b|e|i RESOURCES

SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-44260

Middle East Respiratory Syndrome Coronavirus (MERS-CoV), EMC/2012

Catalog No. NR-44260

Product Description:

MERS-CoV, EMC/2012 was isolated in 2012 from an elderly man with fatal pneumonia in Saudi Arabia. NR-44260 was produced by infecting *Chlorocebus aethiops* kidney epithelial cells (Vero E6; ATCC® CCL-1586™) with BEI Resources seed lot 62043786 and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 2% fetal bovine serum (ATCC® 30-2020™) for 3 days at 37°C with 5% CO_2 to produce this lot.

Passage History:

V(4)/V(2)/VE(1)/VE(1) (Dr. Soliman Fakeeh Hospital/Erasmus Medical Center/Rocky Mountain Lab, (NIAID/NIH)/BEI Resources); V = Vero cells; VE = Vero E6 cells

Lot: 70072725 **Manufacturing Date: 07APR2025**

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero E6 Cells	Refractile cell rounding, clumping and detachment	Refractile cell rounding, clumping and detachment
Next-Generation Sequencing (NGS) of Complete Genome	≥ 98% sequence identity with MERS-CoV, EMC/2012 (GenBank: JX869059)	99.9% sequence identity with MERS-CoV, EMC/2012 (GenBank: JX869059)
Titer by $TCID_{50}$ Assay in Vero E6 Cells by Cytopathic Effect[1] (8 days at 37°C with 5% CO_2)	Report results	8.9×10^5 $TCID_{50}$/mL
Sterility (21-day incubation)		
Harpo's HTYE broth, 37°C and 26°C, aerobic[2]	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, aerobic	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

[1]The Tissue Culture Infectious Dose 50% ($TCID_{50}$) endpoint is the 50% infectious endpoint in cell culture. The $TCID_{50}$ 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% (LD_{50}) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the $TCID_{50}$ provides a measure of the titer (or infectivity) of a virus preparation.
[2]Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

/Sonia Bjorum Brower/
Sonia Bjorum Brower 25 JUN 2025
Technical Manager or designee, ATCC Federal Solutions

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.

Support Provided by NIAID

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