

Dengue Virus Panel

Catalog No. NR-32848

Product Description: The panel consists of four dengue viruses, representing each of the four types. The viruses are in a background of cell lysate and supernatant from infected cells.

Lot: 70001059

NR-80, Lot 64286309 (Dengue Virus Type 3 (DEN-3), Philippines/H87/1956; Manufactured 27MAY2016)

TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (839 nucleotides)	Consistent with DEN-3, Philippines/H87/1956	99% identity with DEN-3, Philippines/H87/1956 (GenBank: AB609590)
Titer by TCID₅₀ Assay^{1,2} in Vero Cells³ with IFA Readout⁴	Report results	8.9 × 10 ⁴ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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

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.

²9 days at 37°C and 5% CO₂

³Vero cells: ATCC® CCL-81™

⁴Using Anti-Dengue Virus Complex Antibody (Millipore MAB8705)

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

NR-82, Lot 64218899 (Dengue Virus Type 1 (DEN-1), Hawaii; Manufactured 02MAY2016)

TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (860 nucleotides)	Consistent with DEN-1, Hawaii	99% identity with DEN-1, Hawaii (GenBank: KM204119)
Titer by TCID₅₀ Assay^{1,2} in Vero Cells³ with IFA Readout⁴	Report results	8.9 × 10 ⁶ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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

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.

²14 days at 33°C and 5% CO₂

³Vero cells: ATCC® CCL-81™

⁴Using Anti-Dengue Virus Type I Antibody (Millipore MAB8701)

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

NR-84, Lot 64347312 (Dengue Virus Type 2 (DEN-2), New Guinea C (NGC); Manufactured 15JUL2016)

TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (861 nucleotides)	Consistent with DEN-2, NGC	99% identity with DEN-2, NGC (GenBank: KM204118)
Titer by TCID₅₀ Assay^{1,2} in LLC-MK2 Derivative Cells³ with IFA Readout⁴	Report results	8.9 × 10 ⁵ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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

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.

²7 days at 37°C and 5% CO₂

³LLC-MK2 derivative cells (ATCC® CCL-7.1™)

⁴Using Anti-Dengue Virus Complex Antibody (Millipore MAB8705)

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

NR-86, Lot 64347313 (Dengue Virus Type 4 (DEN-4), H241 (Tissue Culture Adapted); Manufactured 05JUL2016)

TEST	SPECIFICATIONS	RESULTS
Sequencing of Species-Specific Region (491 nucleotides)	Consistent with DEN-4, H241	99% identity with DEN-4, H241 (GenBank: KR011349)
Titer by TCID₅₀ Assay^{1,2} in LLC-MK2 Derivative Cells³ with IFA Readout⁴	Report results	2.3 × 10 ⁵ TCID ₅₀ per mL
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 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

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.

²7 days at 37°C and 5% CO₂

³LLC-MK2 derivative cells (ATCC® CCL-7.1™)

⁴Using Anti-Dengue Virus Complex Antibody (Millipore MAB8705)

⁵Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

Date: 05 JAN 2017

Signature: 

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