

**Genomic DNA from *Plasmodium falciparum*, Strain IPC 5202**

**Catalog No. MRA-1240G**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Genomic DNA was obtained from a preparation of *Plasmodium falciparum* (*P. falciparum*), strain IPC 5202.

*P. falciparum*, strain IPC 5202 was isolated in 2011 from the blood of a human patient with malaria in Battambang province, western Cambodia.<sup>1,2</sup> *P. falciparum*, strain IPC 5202 has shown resistance to artemisinin<sup>3</sup> and when exposed to dihydroartemisinin gave a ring-stage survival assay (RSA<sub>0-3h</sub>) value of 88.2%.<sup>2</sup>

MRA-1240G has been qualified for PCR applications by amplification of approximately 600-900 base pairs of the merozoite surface protein 2 (MSP2) gene.

**Material Provided:**

Each vial of MRA-1240G contains approximately 500 ng of genomic DNA in TE buffer (10 mM Tris-HCl and 0.5 mM EDTA, pH 9). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

MRA-1240G 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 IPC 5202, MRA-1240G, contributed by Didier Ménard."

**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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Arieu, F., et al. "A Molecular Marker of Artemisinin-Resistant *Plasmodium falciparum* Malaria." Nature 505 (2014): 50-55. PubMed: 24352242.
2. Ménard, D., Personal Communication.
3. Straimer, J., et al. "Drug Resistance. K13-Propeller Mutations Confer Artemisinin Resistance in *Plasmodium falciparum* Clinical Isolates." Science 347 (2015): 428-431. PubMed: 25502314.
4. Witkowski, B., et al. "Novel Phenotypic Assays for the Detection of Artemisinin-Resistant *Plasmodium falciparum* Malaria in Cambodia: *in-vitro* and *ex-vivo* Drug-Response Studies." Lancet Infect. Dis. 13 (2013): 1043-1049. PubMed: 24035558.

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