

**Genomic DNA from *Anaplasma phagocytophilum*, Strain NCH-1**

**Catalog No. NR-51150**

**Product Description:**

Genomic DNA was isolated from a preparation of cell lysate and supernatant from human promyelocytic leukemia cells (HL-60; ATCC® CCL-240™) infected with *Anaplasma phagocytophilum* (*A. phagocytophilum*), strain NCH-1 (BEI Resources lot 70036996) using QIAamp® Viral RNA Mini Kit (Qiagen® 52906). The viral genomic DNA is in a background of cellular nucleic acid.

**Lot: 70010364**

**Manufacturing Date: 12APR2018**

TEST <sup>1</sup>	SPECIFICATIONS	RESULTS
<b>Genotypic Analysis</b> Sequencing of species-specific region (~ 1370 nucleotides)	≥ 99% sequence identity to <i>A. phagocytophilum</i> , strain NCH-1 (GenBank: LANT01000009.1)	99.9% sequence identity to <i>A. phagocytophilum</i> , strain NCH-1 (GenBank: LANT01000009.1) <sup>2</sup>
<b>Functional Activity by PCR Amplification</b> 16S ribosomal RNA gene	≥ 1500 base pair amplicon	~ 1500 base pair amplicon (Figure 1)
<b>Pre-vial Concentration by PicoGreen® Measurement (Bacterial and Cellular)<sup>3</sup></b>	Report results	0.65 ng per 100 µL (0.0065 µg/mL)
<b>Estimated Amount per Vial<sup>3</sup></b>	Report results	0.65 ng
<b>Bacterial Inactivation</b> 10% of total yield inoculated on HL-60 cells and evaluated by IFA <sup>4,5</sup>	No viable bacteria detected	No viable bacteria detected

<sup>1</sup>Genomic DNA was extracted using proprietary technology. All QC tests were completed prior to vialing.

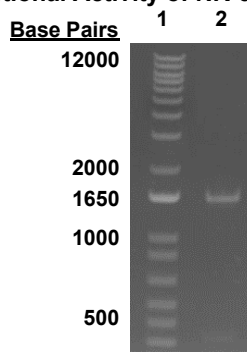
<sup>2</sup>Also consistent with *Ehrlichia equi* and "HGE agent", however, these species were recently recognized as *A. phagocytophilum*. For more information, please see Dumler, J. S., et al. "Reorganization of Genera in the Families Rickettsiaceae and Anaplasmataceae in the Order Rickettsiales: Unification of Some Species of *Ehrlichia* with *Anaplasma*, *Cowdria* with *Ehrlichia* and *Ehrlichia* with *Neorickettsia*, Descriptions of Six New Species Combinations and Designation of *Ehrlichia equi* and 'HGE agent' as Subjective Synonyms of *Ehrlichia phagocytophila*." *Int. J. Syst. Evol. Microbiol.* 51 (2001): 2145-2165. PubMed: 11760958.

<sup>3</sup>Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method.

<sup>4</sup>Using *Anaplasma phagocytophilum* IFA IgG reagents (Fuller Laboratories EEDP and HCG-25)

<sup>5</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of *Anaplasma* spp.

**Figure 1: Functional Activity of NR-51150 by PCR Amplification**



Lane 1: Invitrogen™ TrackIt 1 Kb Plus DNA Ladder™  
Lane 2: 16S PCR product from 1µL of NR-51150

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Technical Manager or designee, ATCC Federal Solutions

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