

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

Catalog No. NR-44080

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) 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: 62038612

Manufacturing Date: 03MAR2015

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
Purity by SDS-PAGE Densitometry Scan	Protein band of interest represents > 95% of total staining intensity	Dominant band of ~ 48 kDa accounts for ~ 90% 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	42 µg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	14 µg 340 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay	Report results	2.9 × 10 ⁸ relative fluorescence units per hour per mg protein ⁴
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	Report results	133 EU per mg
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) (1:3000 dilution)

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

³Using BSA as a standard

⁴Using serial dilutions of NR-44080 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: 13 APR 2015

Signature: 

BEI Resources Authentication

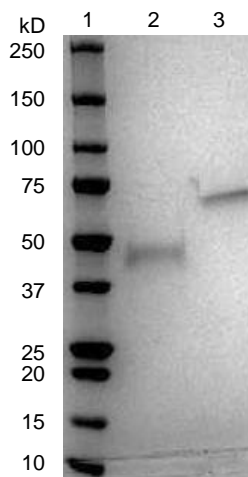
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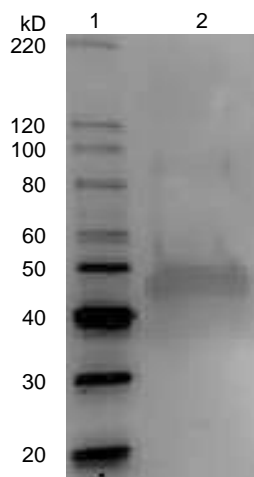


Figure 1: SDS-PAGE



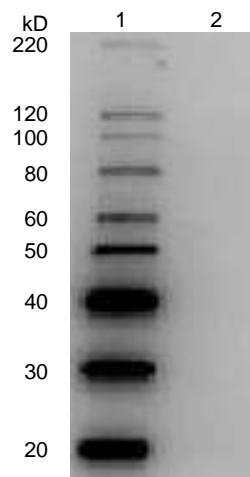
Lane 1: Precision Plus Protein™ Standard
 Lane 2: NR-44080, 1.0 µg
 Lane 3: BSA, 1.0 µg

Figure 2: Western Blot with Polyclonal Anti-N9 NA



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-44080, 0.5 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-44080, 0.5 µg