

## Human Parainfluenza Virus 3, NIH 47885

### Catalog No. NR-3233

**For research use only. Not for use in humans.**

#### Contributor:

National Institute of Allergy and Infectious Diseases (NIAID),  
National Institutes of Health (NIH), USA

#### Manufacturer:

BEI Resources

#### Product Description:

Virus Classification: *Paramyxoviridae, Respirovirus*

Species: Human parainfluenza virus 3 (also referred to as human respirovirus 3)

Strain/Isolate: NIH 47885 (equivalent to Wash/47885/57)

Original Source: NR-3233 is derived from NIAID catalog number V-323-002-020 at BEI Resources. Human parainfluenza virus 3 (HPIV3), NIH 47885 is the laboratory-adapted strain of HPIV3, Wash/47885/57.<sup>1</sup>

Comments: The complete genome of HPIV3, Wash/47885/57 has been constructed as a consensus of available individual and combined gene sequences.<sup>2,3</sup>

Human parainfluenza virus 3 (HPIV3) is an enveloped, negative-sense, single-stranded RNA virus of approximately 15000 base pairs, belonging to the family *Paramyxoviridae*.<sup>4,5,6</sup> HPIV3 causes numerous potentially life-threatening respiratory illnesses in infancy and childhood, including pneumonia, croup, bronchitis and bronchiolitis.<sup>7</sup> HPIV3 is lung-tropic and binds and replicates in the ciliated epithelial cells of the upper and lower respiratory tract.<sup>6,7</sup> Seasonal outbreaks of all HPIV types (1 to 4) are responsible for up to 75% of croup cases in children worldwide.<sup>7,8</sup>

#### Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney cells infected with HPIV3, NIH 47885.

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

#### Packaging/Storage:

NR-3233 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: *Cercopithecus aethiops* kidney cells (Vero E6; ATCC® CRL-1586™)

Growth Medium: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential

amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 70% to 90% confluent

Incubation: 4 to 6 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Cell rounding and sloughing

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Human Parainfluenza Virus 3, NIH 47885, NR-3233."

#### 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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

#### Disclaimers:

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**References:**

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3. Bailly, J. E., et al. "Sequence Determination and Molecular Analysis of Two Strains of Bovine Parainfluenza Virus Type 3 that are Attenuated for Primates." *Virus Genes* 20 (2000): 173-182. PubMed: 10872880.
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