

Product Information Sheet for MRA-810

Plasmid pMPMIV, for Transfection in *Plasmodium falciparum*

Catalog No. MRA-810

For research use only. Not for human use.

Contributor:

Daniel E. Goldberg, M.D., Ph.D., Professor of Internal Medicine, Infectious Diseases and Molecular Microbiology, The Division of Biology & Biomedical Sciences, Washington University School of Medicine, St. Louis, Missouri, USA

Manufacturer:

BEI Resources

Product Description:

MRA-810 is an *Escherichia coli* (*E. coli*) expression plasmid, pMPMIV, encoding the plasmepsin IV gene from *Plasmodium falciparum*, strain HB3. It encodes mature plasmepsin IV with an N-terminal MGSE sequence. The parent vector is pET-3d (Novagen) and the recommended host for expression is *E. coli* BL21 (DE3). *Nco*I and *Bam*HI flank the plasmepsin IV open reading frame (5' and 3', respectively). Ampicillin (*E. coli*) was incorporated as a selectable marker.¹

The resulting size of the plasmid is approximately 5640 base pairs. The complete plasmid sequence and plasmid map are provided on the Certificate of Analysis for MRA-810.

Material Provided:

Each vial contains approximately 0.5 µg of plasmid 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-810 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 pMPMIV, for Transfection in *Plasmodium falciparum*, MRA-810, contributed by Daniel E. Goldberg."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

- Goldberg, D. E., Personal Communication.
- Liu, J., et al. "The Role of *Plasmodium falciparum* Food Vacuole Plasmepsins." *J. Biol. Chem.* 280 (2005):1432-1437. PubMed: 15513918.

ATCC® is a trademark of the American Type Culture Collection.

