

Recombinant Respiratory Syncytial Virus, A2 Expressing Red Fluorescent Protein (RFP) (rgRSV-BNI)

Catalog No. NR-52019

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Pneumoviridae*, *Orthopneumovirus*, *Human orthopneumovirus*

Species: Respiratory Syncytial Virus

Strain/Isolate: A2

Original Source: Recombinant respiratory syncytial virus, A2 expressing red fluorescent protein (RFP) (rgRSV-BNI) was developed using a historical strain of RSV, A2, originally isolated in the 1950s in the USA.¹

Comments: The complete genome of RSV, A2 has been sequenced (GenBank: [KT992094](https://www.ncbi.nlm.nih.gov/nuccore/KT992094)).

Recombinant RSV, A2 expressing RFP (rgRSV-BNI) was developed by recombination using the P. Collins system. It is useful for drug development, such as screening of antiviral drugs, studying RSV infection *in vitro* and *in vivo* animal model, developing assays for identification of neutralizing antibodies and viral assays for vaccine development.¹

Material Provided:

Each vial contains approximately 1.0 mL of cell lysate and supernatant from *Homo sapiens* epithelial carcinoma cells infected with RSV, A2 expressing RFP (rgRSV-BNI).

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

Packaging/Storage:

NR-52019 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: *Homo sapiens* epithelial carcinoma cells (HEp-2; ATCC® CCL-23™)

Growth Medium: Dulbecco's Modified Eagle's Medium containing Earle's Balanced Salt Solution (ATCC® 30-2002™) with 25 mM HEPES (Gibco; 15630-080, supplemented with 10% fetal bovine serum (ATCC®

30-2020™), and 1X Glutamax (Gibco 35050-061) or equivalent

Infection: Cells should be 70% to 90% confluent

Incubation: 3 to 5 days at 37°C and 5% CO₂

Cytopathic Effect: Syncytia formation and cell disruption

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Recombinant Respiratory Syncytial Virus, A2 Expressing Red Fluorescent Protein (RFP) (rgRSV-BNI), NR-52019."

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.

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References:

1. Peeples, M. E., Personal Communication.
2. Hallak, L. K., et al. "Iduronic Acid-Containing Glycosaminoglycans on Target Cells are Required for Efficient Respiratory Syncytial Virus Infection." *Virology* 271 (2000): 264-275. PubMed: 10860881.

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