

Genomic DNA from *Plasmodium falciparum*, Strain K1

Catalog No. MRA-159G

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Product Description: Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain K1.

Lot¹⁻³: 70022465

Manufacturing Date: 08FEB2019

TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 420 base pairs)	≥ 99% sequence identity to <i>P. falciparum</i> , strain K1 (GenBank: ABGV01000272.1)	100% sequence identity to <i>P. falciparum</i> , strain K1 (GenBank: ABGV01000272.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	Report results	~ 0.5 µg in 50 µL per vial (10 µg/mL)
Amount per Vial	Report results	~ 0.5 µg
Functional Activity by PCR Amplification MSP2 locus ⁴	~ 600-900 base pair amplicon	~ 900 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.6 to 2.1	2.0
Protozoan Inactivation Human erythrocytes exposed to 10% of total yield of MRA-159G ^{5,6}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

¹MRA-159G was produced from a cell culture of BEI Resources MR-MRA-159 lot 63527536. Genomic DNA was extracted using proprietary technology.

²MRA-159G lot 70022465 was vialled in AE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9).

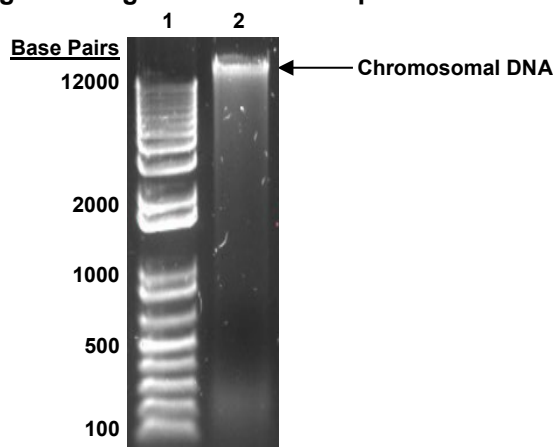
³Testing was completed on bulk material prior to freezing.

⁴Primer sequences and conditions for PCR are available upon request.

⁵14 days in complete RPMI culture medium at 37°C in sealed flasks outgassed with blood-gas atmosphere (90% N₂, 5% CO₂, 5% O₂). Complete RPMI culture medium was changed and parasitemia checked every 1 to 6 days.

⁶An extraction procedure was used that has been shown to consistently inactivate 100% of *Plasmodium* parasites.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder

Lane 2: ~ 200 ng of MRA-159G

/Heather Couch/

Heather Couch

12 JUN 2019

Program Manager or designee, ATCC Federal Solutions

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