

Certificate of Analysis for NR-13658

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

Catalog No. NR-13658

Product Description: Cell lysate and supernatant from Madin-Darby canine kidney cells (MDCK)¹

infected with influenza A virus, A/California/04/2009 (H1N1)pdm09

Passage History: C2/C2 (CDC/BEI); C# = Number passages in MDCK cells

Lot²: 63339776 Manufacturing Date: 17APR2015

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in MDCK Cells	Cell rounding and sloughing	Cell rounding and sloughing
Sequencing of Hemagglutinin and Matrix Coding Regions		
Hemagglutinin gene (444 nucleotides)	Consistent with A/California/ 04/2009 (H1N1)pdm09	99% identity with A/California/ 04/2009 (H1N1)pdm09 (GenBank: JF915184)
Matrix gene (924 nucleotides)	Consistent with A/California/ 04/2009 (H1N1)pdm09	Consistent with A/California/ 04/2009 (H1N1)pdm09 (GenBank: FJ966085)
Titer by TCID ₅₀ Assay ^{3,4,5} in MDCK Cells ¹	Report results	1.6 × 10 ⁵ TCID ₅₀ per mL
Sterility (21-day incubation)		
Harpo's HTYE broth ⁶ , 37°C and 26°C, aerobic	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
Blood agar, 37°C, aerobic	No growth	No growth
Brucella agar, 37°C, anaerobic	No growth	No growth
Thioglycollate broth, 37°C, anaerobic	No growth	No growth
DMEM with 10% FBS, 37°C and 5% CO ₂	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

¹MDCK cells: ATCC[®] CCL-34™

Date: 10 SEP 2015 **Sign**

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.

BEI Resources www.beiresources.org E-mail: contact@beiresources.org
Tel: 800-359-7370

Fax: 703-365-2898

²Grown in Eagle's Minimum Essential Medium (ATCC[®] 30-2003) supplemented with 0.125% bovine serum albumin (Invitrogen™ 15260-037), 10mM HEPES (Sigma-Aldrich[®] 83264-100ML-F), and 2 μg/mL L-1-tosylamido-2-phenylethyl chloromethyl ketone (TPCK)-treated trypsin (Sigma-Aldrich[®] T1426) for 2 days at 33.5°C and 5% CO₂

³Determined by hemagglutination assay of culture supernatant using 0.5% chicken red blood cells.

⁴The Tissue Culture Infectious Dose 50% (TCID₅₀) 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% (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.

⁵⁵ days at 33.5°C and 5% CO₂

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