

**Plasmid pMRLB.59 Containing Gene Rv3914 (Protein TrxC) from *Mycobacterium tuberculosis* for Expression in *Mycobacterium smegmatis*****Catalog No. NR-13309**

This reagent is the tangible property of the U.S. Government.

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

NIH - TB Vaccine Testing and Research Materials Contract

**Product Description:**

NR-13309 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv3914, which encodes the protein thioredoxin, TrxC.<sup>1</sup> Gene Rv3914 was amplified by PCR and cloned into pVV16 for expression in *Mycobacterium smegmatis*. The gene was cloned with a signal sequence. The expressed protein is histidine-tagged and has an observed molecular weight of 12 kDa.

A plasmid map of NR-13309 is attached.

**Note:** Plasmid pMRLB.59 contains the gene required for kanamycin (kan) resistance. The recommended concentration of kan in culture is 25 µg/mL.

**Material Provided:**

Each vial contains 1 µg of plasmid DNA in 10 mM Tris-HCl, pH 7.5. The concentration is shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-13309 was packaged aseptically in 0.5 mL screw-capped 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 the NIH Biodefense and Emerging Infection Research Resources Repository, NIAID, NIH: Plasmid pMRLB.59 Containing Gene Rv3914 (Protein TrxC) from *Mycobacterium tuberculosis* for Expression in *Mycobacterium smegmatis*, NR-13309."

**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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.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](http://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 make 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. This material may be subject to third party patent rights.

**References:**

1. Cole, S. T., et al. "Deciphering the Biology of *Mycobacterium tuberculosis* from the Complete Genome Sequence." *Nature* 393 (1998): 537-544. PubMed: 9634230. Erratum in: *Nature* 396 (1998): 190-198.
2. TubercuList: [Gene Rv3914](#)

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



