

N1 Neuraminidase (NA) Protein Ectodomain from Influenza A Virus, A/Brisbane/02/2018 (H1N1)pdm09, Recombinant from Baculovirus

Catalog No. NR-56547

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

Product Description:

A recombinant form of the ectodomain of the N1 neuraminidase (NA) protein from influenza A virus, A/Brisbane/02/2018 (H1N1) with a hexa-histidine tag was produced in Sf9 insect cells using a baculovirus expression vector system and purified using ion exchange and affinity chromatography. This lot was manufactured and subjected to quality control testing by St. Jude Children's Research Hospital (SJCRH), Memphis, Tennessee, USA.

Lot: 70052507

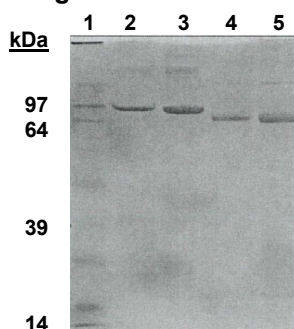
Manufacturing Date: 04NOV2021

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	Opalescent
SDS-PAGE Analysis	Report results	Dominant band of ~ 55 kDa accounting for > 90% of total staining intensity (Figure 1)
Concentration by Bicinchoninic Acid Assay Bovine Serum Albumin (BSA; standard)	Report results	1.43 mg per mL
Final Product Amount per vial Volume per vial	Report results Report results	286 µg 200 µL
Functional Activity Neuraminidase activity in fluorescent enzymatic assay ¹ Western blot analysis with polyclonal anti-N1 NA ²	Report results Report results	Positive (1:12800) Reactive (Figure 2)
Filtration	0.2 µm sterile-filtered	0.2 µm sterile-filtered
Endotoxin	Report results	≤ 0.5 EU per mL

¹Using serial dilutions of NR-55547 and 2'-(4-methylumbelliferyl)-α-D-N-acetylneuraminic acid (4-MUNANA), 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.

²Using a 1:2000 dilution of anti- NA polyclonal goat serum G.48 (2006) [against N1 NA proteins derived from A/Vietnam/1203/2004 and A/Hongkong/483/1997 viruses] as primary antibody

Figure 1: SDS-PAGE



Lane 1: Molecular Weight Markers

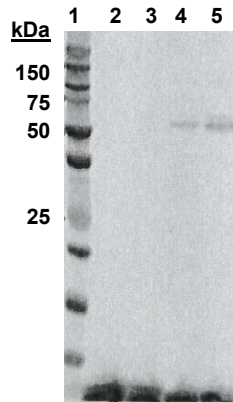
Lane 2: BSA, 1.0 µg

Lane 3: BSA, 2.5 µg

Lane 4: NR-56547, 1.0 µg

Lane 5: NR-56547, 2.5 µg

Figure 2: Western Blot with Polyclonal Anti-N1 NA



Lane 1: Molecular Weight Markers
Lane 2: BSA, 1.0 µg
Lane 3: BSA, 2.5 µg
Lane 4: NR-56547, 1.0 µg
Lane 5: NR-56547, 2.5 µg

/Sonia Bjorum Brower/
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29 SEP 2022

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