Porcine Respiratory Coronavirus, ISU-1, Chemically Inactivated

Catalog No. NR-454

For research use only. Not for human use.

NR-454 did not pass the BEI Resources quality control Sterility Test. Please see the Certificate of Analysis to determine whether or not this product is acceptable for your intended use.

Contributor:

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Product Description:

Virus Classification: *Coronaviridae, Coronavirus*, Group I
Species: Porcine respiratory coronavirus (PRCV), chemically inactivated with binary ethyleneimine
Strain: ISU-1
Original Source: PRCV, ISU-1 was isolated from a nasal swab of a pig with a mild or subclinical respiratory infection.

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from swine testicular (ST) cells infected with the ISU-1 strain of PRCV, which was treated with binary ethyleneimine to inactivate the virus.

Packaging/Storage:

NR-454 was packaged in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Growth Conditions Prior to Inactivation:

Host: ST cells
Growth Medium: Minimum Essential Medium containing Earle's salts, L-glutamine and sodium bicarbonate (supplemented with 1% nonessential amino acids and 1% antibiotics)
Incubation: 18 to 24 hours at 37°C
Cytopathic Effect: Fused, enlarged rounded cells, diffuse cytoplasmic vacuolation
Note: PRCV is sensitive to ultraviolet light, high temperature, and strong mechanical agitation.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Porcine Respiratory Coronavirus, ISU-1, Chemically Inactivated, NR-454."

Biosafety Level: 1

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, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

Disclaimers:

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References:

1. Hill, H. T., et al. "Porcine Respiratory Coronavirus Isolated From Two U. S. Swine Herds." Proc. Am. Assoc. Swine Practitioners 21 (1990): 333.
2. Bae, I., et al. "Differentiation of Transmissible Gastroenteritis Virus from Porcine Respiratory Coronavirus and Other Antigenically Related Coronaviruses by Using cDNA Probes Specific for the 5' Region of the S Glycoprotein Gene." J. Clin. Microbiol. 29 (1991): 215-218. PubMed: 1847152.

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3. Benfield, D. A., et al. "Detection of Transmissible Gastroenteritis Virus using cDNA Probes." Arch. Virol. 116 (1991): 91-106. PubMed: 1848070.

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