Plasmid pINT, for Transfection in *Plasmodium falciparum*

Catalog No. MRA-847

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
MRA-847 is a *Plasmodium falciparum* (*P. falciparum*) plasmid that expresses integrase (INT) from mycobacteriophage Bxb1 to catalyze rapid, site-specific integration of cotransfected *attP* plasmids (e.g. pLN-ENR-GFP, available as BEI Resources MRA-846) into *attB*$^{+}$ parasites (MRA-843 and MRA-845).[1,2] The resulting size of the plasmid is approximately 8,000 base pairs. The complete plasmid sequence and map are provided on the BEI Resources webpage. MRA-847 was produced in *Escherichia coli* (*E. coli*) and extracted.

Material Provided:
Each vial of MRA-847 contains approximately 0.5 µg of plasmid DNA in TE buffer (10 mM Tris-HCl and 0.5 mM EDTA). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:
MRA-847 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.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Plasmid pINT, for Transfection in *Plasmodium falciparum*, MRA-847, contributed by David A. Fidock."

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 (BMBL). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:
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References:
1. Fidock, D. A., Personal Communication.
2. Nkrumah, L. J., et al. "Efficient Site-Specific Integration in *Plasmodium falciparum* Chromosomes Mediated by Mycobacteriophage Bxb1 Integrase." Nat. Methods 3 (2006): 615-621. PubMed: 16862136.