

Certificate of Analysis for NR-327

Rickettsia rickettsii, Strain Lost Horse Canyon

Catalog No. NR-327

Product Description: Cell lysate and supernatant from African green monkey kidney (Vero) cells¹ infected with *Rickettsia rickettsii*, strain Lost Horse Canyon.

Lot²: 58362750 Manufacturing Date: 08DEC2008

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero Cells ¹	Report results	Cell rounding and sloughing
Identification by Sequencing of Citrate Synthase Gene (770 bp)	Rickettsia rickettsii	Rickettsia rickettsii
Titer by TCID ₅₀ Assay ^{3,4} in Vero Cells ¹	Report results	1.6 X 10 ³ TCID ₅₀ /mL
PCR Amplification of Extracted DNA	~ 1154 bp amplicon	~ 1154 bp amplicon
Sterility (21-day incubation) Harpo's HTYE broth ⁵ , 37°C and 26°C, aerobic Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Brucella agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO ₂	No growth	No growth
Mycoplasma Contamination Agar and broth culture (30-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

Vero cells: ATCC® CCL-81™

Date: 14 MAY 2009 **Signature:** Signature on file

Title: Technical Manager, BEI Authentication or designee

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.

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²The material deposited by Dr. F. Marilyn Bozeman was grown in Minimum Essential Medium with Earle's salts (Invitrogen™ 10370-021) supplemented with 10% irradiated fetal bovine serum (Lonza 14-471), 2 mM L-glutamine (Invitrogen™ 25030) and 1 mM sodium pyruvate (Invitrogen™ 11360-070) for 18 days at 35°C and 5% CO₂.

³The Tissue Culture Infectious Dose 50% (TCID₅₀) endpoint is the 50% infectious endpoint in cell culture. The TCID₅₀ is the dilution of virus 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 a virus preparation.

⁴6 days at 35°C and 5% CO₂ with media overlay

⁵Atlas, Ronald M. <u>Handbook of Microbiological Media</u>. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798