

**N1 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/Puerto Rico/8/1934 (H1N1), Recombinant from Baculovirus**

**Catalog No. NR-42002**

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/Puerto Rico/8/1934 (H1N1) containing an N-terminal histidine tag was produced in *Spodoptera frugiperda* Sf9 cells using a baculovirus expression vector system and purified by nickel affinity chromatography.

**Lot: 63195703**

**Manufacturing Date: 17APR2015**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Clear and colorless	Clear and colorless
<b>Purity by SDS-PAGE Densitometry Scan</b>	Protein band of interest represents > 95% of total staining intensity	Protein band of ~ 55 kDa accounts for > 95% of total staining intensity (Figure 1)
<b>Identification by Western Blot Analysis</b> Polyclonal anti-N1 NA <sup>1</sup> Monoclonal anti-histidine tag <sup>2</sup>	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
<b>Concentration by Bicinchoninic Acid Protein Assay<sup>3</sup></b>	Report results	9.79 µg per mL
<b>Final Product</b> Quantity per vial Volume per vial	Report results Report results	2.94 µg 300 µL
<b>Functional Activity</b> Neuraminidase activity in fluorescent enzymatic assay	Report results	3.65 x 10 <sup>8</sup> relative fluorescence units per hour per mg protein <sup>4</sup>
<b>Endotoxin Content (Limulus Amoebocyte Lysate Assay)</b>	Report results	144 EU per mg
<b>Filtration</b>	0.2 µm filtered	0.2 µm filtered

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

<sup>2</sup>R&D Systems (Cat. No. MAB050) (IgG1) (1:1000 dilution)

<sup>3</sup>Pierce Protein Research Products (Cat. No. 23235)

<sup>4</sup>Using serial dilutions of NR-42002 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:** 13 MAY 2015

**Signature:** 

BEI Resources Authentication

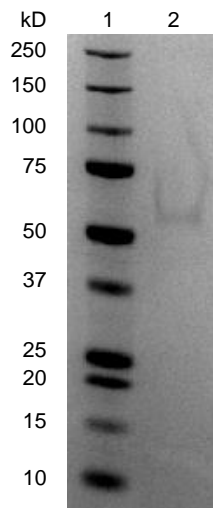
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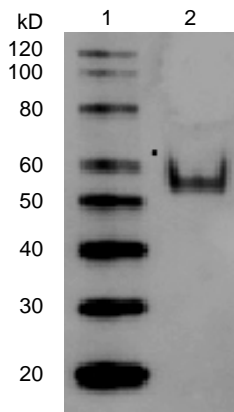


Figure 1: SDS-PAGE



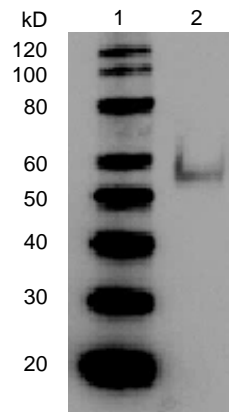
Lane 1: Precision Plus™ Protein Standard  
Lane 2: NR-42002, 40 µL

Figure 2: Western Blot with Polyclonal Anti-N1 NA



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-42002, 20 µL

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-42002, 20 µL