

H5 Hemagglutinin (HA) Protein from Influenza Virus, A/Hong Kong/156/1997 (H5N1), Recombinant from baculovirus

Catalog No. NR-652

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Contributor and Manufacturer:

NIH - Influenza Pandemic Preparedness in Asia Program

Product Description:

Recombinant H5 hemagglutinin (HA) protein from influenza virus A/Hong Kong/156/1997 (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 sodium phosphate (pH 7.4), 150 mM sodium chloride and 0.01% Tween-20. The concentration, expressed as µg/mL, is shown on the Certificate of Analysis.

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 to 8°C immediately upon arrival.

Functional Activity:

NR-652 is biologically active in a hemagglutination assay with 0.5% chicken red blood cells. NR-652 is specific to the H5 HA subtype of influenza virus as determined in serological hemagglutination inhibition (HI) assays. NR-652 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/Hong Kong/156/1997 (H5N1), Recombinant from baculovirus, NR-652."

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.

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NR-652 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. Suarez, D. L., et al. "Comparisons of Highly Virulent H5N1 Influenza A Viruses Isolated from Humans and Chickens from Hong Kong." *J. Virol.* 72 (1998): 6678-6688. PubMed: 9658115. GenBank: AF046097.
2. Swayne, D. E., J. R. Beck, M. L. Perdue, and C. W.

- Beard. "Efficacy of Vaccines in Chickens Against Highly Pathogenic Hong Kong H5N1 Avian Influenza." Avian Dis. 45 (2001): 355–365. PubMed: 11417815.
3. Li, S., et al. "Recombinant Influenza A Virus Vaccines for the Pathogenic Human A/Hong Kong/97 (H5N1) Viruses." J. Infect. Dis. 179 (1999): 1132–1138. PubMed: 10191214.
 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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