

Neuraminidase (NA) Protein with N-Terminal Histidine Tag from Influenza Virus, B/Florida/4/2006, Recombinant from Baculovirus

Catalog No. NR-19236

This reagent is the tangible property of the U.S. Government.

Product Description:

A recombinant form of the neuraminidase (NA) protein from influenza B virus, B/Florida/4/2006 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. NR-19236 contains the predicted ectodomain coding region of the NA protein from influenza B virus, B/Florida/4/2006 (GenPept: [ABU50667](#)) fused to a synthetic gene segment encoding an N-terminal octa-histidine tag followed by a 43 amino acid tetramerization domain from vasodilator-stimulated phosphoprotein (VASP) and a thrombin cleavage site, as described for the 1918 pandemic virus. NR-19236 lot 60371768 was vialled in 10 mM sodium phosphate pH 7.4 with 500 mM sodium chloride.

Lot: 60371768

Manufacturing Date: 27SEP2011

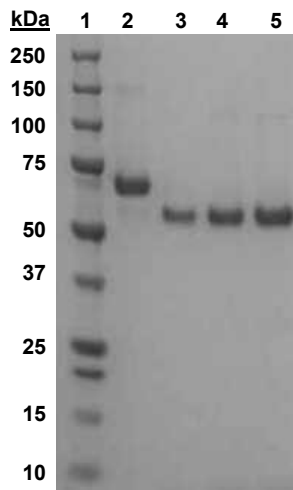
TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless, no particulate matter	Clear and colorless, no particulate matter
SDS-PAGE Analysis	Protein band of interest represents > 95% of total staining intensity	Dominant band of approximately 55 kDa accounts for > 95% of total staining intensity (Figure 1)
Identification by Western Blot Analysis Polyclonal anti-NA Monoclonal anti-histidine tag	Reactive Reactive	Reactive (Figure 2) ¹ Reactive (Figure 3) ²
Concentration by Bicinchoninic Acid Assay	Report results	0.18 mg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	54 µg 300 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay ³	Report results	1 × 10 ⁴ relative fluorescent units per ng

¹BEI Resources NR-3137

²Clontech (Cat. No. 631212) (IgG_{2a})

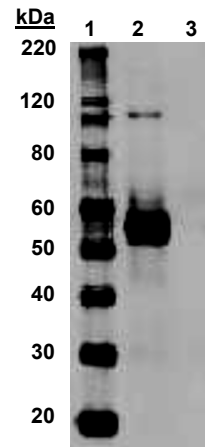
³Using serial dilutions of NR-19236 and 0.15 mM 2'-(4-methylumbelliferyl)-α-D-N-acetylneuraminic acid (4-MUNANA; Sigma Cat. No. M8639) in a one hour assay, as described in Wetherall, N. T., et al. "Evaluation of Neuraminidase Enzyme Assays Using Different Substrates to Measure Susceptibility of Influenza Virus Clinical Isolates to Neuraminidase Inhibitors: Report of the Neuraminidase Inhibitor Susceptibility Network." *J. Clin. Microbiol.* 41 (2003): 742-750. PubMed: 12574276.

Figure 1: SDS-PAGE Analysis



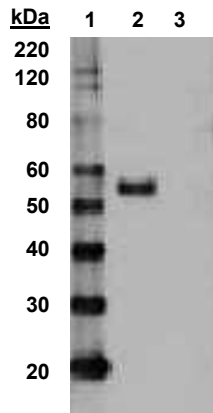
Lane 1: Precision Plus Protein™ All Blue Standard
 Lane 2: BSA, 2 µg
 Lane 3: NR-19236, 1 µg
 Lane 4: NR-19236, 2 µg
 Lane 5: NR-19236, 3 µg

Figure 2: Western Blot with Polyclonal Anti-N1 NA



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-19236, 1 µg
 Lane 3: BSA, 1 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard
 Lane 2: NR-19236, 1 µg
 Lane 3: BSA, 1 µg

/Heather Couch/
 Heather Couch

13 MAY 2021

Program Manager or designee, ATCC Federal Solutions

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.

ATCC® is a trademark of the American Type Culture Collection.
 You are authorized to use this product for research use only. It is not intended for human use.

