

Genomic DNA from *Plasmodium falciparum*, Strain HB3

Catalog No. MRA-155G

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 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 70018089 was extracted from a cell culture of BEI Resources MR-MRA-155 lot 58243283 using proprietary technology and 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: 70018089

Manufacturing Date: 13SEP2018

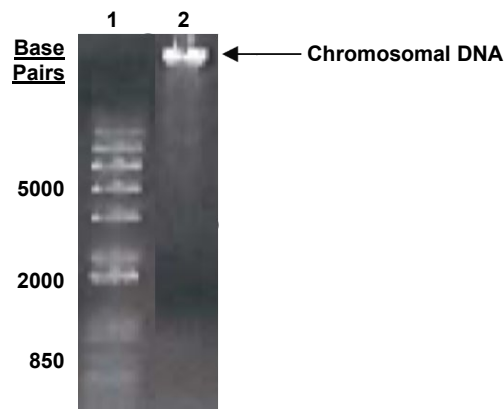
TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (~ 710 base pairs)	≥ 99% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)	100% sequence identity to <i>P. falciparum</i> , strain HB3 (GenBank: AANS01000284.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by NanoDrop Measurement	Report results	~ 500 ng in 50 µL per vial (11 µg/mL)
Amount per Vial	Report results	~ 500 ng
Functional Activity by PCR Amplification MSP2 locus ¹	~ 600-900 base pair amplicon	~ 850 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.6 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.

²15 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 1 to 5 days.

³An 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: ~ 200 ng of MRA-155G

/Heather Couch/

Heather Couch

30 JUN 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.

