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SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-51281

Mumps Virus, MuV/Iowa.US/2006, Plaque Purified

Catalog No. NR-51281

Product Description: Mumps virus (MuV), MuV/Iowa.US/2006 was isolated from an oral swab of a human subject in Iowa, USA in 2006. It was plaque purified three times prior to deposit at BEI Resources.

Passage History: XV7/V2 (Prior to deposit at BEI Resources/BEI Resources); X = Unknown; V = Vero cells[1]

Lot[2]: 70016128 **Manufacturing Date: 06AUG2018**

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero cells	Cell fusion and detachment	Cell fusion and detachment
Sequencing of Species-Specific Region (~ 870 nucleotides)	≥ 98% identity with MuV, MuV/Iowa.US/2006 (GenBank: JN012242.1)	100% identity with MuV, MuV/Iowa.US/2006 (GenBank: JN012242.1)
Titer by $TCID_{50}$ Assay[3,4] in Vero cells[1] by Cytopathic Effect	Report results	8.9×10^6 $TCID_{50}$ per mL
Titer by Plaque Assay[5] in Vero cells[1]	Report results	5.7×10^6 PFU per mL
Amplification of MuV Sequence by RT-PCR	~ 1000 base pair amplicon	~ 1000 base pair amplicon
Sterility (21-day incubation)		
Harpo's HTYE broth[6], 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
Blood agar, 37°C, aerobic	No growth	No growth
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 extracted Test Article nucleic acid	None detected	None detected

[1]*Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CRL-1586™)
[2]Grown in Dulbecco's Modified Eagle's Medium containing 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate, and 1500 mg per L sodium bicarbonate (ATCC® 30-2002) supplemented with 5% fetal bovine serum (ATCC® 30-2020) for 5 days at 37°C with 5% CO_2
[3]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.
[4]Assay plates were incubated 7 days at 37°C and 5% CO_2
[5]Plaque Forming Unit (PFU) count was calculated after 6 days at 37°C and 5% CO_2
[6]Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

/Heather Couch/
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Program Manager or designee, ATCC Federal Solutions

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