

Product Information Sheet for MRA-848

Plasmid pcam-BSD, for Transfection in *Plasmodium falciparum*

Catalog No. MRA-848

For research use only. Not for human use.

Contributor:

David A. Fidock, Ph.D., Professor, Department of Microbiology and Immunology, Columbia University Medical Center, New York, New York, USA

Manufacturer:

BEI Resources

Product Description:

MRA-848 is a *Plasmodium falciparum* (*P. falciparum*) transformation plasmid, which expresses the blasticidin-deaminase (*bsd*) selectable marker under the control of a *P. falciparum* calmodulin promoter.^{1,2} Plasmid pcam-BSD is useful for genetic element studies and calmodulin gene disruption in *P. falciparum*; select with geneticin (G418).²

The resulting size of the plasmid is approximately 4520 base pairs. The plasmid map and the complete plasmid sequence are provided on the Certificate of Analysis for MRA-848.

Material Provided:

Each vial of MRA-848 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-848 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-848 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 pcam-BSD, for Transfection in *Plasmodium falciparum*, MRA-848, 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*. 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:

1. Sidhu, A. B., S. G. Valderramos and D. A. Fidock. "pfmdr1 Mutations Contribute to Quinine Resistance and Enhance Mefloquine and Artemisinin Sensitivity in *Plasmodium falciparum*." *Mol. Microbiol.* 57 (2005): 913-926. PubMed: 16091034.
2. Fidock, D. A., Personal Communication.

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



BEI Resources

www.beiresources.org

E-mail: contact@beiresources.org

Tel: 800-359-7370

Fax: 703-365-2898