

**Kilbourne F37: A/New Jersey/11/1976 (HA) x A/Puerto Rico/8/1934 (NA) (H1N1)**

**Catalog No. NR-3600**

Derived from NIAID Catalog No. V-331-0E5476

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

**Contributor:**

National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH)

**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Orthomyxoviridae, Influenzavirus A*

Species: Influenza A virus

Reassortant: A/New Jersey/11/1976 (HA) x A/Puerto Rico/8/1934 (NA) (H1N1) (Kilbourne F37)<sup>1-3</sup>

Parents: A/New Jersey/11/1976 (H) (H1N1) and A/Puerto Rico/8/1934 (H1N1)

Comments: NR-3600 is an antigenic hybrid reassortant virus derived from a high yield (H) mutant of influenza A virus, A/New Jersey/11/1976 (H1N1), a human isolate recovered during the 1976 swine flu epidemic at Fort Dix, NJ.<sup>4</sup> The parental mutant virus (Kilbourne F7) is available as BEI Resources NR-3598.<sup>5</sup> The non-selectively egg-passaged wild type virus (Kilbourne F9) is available as BEI Resources NR-3595.<sup>6</sup> Three other antigenic hybrids that share the H1<sub>A/New Jersey/11/1976</sub> N1<sub>A/Puerto Rico/8/1934</sub> phenotype with NR-3600 are also available (Kilbourne F131, BEI Resources NR-3517; Kilbourne F141, BEI Resources NR-3518; Kilbourne F142, BEI Resources NR-3484).<sup>7,8,9</sup> Nucleotide sequencing at BEI Resources of a portion of the matrix (M) gene (RNA 7) from NR-3600 indicates that the M gene is derived from A/Puerto Rico/8/1934 (H1N1). The derivation of the five genes encoding the remaining internal proteins and the nonstructural protein has not been determined genotypically.

**Material Provided:**

Each vial contains approximately 1 mL of pooled allantoic fluid from specific pathogen free (SPF) embryonated chicken eggs infected with reassortant influenza A virus, A/New Jersey/11/1976 (HA) x A/Puerto Rico/8/1934 (NA) (H1N1).

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

**Packaging/Storage:**

NR-3600 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: 9- 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

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: Kilbourne F37: A/New Jersey/11/1976 (HA) x A/Puerto Rico/8/1934 (NA) (H1N1), NR-3600."

**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®, 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. [http://www.flu-archive.org/data\\_sheets/F37.doc](http://www.flu-archive.org/data_sheets/F37.doc)
2. <http://www.flu-archive.org/>
3. [http://www.flu-archive.org/search/results.pl?search\\_string=&join\\_type=and](http://www.flu-archive.org/search/results.pl?search_string=&join_type=and)
4. Kilbourne, E. D. "Genetic Dimorphism in Influenza Viruses: Characterization of Stably Associated Hemagglutinin Mutants Differing in Antigenicity and Biological Properties." *Proc. Natl. Acad. Sci. USA.* 75 (1978): 6258-6262. PubMed: 282644.
5. [http://www.flu-archive.org/data\\_sheets/F7.doc](http://www.flu-archive.org/data_sheets/F7.doc)
6. [http://www.flu-archive.org/data\\_sheets/F9.doc](http://www.flu-archive.org/data_sheets/F9.doc)
7. [http://www.flu-archive.org/data\\_sheets/F131.doc](http://www.flu-archive.org/data_sheets/F131.doc)
8. [http://www.flu-archive.org/data\\_sheets/F141.doc](http://www.flu-archive.org/data_sheets/F141.doc)
9. [http://www.flu-archive.org/data\\_sheets/F142.doc](http://www.flu-archive.org/data_sheets/F142.doc)

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

