

Influenza A Virus, A/California/04/2009 (H1N1)pdm09, Cell Isolate (Produced in Cells)

Catalog No. NR-13658

Product Description:

Influenza A virus, A/California/04/2009 (H1N1)pdm09 was isolated from a 10-year-old boy with asthma in San Diego County, California on April 1, 2009. NR-13658 lot 70038214 was produced by infecting Madin-Darby Canine Kidney cells (MDCK; ATCC® CCL-34™) with influenza A virus, A/California/04/2009 (H1N1)pdm09 and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 0.125% bovine serum albumin, 10 mM HEPES and 1 µg per mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin for 3 days at 33.5°C and 5% CO₂.

Passage History:

C(2)/C(3) (Centers for Disease Control and Prevention/BEI Resources); C = MDCK cells

Lot: 70038214

Manufacturing Date: 04SEP2020

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in MDCK Cells	Cell rounding and detachment	Cell rounding and detachment
Sequencing of Hemagglutinin and Matrix Coding Regions Hemagglutinin (~ 440 nucleotides) Matrix (~ 920 nucleotides)	≥ 98% identity with A/California/04/2009 (H1N1)pdm09 (GenBank: JF915184.1) ≥ 98% identity with A/California/04/2009 (H1N1)pdm09 (GenBank: FJ966085.1)	99.8% identity with A/California/04/2009 (H1N1)pdm09 (GenBank: JF915184.1) 100% identity with A/California/04/2009 (H1N1)pdm09 (GenBank: FJ966085.1)
Titer by TCID₅₀ Assay in MDCK Cells with Indirect Fluorescent Antibody (IFA) Readout^{1,2} (7 days at 33.5°C and 5% CO ₂)	Report results	2.8 × 10 ⁶ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ³ 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, aerobic	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
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

¹The Tissue Culture Infectious Dose 50% (TCID₅₀) endpoint is the 50% infectious endpoint in cell culture. The TCID₅₀ 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% (LD₅₀) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID₅₀ provides a measure of the infectious titer (or infectivity) of a virus preparation.

²Using Monoclonal Anti-Influenza A Virus H1 Hemagglutinin (HA) antibody (BEI Resources NR-42021) and Light Diagnostics™ Goat Anti-Mouse IgG:FITC Reagent (Millipore 5008)

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

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09 DEC 2020

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