

**H7 Hemagglutinin (HA) Protein with C-Terminal Histidine Tag from Influenza Virus, A/Anhui/1/2013 (H7N9), Recombinant from Baculovirus**

**Catalog No. NR-44010**

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

**Product Description:** A recombinant form of the H7 hemagglutinin (HA) protein from influenza virus A/Anhui/1/2013 (H7N9) was produced by baculovirus infection of *Trichoplusia ni* insect larvae and purified by standard chromatographic methods.

**Lot: 61775583**

**Manufacturing Date: 07JUN2013**

TEST (Required)	SPECIFICATIONS	RESULTS
<b>SDS-PAGE (Coomassie Blue Densitometry)</b>	HA0 band accounts for > 90% of total density	HA0 band accounts for 98.9% of total density (Figure 1)
<b>Concentration by Bicinchoninic Acid Protein Assay</b>	Report results	1.05 mg per mL
<b>Final Product</b> Quantity per vial	0.1 mg (± 10%) per vial	0.1 mg (± 10%) per vial
<b>Western Blot</b> Anti-histidine monoclonal antibody <sup>1</sup>	Reactive with HA0	Reactive with HA0 (Figure 2)
<b>Demonstration of Protein Glycosylation</b>	Report results	Size reduction of protein observed on SDS-PAGE when treated with de-glycosylating enzyme N-glycosidase F (Figure 3)
<b>Filtration</b>	0.22 µm filtered	0.22 µm filtered
<b>Bioburden</b>	< 10 colony-forming units per mL	< 1 colony-forming unit per mL
<b>Endotoxin Content</b>	< 10 EU per mL	< 0.1 EU per mL

<sup>1</sup>Novagen® 70796-3 (IgG<sub>1</sub>)

**Date:** 25 JUL 2013

**Signature:** 

**Title:** Technical Manager, BEI Authentication or designee

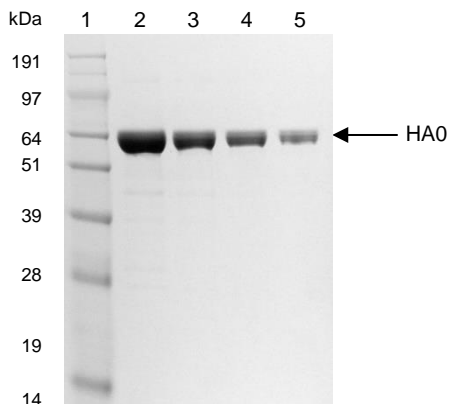
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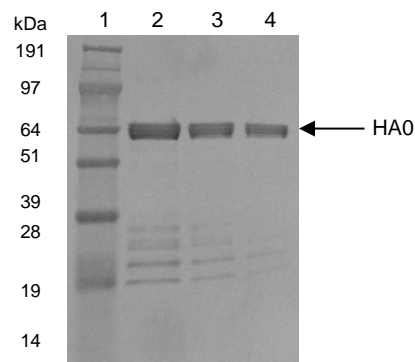


**Figure 1 – SDS-PAGE**



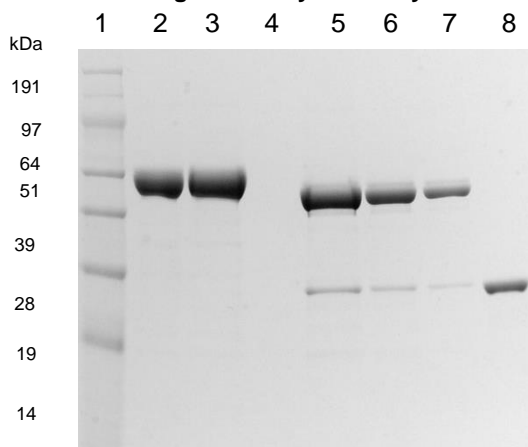
Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)  
 Lane 2: 5.0 µg NR-44010  
 Lane 3: 2.5 µg NR-44010  
 Lane 4: 1.25 µg NR-44010  
 Lane 5: 0.63 µg NR-44010

**Figure 2 - Western Blot with Monoclonal Anti-Histidine Tag**



Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)  
 Lane 2: 1.0 µg NR-44010  
 Lane 3: 0.5 µg NR-44010  
 Lane 4: 0.25 µg NR-44010

**Figure 3 – Glycan Analysis**



Lane 1: SeeBlue® Plus2 MW marker (Invitrogen™ LC5925)  
 Lane 2: 5.0 µg NR-44010  
 Lane 3: 6.7 µg Neg. PNGase NR-44010  
 Lane 4: Blank  
 Lane 5: 6.7 µg PNGaseF Digest NR-44010  
 Lane 6: 3.3 µg PNGaseF Digest NR-44010  
 Lane 7: 1.7 µg PNGaseF Digest NR-44010  
 Lane 8: 1.5 µg PNGaseF Enzyme