

Kilbourne F28:
A/turkey/Kansas/4880/1980 (HA, NA) x
A/Puerto Rico/8/1934 (H1N1), Low (L) Yield

Catalog No. NR-3481

Derived from NIAID Catalog No. V-331-0E4485

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/turkey/Kansas/4880/1980 (HA, NA) x
 A/Puerto Rico/8/1934 (H1N1), Low (L) Yield (Kilbourne
 F28)¹⁻³

Parents: A/turkey/Kansas/4880/1980 (H1N1), Low (L) Yield,
 and X-31 (H3N2)

Comments: The donor of the hemagglutinin and neuraminidase genes of NR-3481 is a low (L) yield derivative (Kilbourne F25; BEI Resources NR-3469)⁴ of influenza A virus, A/turkey/Kansas/4880/1980 (H1N1), which is a virus of swine antigenic phenotype isolated from a turkey in the course of a natural epizootic.^{5,6} As was the case with human isolates of swine phenotype, low- (L) and high-yield (H) HA mutants could be isolated from the wild type parent with the use of selective antibody. X-31 (Kilbourne F108; BEI Resources NR-3483) is A/Aichi/2/1968 (HA, NA) x A/Puerto Rico/8/1934 (H3N2),⁷ and has been shown to contain only the HA and NA genes from A/Aichi/2/1968 (H3N2). Since these were replaced by the HA and NA genes of the A/turkey/Kansas/4880/1980 (H1N1), Low (L) Yield parent, NR-3481 does not contain any genes from A/Aichi/2/1968 (H3N2).

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/turkey/Kansas/4880/1980 (HA, NA) x A/Puerto Rico/8/1934 (H1N1), Low (L) Yield.

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

Packaging/Storage:

NR-3481 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 F28: A/turkey/Kansas/4880/1980 (HA, NA) x A/Puerto Rico/8/1934 (H1N1), Low (L) Yield, NR-3481.”

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/bmbI5/index.htm.

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References:

1. <https://www.beiresources.org/Portals/2/Flu-archiveDocs/F28.doc>
2. <https://www.beiresources.org/Flu-archive.aspx>
3. <https://www.beiresources.org/FluVirusCatalog.aspx>
4. <https://www.beiresources.org/Portals/2/Flu-archiveDocs/F25.doc>
5. Hinshaw, V. S., et al. "Swine Influenza-Like Viruses in Turkeys: Potential Source of Virus for Humans?" *Science* 220 (1983): 206-208. PubMed: 6298942.
6. Kilbourne, E. D., et al. "Hemagglutinin Polymorphism as the Basis for Low- and High-Yield Phenotypes of Swine Influenza Virus." *Proc. Natl. Acad. Sci. U.S.A.* 85 (1988): 7782-7785. PubMed: 3174662.
7. <https://www.beiresources.org/Portals/2/Flu-archiveDocs/F108.doc>

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