

**Alphacoronavirus 1, Purdue P115
(attenuated)
(formerly Porcine Transmissible
Gastroenteritis Virus)**

Catalog No. NR-43285

Derived from BEI Resources NR-446

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Coronaviridae*, *Coronavirinae*, *Alphacoronavirus*

Species: Alphacoronavirus 1, (formerly porcine transmissible gastroenteritis virus (TGEV))¹

Strain: Purdue P115 (attenuated)

Original Source: Porcine TGEV, Purdue was isolated from the small intestinal contents of a young pig with diarrhea, vomiting, and dehydration.

Comments: The virus was propagated in primary porcine kidney (PPK)² cells for 115 passages and then in swine testicular (ST) cells for more than 6 passages. The complete genome of the attenuated Purdue P115 strain has been sequenced (GenBank: [DQ811788](https://www.ncbi.nlm.nih.gov/nuccore/DQ811788)).³

NR-43285 was derived from BEI Resources NR-446 by removal of contaminating mycoplasma. This process required six additional passages in ST cells (ATCC® CRL-1746™). NR-446 is no longer available.

Material Provided:

Each vial contains approximately 1 mL of clarified cell lysate and supernatant from *Sus scrofa* testicular fibroblasts infected with alphacoronavirus 1, Purdue P115 (attenuated).

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

Packaging/Storage:

NR-43285 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: ST cells (ATCC® CRL-1746™)

Growth Medium: Eagle's Minimum Essential Medium with Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 mg/L sodium bicarbonate

Infection: Cells should be 70 to 95% confluent

Incubation: 1 to 5 days at 37°C and 5% CO₂

Cytopathic Effect: Rounding and detachment

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Alphacoronavirus 1, Purdue P115 (attenuated), NR-43285."

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.

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References:

1. [ICTV Taxonomy History for Alphacoronavirus 1](#)
2. Bohl, E. H., et al. "Antibody Responses in Serum, Colostrum, and Milk of Swine after Infection or Vaccination with Transmissible Gastroenteritis Virus." *Infect. Immun.* 6 (1972): 289-301. PubMed: 4629259.
3. Zhang, X., et al. "Complete Genomic Sequences, a Key Residue in the Spike Protein and Deletions in Nonstructural Protein 3b of US Strains of the Virulent and Attenuated Coronaviruses, Transmissible Gastroenteritis Virus and Porcine Respiratory Coronavirus." *Virology* 358 (2007): 424-435. PubMed: 17023013.

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