

Certificate of Analysis for NR-13663

Influenza A Virus, A/California/07/2009 (H1N1)pdm09, Egg Isolate (Produced in Eggs)

Catalog No. NR-13663

Product Description: Pooled allantoic fluid from specific pathogen free (SPF) embryonated chicken eggs¹ infected with influenza A virus, A/California/07/2009 (H1N1)pdm09.

Passage History: E3/E2 (CDC/BEI); E# = Number passages in embryonated chicken eggs

Lot²: 63802102

Manufacturing Date: 30SEP2015

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity Using Embryonated Chicken Eggs¹ Hemagglutination activity using allantoic fluid from infected eggs and 0.5% chicken red blood cells	Positive	Positive
Sequencing of Hemagglutinin and Matrix Coding Regions Hemagglutinin (422 nucleotides) Matrix (918 nucleotides)	Consistent with A/California/07/2009 (H1N1)pdm09 Consistent with A/California/07/2009 (H1N1)pdm09	100% identity with A/California/07/2009 (H1N1)pdm09 (GenBank: CY121680) 99% identity with A/California/07/2009 (H1N1)pdm09 (GenBank: CY121681)
Titer by CEID₅₀^{3,4} Assay in Embryonated Chicken Eggs¹	Report results	1.6 × 10 ⁸ CEID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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 Brucella agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO ₂	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 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

¹9- to 10-day-old SPF Embryonated Chicken Eggs acquired from B&E Eggs, York Springs, Pennsylvania

²Grown in the allantoic cavity of embryonated chicken eggs¹ for 2 days at 35°C in a humidified chamber

³The Chicken Embryo Infectious Dose 50% (CEID₅₀) is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the inoculated embryonated chicken eggs, 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 CEID₅₀ provides a measure of the infectious titer (or infectivity) of a virus preparation.

⁴2 days at 35°C in a humidified chamber

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

Date: 08 FEB 2016

Signature:



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