

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: 62190122

Manufacturing Date: 20NOV2013

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
Purity by SDS-PAGE Densitometry Scan	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)
Identification by Western Blot Analysis Polyclonal anti-N1 NA ¹ Monoclonal anti-histidine tag ²	Reactive Reactive	Reactive (Figure 2A) Reactive (Figure 2B)
Concentration by Bradford Assay³	Report results	922 μg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	101 μg 110 μL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay	Report results	4.5×10^7 relative fluorescence units per hour per mg protein ⁴
Filtration	0.22 μm filtered	0.22 μm filtered

¹BEI Resources NR-19260, Ferret Hyperimmune Sera to Influenza A/Brisbane/59/2007 (H1N1) (1:1000 dilution)

²Clontech (Cat. No. 631212) (1:1000 dilution)

³Using BSA as a standard

⁴Using serial dilutions of NR-43785 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: 18 FEB 2014

Signature: 

Title: Technical Manager, BEI Authentication or designee

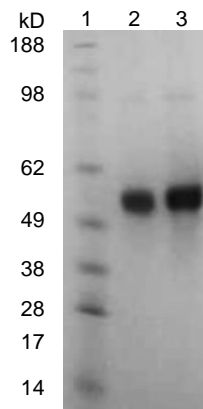
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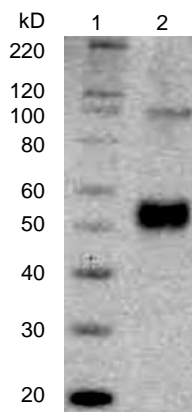
Figure 1: SDS-PAGE



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

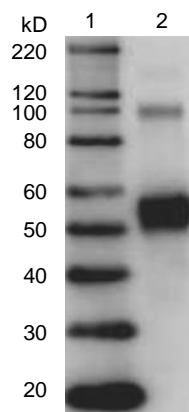
Figure 2: Western Blot Analysis

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