Influenza A Virus, A/Hong Kong/1/1968-2 Mouse-Adapted 21-2 (H3N2)

Catalog No. NR-28634

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:

**Virus Classification:** Orthomyxoviridae, Influenzavirus A

**Species:** Influenza A virus

**Strain:** A/Hong Kong/1/1968-2 mouse-adapted 21-2 (H3N2), also A/Hong Kong/1-2-MA21-2/1968 (H3N2)

**Original Source:** Influenza A virus, A/Hong Kong/1/1968-2 mouse-adapted 21-2 (H3N2) was derived from a virus isolated from a human in Hong Kong on July 17, 1968.1

**Comments:** Sequence information is available for influenza A virus, A/Hong Kong/1-2-MA21-2/1968 (H3N2) at the Influenza Research Database.

The prototype strain of the 1968 influenza epidemic in Hong Kong was originally isolated in primary monkey kidney cells by W. K. Chang1 and sent to H. G. Pereira at the WHO World Influenza Center in London, from whom it was subsequently obtained by the Laboratory for Disease Control, Health Canada, Ottawa.2 The virus was passaged twice in rhesus monkey kidney cells and three times in the allantoic cavity of embryonated chicken eggs before two plaque purifications in Madin-Darby canine kidney (MDCK) cells and re-amplification in embryonated chicken eggs. This virus (available as BEI Resources NR-28620) was subcloned by an additional round of plaque purification in MDCK cells. Subclone 2 was re-amplified again by two egg passages and inoculated intranasally into CD-1 mice. Virus extracts were prepared from lung homogenates after three days. After 21 sequential mouse passages, a clonal isolate was obtained by two plaque purifications in MDCK cells.2,3 The mouse-adapted virus was passaged twice in specific pathogen free embryonated chicken eggs before deposit to BEI Resources.4 Specific mutations in several viral genes are associated with adaptation to the mouse lung and evolution to increased virulence.2,3 Other mutations, or combinations of mutations, are unique to certain isolates, and can be used to identify each individual mouse-adapted variant. The confirmation of the identity of NR-28634 is described on the Certificate of Analysis.

Note that although NR-28634 was deposited to BEI Resources as A/Hong Kong/1/1968-2 mouse-adapted 21-2 (H3N2), nucleotide sequence obtained from the same source material by the NIAID Influenza Genome Sequencing Consortium was deposited to NCBI and IRD as A/Hong Kong/1-2-MA21-2/1968 (H3N2).

Material Provided:
Each vial contains approximately 1 mL of pooled allantoic fluid from specific pathogen free (SPF) embryonated chicken eggs infected with influenza A virus, A/Hong Kong/1/1968-2 mouse-adapted 21-2 (H3N2).

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

Packaging/Storage:
NR-28634 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 without CO₂

**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/Hong Kong/1/1968-2 Mouse-Adapted 21-2 (H3N2), NR-28634.”

Biosafety Level: 2


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References:

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