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SUPPORTING INFECTIOUS DISEASE RESEARCH

# Certificate of Analysis for NR-46497

## *Naegleria fowleri*, Strain CDC:V557

## Catalog No. NR-46497

This reagent is the tangible property of the U.S. Government.

**Product Description:** *Naegleria fowleri (N. fowleri)*, strain CDC:V557 is a clinical isolate collected in 2005 from a 9-year-old male patient.

**Lot[1]: 70002523** **Manufacturing Date: 10FEB2017**

| TEST | SPECIFICATIONS | RESULTS |
|---|---|---|
| **Cellular Morphology[2]** | Report results | Adherent, refractile borders, vacuoles present |
| **Genotyping[3]**<br>Sequencing of Internal Transcribed Spacer 1 (ITS 1) and 5.8S ribosomal RNA gene (520 base pairs) | Consistent with *N. fowleri* | Consistent with *N. fowleri* (genotype I)[4] |
| **Functional Activity by PCR Amplification[3,5]**<br>ITS 1, 5.8S ribosomal RNA gene | ~ 600 base pair amplicon | ~ 600 base pair amplicon |
| **Viable Cell Count by Hemacytometry[3]** | > $10^6$ cells/mL | 5 x $10^6$ cells/mL |
| **Viability[2,6]** | Growth | Growth |
| **Sterility (21-day incubation)[2]**<br>Harpo's HTYE broth[7], 37°C and 26°C, aerobic<br>Trypticase soy broth, 37°C and 26°C, aerobic<br>Sabouraud broth, 37°C and 26°C, aerobic<br>DMEM with 10% FBS, 37°C, aerobic<br>Sheep blood agar, 37°C, aerobic<br>Sheep blood agar, 37°C, anaerobic<br>Thioglycollate broth, 37°C, anaerobic | <br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth | <br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth |

[1]NR-46497 was produced by cultivation of the deposited material in modified PYNFH medium (ATCC® medium 1034) supplemented with 10% heat-inactivated fetal bovine serum for 3 days at 35°C in an aerobic atmosphere until peak density was reached.
[2]Testing completed on vialed, post-freeze material.
[3]Testing completed on bulk material prior to vialing and freezing.
[4]For genotyping details refer to Zhou, L., et al. "Genetic Variations in the Internal Transcribed Spacer and Mitochondrial Small Subunit rRNA Gene of *Naegleria* Spp." J. Eukaryot. Microbiol. 50 (2003): 522-526. PubMed: 14736150.
[5]PCR amplification was performed using the NF-ITS-F1 and NT-ITS-F2 primer set as described in Zhou, L., et al. "Genetic Variations in the Internal Transcribed Spacer and Mitochondrial Small Subunit rRNA Gene of *Naegleria* Spp." J. Eukaryot. Microbiol. 50 (2003): 522-526. PubMed: 14736150.
[6]Viable cells were observed after 1 day under cultivation conditions.
[7]Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

**Date:** 27 JUN 2017 **Signature:**

BEI Resources Authentication

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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