

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. NR-50663 was extracted from a preparation of BEI Resources NR-50441 lot 70002062 using proprietary technology and vialled in 10 mM Tris-HCl, 1 mM EDTA, pH 7.5.

Lot: 70048733

Manufacturing Date: 06JAN2023

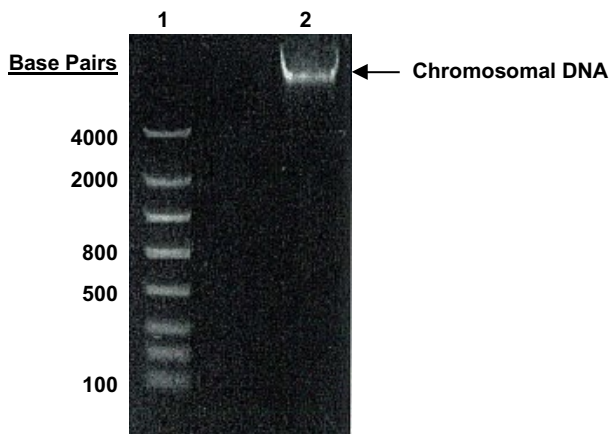
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TEST	SPECIFICATIONS	RESULTS
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Content by PicoGreen® Measurement	0.2 to 3.5 µg in 20 to 200 µL per vial	0.28 µg in 40 µL per vial (7 µg/mL)
Amount per Vial	0.2 to 3.5 µg	0.28 µg
Genotypic Analysis Sequencing of 18S ribosomal RNA (rRNA) gene (~ 1600 base pairs) Sequencing of internal transcribed spacer (ITS) 1, 5.8S ribosomal RNA gene, ITS 2 (~ 790 base pairs)	≥ 99% sequence identity to <i>Babesia</i> sp., strain MO1 (GenBank: AY048113.1) ≥ 99% sequence identity to <i>Babesia</i> sp., strain MO1 (NR-50441 lot 70002062)	99.9% sequence identity to <i>Babesia</i> sp., strain MO1 (GenBank: AY048113.1) 99.9% sequence identity to <i>Babesia</i> sp., strain MO1 (NR-50441 lot 70002062)
PCR Assay of Extracted DNA¹ 18S rRNA gene ITS 1, 5.8S ribosomal RNA gene, ITS 2	~ 2100 base pair amplicon ~ 930 base pair amplicon	~ 2100 base pair amplicon ~ 930 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.8
Protozoan Inactivation 10% of total yield inoculated in medium ²	No viable organisms detected	No viable organisms detected

¹Primer sequences and conditions for PCR are available upon request.

²Incubated in human Type O erythrocytes for 14 days at 37°C in a humidified atmosphere of 93% N₂: 5% CO₂: 2% O₂ in *Babesia* Growth Medium [DMEM/F12 adjusted to contain 20% human serum type A positive, 1% HB 101® supplement (Irvine Scientific® T151), 2 mM L-glutamine, 200 µM hypoxanthine and 30 µM thymidine, 100 IU/mL penicillin, 100 µg/mL streptomycin, 0.25 µg/mL amphotericin B and 100 µg/mL gentamicin]

Figure 1: Agarose Gel Electrophoresis



Lane 1: Lonza FlashGel™ DNA Marker
Lane 2: ~ 200 ng of NR-50663

/Sonia Bjorum Brower /
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20 MAR 2024

Technical Manager or designee, ATCC Federal Solutions

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