

Diagnostic Plasmid Containing the Small Subunit Ribosomal RNA Gene (18S) from *Plasmodium malariae*

Catalog No. MRA-179

Product Description:

The small subunit ribosomal RNA gene (18S rRNA gene; GenBank: [AF145336](#)) from *Plasmodium malariae* (*P. malariae*) was amplified from genomic DNA by nest 1 PCR primers and cloned into vector pCR2.1-TOPO (Invitrogen™). The glycerol stock was grown in Luria-Bertani broth with kanamycin (25 µg/mL) and ampicillin (50 µg/mL) for 1 day at 37°C in an aerobic atmosphere and extracted using a QIAfilter Plasmid Midi Kit (QIAGEN® 12243).

Lot: 70067386

Manufacturing Date: 24MAY2024

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 5,100 base pairs	5,045 base pairs ¹
Genotypic Analysis Sequencing of 18S ribosomal RNA gene (~ 1110 base pairs)	≥ 99% sequence identity to <i>P. malariae</i> 18S rRNA gene (GenBank: AF145336.1)	100% sequence identity to <i>P. malariae</i> 18S rRNA gene (GenBank: AF145336.1)
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene <i>bla</i>) Kanamycin (encoded by <i>aph</i>)	<i>bla</i> sequence present <i>aph</i> sequence present	<i>bla</i> sequence present <i>aph</i> sequence present
Concentration by PicoGreen® Measurement	≥ 2 µg/mL	0.2 µg in 20 µL/vial (10 µg/µL)
Amount per Vial	Report results	0.2 µg/vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9

¹The sequence was assembled pre-vial using the depositor's predicted sequence as the reference sequence.

/Sonia Bjorum Brower/
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13 SEP 2024

Technical Manager or designee, ATCC Federal Solutions

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