

**N9 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/Shanghai/1/2013 (H7N9), Recombinant from Baculovirus**

**Catalog No. NR-44364**

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

**Product Description:** A recombinant form of the N9 neuraminidase (NA) protein from influenza A virus, A/Shanghai/1/2013 (H7N9) 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: 62635922**

**Manufacturing Date: 21JUL2014**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Clear and colorless	Clear and colorless
<b>SDS-PAGE</b>	Protein band of interest represents > 95% of total staining intensity	Dominant band of ~ 55 kDa accounts for ~ 95% of total staining intensity (Figure 1)
<b>Identification by Western Blot Analysis</b> Polyclonal anti-N9 NA <sup>1</sup> Monoclonal anti-histidine tag <sup>2</sup>	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
<b>Concentration by Bradford Assay<sup>3</sup></b>	Report results	60 µg per mL
<b>Final Product</b> Quantity per vial Volume per vial	Report results Report results	36 µg 600 µL
<b>Functional Activity</b> Neuraminidase activity in fluorescent enzymatic assay	Report results	1.1 × 10 <sup>8</sup> relative fluorescence units per hour per mg protein <sup>4</sup>
<b>Filtration</b>	0.2 µm sterile-filtered	0.2 µm sterile-filtered

<sup>1</sup>BEI Resources NR-667, Polyclonal Anti-Influenza Virus N9 Neuraminidase (NA), A/tern/Australia/G70C/1975 (H11N9), (antiserum, Goat) (1:5000 dilution)

<sup>2</sup>R & D Systems (Cat. No. MAB050) (IgG1) (1:500 dilution)

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

<sup>4</sup>Using serial dilutions of NR-44364 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:** 02 SEP 2014

**Signature:**



**Title:**

Technical Manager, BEI Authentication or designee

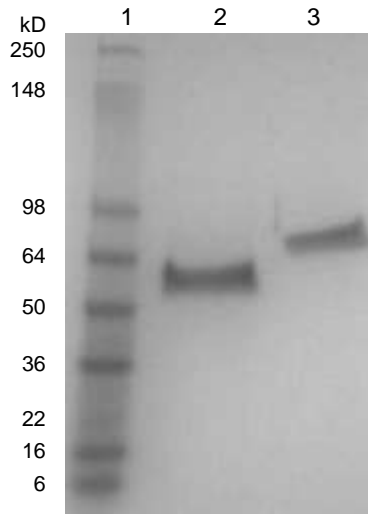
ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

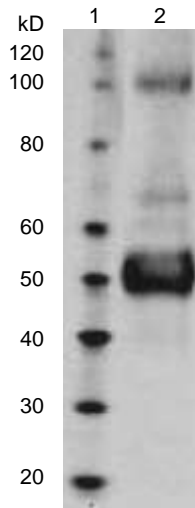


Figure 1: SDS-PAGE



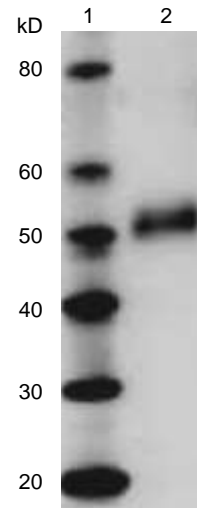
Lane 1: Precision Plus Protein™ Standard  
Lane 2: NR-44364, 2.0 µg  
Lane 3: BSA, 2.0 µg

Figure 2: Western Blot with Polyclonal Anti-N9 NA



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-44364, 0.25 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-44364, 0.25 µg