

**Influenza A Virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN)**

**Catalog No. NR-49383**

**Product Description:** Cell lysate and supernatant from Madin-Darby Canine Kidney (MDCK) cells<sup>1</sup> infected with influenza A virus, A/WSN/33 (H1N1) PA-2A-NLuc (PASTN)

**Lot<sup>2</sup>: 63498601**

**Manufacturing Date: 24SEP2016**

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in MDCK Cells <sup>1</sup>	Cell rounding and detachment	Cell rounding and detachment
Sequencing of PA-2A-NLuc Fusion Region (760 nucleotides)	Identity confirmed	Identity confirmed <sup>3</sup>
Titer by TCID <sub>50</sub> Assay <sup>4,5</sup> in MDCK cells <sup>1</sup> with HA readout	Report results	1.6 × 10 <sup>5</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>Grown in Eagle's Minimum Essential Medium (ATCC® 30-2003) supplemented with 0.125% bovine serum albumin (Gibco 15260-037) and 1.0 µg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin for 3 days at 37°C and 5% CO<sub>2</sub>

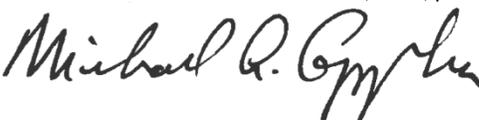
<sup>3</sup>Nucleotide sequencing confirmed the presence of the entire NanoLuc® ORF and the "self-cleaving" 2A peptide from porcine teschovirus fused in frame to the C-terminus of the modified PA gene, with the terminal 50 nucleotides of the native PA sequence repeated after the NLuc stop codon to restore native packaging sequences. See Tran, V., et al. "Highly Sensitive Real-Time *In Vivo* Imaging of an Influenza Reporter Virus Reveals Dynamics of Replication and Spread." *J. Virol.* 87 (2011): 13321-13329 (PubMed: 24089552) for details.

<sup>4</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 infectious titer (or infectivity) of a virus preparation.

<sup>5</sup>8 days at 37°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:** 14 AUG 2017

**Signature:** 

BEI Resources Authentication

ATCC®, 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®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

