

Spondweni Virus, SAAr 94

Catalog No. NR-51973

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Flaviviridae*, *Flavivirus*

Species: Spondweni virus

Group: Spondweni Serogroup

Strain/Isolate: SAAr 94

Original Source: Spondweni virus (SPONV), SAAr 94 was isolated from *Mansonia uniformis* mosquitoes in Lake Simbu, Natal, South Africa in 1955 and contributed to Arbovirus Reference Collection (ARC) by the Yale Arbovirus Research Unit.¹

SPONV is a positive-sense single strand RNA virus, with a genome consisting of three structural proteins and seven non-structural proteins.² SPONV belongs to the Spondweni serogroup, which also includes Zika virus.³ In 1952 in Nigeria, a virus was isolated from a human patient that was initially classified as Zika virus, but was later determined to be Spondweni virus. SPONV causes mild flu-like symptoms and can be difficult to differentiate clinically from Zika virus. It was previously thought that the range of the virus was restricted to Africa, but in 2016 it was identified in a pool of *Culex* mosquitoes in Haiti.³

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with SPONV, SAAr 94.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-51973 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CRL-1586™)

Growth Medium: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential

amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g per L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 70% to 90% confluent

Incubation: 7 to 14 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Spondweni Virus, SAAr 94, NR-51973."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Russell, B. J., Personal Communication.
2. Haddow, A. D., et al. "Genetic Characterization of Spondweni and Zika Viruses and Susceptibility of Geographically Distinct Strains of *Aedes aegypti*, *Aedes albopictus* and *Culex quinquefasciatus* (Diptera: Culicidae) to Spondweni Virus." PLoS: Negl. Trop. Dis. 10 (2016): e0005083. PubMed: 27783682.
3. White, S. K., et al. "Spondweni Virus in Field-Caught *Culex quinquefasciatus* Mosquitoes, Haiti, 2016." Emerg. Infect. Dis. 24 (2018): 1765-1760. PubMed: 30124422.

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