

Dengue Virus Type 3, SL 5-29-04

Catalog No. NR-49755

Product Description: Dengue virus type 3 (DEN-3), SL 5-29-04 was isolated from a human on May 29, 2004 in Sri Lanka. Each vial contains cell lysate and supernatant from *Aedes albopictus* mosquito larval clone C6/36 cells¹ infected with DEN-3, SL 5-29-04

Passage History: XC1/C3 (Prior to deposit at BEI Resources/BEI Resources); X = Unknown; C = C6/36 cells¹

Lot²: 70010365

Manufacturing Date: 08MAY2018

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity Using C6/36 Cells ¹	Report results	Cell rounding and detachment
Identification by Indirect Fluorescent Antibody (IFA) Assay ³	Fluorescence observed	Fluorescence observed
Sequencing of Species-Specific Region (~ 910 nucleotides)	Consistent with DEN-3	Consistent with DEN-3 ⁴
Titer by TCID ₅₀ Assay ^{5,6} in C6/36 Cells ¹ with IFA Readout ³	Report results	2.8 × 10 ⁶ TCID ₅₀ per mL
Amplification of Dengue Virus Sequence by RT-PCR	~ 1000 base pairs amplicon	~ 1000 base pairs amplicon
Sterility (21-day incubation) Harpo's HTYE broth ⁷ , 37°C and 26°C, aerobic 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

¹*Aedes albopictus* clone C6/36 cells (ATCC® CRL-1660™)

²Grown in Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate (ATCC® 30-2003) supplemented with 2% fetal bovine serum (ATCC® 30-2020) for 7 days at 28°C with 5% CO₂.

³Using Anti-Dengue Virus Type 3 Antibody (Millipore MAB8703)

⁴Sequence information for DEN-3, SL 5-29-04 is not available in the NCBI database. Nucleotide sequence obtained for NR-49755 lot 70010365 is ~ 100% identical to the contemporaneous Sri Lankan dengue 3 isolate DENV3_3054 (GenBank: KX518578; Andrade, C. C., et al. "Rise and Fall of Vector Infectivity During Sequential Strain Displacements by Mosquito-Borne Dengue Virus." *J. Evol. Biol.* 29 (2016): 2205-2218. PubMed: 27500505) and consistent with numerous other DEN-3 strains.

⁵The 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.

⁶7 days at 28°C and 5% CO₂

⁷Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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28 SEP 2018

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