

**Genomic DNA from *Plasmodium falciparum*, Strain HB3**

**Catalog No. MRA-155G**

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**Product Description:**

Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain HB3, which was cloned from the Honduras I/CDC strain, originally isolated from a patient in Honduras during an outbreak of urban malaria in 1980. MRA-155G lot 70041230 was extracted from a cell culture of BEI Resources MRA-155 seed lot using proprietary technology and vialled in AE buffer (10 mM Tris-HCl, 0.5 mM EDTA, pH 9). Testing was completed on bulk material prior to freezing.

**Lot: 70041230**

**Manufacturing Date: 24FEB2021**

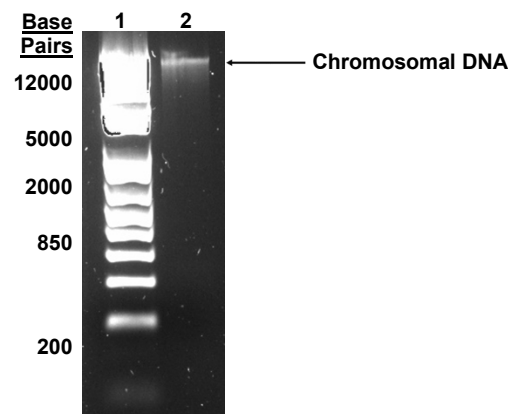
TEST	SPECIFICATIONS	RESULTS
<b>Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 710 base pairs)</b>	≥ 95% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)	99.7% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)
<b>Agarose Gel Electrophoresis</b>	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
<b>Concentration by NanoDrop Measurement</b>	Report results	500 ng in 50 µL per vial (10 µg per mL)
<b>Amount per Vial</b>	Report results	500 ng
<b>Functional Activity by PCR Amplification MSP2 locus<sup>1</sup></b>	600 to 900 base pair amplicon	850 base pair amplicon
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio</b>	1.6 to 2.1	2.0
<b>Protozoan Inactivation</b> Human erythrocytes exposed to 10% of total yield of MRA-155G <sup>2,3</sup>	No parasitemia observed	No parasitemia observed
<b>Mycoplasma Contamination</b> DNA Detection by PCR	None detected	None detected

<sup>1</sup>Primer sequences and conditions for PCR are available upon request.

<sup>2</sup>14 days in complete RPMI culture medium at 37°C in sealed flasks outgassed with blood-gas atmosphere (90% N<sub>2</sub>, 5% CO<sub>2</sub>, 5% O<sub>2</sub>). Complete RPMI culture medium was changed and parasitemia checked every 1 to 4 days.

<sup>3</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of *Plasmodium* parasites.

**Figure 1: Agarose Gel Electrophoresis**



Lane 1: Invitrogen™ 1 Kb Plus DNA Ladder  
Lane 2: 150 ng of MRA-155G

/Heather Couch/

Heather Couch

14 MAY 2021

Program Manager or designee, ATCC Federal Solutions

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