SUPPORTING INFECTIOUS DISEASE RESEARCH

## Certificate of Analysis for NR-51973

## Spondweni Virus, SAAr 94

## Catalog No. NR-51973

## Product Description:

Spondweni virus (SPONV), SAAr 94 was isolated from Mansonia uniformis mosquitoes in Lake Simbu, Natal, South Africa in 1955. NR-51973 lot 70032791 was produced by infecting Cercopithecus aethiops kidney epithelial cells (Vero E6; ATCC ${ }^{\circledR}$ CRL-1586 ${ }^{\text {TM }}$ ) and incubating in Eagle's Minimum Essential Medium (ATCC ${ }^{\circledR}$ 30-2003 ${ }^{\text {TM }}$ ) supplemented with $2 \%$ fetal bovine serum (ATCC ${ }^{\circledR} 30-2020^{\mathrm{TM}}$ ) for 12 days at $37^{\circ} \mathrm{C}$ with $5 \% \mathrm{CO}_{2}$.

## Passage History:

$\mathrm{X}(5) \mathrm{V}(1) / \mathrm{VE} 6(2)$ (Prior to deposit at BEI Resources/BEI Resources); $\mathrm{X}=$ Unknown; $\mathrm{V}=$ Vero cells; VE6 = Vero E6 cells

## Lot: 70032791

Manufacturing Date: 02MAR2020

| TEST | SPECIFICATIONS | RESULTS |
| :---: | :---: | :---: |
| Identification by Infectivity in Vero E6 Cells | Cell rounding and detachment | Cell rounding and detachment |
| Identification by Indirect Fluorescent Antibody (IFA) Assay ${ }^{1}$ | Fluorescence observed | Fluorescence observed |
| Sequencing of Species-Specific Region ( $\sim 870$ nucleotides) | $\geq 98 \%$ identity with SPONV, AR 94 polyprotein gene (GenBank: KX227370.1) | 100\% identity with SPONV, AR 94 polyprotein gene (GenBank: KX227370.1) |
| Titer by TCID 50 Assay in Vero E6 Cells by Cytopathic Effect and IFA ${ }^{1,2}$ <br> (8 days at $37^{\circ} \mathrm{C}$ with $5 \% \mathrm{CO}_{2}$ ) | Report results | $2.8 \times 10^{4} \mathrm{TCID}_{50}$ per mL |
| Amplification of SPONV Sequence by RT-PCR | $\sim 910$ base pair amplicon | $\sim 910$ base pair amplicon |
| Sterility (21-day incubation) <br> Harpo's HTYE broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic ${ }^{3}$ Trypticase Soy broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic Sabouraud broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic Sheep blood agar, $37^{\circ} \mathrm{C}$, aerobic Sheep blood agar, $37^{\circ} \mathrm{C}$, anaerobic Thioglycollate broth, $37^{\circ} \mathrm{C}$, anaerobic DMEM with $10 \%$ FBS, $37^{\circ} \mathrm{C}$, aerobic | No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth | No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth <br> No growth |
| Mycoplasma Contamination <br> Agar and broth culture (14-day incubation at $37^{\circ} \mathrm{C}$ ) DNA detection by PCR of extracted Test Article nucleic acid | None detected None detected | None detected None detected |

${ }^{1}$ Using Monoclonal Anti-Flavivirus Group Antigen, Clone D1-4G2-4-15 (BEI Resources NR-50327) and Light Diagnostics ${ }^{\text {™ }}$ Goat Anti-Mouse IgG FITC Reagent (Millipore ${ }^{\circledR}$ 5008)
${ }^{2}$ The Tissue Culture Infectious Dose $50 \%\left(\mathrm{TCID}_{50}\right)$ endpoint is the $50 \%$ infectious endpoint in cell culture. The $\mathrm{TCID}_{50}$ 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 $50 \%\left(\mathrm{LD}_{50}\right)$ is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the $\mathrm{TCID}_{50}$ provides a measure of the titer (or infectivity) of a virus preparation.
${ }^{3}$ 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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22 MAR 2021

## Program Manager or designee, ATCC Federal Solutions

ATCC ${ }^{\circledR}$, 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 ${ }^{\circledR}$ 's knowledge.

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