

**Influenza A Virus,  
A/Puerto Rico/8-CV5/1934 (H1N1)**

**Catalog No. NR-29032**

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

**Contributor:**

Jonathan W. Yewdell, M.D., Ph.D., Chief, Cell Biology Section, Laboratory of Viral Diseases, NIAID, NIH

**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Orthomyxoviridae, Influenzavirus A*

Species: Influenza A virus

Strain: A/Puerto Rico/8-CV5/1934 (H1N1); deposited as A/Puerto Rico/8-34-CV5/2010 (H1N1)

Original Source: Influenza A virus, A/Puerto Rico/8-CV5/1934 (H1N1) is a monoclonal antibody escape mutant of influenza A virus, A/Puerto Rico/8/1934 (H1N1).<sup>1-3</sup> The escape mutant was selected by incubation of parental virus with an over-neutralizing dose of monoclonal antibody (designated "C" by the contributor)<sup>2</sup> that recognizes the influenza A virus hemagglutinin. Incubation was followed by growth of the non-neutralized virus fraction at limiting dilution in the allantois on shell (AOS) culture system. Virus was re-cloned twice by growth at limiting dilution in the absence of antibody, first in the AOS culture system and then in the allantoic cavity of embryonated chicken eggs.<sup>2</sup> The specific amino acid change in the hemagglutinin protein associated with antibody escape mutant CV5 has been described (GenPept: ADX99680).

Comments: Sequence information is available for influenza A virus, A/Puerto Rico/8-CV5/1934 (H1N1) at the [Influenza Research Database](#). The virus was originally deposited to BEI Resources as influenza A virus, A/Puerto Rico/8-34-CV5/2010 (H1N1), but subsequently named A/Puerto Rico/8-CV5/1934 (H1N1) by the NIAID Influenza Genome Sequencing Consortium. **Please note that the depositor's original nomenclature was used on the product label.**

**Material Provided:**

Each vial contains approximately 1 mL of pooled allantoic fluid from specific pathogen free (SPF) embryonated chicken eggs infected with influenza A virus, A/Puerto Rico/8-CV5/1934 (H1N1).

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-29032 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Host: 10- to 11-day-old SPF embryonated chicken eggs

Infection: Embryonated chicken eggs must be candled for viability prior to inoculation

Incubation: 2 days at 35°C in a humidified chamber without CO<sub>2</sub>

Effect: Hemagglutination activity using chicken red blood cells and allantoic fluid from infected embryonated chicken eggs

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Influenza A Virus, A/Puerto Rico/8-CV5/1934 (H1N1), NR-29032."

**Biosafety Level: 2**

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](http://www.cdc.gov/biosafety/publications/bmb15/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](http://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<sup>®</sup>, 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.

**References:**

1. J. W. Yewdell, personal communication.
2. Caton, A. J., et al. "The Antigenic Structure of the Influenza Virus A/PR/8/34 Hemagglutinin (H1 Subtype)." Cell 31 (1982): 417-427. PubMed: 6186384.
3. Hensley, S. E., et al. "Hemagglutinin Receptor Binding Avidity Drives Influenza A Virus Antigenic Drift." Science 326 (2009): 734-736. PubMed: 19900932.

ATCC<sup>®</sup> is a trademark of the American Type Culture Collection.

