

## Plasmid pL0027, for Transfection in *Plasmodium berghei*

Catalog No. MRA-796

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

### Contributor:

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### Manufacturer:

BEI Resources

### Product Description:

MRA-796 is a *Plasmodium berghei* (*P. berghei*) transformation plasmid, pEFGFP65LucIFVssu, used for insertion (single crossover) with the *Toxoplasma gondii* dihydrofolate reductase-thymidylate synthase (*tgdhfr/ts*) selectable marker.<sup>1,2</sup> Plasmid pL0027 contains a *pbeef1aa*-promoter driven *gfp65-lucIF* expression cassette. The targeted integration locus is *c-* and *d-ssu-rna*. pL0027 was deposited with no insert and designed for transfection of GFP-luciferase into the genome of *P. berghei* parasites.<sup>1,2</sup>

The resulting size of the plasmid is 12.775 kilobases. The plasmid map and the complete plasmid sequence are provided on the Certificate of Analysis for MRA-796.

### Material Provided:

Each vial of MRA-796 contains approximately 500 ng of plasmid 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-796 was packaged aseptically in 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.

### Post-Transformation Growth Conditions:

#### Media:

MRA-796 contains the gene required for ampicillin (Amp) resistance. The recommended concentration of Amp in culture is 50 µg/mL.

Luria Bertani (LB) broth or equivalent

LB agar or equivalent

#### Incubation:

Temperature: 37°C

Atmosphere: Aerobic

#### Propagation:

Incubate the tube, slant and/or plate at 37°C for 24 hours.

### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid pL0027, for Transfection in *Plasmodium berghei*, MRA-796, 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. Franke-Fayard, B., et al. "Murine Malaria Parasite Sequestration: CD36 Is the Major Receptor, but Cerebral Pathology Is Unlinked to Sequestration." *Proc. Natl. Acad. Sci. USA* 102 (2005): 11468-11473. PubMed: 16051702.

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