

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: 60950813

Manufacturing Date: 04MAY2012

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 Bicinchoninic Acid Protein Assay³	Report results	163 µg/mL
Final Product Quantity per vial Volume per vial	Report results Report results	49 µg 300 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay	Report results	5.5 × 10 ⁴ relative fluorescent units per hour per µg protein ⁴

¹BEI Resources NR-3136, Polyclonal Anti-Influenza Virus N1 Neuraminidase (NA), A/New Jersey/8/76 (H1N1), (antiserum, Goat) (1:1000 dilution)

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

³Pierce Protein Research Products (Cat. No. 23235)

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: 28 JUN 2012

Signature: 

Title: Technical Manager, BEI Authentication or designee

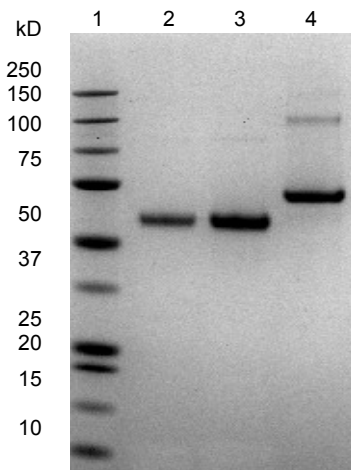
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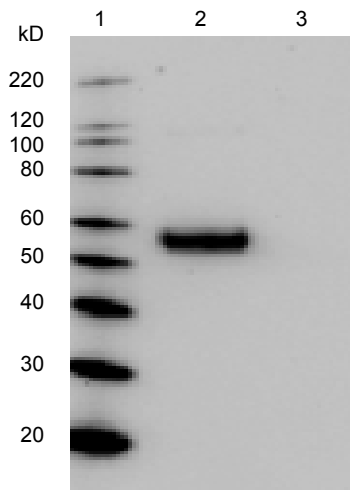


Figure 1: SDS-PAGE



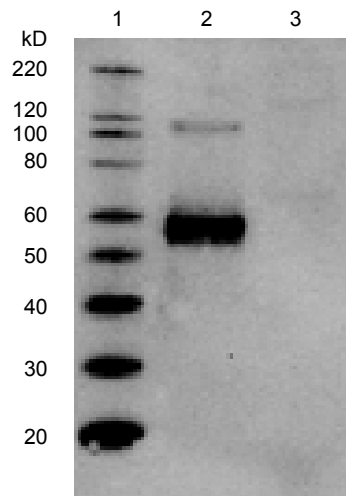
Lane 1: Precision Plus™ Protein Standard
 Lane 2: NR-19234, 1 µg
 Lane 3: NR-19234, 2 µg
 Lane 4: BSA, 2 µg

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