

Dengue Virus Type 3 (DEN-3), Philippines/H87/1956

Catalog No. NR-80

Derived from ATCC® VR-1256 (NIAID V-576-001-022)

Product Description:

Dengue virus type 3 (DEN-3), Philippines/H87/1956 was derived from ATCC® VR-1256 (V-576-001-022). ATCC® VR-1256 was derived from ATCC® VR-216, which was isolated from human serum in the Philippines in 1956. NR-80 lot 70061552 was produced by infecting *Chlorocebus* (formerly *Cercopithecus*) *aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 2% fetal bovine serum (ATCC® 30-2020™) for 7 days at 37°C with 5% CO₂.

Passage History:

SM(21)/V(5) (Prior to deposit at BEI Resources/BEI Resources); SM = Suckling mice; V = Vero cells

Lot: 70061552

Manufacturing Date: 14JUL2023

TEST	SPECIFICATIONS	RESULTS
Identification by Fluorescent Antibody Assay in Vero Cells	Fluorescence observed	Fluorescence observed
Sequencing of Species-Specific Region (~ 890 nucleotides)	≥ 98% identity with DEN-3, Philippines/H87/1956 (GenBank: M93130)	99.6% identity with DEN-3, Philippines/H87/1956 (GenBank: M93130)
Titer by TCID₅₀ Assay in Vero Cells by Cytopathic Effect and Fluorescent Antibody Test^{1,2} (12 days at 37°C with 5% CO ₂)	Report results	1.6 × 10 ⁷ TCID ₅₀ /mL
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

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 mouse anti-dengue 3 (Millipore 8703)

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

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02 NOV 2023

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