

Thottapalayam Virus

Catalog No. NR-465

For research use only. Not for human use.

Contributor:

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Product Description:

Virus Classification: *Bunyaviridae, Hantavirus*

Species: Thottapalayam (TPM) virus

Original Source: Isolated in 1964 from the spleen of an Asian house shrew (*Suncus murinus*) captured in southern India¹

Comments: The complete nucleotide sequences of the large (L; GenBank: DQ825771),² medium (M; GenBank: DQ825770),² and small (S; GenBank: AY526097)³ RNA segments of TPM virus have recently been determined.

Despite being the first hantavirus isolated, TPM virus remains somewhat of an enigma, in that it was not isolated from a rodent (rather an insectivore) and has to been shown to be the most genetically and antigenically distinct of all hantaviruses to date.²⁻⁶

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from African green monkey cells (Vero; ATCC[®] CCL-81[™]) infected with TPM virus.

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

Packaging/Storage:

NR-465 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: Vero cells (ATCC[®] CCL-81[™])

Growth Medium: Minimum Essential Medium supplemented with 2% irradiated fetal bovine serum, or equivalent (lot-specific details are on the Certificate of Analysis)

Infection: Cells should be 80–90% confluent (not 100% confluent)

Incubation: 6 to 8 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and detachment

Citation:

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Thottapalayam Virus, NR-465.”

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

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References:

1. Carey, D. E., et al. “Thottapalayam Virus: a Presumptive Arbovirus Isolated from a Shrew in India.” Indian J. Med. Res. 59 (1971): 1758–1760. PubMed: 5169031.

2. Yadav, P. D., M. J. Vincent, and S. T. Nichol. "Thottapalayam Virus Is Genetically Distant to the Rodent-borne Hantaviruses, Consistent with Its Isolation from the Asian House Shrew (*Suncus murinus*)." *Virology* 4 (2007): 80. PubMed: 17711577.
3. Song, J.-W., L. J. Baek, C. S. Schmaljohn, and R. Yanagihara. "Thottapalayam Virus, a Prototype Shrewborne Hantavirus." *Emerg. Infect. Dis.* 13 (2007): 980–985.
4. Okamura, M., et al. "Development of Serological Assays for Thottapalayam Virus, an Insectivore-Borne Hantavirus." *Clin. Vaccine Immunol.* 14 (2007): 173–181. PubMed: 17182762.
5. Chu, Y. K., et al. "Serological Relationships among Viruses in the *Hantavirus* Genus, Family Bunyaviridae." *Virology* 198 (1994): 196–204. PubMed: 8259655.
6. Xiao, S.-Y., et al. "Phylogenetic Analyses of Virus Isolates in the Genus *Hantavirus*, Family Bunyaviridae." *Virology* 198 (1994): 205–217. PubMed: 8259656.

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