

# Human Respiratory Syncytial Virus, *A/Homo sapiens*/ARG/177/2006

Catalog No. NR-48671

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

## Contributor:

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## Manufacturer:

BEI Resources

## Product Description:

Virus Classification: *Pneumoviridae*, *Orthopneumovirus*

Species: Human respiratory syncytial virus type A

Strain/Isolate: *A/Homo sapiens*/ARG/177/2006

Original Source: Human respiratory syncytial virus (RSV), *A/Homo sapiens*/ARG/177/2006 was isolated from the nasal cavity of a human in Buenos Aires, Argentina, on June 6, 2006.<sup>1,2</sup> The strain was obtained by Dr. Henrickson from Cristina Videla of the Clinical Virology Laboratory, Centro de Educación Médica e Investigaciones Clínicas, University Hospital, Buenos Aires, Argentina.

Comments: Human RSV, *A/Homo sapiens*/ARG/177/2006 is a clade GA5 virus.<sup>3</sup> The complete genome of RSV, *A/Homo sapiens*/ARG/177/2006 strain has been sequenced (GenBank: [KF826838](#)).<sup>2,3</sup>

RSV is an enveloped, negative-sense, non-segmented, single-stranded RNA virus first isolated in 1955 from chimpanzees suffering from respiratory illness.<sup>4</sup> RSV is a major pathogen in children causing severe lower respiratory tract disease in infants and young children. RSV can also infect adults causing severe illness in the elderly.<sup>3,4</sup> The RSV genome contains 10 genes encoding for 11 proteins, including G and F surface glycoproteins with important roles in entry.<sup>4</sup> RSV is divided into two distinct subtypes, A and B, with each divided into multiple genotypes. Most genetic studies in RSV are focused on G glycoprotein which is the most variable structural protein among RSV isolates.<sup>4,5</sup>

## Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from HEP-2 cells infected with human respiratory syncytial virus, *A/Homo sapiens*/ARG/177/2006.

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

## Packaging/Storage:

NR-48671 was packaged aseptically in 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: Human Epithelial carcinoma cells (HEp-2; ATCC® CCL-23™)

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 90% to 100% confluent

Incubation: 3 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: Human Respiratory Syncytial Virus, *A/Homo sapiens*/ARG/177/2006, NR-48671."

## 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). Current Edition. Washington, DC: U.S. Government Printing Office.

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#### References:

1. Henrickson, K. J., Personal Communication.
2. Lorenzi, H., et al. J. Craig Venter Institute, Rockville, Maryland, USA. Direct Submission.
3. Bose, M. E., et al. "Sequencing and Analysis of Globally Obtained Human Respiratory Syncytial Virus A and B Genomes." *PLoS One* 10 (2015): e0120098. PubMed: 25793751.
4. Battles, M. B. and J. S. McLellan. "Respiratory Syncytial Virus Entry and How to Block It." *Nat. Rev. Microbiol.* 17 (2019): 233-245. PubMed: 30723301.
5. Mufson, M. A., et al. "Two Distinct Subtypes of Human Respiratory Syncytial Virus." *J. Gen. Virol.* 66 (1985): 2111-2124. PubMed: 2413163.

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