



## Certificate of Analysis

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### LudgerTag™ Sialic Acid DMB Labeling Kit

Cat. #: LT-KDMB-A1

Batch: B93F-01

Size: 1 set of labeling reagents per kit

Expiry Date: 26 Feb 2021

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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	Cat #	Batch #	Component Name
2	LT-ACETIC2M-01	B93B-02	Acetic Acid 2Molar
1	LT-MERCAPTO-01	B92R-01	Mercaptoethanol
1	LT-DITHIO-01	B92Q-01	Sodium Dithionite
1	LT-DMB-01	B937-01	DMB Dye
1	CM-SRP-01	B92L-01	Sialic Acid Reference Panel
1	CM-NEUAC-01	B8BS-01	N-Acetyl Neuraminic acid
1	CM-NEUGC-01	B8CB-01	N-Glycolyl Neuraminic acid

## Certificate of Analysis

### Sialic Acid Reference Panel

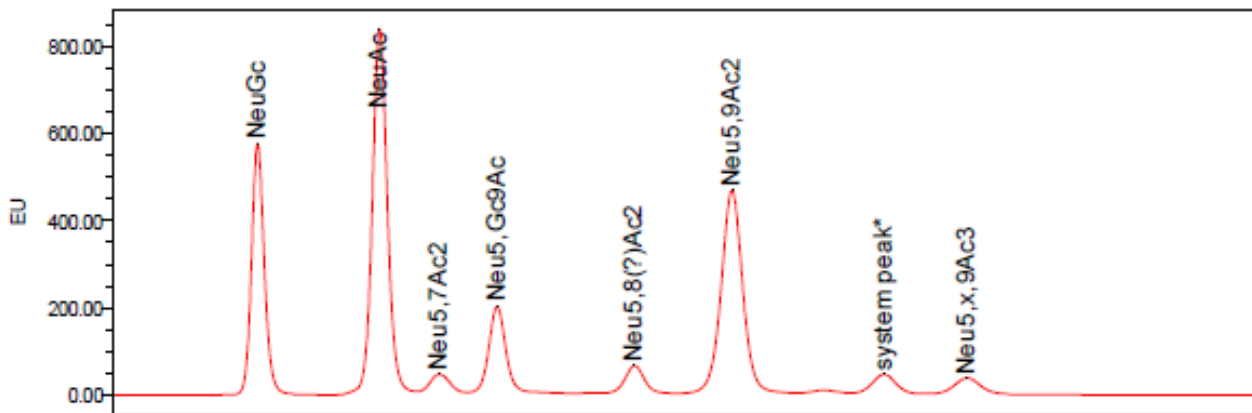
Cat. #: CM-SRP-01

Batch: B92L-01

Size: approx. 1.25 nmols

Expiry Date: 25 Mar 2024

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 B92L-01).

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

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

Flow: 0.5 ml/min.

Temperature: 30 °C

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

Solvent B: acetonitrile

Gradient:

Time (min)	%B
0.0	0.0
19.0	0.0
19.5	90.0
23.5	90.0
24.0	0.0
30.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm

## Certificate of Analysis

### NeuAc Standard

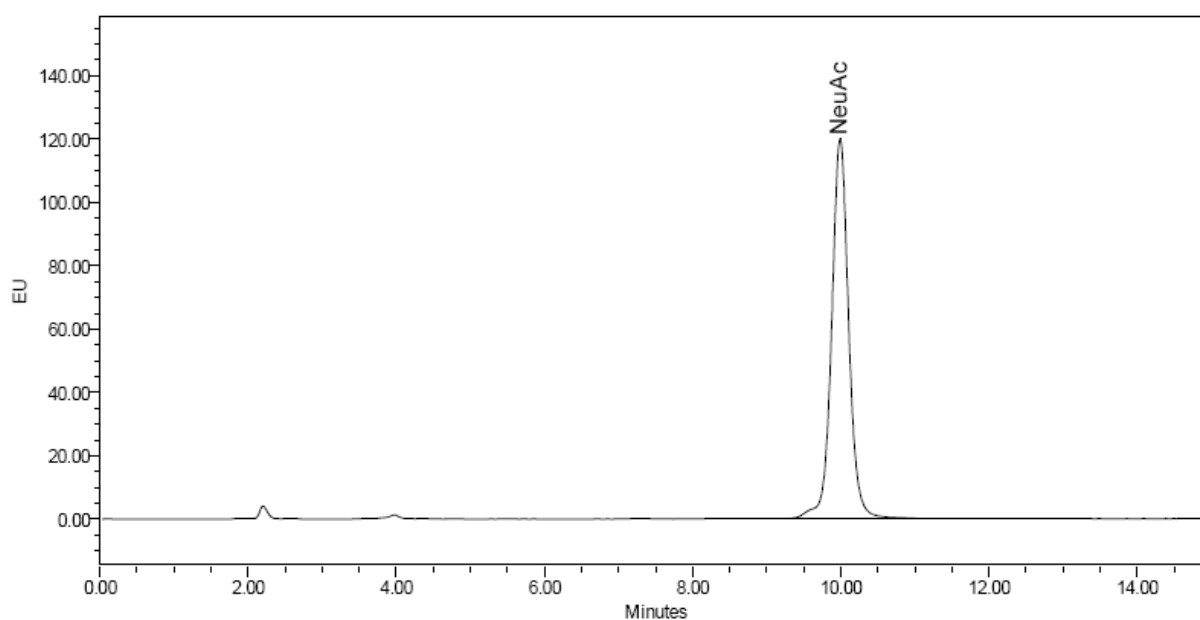
Cat. #: CM-NEUAC-01  
01

Batch: B8BS-

Size:  $1.00 \pm 0.02$  nmol

Expiry Date: 30 Nov 2023

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 B8BS-01).

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

**The dispensed amount was determined as  $1.00 \pm 0.02$  nmol NeuAc per vial.**

Values are in nmols  $\pm$  standard deviation.

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

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

Flow: 0.5 ml/min.

Temperature: 30 °C

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

Solvent B: acetonitrile

Gradient:

Time (min)	%B
0.0	0.0
19.0	0.0
19.5	90.0
23.5	90.0
24.0	0.0
30.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm

## Certificate of Analysis

### NeuGc Standard

Cat. #: CM-NEUGC-01

Batch: B8CB-01

Size :  $1.07 \pm 0.01$  nmol

Expiry Date: 06 Dec 2023

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

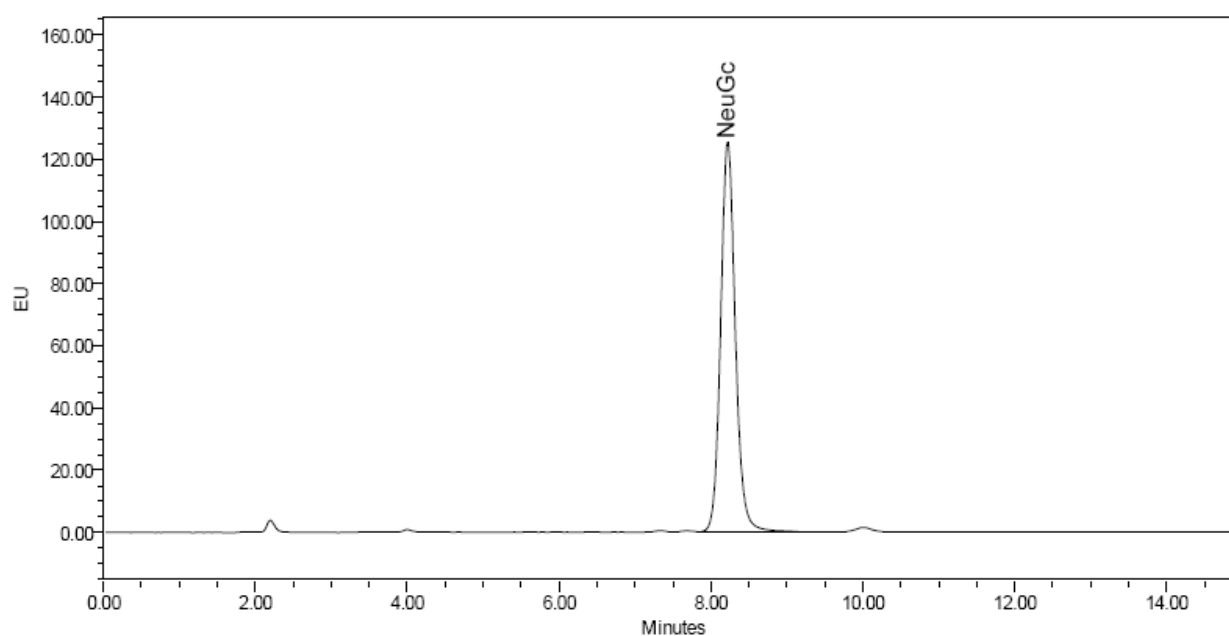


Figure 1: LudgerSep-uR2 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuGc standard (Cat. #: CM-NEUGC-01, Batch B8CB-01).

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

**The dispensed amount was determined as  $1.07 \pm 0.01$  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 R1      (Cat. #: LS-R1-4.6x150)

Flow: 0.5 ml/min.

Temperature: 30 °C

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

Solvent B: acetonitrile

Gradient:

Time (min)	%B
0.0	0.0
19.0	0.0
19.5	90.0
23.5	90.0
24.0	0.0
30.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm