

Recombinant Murine Coronavirus, icA59

Catalog No. NR-43000

Product Description:

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. NR-43000 lot 70033869 was produced by infecting *Mus musculus* liver epithelial cells (NCTC clone 1469 cells; ATCC® CCL-9.1™) and incubating in Dulbecco's Modified Eagle Medium (ATCC® 30-2002™) supplemented with 2% heat-inactivated horse serum (Gibco® 26050-070) for 2 days at 37°C with 5% CO₂.

Passage History:

17CI-1(2 or 3)/NCTC(2) (Prior to deposit at BEI Resources/BEI Resources); 17CI-1 = Mouse fibroblast 17CI-1 cells; NCTC = NCTC clone 1469 cells

Lot: 70033869

Manufacturing Date: 27MAR2020

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in NCTC Clone 1469 Cells	Cell rounding and detachment	Cell rounding and detachment
Sequencing of Species-Specific Region (~ 660 nucleotides)	≥ 98% identity with MHV-A59, icA59 (GenBank: KF268337.1)	100% identity with MHV-A59, icA59 (GenBank: KF268337.1)
Titer by TCID₅₀ Assay in NCTC Clone 1469 Cells by Cytopathic Effect¹ (4 days at 37°C with 5% CO ₂)	Report results	8.9 × 10 ⁷ TCID ₅₀ per mL
Amplification of Murine Coronavirus Sequence by RT-PCR	~ 680 base pair amplicon	~ 680 base pair amplicon
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ² Trypticase Soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO ₂	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
Mycoplasma Contamination Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

¹The Tissue Culture Infectious Dose 50% (TCID₅₀) endpoint is the 50% infectious endpoint in cell culture. The TCID₅₀ is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD₅₀) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID₅₀ provides a measure of the titer (or infectivity) of a virus preparation.

²Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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