

## **Certificate of Analysis for NR-3792**

## Dengue Virus Type 2, BC27/96

Catalog No. NR-3792

**Product Description:** Cell lysate and supernatant from *Aedes albopictus* clone C6/36 cells<sup>1</sup> infected with dengue virus type 2 (DEN-2), BC27/96.

Lot<sup>2,3</sup>: 58613978 Manufacturing Date: 26FEB2010

| TEST  | SPECIFICATIONS  | RESULTS   |
|---|---|---|
| Identification by Infectivity in C6/36 Cells <sup>1</sup>   | Report results  | Cell rounding and syncytia  |
| Identification by Indirect Fluorescent Antibody (IFA) Assay <sup>4</sup>  | Fluorescence observed   | Fluorescence observed   |
| Sequencing of DEN-2 Specific Region (856 nucleotides)   | Consistent with DEN-2   | Consistent with DEN-2   |
| Titer by TCID <sub>50</sub> Assay in C6/36 Cells with IFA Readout <sup>1,5,6</sup>  | Report results  | 1.6 x 10 <sup>9</sup> TCID <sub>50</sub> /mL                                    |
| Functional Activity by RT-PCR Assay Using DEN-2 Specific Primers  | ~ 1200 bp amplicon  | ~ 1200 bp amplicon  |
| Sterility (21-day incubation)  Harpo's HTYE broth <sup>7</sup> , 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 <sub>2</sub> | No growth | No growth |
| Mycoplasma Contamination  Agar and broth culture (14-day incubation at 37°C)  DNA Detection by PCR of Test Article nucleic acid   | None detected<br>None detected  | None detected<br>None detected  |

<sup>&</sup>lt;sup>1</sup>Aedes albopictus clone C6/36 cells (ATCC<sup>®</sup> CRL-1660™)

**Date:** 23 JUN 2010 **Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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<sup>&</sup>lt;sup>2</sup>The deposited virus preparation was determined by PCR to be contaminated with *Mycoplasma*. Genomic RNA was extracted from the deposited material and transfected into *Aedes albopictus* clone C6/36 cells. The resulting virus preparation was shown to be free of mycoplasma contamination and was used as the source virus for this lot.

<sup>&</sup>lt;sup>3</sup>Grown in Minimum Essential Medium containing Earle's salts and non-essential amino acids (Invitrogen™ 10370-021) supplemented with 2% fetal bovine serum (ATCC<sup>®</sup> 30-2020), 2 mM L-glutamine (Invitrogen™ 25030-081), and 1 mM sodium pyruvate (Invitrogen™ 11360-070) for 7 days at 28°C with 5% CO<sub>2</sub>

<sup>&</sup>lt;sup>4</sup>Using monoclonal antibody specific to dengue complex (Chemicon MAB8705)

<sup>&</sup>lt;sup>5</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>&</sup>lt;sup>6</sup>12 days at 28°C with 5% CO<sub>2</sub>

<sup>&</sup>lt;sup>7</sup>Atlas, Ronald M. <u>Handbook of Microbiological Media</u>. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.