Product Information Sheet for NR-22227

Human Metapneumovirus, TN/83-1211

Catalog No. NR-22227

For research use only. Not for use in humans.

Contributor:
John V. Williams, M.D., Departments of Pediatrics and Pathology, Microbiology, and Immunology, Vanderbilt University Medical Center, Nashville, Tennessee, USA

Manufacturer:
BEI Resources

Product Description:
Virus Classification: *Paramyxoviridae*, *Pneumovirinae*, *Metapneumovirus*
Species: Human metapneumovirus
Strain/Isolate: TN/83-1211
Original Source: Human metapneumovirus (HMPV), TN/83-1211 was isolated from a human specimen collected in Tennessee, USA, in 1983.[1,2]
Comments: Additional information for HMPV, TN/83-1211 is available at the Virus Pathogen Resource. The complete genome of the TN/83-1211 isolate has been sequenced (GenBank: KC562244).

Human metapneumovirus was first isolated from young children with acute respiratory tract disease in the Netherlands in 2001, and subsequently recognized as a major cause of respiratory illness in infants and children worldwide.[3,4] 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/83-1211 was originally designated a type B1 virus, but is now classified as a type B2 virus based on the complete genome sequence.[2,5]

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from *Macaca mulatta* kidney epithelial cells (LLC-MK2 Derivative; ATCC® CCL-7.1™) infected with HMPV, TN/83-1211.

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

Packaging/Storage:
NR-22227 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: LLC-MK2 Derivative cells (ATCC® CCL-7.1™)
Growth Medium: Opti-MEM® Minimal Essential Medium supplemented with 2 mM L-glutamine, 100 µg per mL $CaCl_2$ and 5 µg per mL trypsin
Infection: Cells should be 70% to 90% confluent
Incubation: 3 to 7 days at 37°C and 5% CO_2
Cytopathic Effect: Rounding, sloughing and syncytia formation

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Human Metapneumovirus, TN/83-1211, NR-22227."

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.

Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

References:

1. Williams, J. V., Personal Communication.
2. 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.

Support Provided by NIAID

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898