

Influenza A Virus, A/bovine/Ohio/B24OSU-439/2024 (H5N1), Tissue Culture Adapted

Catalog No. NR-59872

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Product Description:

Influenza A virus, A/bovine/Ohio/B24OSU-439/2024 (H5N1) was isolated from a dairy cow on April 5, 2024, in Ohio, USA. NR-59872 lot 70070368 was produced in Madin-Darby canine kidney cells (MDCK; ATCC® CCL-34) infected with the deposited material and incubating in Eagle’s Minimum Essential Medium (ATCC® 30-2003™) supplemented with 0.125% bovine serum albumin and 1 µg/mL TPCK-treated trypsin for 2 days at 37°C and 5% CO₂.

Lot: 70070368

Manufacturing Date: 05AUG2024

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity Using MDCK cells	Positive	Positive
Next-Generation Sequencing (NGS) of Complete Genome Using Illumina® MiSeq™ Platform Hemagglutinin gene (~ 1750 nucleotides) Matrix protein 1 and BM2 protein genes (~ 1000 nucleotides)	≥ 98% identity with A/bovine/Ohio/B24OSU-439/2024 (H5N1) (GenBank: PP836471) ≥ 98% identity with A/bovine/Ohio/B24OSU-439/2024 (H5N1) (GenBank: PP836474)	100% identity with A/bovine/Ohio/B24OSU-439/2024 (H5N1) (GenBank: PP836471) 100% identity with A/bovine/Ohio/B24OSU-439/2024 (H5N1) (GenBank: PP836474)
Titer by CEID₅₀ Assay in MDCK Cells by Cytopathic Effect¹ (7 days at 37°C and 5% CO ₂)	Report results	3.1 × 10 ⁶ TCID ₅₀ /mL ²
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	Pending Pending Pending Pending Pending Pending Pending
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	Pending 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.

²Titer was determined by cytopathic effects (CPE) and completed in quadruplicate (1.6 × 10⁶ TCID₅₀ per mL, 8.9 × 10⁵ TCID₅₀ per mL, 8.9 × 10⁵ TCID₅₀ per mL and 8.9 × 10⁵ TCID₅₀ per mL). The average of the four values is reported.

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

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05 SEP 2024

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