SUPPORTING INFECTIOUS DISEASE RESEARCH

Influenza A Virus, A/Puerto Rico/8-CV2/1934 (H1N1)

Catalog No. NR-29031

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

<u>Virus Classification</u>: Orthomyxoviridae, Influenzavirus A Species: Influenza A virus

- Strain: A/Puerto Rico/8-CV2/1934 (H1N1); deposited as A/Puerto Rico/8-34-CV2/2010 (H1N1)
- <u>Original Source:</u> Influenza A virus, A/Puerto Rico/8-CV2/1934 (H1N1) is a monoclonal antibody escape mutant of influenza A virus, A/Puerto Rico/8/1934 (H1N1).¹⁻³ The escape mutant was selected by incubation of parental virus with an over-neutralizing dose of monoclonal antibody (designated "C" by the contributor)² 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.² The specific amino acid change in the hemagglutinin protein associated with antibody escape mutant CV2 has been described (GenPept: ADX99669).
- <u>Comments</u>: Sequence information is available for influenza A virus, A/Puerto Rico/8-CV2/1934 (H1N1) at the <u>Influenza</u> <u>Research Database</u>. This virus was originally deposited to BEI Resources as influenza A virus, A/Puerto Rico/8-34-CV2/2010 (H1N1), but subsequently named A/Puerto Rico/8-CV2/1934 (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-CV2/1934 (H1N1).

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

Packaging/Storage:

NR-29031 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_2

<u>Effect</u>: 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-CV2/1934 (H1N1), NR-29031."

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. <u>Biosafety in</u> <u>Microbiological and Biomedical Laboratories</u>. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

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

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