

**Monoclonal Anti-Influenza Virus H1 Hemagglutinin (HA), A/California/04/2009 (H1N1)pdm09, Clone 5C12 (produced *in vitro*)**

**Catalog No. NR-42019**

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**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Antibody Class: IgG2ak

Mouse monoclonal antibody prepared against the H1 hemagglutinin (HA) protein of the A/California/04/2009 (H1N1)pdm09 strain of influenza virus was purified from clone 5C12 hybridoma supernatant using protein G affinity chromatography. The B cell hybridoma was generated by the fusion of mouse myeloma cells with splenocytes from BALB/c mice immunized and boosted with virus-like particles containing only the influenza virus A/California/04/2009 (H1N1)pdm09 HA.<sup>1</sup>

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-42019 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-42019 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-42019 recognizes influenza A virus A/California/04/2009 (H1N1)pdm09-infected cells in indirect immunofluorescence assays, and neutralizes A/California/04/2009 (H1N1)pdm09 *in vitro*. Clone 5C12 antibody is also reported to function in ELISA, hemagglutination inhibition, and western blot assays.<sup>1</sup>

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH:

Monoclonal Anti-Influenza Virus H1 Hemagglutinin (HA), A/California/04/2009 (H1N1)pdm09, Clone 5C12 (produced *in vitro*), NR-42019."

**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](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

- Schmeisser, F., et al. "Neutralizing and Protective Epitopes of the 2009 Pandemic Influenza H1N1 Hemagglutinin." Influenza Other Respir. Viruses 7 (2013): 480-490. PubMed: 23122228.

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