

H5 Hemagglutinin (HA) Protein from Influenza Virus, A/Vietnam/1203/2004 (H5N1), Recombinant from baculovirus

Catalog No. NR-660

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Contributor and Manufacturer:

St. Jude Children's Research Hospital (CEIRS)

Product Description:

Recombinant H5 hemagglutinin (HA) protein from influenza virus A/Vietnam/1203/2004 (H5N1)¹⁻⁴ was produced in Sf9 insect cells using a baculovirus expression vector system.^{5,6} Recombinant H5 HA protein was purified using conventional chromatographic techniques.

Material Provided:

Each vial contains approximately 0.25 mL of purified recombinant H5 HA protein in 10 mM phosphate buffer (pH 7.0), 150 mM sodium chloride and 0.005% Tween-20. The concentration, expressed as µg/mL, is shown on the Certificate of Analysis.

Note: The buffer composition described above is specific to lot 59137401. An earlier lot (4146578) was supplied in 20mM phosphate buffer (pH 7.0), 0.25 M sodium chloride and 0.01% Tergitol.

Packaging/Storage:

Purified recombinant H5 HA protein was packaged aseptically, in screw-capped plastic cryovials. This product is provided on wet ice and should be stored at 2°C to 8°C immediately upon arrival.

Functional Activity:

NR-660 is biologically active in a hemagglutination assay with 0.5% chicken red blood cells. NR-660 is specific to the H5 HA subtype of influenza virus as determined in serological hemagglutination inhibition (HI) assays. NR-660 demonstrates reactivity in HI and ELISA assays within the H5 HA subtype. Applications: HI, ELISA, SDS-PAGE, Western blot, antiserum preparation (immunogen).

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: H5 Hemagglutinin (HA) Protein from Influenza Virus, A/Vietnam/1203/2004 (H5N1), Recombinant from baculovirus, NR-660."

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/bmb15/index.htm.

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NR-660 is claimed in U.S. Patent Numbers 5,762,939 and 6,103,526, and the continuations, continuations-in-part, reissues and foreign counterparts thereof. Commercial use also requires a license from Protein Sciences Corporation, Meriden, Connecticut. For information call 203-686-0800.

References:

1. Govorkova, E. A., et al. "Lethality to Ferrets of H5N1 Influenza Viruses Isolated from Humans and Poultry in

- 2004.” J. Virol. 79 (2005): 2191–2198. PubMed: 15681421. GenBank: AY818135.
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 3. Yen, H. L., A. S. Monto, R. G. Webster, and E. A. Govorkova. “Virulence May Determine the Necessary Duration and Dosage of Oseltamivir Treatment for Highly Pathogenic A/Vietnam/1203/04 Influenza Virus in Mice.” J. Infect. Dis. 192 (2005): 665–672. PubMed: 16028136.
 4. World Health Organization Global Influenza Program Surveillance Network. “Evolution of H5N1 Avian Influenza Viruses in Asia.” Emerg. Infect. Dis. 11 (2005): 1303–1305.
 5. Smith, G. E., et al. Method for Producing Influenza Hemagglutinin Multivalent Vaccines Using Baculovirus. MG-PMC, LLC, assignee. U.S. Patent 5,762,939. 09 Jun. 1998.
 6. Smith, G. E., et al. *Spodoptera frugiperda* Single Cell Suspension Cell Line in Serum-Free Media, Methods of Producing and Using. Protein Sciences Corporation, assignee. U.S. Patent 6,103,526. 15 Aug. 2000.

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