

Human Metapneumovirus, TN/96-213

Catalog No. NR-22243

Product Description:

Human metapneumovirus (HMPV), TN/96-213 was isolated from a human specimen collected in Tennessee, USA, in 1996. NR-22243 lot 70062308 was produced by infecting *Macaca mulatta* kidney cells (LLC-MK2; ATCC® CCL-7.1™) in Opti-MEM® Minimal Essential Medium (Gibco® 31985) supplemented with, 2 mM L-glutamine (ATCC® 30-2214™), 100 µg/mL CaCl₂, and 5 µg/mL trypsin (ATCC® 30-2101™) for 7 days at 37°C and 5% CO₂.

Passage History:

L(3)/L(5) (Vanderbilt/BEI Resources); L = LLC-MK2 cells

Lot: 70062308

Manufacturing Date: 25AUG2023

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TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in LLC-MK2 Cells	Cell rounding and detachment	Cell rounding and detachment
Sequencing of Species-Specific Region Glycoprotein gene (~ 280 nucleotides)	≥ 98% identity with HMPV, TN96-213 glycoprotein gene, complete cds (GenBank: JF929885.1)	99.6% identity with HMPV, TN96-213 glycoprotein gene, complete cds (GenBank: JF929885.1) ¹
Glycoprotein gene (~ 650 nucleotides)	≥ 98% identity with HMPV/USA/TN-96-213/1996/B complete genome (GenBank: KC562229.1)	98.0% identity with HMPV/USA/TN-96-213/1996/B complete genome (GenBank: KC562229.1) ¹
Titer by TCID₅₀ Assay in LLC-MK2 Cells by RT-PCR² (9 days at 35°C with 5% CO ₂)	Report results	8.9 × 10 ⁵ TCID ₅₀ /mL
Amplification of HMPV Sequence by RT-PCR	~ 1300 base pair amplicon	~ 1300 base pair amplicon
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 reason for the discrepancy between the two published sequences [HMPV, TN/96-213 complete genome (GenBank: KC562229.1) and HMPV, isolate TN96-213 glycoprotein, complete cds (GenBank: JF929885.1)] is unclear. Please see Yang, C. F., et al. "Human Metapneumovirus G Protein is Highly Conserved within but not between Genetic Lineages." *Arch. Virol.* 158 (2013): 1245-1252. PubMed: 23385328] for additional information.

²The 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 titer (or infectivity) of a virus preparation

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

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