

## **Certificate of Analysis for NR-49771**

## **Heartland Virus, MO-4**

Catalog No. NR-49771

**Product Description:** Cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero)<sup>1</sup> infected with Heartland virus (HRTV), MO-4

**Passage History:** D1V2/V3 (Prior to deposit at BEI Resources/BEI Resources); D# = Number of passages in DH82 cells; V# = Number of passages in Vero cells<sup>1</sup>

Lot<sup>2</sup>: 70013050 Manufacturing Date: 23FEB2018

TEST	SPECIFICATIONS	RESULTS
Infectivity in Vero Cells <sup>1</sup>	Report results	Cell rounding and detachment
Sequencing of Species-Specific Region (~ 860 nucleotides)	Consistent with HRTV	100% identity with HRTV (GenBank: JX005847)
Titer by TCID <sub>50</sub> Assay in Vero Cells by CPE <sup>1,3,4</sup>	Report results	2.8 x 108 TCID <sub>50</sub> per mL
Sterility (21-day incubation) Harpo's HTYE broth <sup>5</sup> , 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 <sub>2</sub>	No growth	No growth
Mycoplasma Contamination  Agar and broth culture (14-day incubation at 37°C)  DNA Detection by PCR of Test Article nucleic acid	None detected None detected	None detected None detected

¹Vero cells: ATCC® CCL-81™

05 JUN 2018

Program 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.

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.

E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

 <sup>&</sup>lt;sup>2</sup>Grown in Eagle's Minimum Essential Medium Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate (ATCC® 30-2003) supplemented with 2% fetal bovine serum (ATCC® 30-2020)) for 8 days at 37°C with 5% CO<sub>2</sub>
 <sup>3</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> 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<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a virus preparation.
 <sup>4</sup>13 days at 37°C with 5% CO<sub>2</sub>

<sup>&</sup>lt;sup>5</sup>Atlas, Ronald M. <u>Handbook of Microbiological Media</u>. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.