

Monoclonal Anti-Influenza A Virus H1 Hemagglutinin (HA), A/California/04/2009 (H1N1)pdm09, Clone 4F8 (produced *in vitro*)

Catalog No. NR-42021

This reagent is the property of the U.S. Government.

Product Description: Mouse monoclonal antibody prepared against the H1 hemagglutinin (HA) protein of the A/California/04/2009 (H1N1)pdm09 strain of influenza A virus was purified from clone 4F8 hybridoma supernatant by protein G affinity chromatography.

Lot: 70011140

Manufacturing Date: 10JAN2018

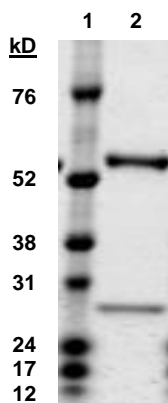
TEST	SPECIFICATIONS	RESULTS
Antibody Class Determination	IgG2ak	IgG2ak
SDS-PAGE Analysis	Correct molecular weight (MW) for heavy and light chains Report results	Correct MW for heavy and light chains (Figure 1) 100% pure ¹
Concentration by Spectrophotometer at OD ₂₈₀	Report results	1.2 mg per mL
Functional Activity Indirect Immunofluorescence Assay with A/California/04/2009 (H1N1)pdm09-infected MDCK cells ²	Fluorescence observed	Fluorescence observed (Figure 2)
Neutralization of A/California/04/2009 (H1N1)pdm09 infectivity in MDCK cells ³	Neutralization observed	Neutralization observed
Sterility	0.22 µm filter-sterilized	0.22 µm filter-sterilized

¹Purity assessed by densitometry using LI-COR Odyssey[®] imaging system

²MDCK cells (ATCC[®] CCL-34[™]) were infected with influenza A virus A/California/04/2009 (H1N1)pdm09 (BEI Resources NR-13658) at a MOI of 0.3 and stained 5 days later with NR-42021 at dilutions of 1:100 and 1:300, followed by staining with FITC-conjugated goat anti-mouse IgG F(ab')₂ fragment (Millipore 5008).

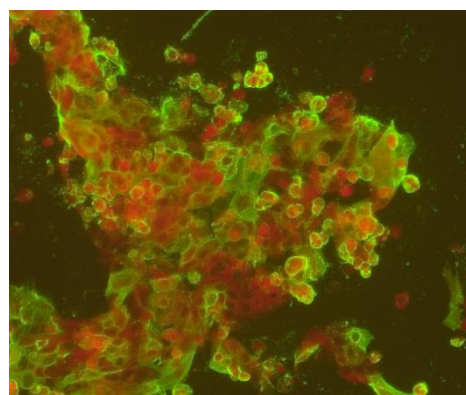
³100 TCID₅₀ of influenza A virus A/California/04/2009 (H1N1)pdm09 (BEI Resources NR-13658) was pre-incubated with NR-42021 lot 7011140 at dilutions of 1:100, 1:500, and 1:2500 and then used to inoculate cultures of MDCK cells. Cells were monitored for the presence of cytopathic effects for 6 days, and culture supernatants were tested for the presence of hemagglutinating activity. BEI Resources NR-13452 (Monoclonal Anti-Influenza A Virus H1 Hemagglutinin, A/South Carolina/1/1918 (H1N1), Clone 6B9) and NR-50414 (Monoclonal Anti-Zika Virus Envelope Protein, Clone ZV-2) were used as positive and negative controls, respectively.

Figure 1: SDS-PAGE Analysis



Lane 1: GE Healthcare Rainbow[™] Marker
Lane 2: NR-42021

Figure 2: Immunofluorescence Assay of A/California/04/2009 (H1N1)pdm09-Infected MDCK Cells



NR-42021, 1:300 dilution

/Heather Couch/
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Program Manager or designee, ATCC Federal Solutions

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