

## Shuttle Vector pMCSU5 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*

### Catalog No. NR-13407

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### For research use only. Not for human use.

#### Contributor:

NIH - TB Vaccine Testing and Research Materials Contract

#### Product Description:

NR-13407 is a shuttle vector that can be used for gene expression in either *Escherichia coli* or *Mycobacterium tuberculosis*. The pMCSU5 vector contains origins of replication for both organisms, *Escherichia coli* bacteriophage  $\lambda$  attR sites, a *Streptomyces coelicolor* tetracycline operator sequence, as well as the genes that confer resistance to kanamycin (Km) and chloramphenicol (Cm). The recommended antibiotic concentration in culture is 50  $\mu$ g/mL Km.

#### Material Provided:

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

#### Packaging/Storage:

NR-13407 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 pMCSU5 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*, NR-13407."

#### 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:

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