

H9 Hemagglutinin (HA) Protein from Influenza Virus, A/chicken/Hong Kong/G9/1997 (H9N2), Recombinant from baculovirus

Catalog No. NR-659

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

For research use only. Not for human use.

Contributor and Manufacturer:

NIH - Influenza Pandemic Preparedness in Asia Program

Product Description:

Recombinant H9 hemagglutinin (HA) protein from influenza virus A/chicken/Hong Kong/G9/1997 (H9N2)¹⁻⁴ was produced in Sf9 insect cells using a baculovirus expression vector system.^{5,6} Recombinant H9 HA protein was purified using conventional chromatographic techniques.

Material Provided:

Each vial contains 0.25 mL of purified recombinant H9 HA protein in 20 mM sodium phosphate (pH 7.0), 150 mM sodium chloride, 300 mM mannopyranoside and 0.01% Tween-20. The concentration, expressed as µg/mL, is shown on the Certificate of Analysis.

Packaging/Storage:

Purified recombinant H9 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-659 is not active in a hemagglutination assay with 0.5% chicken red blood cells. Thus, serological hemagglutination inhibition tests are not possible. In ELISA assays, NR-659 reacts with reference antisera within the H9 HA subtype. Applications: ELISA, SDS-PAGE, Western blot, antiserum preparation (immunogen).

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: H9 Hemagglutinin (HA) Protein from Influenza Virus, A/chicken/Hong Kong/G9/1997 (H9N2), Recombinant from baculovirus, NR-659."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

NR-659 is claimed in U.S. Patent Numbers 5,762,939 and 6,103,526, and the continuations, continuations-in-part, re-issues and foreign counterparts thereof. Commercial use also requires a license from Protein Sciences Corporation, Meriden, Connecticut. For information call 203-686-0800.

References:

1. Guan, Y., K. F. Shortridge, S. Krauss, and R. G. Webster. "Molecular Characterization of H9N2 Influenza Viruses: Were They the Donors of the "Internal" Genes of H5N1 Viruses in Hong Kong?" Proc. Natl. Acad. Sci. U.S.A. 96 (1999): 9363-9367. PubMed: 10430948. GenBank: AF156373.

2. Liu, H., et al. "Phylogenetic Analysis of the Hemagglutinin Genes of Twenty-Six Avian Influenza Viruses of Subtype H9N2 Isolated from Chickens in China During 1996-2001." *Avian Dis.* 47 (2003): 116-127. PubMed: 12713166.
3. Lin, Y. P., et al. "Avian-to-Human Transmission of H9N2 Subtype Influenza A Viruses: Relationship Between H9N2 and H5N1 Human Isolates." *Proc. Natl. Acad. Sci. U.S.A.* 97 (2000): 9654-9658. PubMed: 10920197.
4. Guan, Y., et al. "H9N2 Influenza Viruses Possessing H5N1-Like Internal Genomes Continue to Circulate in Poultry in Southeastern China." *J. Virol.* 74 (2000): 9372-9380. PubMed: 11000205.
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.

ATCC® is a trademark of the American Type Culture Collection.

