

Genomic DNA from *Plasmodium falciparum*, Strain Dd2

Catalog No. MRA-156G

Product Description:

Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain Dd2. MRA-156G was produced from a cell culture of BEI Resources MR-MRA-156 lot 59523802. Genomic DNA was extracted using proprietary technology. MRA-156G lot 70034409 was vialled in AE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9).

Lot: 70034409

Manufacturing Date: 12JUN2020

TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 790 base pairs)¹	≥ 99% sequence identity to <i>P. falciparum</i> , strain Dd2 (GenBank: AASM01000018.1)	99.9% sequence identity to <i>P. falciparum</i> , strain Dd2 (GenBank: AASM01000018.1)
Agarose Gel Electrophoresis¹	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement¹	Report results	~ 0.5 µg in 50 µL per vial (10 µg/mL)
Amount per Vial¹	Report results	~ 0.5 µg
Functional Activity by PCR Amplification¹ MSP2 locus ²	~ 600-900 base pair amplicon	~ 900 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio¹	1.6 to 2.1	1.9
Protozoan Inactivation¹ Human erythrocytes exposed to 10% of total yield of MRA-156G ^{3,4}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination¹ DNA Detection by PCR	None detected	None detected

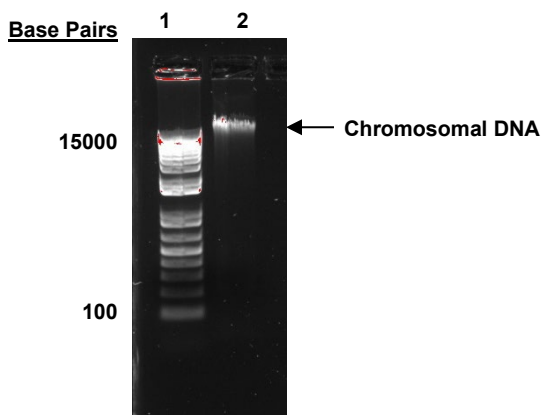
¹Testing was completed on bulk material prior to freezing.

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-156G

/Heather Couch/
Heather Couch

19 AUG 2020

Program Manager or designee, ATCC Federal Solutions

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