

**Monoclonal Anti-Influenza Virus H1 Hemagglutinin (HA), A/California/04/2009 (H1N1)pdm09, Clone S-OIV-3B2 (produced *in vitro*)**

**Catalog No. NR-19864**

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 virus was purified from clone S-OIV-3B2 hybridoma supernatant by protein G affinity chromatography.

**Lot: 59476514**

**Manufacturing Date: 10NOV2010**

TEST	SPECIFICATIONS	RESULTS
<b>Antibody Class Determination</b>	Report results	IgG2a $\lambda$
<b>Experion Pro260 Analysis</b>	Correct molecular weight (MW) for heavy and light chains Report results	Correct MW for heavy and light chains (Figure 1) 97.5% pure
<b>Concentration by Spectrophotometer at OD<sub>280</sub></b>	Report results	1.0 mg/mL
<b>Functional Activity</b> Indirect Immunofluorescence Assay (Figure 2) <sup>1</sup> A/California/04/2009 (H1N1)pdm09 <sup>2</sup> A/swine/lowa/15/1930 (H1N1) <sup>3</sup>  ELISA Indirect <sup>4</sup> rHA from A/California/04/2009 (H1N1)pdm09 <sup>5</sup> rHA1 from A/swine/lowa/15/1930 (H1N1) <sup>6</sup> Sandwich <sup>7</sup>	Fluorescence observed Fluorescence observed  Report results Report results Report results	Fluorescence observed Fluorescence observed  Reactive Reactive Not tested
<b>Sterility</b>	0.22 $\mu$ m filter-sterilized	0.22 $\mu$ m filter-sterilized

<sup>1</sup>MDCK cells (ATCC<sup>®</sup> CCL-34<sup>™</sup>) were infected with the indicated influenza virus at an MOI of 0.1 and stained 3 days later with a 1:300 dilution of NR-19864 and FITC-conjugated goat anti-mouse IgG F(ab')<sub>2</sub> fragment (Millipore 5008).

<sup>2</sup>BEI Resources NR-13658

<sup>3</sup>ATCC<sup>®</sup> VR-1683<sup>™</sup>

<sup>4</sup>Wells were coated with 5 to 20 ng of recombinant H1 HA from the indicated influenza virus, blocked and incubated with a 1:100 dilution of NR-19864 followed by biotin-conjugated goat anti-mouse IgG + IgM (H & L) (Rockland Immunochemicals 610-106-115), peroxidase-conjugated streptavidin (Rockland Immunochemicals S000-03) and tetramethylbenzidine (TMB) ELISA peroxidase substrate (Rockland Immunochemicals TMBE-1000). Absorbance was read at 450 – 650 nm.

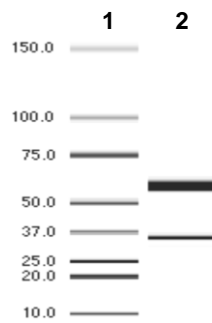
<sup>5</sup>BEI Resources NR-15749

<sup>6</sup>Immune Technology IT-003-SW3p

<sup>7</sup>In combination with NR-19866 and NR-19867, NR-19864 has been used in a sandwich ELISA to distinguish influenza A (H1N1)pdm09 viruses from other swine-origin H1 viruses as well as human seasonal H1N1 and H3N2 viruses (Shao, H., et al. "A Monoclonal Antibody-Based ELISA for Differential Diagnosis of 2009 Pandemic H1N1." *Influenza Other Respi. Viruses* 5 Suppl. 1 (2011): 138-141. PubMed: 21761586).

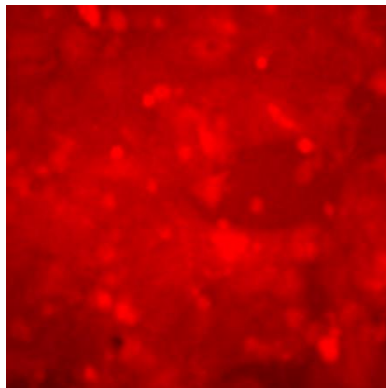
# Certificate of Analysis for NR-19864

Figure 1

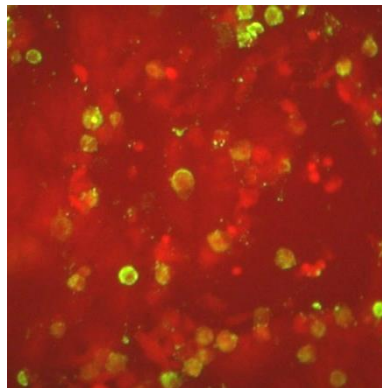


Lane 1: MW Markers (kDa)  
Lane 2: NR-19864

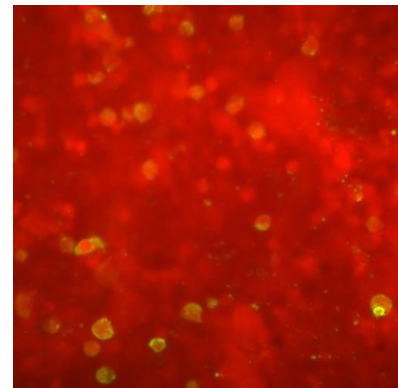
Figure 2



A. Mock-infected



B. A/California/04/2009 (H1N1)pdm09-infected



C. A/swine/Iowa/15/1930-infected

Date: 29 MAY 2013

Signature:

Title:

Technical Manager, BEI Authentication or designee

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC<sup>®</sup>'s knowledge.

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