

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

**Catalog No. MRA-178**

**Product Description:**

The small subunit ribosomal RNA gene (18S rRNA gene; GenBank: [AF145335](#)) from *Plasmodium vivax* (*P. vivax*) was amplified from genomic DNA by nest 1 PCR primers and cloned into vector pCR2.1-TOPO (Invitrogen™). The resulting plasmid (clone 16) may be used in PCR assays for the diagnosis of mixed species malaria infections. 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 Maxi Kit (QIAGEN® 12262).

**Lot: 70076524**

**Manufacturing Date: 15SEP2025**

TEST	SPECIFICATIONS	RESULTS
<b>Next-Generation DNA Sequencing</b>	~ 5,000 base pairs	5,054 base pairs <sup>1</sup>
<b>Genotypic Analysis</b> Sequencing of 18S ribosomal RNA gene (~ 1120 base pairs)	≥ 99% sequence identity to <i>P. vivax</i> 18S rRNA gene (GenBank: AF145335.1)	99.6% sequence identity to <i>P. vivax</i> 18S rRNA gene (GenBank: AF145335.1)
<b>Antibiotic Resistance</b> 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
<b>Concentration by PicoGreen® Measurement</b>	≥ 2 µg/mL	0.5 µg in 50 µL/vial (10 µg/mL)
<b>Amount per Vial</b>	Report results	0.5 µg/vial
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio</b>	1.7 to 2.1	1.99

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

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06 FEB 2026

Technical Manager or designee, ATCC Federal Solutions

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