

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. MRA-178 lot 70041752 was extracted from a preparation of BEI Resources seed lot 58068547, produced in One Shot® TOP10 chemically competent *Escherichia coli* (Invitrogen™) and extracted using a QIAprep® Spin Miniprep Kit (QIAGEN® 27104).

Lot: 70041752

Manufacturing Date: 12MAR2021

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 5,000 base pairs	5,054 base pairs
Genotypic Analysis 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)
Concentration by PicoGreen® Measurement	≥ 2 µg per mL	0.2 µg in 20 µL per vial (10 µg per mL)
Amount per Vial	Report results	0.2 µg per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.88

/Sonia Bjorum Brower/

Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

31 AUG 2022

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC® to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

