

**Dengue Virus Type 1, UIS 1162**

**Catalog No. NR-49707**

**Product Description:**

Dengue virus type 1 (DEN-1), UIS 1162 was isolated from a serum specimen collected from a human in Bucaramanga, Santander, Colombia, on April 25, 2007. NR-49707 lot 70058082 was produced by infecting *Aedes albopictus* mosquito larval epithelial cells (clone C6/36; ATCC® CRL-1660™) with DEN-1, UIS 1162 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% CO<sub>2</sub>.

**Passage History:**

C(1)/C(4) (Prior to deposit at BEI Resources/BEI Resources); C = C6/36 cells

**Lot: 70058082**

**Manufacturing Date: 15FEB2023**

TEST	SPECIFICATIONS	RESULTS
<b>Identification by Infectivity in C6/36 Cells</b>	Cell rounding and detachment; syncytia formation	Cell rounding and detachment; syncytia formation
<b>Sequencing of Species-Specific Region</b> (~ 900 nucleotides)	≥ 98% identity with DENV-1	99.9% identity with DENV-1/CO/BID-V3390/2007 (GenBank: GQ868569) <sup>1</sup>
<b>Titer by TCID<sub>50</sub> Assay in C6/36 Cells by Indirect Fluorescent Antibody<sup>2,3</sup></b> (9 days at 28°C with 5% CO <sub>2</sub> )	Report results	8.9 × 10 <sup>7</sup> TCID <sub>50</sub> /mL
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth, 37°C and 26°C, aerobic <sup>4</sup> 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
<b>Mycoplasma Contamination</b> 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

<sup>1</sup>Sequence information for DEN-1, UIS 1162 is not available in the NCBI database; nucleotide sequence obtained for NR-49707, Lot No. 70058082 is ~ 99% identical to DENV-1/CO/BID-V3390/2007 (GenBank: GQ868569), a DEN-1 strain that was also isolated in Santander, Colombia in 2007.

<sup>2</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> 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% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a virus preparation.

<sup>3</sup>Using anti-Dengue complex (Millipore MAB8705) and anti-mouse FITC (Light Diagnostics 5008)

<sup>4</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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