

Genomic RNA from Human Metapneumovirus, TN/91-320

Catalog No. NR-49123

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Genomic RNA was isolated from a preparation of cell lysate and supernatant from *Macaca mulatta* kidney epithelial cells (LLC-MK2 Derivative; ATCC® CCL-7.1™) infected with human metapneumovirus (HMPV), TN/91-320 (BEI Resources NR-22234).

HMPV, TN/91-320 was isolated from a human specimen collected in Tennessee, USA, in 1991.^{1,2} HMPV was first isolated from young children with acute respiratory tract disease in the Netherlands in 2001,³ and subsequently recognized as a major cause of respiratory illness in infants and children worldwide.⁴ Retrospective serological analyses indicated that the virus had been circulating in humans for at least half a century. Two serotypes of HMPV have been defined, with two genetic lineages within each serotype.⁵ TN/91-320 is classified as a type B2 virus.²

Nucleotide sequencing of HMPV, TN/91-320 performed at BEI Resources is consistent with the complete genome sequence (GenBank: KC403972) but not with the partial sequence (GenBank: JF929900) reported by Yang et al.² The reason for the discrepancy between the two published sequences is not clear.

NR-49123 has been qualified for RT-PCR applications by amplification of an approximately 1300 nucleotide sequence.

Material Provided:

Each vial contains approximately 100 µL of genomic RNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 7). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-49123 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic RNA from Human Metapneumovirus, TN/91-320, NR-49123."

Biosafety Level: 1

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, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

- Williams, J. V., Personal Communication.
- Yang, C. F., et al. "Human Metapneumovirus G Protein is Highly Conserved within but not between Genetic

- Lineages." Arch. Virol. 158 (2013): 1245-1252. PubMed: 23385328.
3. van den Hoogen, B. G., et al. "A Newly Discovered Human Pneumovirus Isolated from Young Children with Respiratory Tract Disease." Nat. Med. 7 (2001): 719-724. PubMed: 11385510.
 4. Williams, J. V. "Human Metapneumovirus: An Important Cause of Respiratory Disease in Children and Adults." Curr. Infect. Dis. Rep. 7 (2005): 204-210. PubMed: 15847723.
 5. van den Hoogen, B. G., et al. "Antigenic and Genetic Variability of Human Metapneumoviruses." Emerg. Infect. Dis. 10 (2004): 658-666. PubMed: 15200856.

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