

**Genomic DNA from *Plasmodium falciparum*, Strain 3D7 (GL Clone)**

**Catalog No. MRA-1001G**

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 (GL Clone). MRA-1001G was produced from a cell culture of BEI Resources seed lot 58606906. Genomic DNA was extracted using proprietary technology. MRA-1001G was vialled in TE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9). Testing was completed on bulk material prior to freezing.

**Lot: 70065662**

**Manufacturing Date: 15AUG2024**

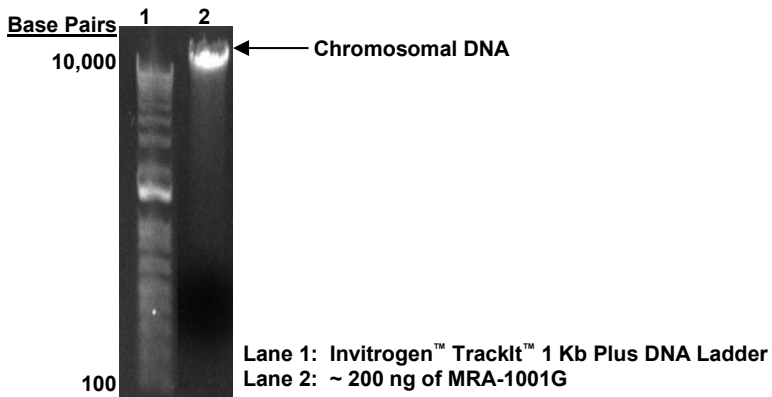
TEST	SPECIFICATIONS	RESULTS
<b>Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 780 base pairs)</b>	Consistent with <i>P. falciparum</i>	Consistent with <i>P. falciparum</i>
<b>Agarose Gel Electrophoresis</b>	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
<b>Concentration by PicoGreen® Measurement</b>	Report results	~ 0.5 µg in 50 µL/vial (10 µg/mL)
<b>Amount per Vial</b>	Report results	~ 0.5 µg
<b>Functional Activity by PCR Amplification MSP2 locus<sup>1</sup></b>	~ 600 to 900 base pair amplicon	~ 900 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-1001G <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>15 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 3 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**



/Sonia Bjorum Brower/  
Sonia Bjorum Brower  
Technical Manager or designee, ATCC Federal Solutions

21 OCT 2024

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.

