

Diagnostic Plasmid Containing the Small Subunit Ribosomal RNA Gene (18S) from *Plasmodium knowlesi*, Chromosome 3

Catalog No. MRA-1348

Product Description:

The small subunit ribosomal RNA gene (18S rRNA gene; GenBank: [XR_005506366](#)) from *Plasmodium knowlesi* (*P. knowlesi*) was amplified from genomic DNA by nest 1 PCR primers and cloned into vector pCR2.1-TOPO (Invitrogen™). This plasmid has been specifically cloned to be compatible with primers and probes that target the rRNA on chromosome 3 (PKNH_0320900 – 62348032). The deposited plasmid was transformed into One Shot® TOP10 chemically competent *Escherichia coli* (Invitrogen™ 404003) and extracted using a QIAfilter® Plasmid Midi Kit (QIAGEN® 12243).

Lot: 70069158

Manufacturing Date: 09JAN2025

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	5,599 base pairs	5,599 base pairs ¹
Genotypic Analysis Sequencing of 18S rRNA insert (~ 1670 base pairs)	≥ 99% sequence identity to depositor's sequence	100% sequence identity to depositor's sequence
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	0.5 µg in 50 µL/vial (10 µg/mL)
Amount per Vial	Report results	0.5 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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30 MAR 2026

Technical Manager or designee, ATCC Federal Solutions

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