

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

Catalog No. NR-44260

Product Description: Cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with Middle East respiratory syndrome coronavirus (MERS-CoV), EMC/2012

Passage History: Dr. Soliman Fakeeh Hospital: Vero (4); Erasmus Medical Center: Vero (2); Rocky Mountain Laboratories, NIAID, NIH: Vero E6 (1); BEI Resources: Vero E6 (2)

Lot¹: 70000143

Manufacturing Date: 15DEC2016

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero Cells	Refractile cell rounding and detachment	Refractile cell rounding and detachment
Identification by Sequencing of ORF1 Gene (~ 1200 nucleotides)	≥ 98% identity with MERS-CoV, EMC/2012	100% identity with MERS-CoV, EMC/2012 (GenBank: JX869059)
Titer by TCID ₅₀ Assay in Vero Cells ^{2,3}	Report results	8.9 × 10 ⁵ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁴ , 37°C and 26°C, aerobic 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 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
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

¹Grown in Vero 76, clone E6 cells in Dulbecco's Modified Eagle's Medium (ATCC® 30-2002) supplemented with 5% fetal bovine serum (ATCC® 30-2020) for 6 days at 37°C and 5% CO₂

²TCID₅₀ (50% tissue culture infectious dose): The TCID₅₀ is the 50% infectious endpoint in tissue 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. A reciprocal of the dilution required to yield the TCID₅₀ provides a measure of the titer of a virus preparation.

³5 days at 37°C and 5% CO₂ in Vero 76, clone E6 cells (ATCC® CRL-1586™)

⁴Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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