

Plasmid pUC19 Containing the Internal Transcribed Spacer (ITS)1-5.8S Ribosomal RNA Gene-ITS2 Region from *Babesia duncani*, Strain WA1

Catalog No. NR-50742

Product Description:

The ITS1-5.8S rRNA-ITS2 region from *Babesia duncani* (*B. duncani*), strain WA1 was amplified by PCR and cloned into vector pUC19. The resulting plasmid, NR-50742, may be used in PCR assays for the detection of *B. duncani*. The plasmid was produced in MAX Efficiency™ DH5α Competent *Escherichia coli* (Invitrogen™) and extracted using a QIAGEN® Plasmid Midi Kit. Ampicillin was incorporated as a selectable marker.

Lot: 70005278^{1,2}

Manufacturing Date: 07JUN2017

TEST	SPECIFICATIONS	RESULTS
Confirmation of Plasmid by Sequencing³ pUC19 containing ITS1-5.8S rRNA-ITS2 insert ITS1-5.8S rRNA-ITS2 insert	Report results Report results	3768 base pairs (Figures 1 and 2) ⁴ 819 base pairs
Confirmation of Insert by PCR⁵	~ 930 to 950 base pair amplicon	~ 930 base pair amplicon
Concentration by PicoGreen® Measurement	Report results	1.0 µg in 32 µL per vial (31 µg/mL)
Amount	Report results	1.0 µg per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9

¹Produced in MAX Efficiency™ DH5α Competent *Escherichia coli* (Invitrogen™ 18258-012) and extracted using a QIAGEN® Plasmid Midi Kit (QIAGEN® 12143).

²NR-50742 lot 70005278 was vialled in EB buffer (10 mM Tris-HCl, pH 8.5).

³Illumina® MiSeq® sequence was analyzed with CLC Genomics Workbench.

⁴Plasmid map was generated using DNASTAR® SeqBuilder™ Version 14.1.

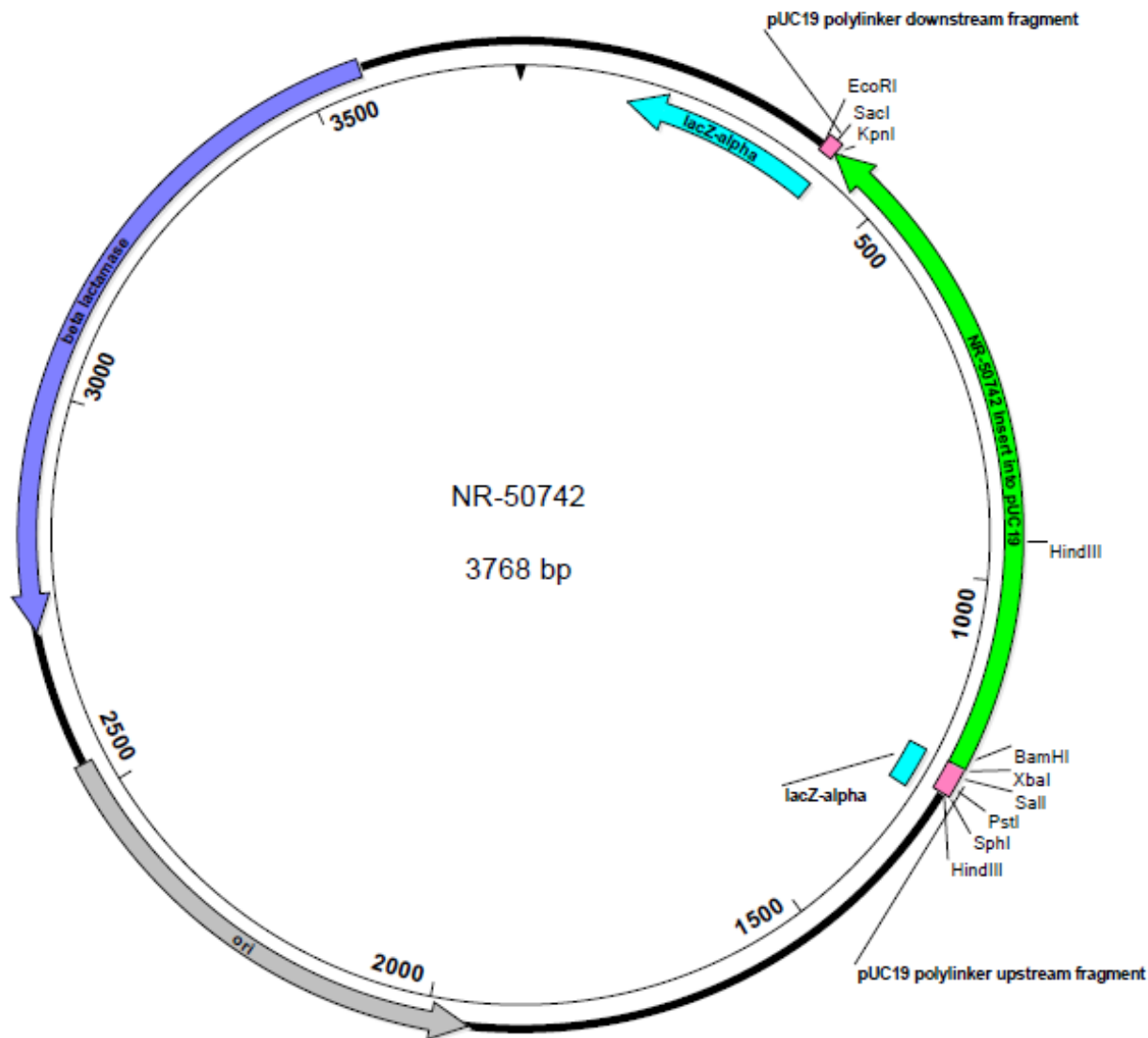
⁵Primer sequences and conditions for PCR are available upon request.

Figure 1: Complete Plasmid Sequence of NR-50742

>NR-50742 lot 70005278 complete plasmid sequence (red text is ITS1-5.8S rRNA-ITS2 insert sequence)
 tcgcgcggtttcgggtgatgacgggtgaaaacctctgacacatgcagctcccgagacggtcacagcttctgtctgtaagcggatgccgggagcagacaagc
 ccgtcaggggcgctcagcgggtgttggcgggtgtcggggctggccttaactatgcccagcagagcagattgtactgagagtgaccatagcgggtg
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Figure 2: Plasmid Map of NR-50742



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Program Manager or designee, ATCC Federal Solutions

17 OCT 2019

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