

Certificate of Analysis for NR-22227

Human Metapneumovirus, TN/83-1211

Catalog No. NR-22227

Product Description: Cell lysate and supernatant from *Macaca mulatta* kidney epithelial cells¹ infected with human metapneumovirus (HMPV), TN/83-1211

Passage History: L7/L2 (Vanderbilt/BEI Resources; L# = Number of passages in LLC-MK2 cells)

Lot²: 62359753 Manufacturing Date: 27MAR2014

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in LLC-MK2 Derivative Cells ¹	Report results	Rounding, sloughing and syncytia formation
Sequencing of Species-Specific Region ³ (G and L genes; 912 nucleotides)	Consistent with HMPV, TN/83-1211	99% identity with HMPV, TN/83-1211 (GenBank: KC562244)
Titer by TCID ₅₀ Assay ^{4,5} in LLC-MK2 Derivative Cells ¹ With DFA Readout ⁶	Report results	2.8 × 10 ⁴ TCID ₅₀ per mL
Sterility (21-day incubation)		
Harpo's HTYE broth ⁷ , 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
Sheep blood agar, 37°C, aerobic	No growth	No growth
Sheep blood 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 Test Article nucleic acid	None detected	None detected

¹LLC-MK2 Derivative cells (ATCC[®] CCL-7.1 ™)

Date: 23 JUN 2017

Signature:

Title: Technical Manager, BÉI Áuthentication or designee

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 Opti-MEM[®] Minimal Essential Medium (Life Technologies 31985) supplemented with 2 mM L-glutamine (Life Technologies 25030), 100 μg per mL CaCl₂, and 5 μg per mL trypsin (ATCC[®] 30-2101) for 6 days at 37°C and 5% CO₂

³The limited nucleotide sequencing of NR-22227 performed at BEI Resources is not sufficient to confirm exact strain identity owing to the high degree of sequence conservation within HMPV lineages.

⁴The 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.

⁵7 days at 37°C and 5% CO₂

⁶Using Light Diagnostics™ Human Metapneumovirus DFA Reagent (Millipore 5091RUO)

⁷Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.