

Genomic DNA from *Ehrlichia chaffeensis*, Strain Liberty

Catalog No. NR-50091

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Product Description:

Genomic DNA was isolated from a preparation of cell lysate and supernatant from *Canis familiaris* macrophage-monocyte cells (DH-82; ATCC® CRL-10389™) infected with *Ehrlichia chaffeensis* (*E. chaffeensis*), strain Liberty. (BEI Resources lot 70028935) using QIAamp® Viral RNA Mini Kit (Qiagen® 52906).

Lot: 70060065

Manufacturing Date: 07JUN2023

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of species-specific region (~ 870 nucleotides)	≥ 98% identity with <i>E. chaffeensis</i> , strain Liberty (GenBank: CP007476)	100% identity with <i>E. chaffeensis</i> , strain Liberty (GenBank: CP007476)
Functional Activity by PCR Amplification¹ ECH_0849 gene	~ 1000 base pair amplicon	~ 1000 base pair amplicon (Figure 1)
Estimated Concentration (post-dilution) by PicoGreen® Measurement (Viral and Cellular)²	Report results	2.2 ng per 100 µL (0.22 µg/mL)
Estimated Amount per Vial²	Report results	2.2 ng
Virus Inactivation 10% of total yield inoculated on 10% of total yield inoculated on DH82 cells and evaluated by IFA ^{3,4}	No viable virus detected	No viable virus detected

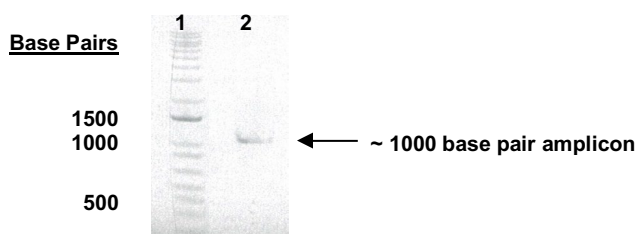
¹Amplified using iTaq™ Universal SYBR Green One-step Kit (Bio-Rad® 172-5151) with 5 µL of NR-50091 in a 50 µL reaction

²Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method

³Use of the QIAamp® Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of *E. chaffeensis* as shown by the absence of cytopathic effect (CPE) and fluorescent antibody testing after plating the entire extract on virus-susceptible cells for two passages.

⁴Using *Ehrlichia chaffeensis* IFA IgG reagents (Fuller Laboratories ECP)

Figure 1: Functional Activity of NR-50091 by PCR Amplification of ECH_0849 Gene



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder

Lane 2: PCR product from 1 µL of NR-50091

/Sonia Bjorum Brower/

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21 SEP 2023

Technical Manager or designee, ATCC Federal Solutions

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