

***Ehrlichia chaffeensis*, Strain Liberty**

**Catalog No. NR-46446**

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**Product Description:**

*Ehrlichia chaffeensis* (*E. chaffeensis*), strain Liberty was isolated in 1998 from the blood of a patient in Florida, USA, with a suspected diagnosis of human monocytic ehrlichiosis (HME). NR-46446 lot 70028935 was produced by infecting DH82 cells (ATCC® CRL-10389™) and incubating in Dulbecco's Modified Eagle's Medium (DMEM) containing 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate and 1500 mg per L sodium bicarbonate (ATCC® 30-2002™), supplemented with 7% fetal bovine serum (ATCC® 30-2020™) that was heat-inactivated and an additional 2 mM L-glutamine (ATCC® 30-2214™) for 3 days at 37°C with 5% CO<sub>2</sub>. NR-46446 is provided in cell lysate and supernatant supplemented with 45% heat-inactivated fetal bovine serum and 5% DMSO.

**Lot: 70028935**

**Manufacturing Date: 13SEP2019**

TEST	SPECIFICATIONS	RESULTS
<b>Identification of Infectivity in DH82 Cells by Indirect Fluorescent Antibody (IFA) Assay<sup>1</sup></b>	Fluorescence observed	Fluorescence observed
<b>Genotypic Analysis</b> Sequencing of <i>ECH_0849</i> gene (~ 920 base pairs)	≥ 98% identity with <i>E. chaffeensis</i> , strain Liberty (GenBank: CP007476.1)	100% identity with <i>E. chaffeensis</i> , strain Liberty (GenBank: CP007476.1)
<b>Titer by TCID<sub>50</sub> Assay in DH82 Cells by IFA<sup>1,2</sup></b>	Report results	8.9 × 10 <sup>5</sup> TCID <sub>50</sub> per mL in 7 days at 37°C with 5% CO <sub>2</sub>
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth, 37°C and 26°C, aerobic <sup>3</sup> Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO <sub>2</sub>	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
<b>Mycoplasma Contamination</b> Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

<sup>1</sup>*Ehrlichia chaffeensis* IFA IgG reagent kit (Fuller Laboratories ECHG-120)

<sup>2</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> is the dilution of organism that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of the organism preparation.

<sup>3</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798

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