

## **Certificate of Analysis for NR-31657**

## Influenza A Virus, A/Brisbane/59/2007 (H1N1) (Tissue Culture Adapted)

Catalog No. NR-31657

**Product Description:** Cell lysate and supernatant from Madin-Darby canine kidney (MDCK) cells<sup>1</sup> infected with influenza A virus, A/Brisbane/59/2007 (H1N1) (tissue culture adapted)

Lot<sup>2</sup>: 64152184 Manufacturing Date: 13APR2016

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity Using MDCK Cells <sup>1</sup> Hemagglutination assay using cell lysate and supernatant from infected MDCK cells and 0.5% chicken red blood cells	Positive	Positive
Sequencing of Hemagglutinin and Matrix Coding Regions Hemagglutinin (370 nucleotides)  Matrix (953 nucleotides)	Consistent with A/Brisbane/59/2007 (H1N1)  Consistent with A/Brisbane/59/2007 (H1N1)	100% identity with A/Brisbane/59/2007 (H1N1) (GenBank: CY163640) 99% identity with A/Brisbane/59/2007 (H1N1) (GenBank: CY163633)
Titer by TCID <sub>50</sub> Assay <sup>3,4</sup> in MDCK Cells <sup>1</sup>	Report results	2.8 × 10 <sup>7</sup> TCID <sub>50</sub> per mL
Sterility (21-day incubation)  Harpo's HTYE broth <sup>5</sup> , 37°C and 26°C, aerobic Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep 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
Mycoplasma Contamination  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

¹MDCK cells: ATCC® CCL-34™

**Date:** 26 SEP 2016

Signature:

**BEI Resources Authentication** 

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<sup>&</sup>lt;sup>2</sup>Grown in Minimum Essential Medium supplemented with 0.125% Bovine Serum Albumin and 1 μg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin for 2 days at 35°C with 5% CO<sub>2</sub>.

<sup>&</sup>lt;sup>3</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, 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 titer (or infectivity) of a virus preparation.

<sup>&</sup>lt;sup>4</sup>9 days at 35°C with 5% CO<sub>2</sub>

<sup>&</sup>lt;sup>5</sup>Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.