Product Information Sheet for NR-22227

Human Metapneumovirus, TN/83-1211

Catalog No. NR-22227

For research use only. Not for use in humans.

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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: The complete genome of HMPV, isolate TN/83-1211 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 1.0 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: *Macaca mulatta* kidney epithelial cells (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: Cell 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 (BMBL). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:
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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.

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