Product Information Sheet for NR-43000

Recombinant Murine Coronavirus, icA59

Catalog No. NR-43000

For research use only. Not for human use.

Contributor:
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Manufacturer:
BEI Resources

Product Description:

Virus Classification: Coronaviridae, Coronavirinae, Betacoronavirus
Species: Murine coronavirus [formerly both murine hepatitis virus (MHV) and mouse hepatitis virus]¹
Strain/Isolate: icA59
Original Source: NR-43000 is a recombinant murine coronavirus that was produced using a vaccinia virus-based reverse genetics system, and derived from cloned, full-length MHV-A59 cDNA.²³
Comments: The complete genome of the recombinant strain has been sequenced (GenBank: KF268337).

Murine coronaviruses are enveloped, positive-stranded RNA viruses capable of causing a variety of diseases in mice.⁴ Based on the organ tropism displayed by the strains, they can be divided into several groups like enterotropic, hepatotropic, pneumotropic and neurotropic.⁵ MHV, A59 strain is a relatively neuroattenuated and moderately hepatovirulent strain that was isolated in 1961 from a colony of BALB/c mice with leukemia.² It is a widely studied strain which reaches high titers in cell culture and has a large collection of temperature-sensitive mutants defective in viral RNA synthesis.²

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from Mus musculus liver epithelial cells infected with recombinant murine coronavirus, icA59.

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

Packaging/Storage:
NR-43000 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: NCTC clone 1469 cells (ATCC® CCL-9.1™)
Growth Medium: Dulbecco’s Modified Eagle’s Medium modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1.5 g/L sodium bicarbonate supplemented with 2% horse serum, or equivalent

Infection: Cells should be 80% to 90% confluent
Incubation: 2 to 4 days at 37°C and 5% CO₂
Cytopathic Effect: Cell enlargement and detachment

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH; Recombinant Murine Coronavirus, icA59, NR-43000.”

Biosafety Level: 2

Disclaimers:
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References:
1. ICTV Taxonomy History for Murine coronavirus

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