

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

Note: The RFP designation on the vial label is incorrect. The correct RFP designation is rrRSV-BN1.

Original Source: Recombinant respiratory syncytial virus, A2 expressing red fluorescent protein (RFP; rrRSV-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](#)).

Recombinant RSV, A2 expressing RFP (rrRSV-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 (rrRSV-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) (rrRSV-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). Current Edition. Washington, DC: U.S. Government Printing Office.

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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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