

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 was produced from a cell culture of BEI Resources MR-MRA-154 lot 58243283. Genomic DNA was extracted using proprietary technology and vialled in AE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9). Testing was completed on bulk material prior to freezing.

Lot: 70060496

Manufacturing Date: 07SEP2023

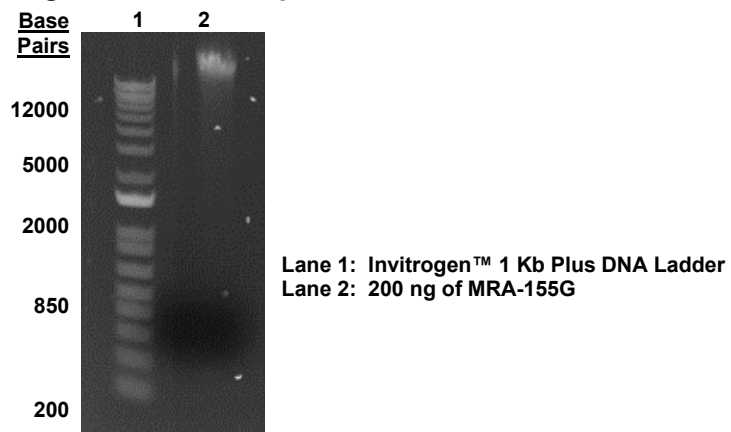
TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 720 base pairs)	≥ 95% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)	100% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	Report results	0.5 µg in 50 µL per vial (10 µg/mL)
Amount per Vial	Report results	~ 0.5 µg
Functional Activity by PCR Amplification MSP2 gene locus¹	~ 600-900 base pair amplicon	~ 850 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9
Protozoan Inactivation Human erythrocytes exposed to 10% of total yield of MRA-155G ^{2,3}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

¹Primer sequences and conditions for PCR are available upon request.

²16 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 was checked every 1 to 3 days.

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

Figure 1: Agarose Gel Electrophoresis



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18 SEP 2023

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