

## H5 Hemagglutinin (HA) Protein from Influenza Virus, A/chicken/Netherlands/14015531/2014 (H5N8), Recombinant from Baculovirus

### Catalog No. NR-50133

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### For research use only. Not for human use.

#### Contributor:

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#### Manufacturer:

BEI Resources

#### Product Description:

A recombinant form of the H5 hemagglutinin (HA) protein from influenza A virus, A/chicken/Netherlands/14015531/2014 (H5N8)<sup>1</sup> was produced in Sf9 insect cells using a baculovirus expression vector system. The predicted transmembrane and endodomain coding regions of the HA gene were replaced with a synthetic gene segment encoding a thrombin cleavage site, trimerizing (foldon) domain and six histidine residues, as described for several influenza A virus subtypes.<sup>2</sup> The HA0 form of the protein was purified by nickel affinity chromatography and then treated with thrombin to remove the foldon domain and the histidine tag. The thrombin-treated protein was further purified prior to final formulation. The full-length HA precursor protein is 567 residues (GISAID EpiFlu: EPI548623). **Note that NR-50133 is not active in hemagglutination assays.**

#### Material Provided:

Each vial contains 100 µg to 200 µg of purified recombinant HA protein in PBS (pH 7.4). The protein content in µg and the concentration, expressed as µg/mL, are shown on the Certificate of Analysis.

#### Packaging/Storage:

Purified recombinant HA protein was packaged aseptically, in screw-capped plastic cryovials. This product is provided on blue ice and should be stored at -20°C immediately upon arrival.

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: H5 Hemagglutinin (HA) Protein from Influenza Virus, A/chicken/Netherlands/14015531/2014 (H5N8), Recombinant from Baculovirus, NR-50133."

#### Biosafety Level: 1

Appropriate safety procedures should always be used with

this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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#### References:

1. de Vries, E., et al. "Rapid Emergence of Highly Pathogenic Avian Influenza Subtypes from a Subtype H5N1 Hemagglutinin Variant." Emerg. Infect. Dis. 21(2015): 842-846. PubMed: 25897518.
2. Krammer, F., et al. "A Carboxy-Terminal Trimerization Domain Stabilizes Conformational Epitopes on the Stalk Domain of Soluble Recombinant Hemagglutinin Substrates." PLoS One 7 (2012): e43603. PubMed: 22928001.

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