

Genomic DNA from *Naegleria fowleri*, Strain CDC:V414

Catalog No. NR-50144

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Product Description:

Genomic DNA was extracted from *Naegleria fowleri* (*N. fowleri*), strain CDC:V414, a clinical isolate collected in 1998 from the cerebrospinal fluid of a 16-year-old male in Florida, USA. NR-50144 was extracted from a culture of BEI Resources NR-46494 lot 62819268 using proprietary technology. NR-50144 lot 70001266 is provided in 10 mM Tris-HCl, 1 mM EDTA, pH 7.5.

Lot: 70001266

Manufacturing Date: 22FEB2016

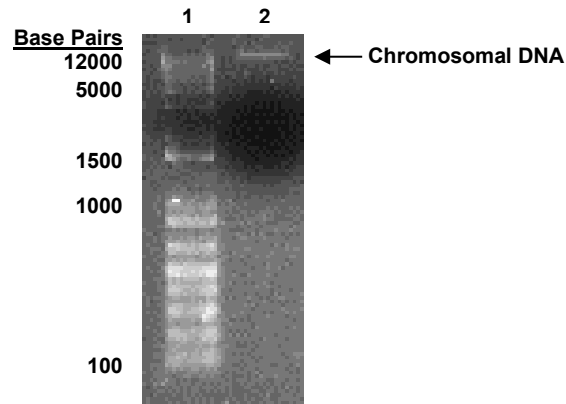
| TEST | SPECIFICATIONS | RESULTS |
|--|--|---|
| Agarose Gel Electrophoresis | High molecular weight chromosomal DNA | High molecular weight chromosomal DNA (Figure 1) |
| Content by PicoGreen® Measurement | 0.2 to 3.5 µg in 20 to 200 µL per vial | 1.6 µg in 153 µL per vial (10.7 µg per mL) |
| Amount per Vial | 0.2 to 3.5 µg | 1.6 µg |
| Genotypic Analysis Sequencing of Internal Transcribed Spacer (ITS) 1, 5.8S ribosomal RNA (rRNA) gene, ITS 2 (~ 545 base pairs) | Consistent with <i>N. fowleri</i> | Consistent with <i>N. fowleri</i> (genotype I) ^{1,2} |
| Functional Activity by PCR Amplification ITS 1, 5.8S rRNA gene, ITS 2 ³ | ~ 600 base pair amplicon | ~ 600 base pair amplicon |
| OD₂₆₀/OD₂₈₀ Ratio | 1.7 to 2.1 | 1.9 |
| Protozoan Inactivation 10% of total yield inoculated in Modified PYNFH medium supplemented with 10% heat-inactivated fetal bovine serum and incubated for 14 days at 35°C in an aerobic atmosphere | No viable organisms detected | No viable organisms detected |

¹For 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.

²Also consistent with *Naegleria lovaniensis*

³PCR 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.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
 Lane 2: ~ 200 ng of NR-50144

/Heather Couch/
 Heather Couch

15 APR 2022

Program Manager or designee, ATCC Federal Solutions

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