

# Certificate of Analysis for NR-3694

**Kilbourne F61: A/WSN/1933 (HA, NA) x A/Rockefeller Institute/5/1957 (H1N1),  
Reassortant NWS R7**

**Catalog No. NR-3694**

**Product Description:** Cell lysate and supernatant from Madin-Darby Canine Kidney (MDCK) cells<sup>1</sup> infected with reassortant influenza A virus, A/WSN/1933 (HA, NA) x A/Rockefeller Institute/5/1957 (H1N1)

**Lot<sup>2,3</sup>: 61304790**

**Manufacturing Date: 18MAR2013**

TEST	SPECIFICATIONS	RESULTS
<b>Identification by Infectivity in MDCK cells<sup>1</sup></b>	Report results	Cell rounding and clumping
<b>Sequencing of Hemagglutinin and Matrix Coding Regions</b> Hemagglutinin (449 nucleotides)  Matrix (904 nucleotides)	Consistent with A/WSN/1933 (H1N1)  Consistent with A/Rockefeller Institute/5/1957 (H2N2)	100% identity with A/WSN/1933 (H1N1) (GenBank: CY034132) 99% identity with A/Rockefeller Institute/5/1957 (H2N2) (Gen Bank: CY045845)
<b>Titer by TCID<sub>50</sub> Assay<sup>4,5</sup> in MDCK Cells<sup>1</sup></b>	Report results	1.6 × 10 <sup>4</sup> TCID <sub>50</sub> per mL
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth <sup>6</sup> , 37°C and 26°C, aerobic Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Blood agar, 37°C, aerobic Blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO <sub>2</sub>	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
<b>Mycoplasma Contamination</b> Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

<sup>1</sup>MDCK; ATCC® CCL-34

<sup>2</sup>Derived from NIAID Catalog No. V-331-0TC476

<sup>3</sup>Grown in Dulbecco's Modified Eagle Medium (ATCC® 30-2002™) supplemented with 0.1% BSA (Invitrogen™ 15260-037) and 0.025 µg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin (USB 22725) for 3 days at 35°C and 5% CO<sub>2</sub>

<sup>4</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the infected cells, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the infectious titer (or infectivity) of a virus preparation.

<sup>5</sup>6 days at 35°C and 5% CO<sub>2</sub>

<sup>6</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

**Date:** 03 JUN 2013

**Signature:**



**Title:**

Technical Manager, BEI Authentication or designee

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