

Monoclonal Anti-Influenza Virus H9 Hemagglutinin (HA) Protein (15F1), A/duck/Hong Kong/Y280/1997 (H9N2), (ascites, Mouse)

Catalog No. NR-9492

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Contributor and Manufacturer:

St. Jude Children's Research Hospital (CEIRS)

Product Description:

Antibody Class: IgG2b.k

Mouse antibody (15F1)¹⁻⁴ specific to a recombinant form of the H9 hemagglutinin (HA) protein (GenPept: AAF00704)⁵ of the A/duck/Hong Kong/Y280/1997 (H9N2) strain of influenza virus was produced in mouse ascites. Ascites formation was induced by injecting cultured hybridoma cells into the peritoneal cavity of BALB/c mice that had been primed with Incomplete Freund's adjuvant. Antibody-rich ascites fluid was aseptically harvested 1 to 2 weeks following hybridoma cell injection. The harvested ascites fluid was pooled and then clarified using centrifugation and filtration. Sodium azide (0.02%) and gentamycin (0.01%) were added to the pooled ascites fluid prior to vialing and lyophilization.

HA is an antigenic glycoprotein found on the envelope of the influenza A virus. This protein binds to cellular receptors on the target cell and allows the influenza A virus to enter via endocytosis and membrane fusion. HA is an important target for drug and vaccine development.

Material Provided:

Each vial of NR-9492 contains lyophilized (0.5 mL containing 0.02% sodium azide and 0.01% gentamycin) mouse ascites fluid.

Packaging/Storage:

NR-9492 was packaged in glass serum vials with an aluminum crimp seal. The product is provided frozen and should be stored at -20°C to -40°C immediately upon arrival. **Storage at warmer temperatures is not recommended due to a low bioburden.** At colder temperatures, the rubber stopper may become brittle and compromise the seal. **NR-9492 should be reconstituted with 0.5 mL of sterile distilled water.** Reconstituted material should be stored at -20°C to -40°C. Reconstituted material may be thawed at room temperature and should be re-frozen.

Functional Activity:

NR-9492 is specific for the H9 HA subtype of the influenza A virus as determined in standard hemagglutination inhibition

(HI) assays. NR-9492 also demonstrates reactivity within the H9 HA subtype. HI titers with 20 different influenza strains of the H9 HA subtype representing Eurasian and North America lineages, as well as H9 HA viruses from other geographic areas, are shown on the Certificate of Analysis. No reactivity was observed with several viruses of North American lineage.

Biosafety Level: 1

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.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Influenza Virus H9 Hemagglutinin (HA) Protein (15F1), A/duck/Hong Kong/Y280/1997 (H9N2), (ascites, Mouse), NR-9492."

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References:

1. Xu, K. M., et al. "Evolution and Molecular Epidemiology of H9N2 Influenza A Viruses from Quail in Southern China, 2000 to 2005." J. Virol. 81 (2007): 2635-2645. PubMed: 17192315.
2. Butt, K. M., et al. "Human Infection with an Avian H9N2 Influenza A Virus in Hong Kong in 2003." J. Clin. Microbiol. 43 (2005): 5760-5767. PubMed: 16272514.
3. Choi, Y. K., et al. "Continuing Evolution of H9N2 Influenza Viruses in Southeastern China." J. Virol. 78 (2004): 8609-8614. PubMed: 15280470.
4. Kaverin, N. V., et al. "Structural Differences among Hemagglutinins of Influenza A Virus Subtypes are Reflected in Their Antigenic Architecture: Analysis of H9 Escape Mutants." J. Virol. 78 (2004): 240-249. PubMed: 14671105.
5. Guan, Y., et al. "Molecular Characterization of H9N2 Influenza Viruses: Were They the Donors of the "Internal" Genes of H5N1 Viruses in Hong Kong?" Proc. Natl. Acad. Sci. U. S. A. 96 (1999): 9363-9367. PubMed: 10430948. GenPept: AAF00704.
6. Cong, Y. L., et al. "Antigenic and Genetic Characterization of H9N2 Swine Influenza Viruses in China." J. Gen. Virol. 88 (2007): 2035-2041. PubMed: 17554038.
7. Wang, S., et al. "Genetic Analysis of the Nonstructural (NS) Genes of H9N2 Chicken Influenza Viruses Isolated in China During 1998-2002." Virus Genes 31 (2005): 329-335. PubMed: 16175338.
8. Li, K. S., et al. "Characterization of H9 Subtype Influenza Viruses from the Ducks of Southern China: A Candidate for the Next Influenza Pandemic in Humans?" J. Virol. 77 (2003): 6988-6994. PubMed: 12768017.
9. Guan, Y., et al. "H9N2 Influenza Viruses Possessing H5N1-Like Internal Genomes Continue to Circulate in Poultry in Southeastern China." J. Virol. 74 (2000): 9372-9380. PubMed: 11000205.

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