



Certificate of Analysis

LudgerTag Sialic Acid DMB Labeling Kit

Cat. #: LT-KDMB-A1

Batch #: B821-01

Size: 1 set of labeling reagents per kit

Expiry Date: September 2019

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	B7AI-04	Acetic Acid 2Molar
1	LT-MERCAPTO-01	B79T-01	Mercaptoethanol
1	LT-DITHIO-01	B8IJ-01	Sodium Dithionite
1	LT-DMB-01	B813-01	DMB Dye
1	CM-SRP-01	B7B2-01	Sialic Acid Reference Panel
1	CM-NEUAC-01	B818-01	N-Acetyl Neuraminic acid
1	CM-NEUGC-01	B81G-01	N-Glycolyl Neuraminic acid

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Sialic Acid Reference Panel

Cat. #: CM-SRP-01

Batch: B7B2-01

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.

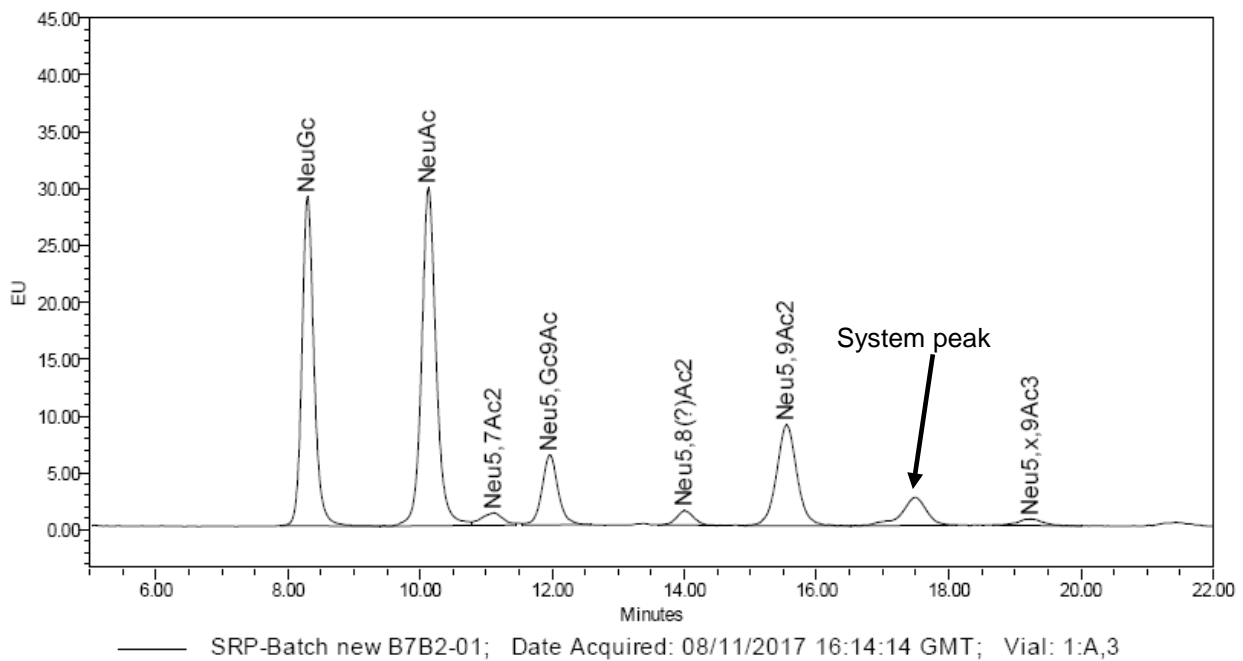


Figure 1: LudgerSep R1 HPLC profile of DMB labeled Sialic acid Reference Panel (Cat. #: CM-SRP-01, Batch B7B2-01).

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DMB labeled SRP peaks seen above 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
35.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm

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NeuAc Standard

Cat. #: CM-NEUAC-01

Batch: B818-01

Size: 0.99 ± 0.04 nmol

Expiry Date: 09 Jan 2023

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

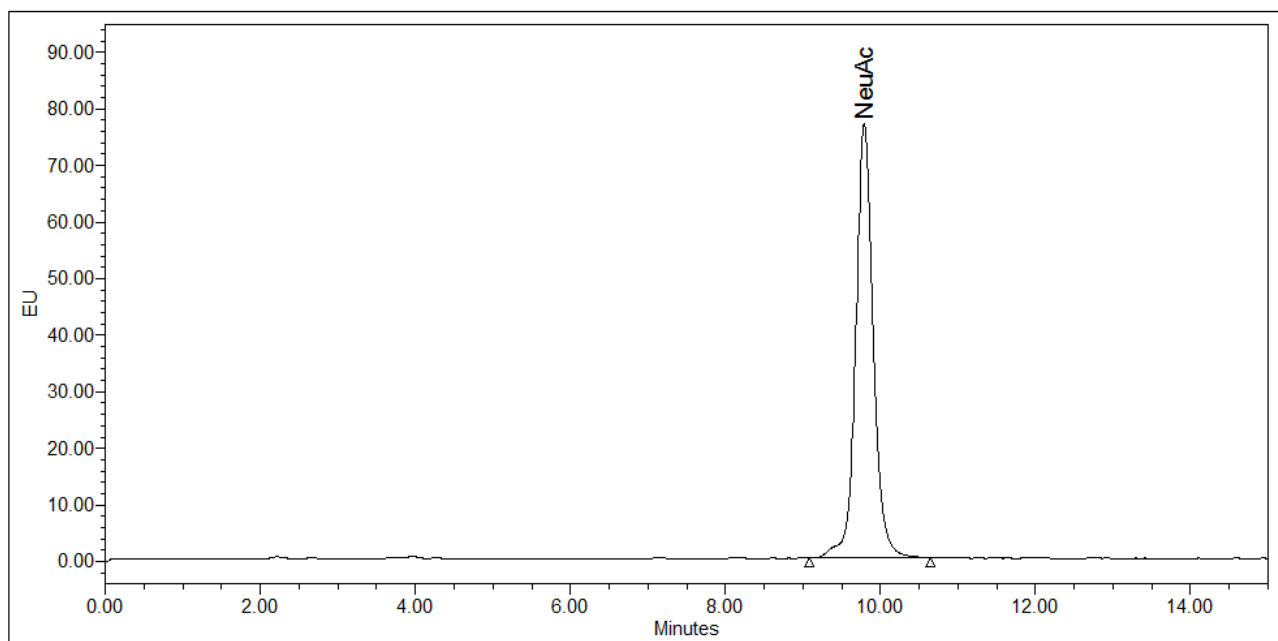


Figure 1: LudgerSep-R1 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuAc standard (Cat. #: CM-NEUAC-01, Batch B818-01).

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

The dispensed amount was determined as 0.99 ± 0.04 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)

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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
35.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm

Certificate of Analysis

NeuGc Standard

Cat. #: CM-NEUGC-01

Batch: B81G-01

Size : 1.05 ± 0.06 nmol

Expiry Date: 17 Jan 2023

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

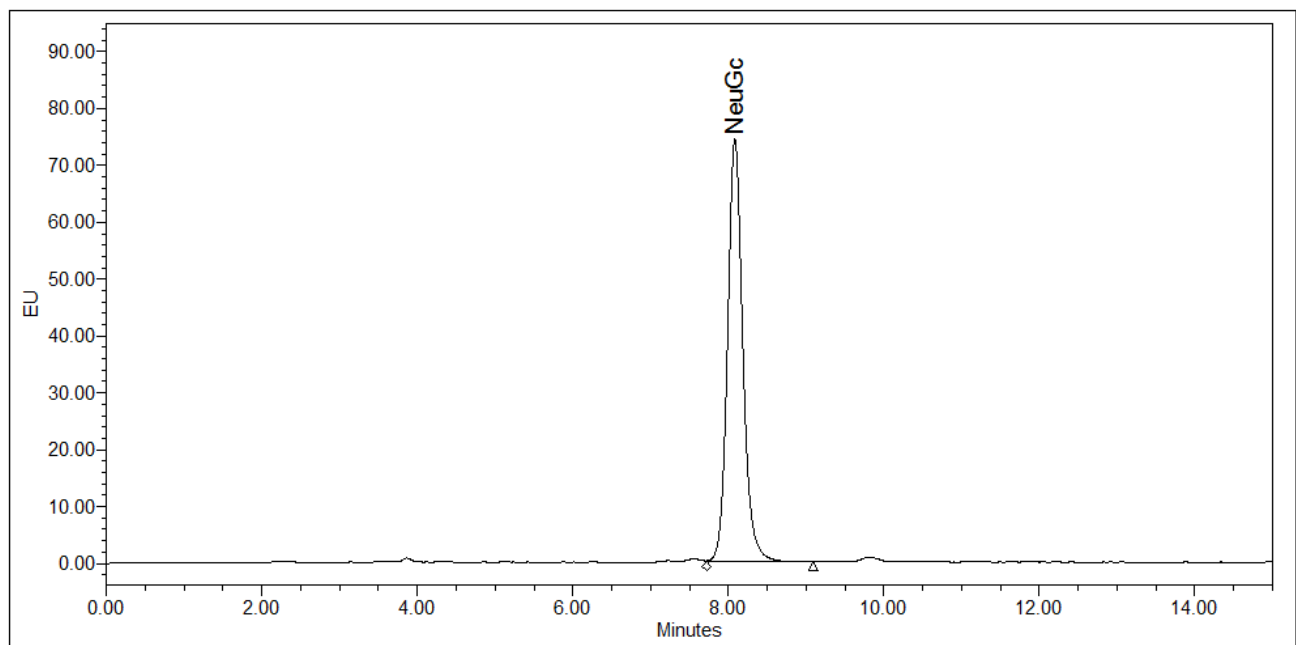


Figure 1: LudgerSep-R1 HPLC profile of 1,2-diamino-4,5-methylenedioxybenzene.2HCl (DMB) labeled NeuGc standard (Cat. #: CM-NEUGC-01, Batch B81G-01).

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

The dispensed amount was determined as 1.05 ± 0.06 nmol NeuGc per vial.

Values are in nmols \pm standard deviation.

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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
35.0	0.0

Detector: Fluorescence

Excitation wavelength: 373 nm

Emission wavelength: 448 nm