

Shuttle Vector pMCSU4 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*

Catalog No. NR-13406

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Contributor:

NIH - TB Vaccine Testing and Research Materials Contract

Product Description:

NR-13406 is a shuttle vector that can be used for gene expression in either *Escherichia coli* or *Mycobacterium tuberculosis*. The pMCSU4 vector contains origins of replication for both organisms, *Escherichia coli* bacteriophage λ attR sites, Mycobacteriophage L5 integrase CDS and attP site, a *Mycobacterium BCG* hsp60 promoter region, as well as the genes that confer resistance to kanamycin (Km) and chloramphenicol (Cm). The recommended antibiotic concentration in culture is 50 μ g/mL Km.

Material Provided:

Each vial contains approximately 1 μ g of plasmid DNA in 10 mM Tris-HCl, pH ~ 8.0. The concentration is shown on the Certificate of Analysis.

Packaging/Storage:

NR-13406 was packaged aseptically in 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 Infections Research Resources Repository, NIAID, NIH: Shuttle Vector pMCSU4 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*, NR-13406."

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.

Disclaimers:

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