

N1 Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, A/California/04/2009 (H1N1)pdm09, Recombinant from Baculovirus

Catalog No. NR-19234

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/California/04/2009 (H1N1)pdm09 containing an N-terminal histidine tag was produced in Sf9 insect cells using a baculovirus expression vector system and was purified by nickel affinity chromatography.

Lot: 62220474

Manufacturing Date: 06MAR2014

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 ~ 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 2) Reactive (Figure 3)
Concentration by Bradford Assay³	Report results	134 µg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	51 µg 380 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay	Report results	4.9 × 10 ⁵ relative fluorescent units per hour per µg protein ⁴

¹BEI Resources NR-3136, Polyclonal Anti-Influenza Virus N1 Neuraminidase (NA), A/New Jersey/8/1976 (H1N1), (antiserum, Goat) (1:1000 dilution)

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

³Using BSA as a standard

⁴Using NR-19234 and 2'-(4-methylumbelliferyl)-α-D-N-acetylneuraminic acid (4-MUNANA), Sigma (Cat. No. M8639) in a one hour assay, 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: 31 MAR 2014

Signature: 

Title: Technical Manager, BEI Authentication or designee

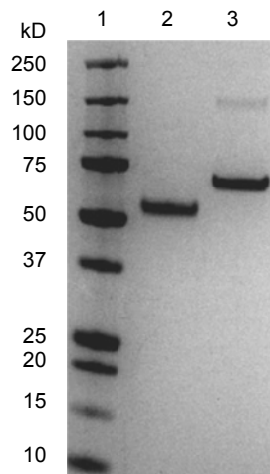
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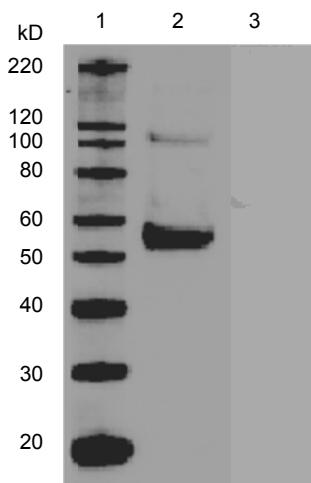


Figure 1: SDS-PAGE



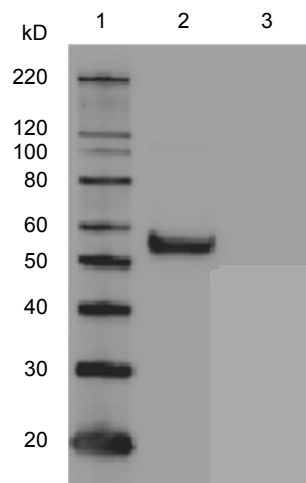
Lane 1: Precision Plus™ Protein Standard
 Lane 2: NR-19234, 0.5 µg
 Lane 3: BSA, 0.5 µg

Figure 2: Western Blot with Polyclonal Anti-N1 NA



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-19234, 0.5 µg
 Lane 3: BSA, 0.5 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-19234, 0.5 µg
 Lane 3: BSA, 0.5 µg