

H1 Hemagglutinin (HA) Protein with C-Terminal Histidine Tag from Influenza Virus, A/California/04/2009 (H1N1)pdm09, Recombinant from Baculovirus

Catalog No. NR-15749

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

Product Description: The H1 hemagglutinin (HA) protein from influenza A virus, A/California/04/2009 (H1N1)pdm09 containing a C-terminal histidine tag was produced in Sf9 insect cells using a baculovirus expression vector system and was purified by nickel affinity chromatography.

Lot: 58951684

Manufacturing Date: 20JUL2010

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE (Figure 1)	Report results	Theoretical MW ~ 63 kDa Dominant band of ~ 75 kDa observed difference likely due to post-translational modification
Experion Pro260 Analysis	> 95% pure	96.6% pure
Mass Spectrometry	Report results	Theoretical mass = 63311 daltons Measured mass = 71159 daltons (expt 1), 71497 daltons (expt 2), difference likely due to post-translational modification
Identification by Mass Spectrometry of Protease Digested Protein	> 50% of total residues accounted for in peptides of expected mass	78% of total residues accounted for in peptides of expected mass
Concentration by Bradford Assay¹	Report results	477 µg/mL
Final Product Quantity per vial Volume per vial	Report results Report results	150.4 µg 315 µL
Functional Activity Hemagglutination activity using 0.5% chicken and turkey red blood cells Western blot analysis Polyclonal anti-H1 HA ² Monoclonal anti-histidine tag ³	Report results Reactive Reactive	No hemagglutination activity Reactive (Figure 2) Reactive (Figure 3)
Filtration	Report results	0.45 µm filtered
Endotoxin Content (Limulus Amoebocyte Lysate Assay)	Value between 1 and 10,000 EU per mg	143 – 358 EU per mg

¹Using BSA as a standard

²Immune Technology Corp. (Cat. No. IT-003-SW)

³R & D Systems® (Cat. No. MAB050) (IgG₁)

Figure 1 – SDS-PAGE

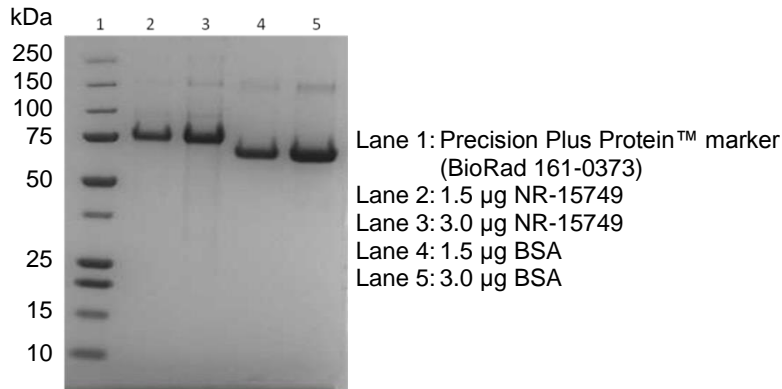
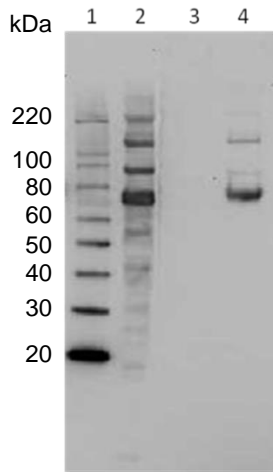
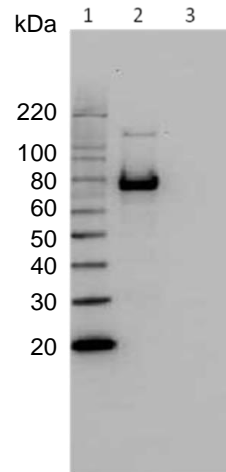


Figure 2 – Western Blot with Polyclonal Anti-H1 HA



Lane 1: Magic Mark™ XP MW marker (Invitrogen™ LC5602)
 Lane 2: Precision Plus Protein™ marker (Bio-Rad 161-0373)
 Lane 3: 1.0 µg BSA
 Lane 4: 1.0 µg NR-15749

Figure 3 – Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: Magic Mark™ XP MW marker (Invitrogen™ LC5602)
 Lane 2: 1.0 µg NR-15749
 Lane 3: 1.0 µg BSA

Date: 18 JUN 2013

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

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