SUPPORTING INFECTIOUS DISEASE RESEARCH

Genomic DNA from Plasmodium falciparum, Strain 3D7

Catalog No. MRA-102G

This reagent is the tangible property of the U.S. Government.

Product Description: Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain 3D7.

Lot^{1,2}: 64202796

Manufacturing Date: 06JUN2016

TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 820 base pairs)	≥ 99% sequence identity to <i>P. falciparum</i> , strain 3D7 (GenBank: LN999943.1)	99.7% sequence identity to <i>P. falciparum</i> , strain 3D7 (GenBank: LN999943.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen [®] Measurement	Report results	$\sim 500~\text{ng}$ in 50 μL per vial (10 ng/ $\mu\text{L})$
Amount	Report results	~ 500 ng per vial
Functional Activity by PCR Amplification MSP2 locus ³	~ 600-900 base pair amplicon	~ 900 base pair amplicon
OD ₂₆₀ /OD ₂₈₀ Ratio	1.6 to 2.1	2.0
Protozoan Inactivation Human erythrocytes exposed to 10% of total yield of MRA-102G ^{4,5}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

¹MRA-102G was produced from a cell culture of BEI Resources MR-MRA-102 lot 63085271. Genomic DNA was extracted using proprietary technology.

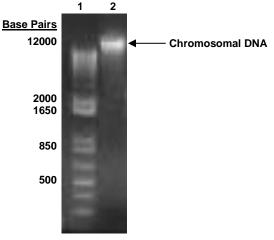
²MRA-102G lot 64202796 was vialed in TE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9).

³Primer sequences and conditions for PCR are available upon request.

⁴15 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 3 to 5 days.

⁵An 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: 613 ng of MRA-102G

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Certificate of Analysis for MRA-102G

/Heather Couch/ Heather Couch

28 AUG 2018

Program Manager or designee, ATCC Federal Solutions

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected 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.

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