

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

Catalog No. NR-44260

Passage History:

Dr. Soliman Fakeeh Hospital: Vero (4)
 Erasmus Medical Center: Vero (2)
 Rocky Mountain Laboratories, NIAID, NIH: Vero E6 (1)
 BEI Resources: Vero E6¹ (1)

Lot²: 62043787

Manufacturing Date: 09SEP2013

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero E6 Cells ¹	Rounding and detachment	Rounding and detachment
Identification by Sequencing of ORF1 Gene (1165 nt)	Consistent with MERS-CoV, EMC/2012	100% identity to MERS-CoV, EMC/2012 (GenBank: JX869059)
Titer by TCID ₅₀ Assay in Vero E6 Cells ^{1,3,4}	Report results	2.8 X 10 ⁶ TCID ₅₀ /mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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

¹Vero E6 (also Vero C1008) cells: ATCC[®] CRL-1586™

²Grown in Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1500 mg/L sodium bicarbonate (ATCC[®] 30-2002) supplemented with 2% fetal bovine serum (ATCC[®] 30-2020) for 3 days at 37°C and 5% CO₂

³5 days at 37°C and 5% CO₂

⁴TCID₅₀ (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.

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

Date: 21 OCT 2013

Signature:



Title: Technical Manager, BEI Authentication or designee

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