

H1 Hemagglutinin (HA) Protein with C-Terminal Histidine Tag from Influenza Virus, A/Christchurch/16/2011 (H1N1)pdm09, Recombinant from Baculovirus

Catalog No. NR-42487

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

Product Description: A recombinant form of the H1 hemagglutinin (HA) protein from influenza virus A/Christchurch/16/2011 (H1N1)pdm09 containing a C-terminal histidine tag was produced by baculovirus infection of *Trichoplusia ni* insect larvae and purified by standard chromatographic methods.

Lot: 61376138

Manufacturing Date: 01FEB2013

TEST	SPECIFICATIONS	RESULTS
SDS-PAGE (Coomassie Blue Densitometry)	HA bands account for > 90% of total density	HA bands account for > 93% of total density (Figure 1)
Concentration by Bicinchoninic Acid Protein Assay	Report results	0.55 mg per mL
Final Product Quantity per vial	0.1 mg (\pm 10%) per vial	0.1 mg (\pm 10%) per vial
Hemagglutination Titer with 0.5% Chicken Red Blood Cells	Report results	32,768 ¹
Western Blot Anti-histidine monoclonal antibody ²	Report results	Reactive with HA0 and HA2 (Figure 2)
Demonstration of Protein Glycosylation	Size reduction of protein observed on SDS-PAGE when treated with de-glycosylating enzyme N-glycosidase (PNGaseF)	Size reduction of protein observed on SDS-PAGE when treated with PNGaseF (Figure 3)
Filtration	0.22 μ m filtered	0.22 μ m filtered
Bioburden	Report results	< 1 colony-forming unit per mL
Endotoxin Content	Report results	< 0.05 EU per mL

¹Highest dilution of protein that showed hemagglutination activity

²Novagen® 70796-4 (IgG₁)

Date: 25 APR 2013

Signature:

Dorothy C. Young

Title:

Technical Manager, BEI Authentication or designee

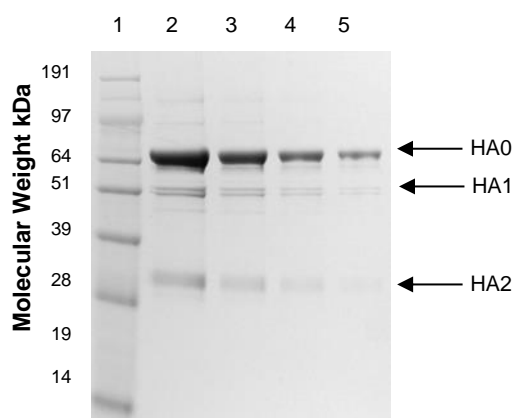
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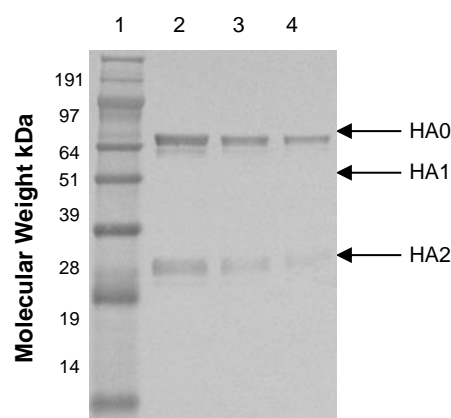


Figure 1 – SDS-PAGE



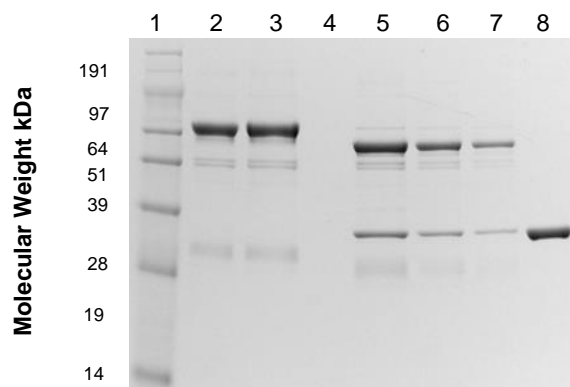
Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)
Lane 2: 5.0 µg NR-42487
Lane 3: 2.5 µg NR-42487
Lane 4: 1.25 µg NR-42487
Lane 5: 0.63 µg NR-42487

Figure 2 – Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)
Lane 2: 1.0 µg NR-42487
Lane 3: 0.5 µg NR-42487
Lane 4: 0.25 µg NR-42487

Figure 3 – Glycan Analysis



Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)
Lane 2: 5 µg NR-42487
Lane 3: 5 µg NR-42487 with digest mixture without PNGaseF
Lane 4: Blank
Lane 5: 5 µg NR-42487, PNGaseF Digest
Lane 6: 2.5 µg NR-42487, PNGaseF Digest
Lane 7: 1.25 µg NR-42487, PNGaseF Digest
Lane 8: 1.5 µg PNGaseF Enzyme