

Product Information Sheet for MRA-159G

Genomic DNA from *Plasmodium falciparum*, Strain K1

Catalog No. MRA-159G

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

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Genomic DNA was extracted from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain K1.

P. falciparum, strain K1 was isolated in Thailand^{1,2} and is reported to be a multidrug-resistant strain.^{2,3,4} The complete genome of *P. falciparum*, strain K1 has been sequenced (GenBank: [ABGV00000000](#)).

MRA-159G has been qualified for PCR applications by amplification of approximately 800 base pairs of the merozoite surface protein 2 (MSP2) gene.

Material Provided:

Each vial of MRA-159G contains approximately 0.5 µg of genomic DNA in buffer. The amount per vial, concentration and buffer composition are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

MRA-159G was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from *Plasmodium falciparum*, Strain K1, MRA-159G, contributed by Dennis E. Kyle."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

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References:

1. Thaithong, S., G. H. Beale and M. Chutmongkonkul. "Susceptibility of *Plasmodium falciparum* to Five Drugs: An *in vitro* Study of Isolates Mainly from Thailand." Trans. R. Soc. Trop. Med. Hyg. 77 (1983): 228-231. PubMed: 6346591.
2. Chen, N., et al. "Origin and Dissemination of Chloroquine-Resistant *Plasmodium falciparum* with Mutant *pfcr* Alleles in the Philippines." Antimicrob. Agents Chemother. 49 (2005): 2102-2105. PubMed: 15855538.
3. Cameron, A., et al. "Identification and Activity of a Series of Azole-Based Compounds with Lactate Dehydrogenase-Directed Anti-Malarial Activity." J. Biol. Chem. 279 (2004): 31429-31439. PubMed: 15117937.
4. Alker, A. P., et al. "Mutations Associated with Sulfadoxine-Pyrimethamine and Chlorproguanil Resistance in *Plasmodium falciparum* Isolates from Blantyre, Malawi." Antimicrob. Agents Chemother. 49 (2005): 3919-3921. PubMed: 16127071.
5. Gómez-Saladín, E., et al. "*Plasmodium falciparum* *mdr1* Mutations and *in vivo* Chloroquine Resistance in Indonesia." Am. J. Trop. Med. Hyg. 61 (1999): 240-244. PubMed: 10463673.

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