

**Mammalian Rubulavirus 5, 21005-2WR  
(Tissue Culture Adapted) (formerly  
Parainfluenza Virus 5)**

**Catalog No. NR-42515**

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**For research use only. Not for human use.**

**Contributor:**

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

**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Paramyxoviridae, Rubulavirus*

Species: Mammalian Rubulavirus 5 (formerly parainfluenza virus 5, simian virus 5)

Strain/Isolate: 21005-2WR

Original Source: Mammalian rubulavirus 5 was first isolated from monkey kidney cell cultures by Dr. Robert Hull in 1954.<sup>1</sup>

Comments: Mammalian rubulavirus 5 was originally designated simian virus 5.<sup>1</sup> The International Committee on Taxonomy of Viruses (ICTV) approved a name change of simian virus 5 to parainfluenza virus 5 in 2009, followed by another name change to mammalian rubulavirus 5 in 2016.<sup>2</sup> NR-42515 was derived from NIAID catalog number V-322-011-000. It was adapted to growth in tissue culture by three passages in rhesus monkey kidney epithelial (LLC-MK2) cells (ATCC® CCL-7.1™).

Although first described as a contaminant of monkey cell cultures, the true origin and natural host of mammalian rubulavirus 5 is not clear. It is associated with kennel cough in dogs, and is thus often referred to as canine parainfluenza virus in the veterinary literature.<sup>3,4</sup> Mammalian rubulavirus 5 is not known to cause disease in humans or other animals.

**Material Provided:**

Each vial contains approximately 1 mL of cell lysate and supernatant from rhesus monkey kidney cells infected with tissue culture adapted mammalian rubulavirus 5, 21005-2WR.

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

**Packaging/Storage:**

NR-42515 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 cells (LLC-MK2, ATCC® CCL-7.1™)

Growth Medium: Dulbecco's Modified Eagle's Minimum Essential Medium, or equivalent, supplemented with 4 µg/mL trypsin and 10% fetal bovine serum

Infection: Cells should be 80% confluent

Incubation: 2 to 5 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: Mammalian Rubulavirus 5, 21005-2WR (Tissue Culture Adapted), NR-42515."

**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, 2009; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Hull, R. N., J. R. Minner and J. W. Smith. "New Viral Agents Recovered from Tissue Cultures of Monkey Kidney Cells. I. Origin and Properties of Cytopathic Agents S.V.1, S.V.2, S.V.3, S.V.4, S.V.5, S.V.6, S.V.11, S.V.12 and S.V.15." Am. J. Hyg. 63 (1956): 204-215. PubMed: 13302209.
2. [ICTV Official Taxonomy](#)
3. McCandlish, I. A., et al. "A Study of Dogs with Kennel Cough." Vet. Rec. 102 (1978): 293-301. PubMed: 207006.
4. Chen, Z., et al. "Evaluating a Parainfluenza Virus 5-Based Vaccine in a Host with Pre-existing Immunity against Parainfluenza Virus 5." PLoS One 7 (2012): e50144. PubMed: 23185558.

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