

Anaplasma phagocytophilum, Strain HGE2

Catalog No. NR-48593

Product Description:

Anaplasma phagocytophilum (*A. phagocytophilum*), strain HGE2 was isolated from a human in Minnesota, USA. NR-48593 lot 70026735 was produced by infecting HL-60 cells (ATCC® CCL-240™) and incubating in RPMI-1640 medium containing 10% fetal bovine serum (ATCC® 30-2020) for 5 days at 37°C with 5% CO₂.

Lot: 70026735

Manufacturing Date: 22JUL2019

TEST	SPECIFICATIONS	RESULTS
Identification by Indirect Fluorescent Antibody (IFA) Assay¹	Fluorescence observed	Fluorescence observed
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1300 base pairs)	≥ 99% identity with <i>A. phagocytophilum</i> , strain HGE2 (GenBank: LAOE01000001.1)	100% identity with <i>A. phagocytophilum</i> , strain HGE2 (GenBank: LAOE01000001.1) ²
Titer by TCID₅₀ Assay in HL-60 Cells by IFA^{1,3}	Report results	8.9 × 10 ³ TCID ₅₀ per mL in 9 days at 37°C with 5% CO ₂
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ⁴ 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 ₂	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
Mycoplasma Contamination 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

¹*A. phagocytophilum* IFA IgG reagent kit (Fuller Laboratories EEG-120)

²Also 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.

³The Tissue Culture Infectious Dose 50% (TCID₅₀) endpoint is the 50% infectious endpoint in cell culture. The TCID₅₀ 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% (LD₅₀) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID₅₀ provides a measure of the titer (or infectivity) of the organism preparation.

⁴Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798

/Heather Couch/

Heather Couch

27 MAR 2020

Program Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

