

Genomic DNA from *Plasmodium falciparum*, Strain 3D7A

Catalog No. MRA-151G

Product Description:

Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain 3D7A. MRA-151G was produced from a cell culture of BEI Resources MR-MRA-151 lot 59531004. Genomic DNA was extracted using proprietary technology. MRA-151G lot 70030317 was vialled in AE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9).

Lot: 70030317

Manufacturing Date: 11DEC2019

TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 760 base pairs) ¹	≥ 99% sequence identity to <i>P. falciparum</i> , strain 3D7 (GenBank: LN999943.1)	100% sequence identity to <i>P. falciparum</i> , strain 3D7 (GenBank: LN999943.1)
Agarose Gel Electrophoresis ¹	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement ¹	Report results	~ 0.5 µg in 50 µL per vial (10 µg/mL)
Amount per Vial ¹	Report results	~ 0.5 µg
Functional Activity by PCR Amplification ¹ MSP2 locus ²	~ 600-900 base pair amplicon	~ 900 base pair amplicon
OD ₂₆₀ /OD ₂₈₀ Ratio ¹	1.6 to 2.1	1.9
Protozoan Inactivation ¹ Human erythrocytes exposed to 10% of total yield of MRA-151G ^{3,4}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination ¹ DNA Detection by PCR	None detected	None detected

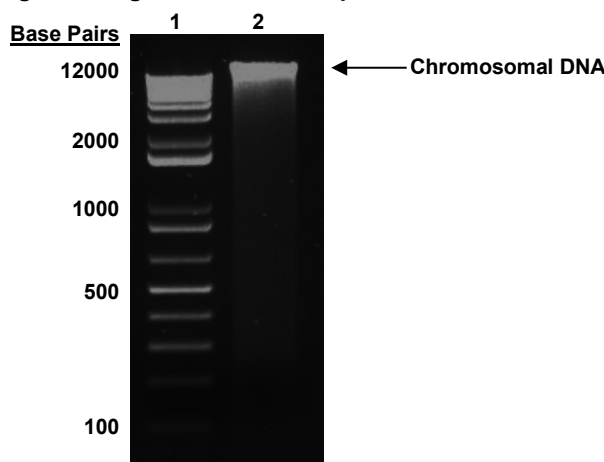
¹Testing was completed on bulk material prior to freezing.

²Primer sequences and conditions for PCR are available upon request.

³15 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 4 days.

⁴An 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-151G

Certificate of Analysis for MRA-151G

/Heather Couch/
Heather Couch

20 AUG 2020

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.

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.

