

**N1 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/Brisbane/59/2007 (H1N1), Recombinant from Baculovirus**

**Catalog No. NR-43785**

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/Brisbane/59/2007 (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: 63417493**

**Manufacturing Date: 15JUL2015**

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 $\geq 95\%$ 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 2A) Reactive (Figure 2B)
<b>Concentration by Bradford Assay<sup>3</sup></b>	Report results	104 $\mu\text{g}$ per mL
<b>Final Product</b> Quantity per vial Volume per vial	Report results Report results	114 $\mu\text{g}$ 110 $\mu\text{L}$
<b>Functional Activity</b> Neuraminidase activity in fluorescent enzymatic assay	Report results	$1.5 \times 10^8$ relative fluorescence units per hour per mg protein <sup>4</sup>
<b>Endotoxin Content (Limulus Amoebocyte Lysate Assay)</b>	Report results	31.2 EU per mg
<b>Filtration</b>	0.22 $\mu\text{m}$ filtered	0.22 $\mu\text{m}$ filtered

<sup>1</sup>BEI Resources NR-19260, Ferret Hyperimmune Sera to Influenza A/Brisbane/59/2007 (H1N1) (1:500 dilution)

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

<sup>3</sup>Using BSA as a standard

<sup>4</sup>Using serial dilutions of NR-43785 and 0.15 mM 2'-(4-methylumbelliferyl)- $\alpha$ -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:** 14 SEP 2015

**Signature:**



BEI Resources Authentication

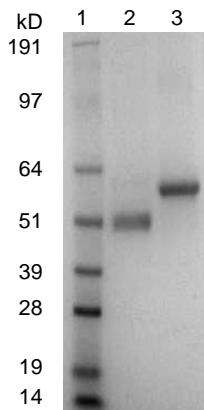
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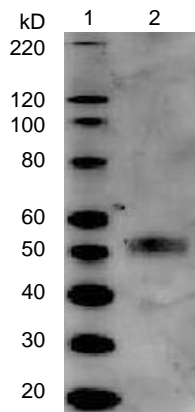
**Figure 1: SDS-PAGE**



Lane 1: SeeBlue® Plus2 Pre-Stained standard  
 Lane 2: NR-43785, 2 µg  
 Lane 2: BSA, 2 µg

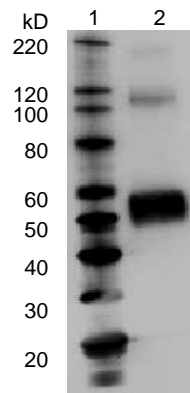
**Figure 2: Western Blot Analysis**

**A. Polyclonal Anti-N2 NA**



Lane 1: MagicMark™ XP Protein Standard  
 Lane 2: NR-43785, 0.5 µg

**B. Monoclonal Anti-Histidine Tag**



Lane 1: MagicMark™ XP Protein Standard  
 Lane 2: NR-43785, 0.5 µg