

N9 Neuraminidase (NA) Protein from Influenza Virus, A/Anhui/1/2013 (H7N9), Recombinant from Baculovirus

Catalog No. NR-44082

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/Anhui/1/2013 (H7N9) was produced in Sf9 insect cells using a baculovirus expression vector system, purified by nickel affinity chromatography, and treated with thrombin to remove an N-terminal histidine tag.

Lot: 62038616

Manufacturing Date: 05SEP2014

| 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-N9 NA ¹ Monoclonal anti-histidine tag ² | Reactive Not reactive | Reactive (Figure 2) Not reactive (Figure 3) |
| Concentration by Bradford Assay³ | Report results | 150 µg per mL |
| Final Product Quantity per vial Volume per vial | Report results Report results | 53 µg 350 µL |
| Functional Activity Neuraminidase activity in fluorescent enzymatic assay | Report results | 3.3 × 10 ¹⁰ relative fluorescence units per hour per mg protein ⁴ |
| Filtration | 0.2 µm sterile-filtered | 0.2 µm sterile-filtered |

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

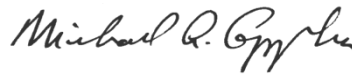
²R & D Systems (Cat. No. MAB050) (IgG1) (1:1000 dilution)

³Using BSA as a standard

⁴Using serial dilutions of NR-44366 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: 17 SEP 2014

Signature:



Title:

Technical Manager, BEI Authentication or designee

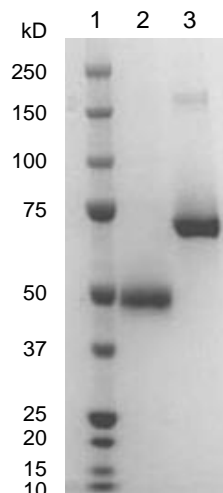
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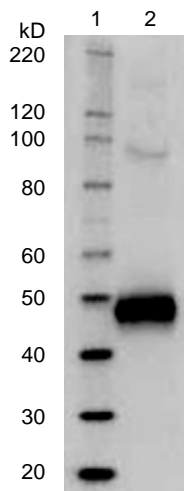


Figure 1: SDS-PAGE



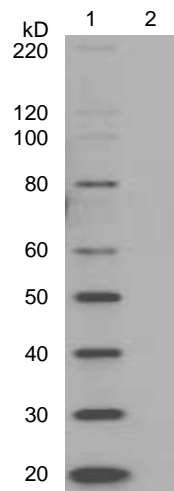
Lane 1: Precision Plus Protein™ Standard
 Lane 2: NR-44082, 2.0 µg
 Lane 3: BSA, 2.0 µg

Figure 2: Western Blot with Polyclonal Anti-N9 NA



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-44082, 0.25 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-44082, 0.25 µg