b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-13523

N8 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/equine/Pennsylvania/1/2007 (H3N8), Recombinant from Baculovirus

Catalog No. NR-13523
This reagent is the tangible property of the U.S. Government.

Product Description: The N8 neuraminidase (NA) protein from influenza virus A/equine/Pennsylvania/1/2007 (H3N8) containing an N-terminal histidine tag was produced in High-Five™ insect cells using a baculovirus expression vector system and was purified by metal affinity chromatography.

Lot: 62232222 **Manufacturing Date: 01OCT2014**

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE	Protein band of interest represents > 95% of total staining intensity	Dominant band of ~ 55 kDa accounts for ~ 95% of total staining intensity (Figure 1)
Identification by Western Blot Analysis Polyclonal anti-N8 NA[1] Monoclonal anti-histidine tag[2]	 Reactive Reactive	 Reactive (Figure 2) Reactive (Figure 3)
Concentration by Bradford Assay[3]	Report results	203 µg per mL
Final Product Quantity per vial Volume per vial	 Report results Report results	 60.9 µg 300 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay[4]	Report results	9.8×10^9 relative fluorescence units per hour per mg protein[4]
Filtration	0.2 µm sterile-filtered	0.2 µm sterile-filtered

[1]BEI Resources NR-3145, Polyclonal Anti-Influenza Virus N8 (Neq2) Neuraminidase (NA), A/equine/Miami/1/1963 (H3N8), (antiserum, Goat) (1:1000 dilution)
[2]R & D Systems® (Cat. No. MAB050) (IgG1) (1:1000 dilution)
[3]Using BSA as a standard
[4]Using 100 ng NR-13523 and 0.3 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: 20 OCT 2014 **Signature:** Michael Q. Gyrla

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.

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Support Provided by NIAID

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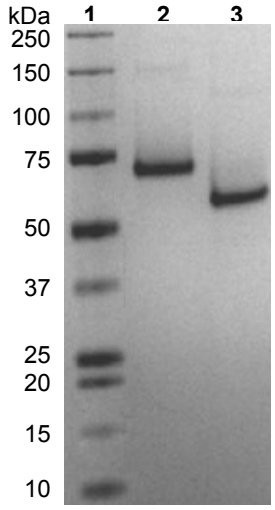
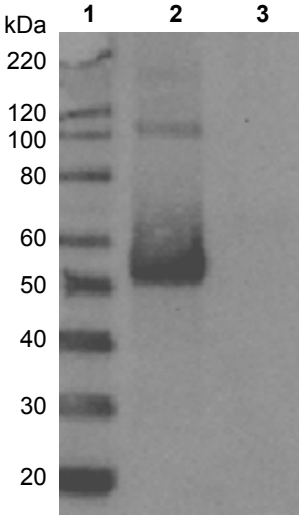
Figure 1 – SDS-PAGE



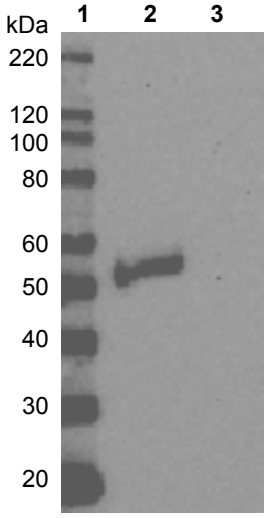
Lane 1: Precision Plus Protein™ Marker (BioRad)
Lane 2: BSA; 1.0 µg
Lane 2: NR-13523; 1.0 µg

Figure 2 – Western Blot with Polyclonal Anti-N8 NA



Lane 1: Magic Mark™ XP Protein Standard
Lane 2: NR-13523; 0.25 µg
Lane 3: BSA; 0.25 µg

Figure 3 – Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: Magic Mark™ XP Protein Standard
Lane 2: NR-13523; 0.25 µg
Lane 3: BSA; 0.25 µg

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