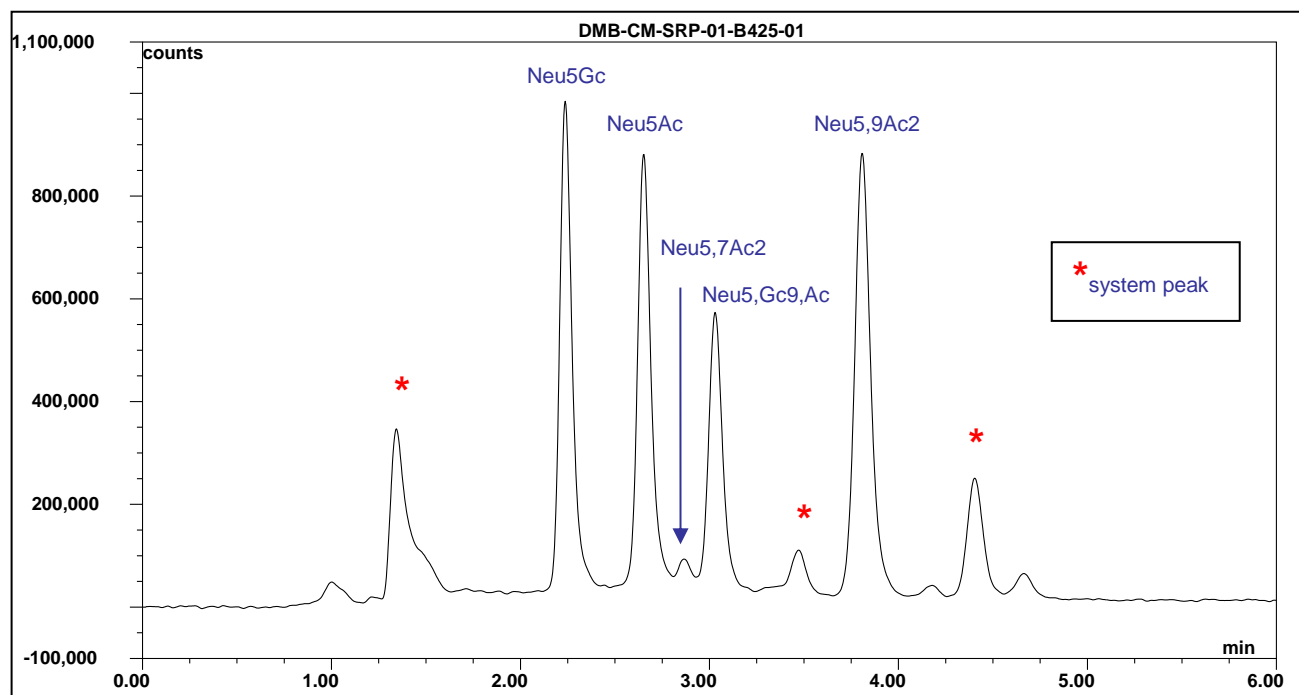
### Sialic Acid Reference Panel

Cat. #: CM-SRP-01

Batch: B425-01

Size: approx. 0.125 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 UR2 HPLC profile of DMB labeled Sialic acid Reference Panel (Cat. #: CM-SRP-01, Batch B425-01).

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

Column: LudgerSep UR2 (1.9 $\mu$ m, 2.1x100mm)

Flow: 0.35 ml/min.

Temperature: 30 °C

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

Fluorescence detector: Dionex U3000 Excitation wavelength: 373 nm Emission wavelength: 448 nm