

Certificate of Analysis for MRA-819G

Genomic DNA from Plasmodium falciparum, Strain INDO

Catalog No. MRA-819G

This reagent is the tangible property of the U.S. Government.

Product Description:

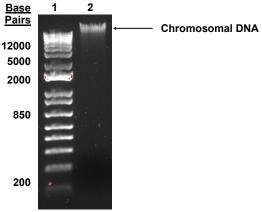
Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain INDO, an *in vitro* culture-adapted clone from Indochina. MRA-819G lot 70041752 was extracted from a cell culture of BEI Resources MRA-819 seed lot using proprietary technology and vialed in AE buffer (10 mM Tris-HCl, 0.5 mM EDTA, pH 9).¹ Testing was completed on bulk material prior to freezing.

Lot: 70041753 Manufacturing Date: 26MAR2021

TEST	SPECIFICATIONS	RESULTS
Sequencing of Merozoite Surface Protein 2 (MSP2) gene (800 base pairs)	Consistent with <i>P. falciparum</i>	Consistent with P. falciparum
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 (10 μg per mL)
Amount per Vial	Report results	500 ng
Functional Activity by PCR Amplification MSP2 locus ²	600 to 900 base pair amplicon	850 base pair amplicon
OD ₂₆₀ /OD ₂₈₀ Ratio	1.6 to 2.1	2.0
Protozoan Inactivation Human erythrocytes exposed to 10% of total yield of MRA-819G ^{3,4}	No parasitemia observed	No parasitemia observed
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

¹Note: MRA-819 seed lot has not been authenticated by BEI Resources.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ 1 Kb Plus DNA Ladder

Lane 2: ~ 200 ng of MRA-819G

BEI Resources www.beiresources.org E-mail: contact@beiresources.org
Tel: 800-359-7370

Tel: 800-359-7370 Fax: 703-365-2898

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 1 to 4 days.

⁴An extraction procedure was used that has been shown to consistently inactivate 100% of *Plasmodium* parasites.



Certificate of Analysis for MRA-819G

/Heather Couch/ Heather Couch

BEI Resources

www.beiresources.org

02 DEC 2021

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.

E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

Page 2 of 2