

N1 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/New Caledonia/20/1999 (H1N1), Recombinant from Baculovirus

Catalog No. NR-43779

This reagent is the tangible property of the U.S. Government.

Product Description: A recombinant form of the N1 neuraminidase (NA) protein from influenza A virus A/New Caledonia/20/1999 (H1N1) containing an N-terminal histidine tag was produced in Sf9 insect cells using a baculovirus expression vector system and purified by nickel affinity chromatography.

Lot: 63633047

Manufacturing Date: 11SEP2015

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
Purity by SDS-PAGE Densitometry Scan	Protein band of interest represents ≥ 95% of total staining intensity	Protein band of ~ 55 kDa accounts for ~ 95% of total staining intensity (Figure 1)
Identification by Western Blot Analysis Polyclonal anti-N1 NA ¹ Ferret hyperimmune sera ² Monoclonal anti-histidine tag ³	Reactive Reactive Reactive	Reactive (Figure 2A) Reactive (Figure 2B) Reactive (Figure 2C)
Concentration by Bradford Assay ⁴	Report results	256 µg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	97 µg 380 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay	Report results	7.3 × 10 ⁶ relative fluorescence units per hour per mg protein ⁵
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	Report results	45.7 EU per mg
Filtration	0.2 µm filtered	0.2 µm filtered

¹BEI Resources NR-3136, Polyclonal Anti-Influenza Virus N1 Neuraminidase (NA), A/New Jersey/8/1976 (H1N1), (antiserum, Goat) (1:1000 dilution)

²BEI Resources NR-19263, Ferret Hyperimmune Sera to Influenza A/New Caledonia/20/1999 (H1N1) (1:1000 dilution)

³R&D Systems (Cat. No. MAB050) (IgG1) (1:1000 dilution)

⁴Using BSA as a standard

⁵Using serial dilutions of NR-43779 and 0.15 mM 2'-(4-methylumbelliferyl)-α-D-N-acetylneuraminic acid (4-MUNANA), Sigma (Cat. No. M8639), as described in Wetherall, N.T., et al. "Evaluation of Neuraminidase Enzyme Assays Using Different Substrates to Measure Susceptibility of Influenza Virus Clinical Isolates to Neuraminidase Inhibitors: Report of the Neuraminidase Inhibitor Susceptibility Network." *J. Clin. Microbiol.* 41 (2003): 742-750. PubMed: 12574276.

Date: 19 OCT 2015

Signature: 

BEI Resources Authentication

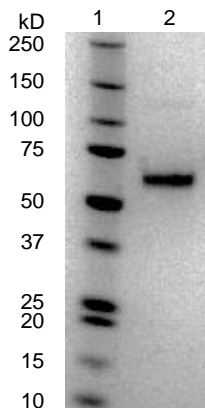
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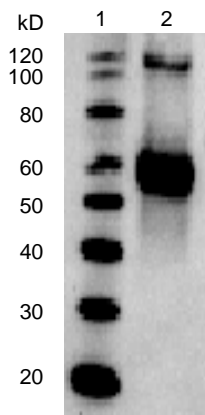
Figure 1: SDS-PAGE



Lane 1: Precision Plus™ Protein Standard
Lane 2: NR-43779, 1 µg

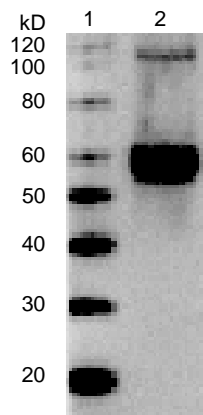
Figure 2: Western Blot Analysis

A. Polyclonal Anti-N1 NA



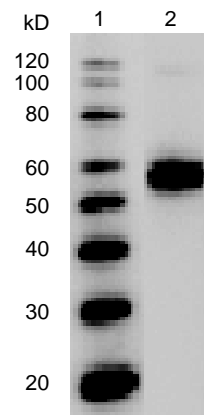
Lane 1: MagicMark™ XP Protein Standard
Lane 2: NR-43779, 1 µg

B. Ferret Hyperimmune Sera



Lane 1: MagicMark™ XP Protein Standard
Lane 2: NR-43779, 1 µg

C. Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
Lane 2: NR-43779, 1 µg