

## **Certificate of Analysis for NR-50663**

## Genomic DNA from Babesia sp., Strain MO1

## Catalog No. NR-50663

**Product Description:** Genomic DNA was extracted from *Babesia* sp., strain MO1, which was isolated in 2003 from the blood of a wild Eastern cottontail rabbit (*Sylvilagus floridanus*) on Nantucket Island, Massachusetts, USA, and adapted to continuous *in vitro* culture in human erythrocytes.

Lot<sup>1</sup>: 70004194 Manufacturing Date: 24MAR2017

TEST	SPECIFICATIONS	RESULTS
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Content by PicoGreen® Measurement	0.2 to 3.5 µg in 20 to 200 µL per vial	0.48 μg in 25 μL per vial (19 μg/mL)
Amount per vial	0.2 to 3.5 μg	0.48 µg
Genotypic Analysis Sequencing of 18S ribosomal RNA gene (~ 1580 base pairs)	≥ 99% sequence identity to  **Babesia* sp., strain MO1 (GenBank: AY048113.1)	99.9% sequence identity to <i>Babesia</i> sp., strain MO1 (GenBank: AY048113.1) <sup>2</sup>
PCR Assay of Extracted DNA <sup>3</sup> 18S ribosomal RNA gene	~ 2100 base pair amplicon	~ 2100 base pair amplicon
OD <sub>260</sub> /OD <sub>280</sub> Ratio	1.7 to 2.1	1.9
Protozoan Inactivation 10% of total yield inoculated in medium <sup>4</sup>	No viable organisms detected	No viable organisms detected

<sup>&</sup>lt;sup>1</sup>NR-50663 was extracted from an established culture of the deposited material that was also used to produce NR-50441 lot 70002062. Genomic DNA was extracted from the organism using proprietary technology. NR-50663 lot 70004194 is provided in 10 mM Tris-HCl, 0.5 mM EDTA, pH 9.

Free Medium (Lonza 77201) adjusted to contain 20% human serum type A positive, 1% HB 101® supplement (Irvine Scientific® T151), 2 mM L-glutamine, 0.2 mM hypoxanthine and 0.03 mM thymidine]

Base Pairs
15000
Chromosomal DNA
1500

Figure 1: Agarose Gel Electrophoresis

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

Lane 2: ~ 200 ng of NR-50663

BEI Resources www.beiresources.org E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

<sup>&</sup>lt;sup>2</sup>Also consistent with other *Babesia* species <sup>3</sup>Primer sequences and conditions for PCR are available upon request.

<sup>&</sup>lt;sup>4</sup>Incubated for 14 days at 37°C in a humidified atmosphere of 93% N₂: 5% CO₂: 2% O₂ in *Babesia* Growth Medium [HL-1™ Chemically Defined, Serum-Free Medium (Lonza 77201) adjusted to contain 20% human serum type A positive, 1% HB 101® supplement (Irvine Scientific® T151),



## **Certificate of Analysis for NR-50663**

/Heather Couch/

**Heather Couch** 20 JUN 2018

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.

**BEI Resources** www.beiresources.org

E-mail: contact@beiresources.org Tel: 800-359-7370 Fax: 703-365-2898