b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

# Certificate of Analysis for NR-46489

## *Naegleria fowleri*, Strain CDC:V020

## Catalog No. NR-46489

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

**Product Description:** *Naegleria fowleri (N. fowleri)*, strain CDC:V020 is a clinical isolate collected in 1984 from the cerebral spinal fluid of a 12-year-old male in Texas, USA.

**Lot[1,2]: 70002373** **Manufacturing Date: 23MAR2017**

| TEST | SPECIFICATIONS | RESULTS |
|---|---|---|
| **Cellular Morphology[2]** | Report results | Adherent and refractile |
| **Genotyping[3]**<br>Sequencing of Internal Transcribed Spacer 1 (ITS), 5.8S ribosomal RNA (rRNA) gene, ITS 2 (~ 540 base pairs) | Consistent with *N. fowleri* | Consistent with *N. fowleri* (genotype I)[4,5] |
| **Functional Activity by PCR Amplification[3,6]**<br>ITS 1, 5.8S ribosomal RNA gene, ITS2 | ~ 600 base pair amplicon | ~ 600 base pair amplicon |
| **Viable Cell Count by Hemacytometry[3]** | > $10^6$ cells/mL | 5.55 × $10^6$ cells/mL |
| **Viability[2,7]** | Growth | Growth |
| **Sterility (21-day incubation)[2]**<br>Harpo's HTYE broth[8], 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-46489 was produced by cultivation of the deposited material in modified PYNFH medium (ATCC® medium 1034) supplemented with 10% heat-inactivated fetal bovine serum for 13 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]Also consistent with *Naegleria lovaniensis*
[6]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.
[7]Viable cells were observed after 1 day at 35°C in an aerobic atmosphere.
[8]Atlas, Ronald M. Handbook of Microbiological Media. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

**Date:** 16 AUG 2017 **Signature:**

BEI Resources Authentication

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