

Enterovirus Species A Type 71, USA/2018-23092

Catalog No. NR-52000

Product Description:

Enterovirus species A type 71 (EV-A71), USA/2018-23092 was isolated in 2018 from the stool sample of a human subject suffering from acute flaccid myelitis in the USA. NR-52000 lot 70032015 was produced by infecting rhabdomyosarcoma cells (RD; ATCC® CCL-136™) and incubating in Eagle’s Minimum Essential Medium (ATCC® 30-2003) supplemented with 2% fetal bovine serum (ATCC® 30-2020) for 4 days at 37°C with 5% CO₂.

Passage History:

RD(3)/RD(2) (Prior to deposit at BEI Resources/BEI Resources); RD = Rhabdomyosarcoma cells

Lot: 70032015

Manufacturing Date: 20JAN2020

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in RD cells	Cell rounding and detachment	Cell rounding and detachment
Whole Genome Sequencing (~ 7400 nucleotides)	≥ 98% identity with EV-A71, USA/2018-23092 (GenBank: MK652139.1)	100% identity with EV-A71, USA/2018-23092 (GenBank: MK652139.1)
Titer by TCID ₅₀ Assay in RD cells by Indirect Fluorescent Antibody (IFA) Readout ^{1,2} 7 days at 37°C with 5% CO ₂	Report results	1.6 × 10 ⁷ TCID ₅₀ per mL
Amplification of EV-A71 Sequence by RT-PCR	~ 890 base pair amplicon	~ 890 base pair amplicon
Sterility (21-day incubation) Harpo’s HTYE broth, 37°C and 26°C, aerobic ³ 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.

²Using Pan-Enterovirus Reagent (Light Diagnostics™ 3360)

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

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Program Manager or designee, ATCC Federal Solutions

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