

Monoclonal Anti-Influenza A Virus H5 Hemagglutinin (HA), A/Vietnam/1203/2004 (H5N1), Clone DPJY01 (produced *in vitro*)

Catalog No. NR-19869

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgAk

Mouse monoclonal antibody prepared against the H5 hemagglutinin (HA) protein of the A/Vietnam/1203/2004 (H5N1) strain of influenza A virus was purified from clone DPJY01. Lot 59476519 was purified by protein L affinity chromatography. Lot 61728588 was purified using a protein-free thiophilic adsorbent column. The B cell hybridoma was generated by the fusion of Sp2/0 mouse myeloma cells with splenocytes from BALB/c mice immunized by intraperitoneal injection with the attenuated influenza virus strain ΔH5N1-WF10tsHA.^{1,2}

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-19869 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-19869 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-19869 reacts with H5 influenza viruses in ELISA. See Certificate of Analysis for details. The antibody is also reported to be strongly neutralizing both *in vitro* and *in vivo*, to be broadly reactive against H5 influenza viruses in hemagglutination inhibition tests, and to protect mice from

sublethal challenge with the highly pathogenic influenza A virus A/Vietnam/1203/2004 (H5N1).¹

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Influenza A Virus H5 Hemagglutinin (HA), A/Vietnam/1203/2004 (H5N1), Clone DPJY01 (produced *in vitro*), NR-19869.”

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/bmbl5/index.htm.

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References:

1. Ye, J., Shao, H., et al. "Intranasal Delivery of an IgA Monoclonal Antibody Effective against Sublethal H5N1 Influenza Virus Infection in Mice." Clin. Vaccine Immunol. 17 (2010): 1363-1370. PubMed: 20668143.
2. Song, H., G. R. Nieto, and D. R. Perez. "A New Generation of Modified Live-Attenuated Avian Influenza Viruses Using a Two-Strategy Combination as Potential Vaccine Candidates." J. Virol. 81 (2007): 9238-9248. PubMed: 17596317.

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