

Spondweni Virus, Chuku

Catalog No. NR-51972

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

Strain/Isolate: Chuku

Original Source: Spondweni virus (SPOV), Chuku was isolated by F. N. Macnamara from the blood of a febrile human in Nigeria in 1952 and contributed to Arbovirus Reference Collection (ARC) by the Yale Arbovirus Research Unit.¹

Comments: The polyprotein gene of SPOV, Chuku has been sequenced (GenBank: [KX227369](#)).

SPOV is a positive-sense single strand RNA virus, with a genome consisting of three structural proteins and seven non-structural proteins.² SPOV 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. SPOV 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 1.0 mL of cell lysate and supernatant from *Aedes albopictus* cells (C6/36; ATCC® CRL-1660™) infected with Spondweni virus, Chuku.

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

Packaging/Storage:

NR-51972 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: *Aedes albopictus* cells (C6/36; ATCC® CRL-1660™)

Growth Medium: Eagle's Minimum Essential Medium (EMEM; ATCC® 30-2003) supplemented with 2% fetal bovine serum (FBS; ATCC® 30-2020), or equivalent

Infection: Cells should be 70% to 80% confluent

Incubation: 5 to 8 days at 28°C

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Spondweni Virus, Chuku, NR-51972."

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/bmbli5/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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