b|e|i RESOURCES

SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-44345

Influenza A Virus, A/Hong Kong/H090-761-V1(0)/2009 (H1N1)pdm09

Catalog No. NR-44345

Product Description:

Influenza A virus, A/Hong Kong/H090-761-V1(0)/2009 (H1N1)pdm09 was isolated from a human in Hong Kong on July 31, 2009. NR-44345 lot 70061554 was produced by infecting Madin-Darby Canine Kidney cells (MDCK; ATCC® CCL-34™) with influenza A virus, A/Hong Kong/H090-761-V1(0)/2009 and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 1 µg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin for 2 days at 37°C and 5% CO_2.

Passage History:

MDCK(1)/MDCK(4) (Prior to deposit at BEI Resources/BEI Resources)

Lot: 70061554 Manufacturing Date: 20JUL2023

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in MDCK Cells	Cell rounding and detachment	Cell rounding and detachment
Sequencing of HA and NA Coding Regions		
Hemagglutinin (~ 880 nucleotides)	≥ 98% identity with Kong/H090-761-V1(0)/2009 (H1N1)pdm09 (GenBank: JN256841)	99.9% identity with Kong/H090-761-V1(0)/2009 (H1N1)pdm09 (GenBank: JN256841)
Matrix (~ 920 nucleotides)	Consistent with influenza A virus subtype H1N1	Consistent with influenza A virus subtype H1N1[1]
Titer by $TCID_{50}$ Assay in MDCK Cells by CPE[2] (9 days at 37°C and 5% CO_2)	Report results	8.9×10^6 $TCID_{50}$/mL
Sterility (21-day incubation)		
Harpo's HTYE broth, 37°C and 26°C, aerobic[3]	No growth	No growth
Trypticase Soy broth, 37°C and 26°C, aerobic	No growth	No growth
Sabouraud broth, 37°C and 26°C, aerobic	No growth	No growth
Sheep blood agar, 37°C, aerobic	No growth	No growth
Sheep blood agar, 37°C, anaerobic	No growth	No growth
Thioglycollate broth, 37°C, anaerobic	No growth	No growth
DMEM with 10% FBS, 37°C, aerobic	No growth	No growth
Mycoplasma Contamination		
Agar and broth culture (14-day incubation at 37°C)	None detected	None detected
DNA detection by PCR of extracted Test Article nucleic acid	None detected	None detected

[1]The matrix gene sequence of influenza A/Hong Kong/H090-761-V1(0)/2009 (H1N1)pdm09 is not in the NCBI database; the matrix gene sequence obtained for NR-44345 is identical to more than 80 human H1N1 influenza viruses isolated worldwide in 2009 and 2010, as well as several swine influenza A viruses isolated between 2009 and 2011.

[2]The Tissue Culture Infectious Dose 50% ($TCID_{50}$) endpoint is the 50% infectious endpoint in cell culture. The $TCID_{50}$ 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_{50}) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the $TCID_{50}$ provides a measure of the infectious titer (or infectivity) of a virus preparation.

[3]Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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Technical Manager or designee, ATCC Federal Solutions

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.

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