

Dengue Virus Type 3, DENV-3/US/BID-V1043/2006

Catalog No. NR-43282

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Product Description:

Dengue virus type 3, DENV-3/US/BID-V1043/2006 was isolated from a human in Puerto Rico in 2006. NR-43282 lot 70058084 was produced by infecting *Aedes albopictus* mosquito larval epithelial cells (clone C6/36; ATCC® CRL-1660™) with BEI Resources lot 62623614 and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 2% fetal bovine serum (ATCC® 30-2020™) for 7 days at 28°C with 5% CO₂.

Passage History:

C6(2)/C6(2) (Prior to deposit at BEI Resources/BEI Resources); C6 = C6/36 cells

Lot: 70058084

Manufacturing Date: 09FEB2023

TEST	SPECIFICATIONS	RESULTS
Identification by Indirect Fluorescent Antibody (IFA) Assay ¹	Fluorescence observed	Fluorescence observed
Sequencing of Species-Specific Region (~ 910 nucleotides)	≥ 98% identity with DENV-3/US/BID-V1043/2006 (GenBank: EU482555.1)	99.9% identity with DENV-3/US/BID-V1043/2006 (GenBank: EU482555.1)
Titer by TCID ₅₀ Assay in C6/36 Cells by IFA ^{1,2} (7 days at 28°C with 5% CO ₂)	Report results	1.6 × 10 ⁷ TCID ₅₀ per mL
Functional Activity by RT-PCR Assay	~ 1000 base pair amplicon	~ 1000 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, aerobic	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

¹Using Anti-Dengue Virus Complex Antibody (Millipore MAB8705)

²The 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.

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

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