Influenza A Virus, A/Hong Kong/1/1968-1 Mouse-Adapted 12A (H3N2)

Catalog No. NR-28622

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/1/1968-1 mouse-adapted 12A (H3N2), also A/Hong Kong/1-1-MA-12A/1968 (H3N2)

Original Source: Influenza A virus, A/Hong Kong/1/1968-1 mouse-adapted 12 (H3N2) was derived from a virus isolated from a human in Hong Kong on July 17, 1968.

Comments: Sequence information is available for influenza A virus, A/Hong Kong/1-1-MA-12A/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. Chang and sent to H. G. Pereira at the WHO World Influenza Center in London, from whom it was subsequently obtained by the Laboratory Center for Disease Control, Health Canada, Ottawa. 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. The cloned virus (available as BEI Resources NR-28620) was then inoculated intranasally into CD-1 mice and virus extracts were prepared from lung homogenates after three days. After twelve sequential mouse passages, a clonal isolate was obtained by two plaque purifications in MDCK cells. The mouse-adapted virus was passaged twice in specific pathogen free embryonated chicken eggs before deposit to BEI Resources. Specific mutations in several viral genes are associated with adaptation to the mouse lung and evolution to increased virulence. 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-28622 is described on the Certificate of Analysis.

Note that although NR-28622 was deposited to BEI Resources as A/Hong Kong/1/1968-1 mouse-adapted 12A (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/1-1-MA-12A/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/1/1968-1 Mouse-Adapted 12A (H3N2).

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

Packaging/Storage:
NR-28622 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/1/1968-1 Mouse-Adapted 12A (H3N2), NR-28622."

Biosafety Level: 2


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References:

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