

**Plasmid pL0019, for Transfection in *Plasmodium berghei***

**Catalog No. MRA-788**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

MRA-788 is a *Plasmodium berghei* (*P. berghei*) transformation plasmid, pDEFhDexpGFPM3, used for insertion (single crossover) with the human dihydrofolate reductase (*dhfr*) selectable marker.<sup>1,2</sup> Plasmid pL0019 contains a *pbeef1aa*-promoter-driven *gfp mutant3* expression cassette. The targeted integration locus is *c-* and *d-ssu-rma*.<sup>1,2</sup>

The resulting size of the plasmid is approximately 8120 base pairs. A plasmid map is provided in Figure 1.<sup>1</sup> The complete plasmid sequence is provided on the Certificate of Analysis for MRA-788.

**Material Provided:**

Each vial contains 0.7 µg of plasmid DNA in 10 mM Tris-HCl, pH 8.5. The amount per vial and concentration are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

MRA-788 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Note: MRA-788 was not provided in ethylenediamine-tetraacetic acid (EDTA); for long-term storage, EDTA may be added to a final concentration of 1 mM.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid pL0019, for Transfection in *Plasmodium berghei*, MRA-788, contributed by Andrew P. Waters.”

**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. Waters, A. P., Personal Communication.
2. Van Dijk, M. R., et al. “Genetically Attenuated, P36p-Deficient Malarial Sporozoites Induce Protective Immunity and Apoptosis of Infected Liver Cells.” Proc. Natl. Acad. Sci. USA 102 (2005): 12194-12199. PubMed: 16103357.

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Figure 1: Plasmid Map of pL0019

