Shuttle Vector pMCSU3 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*

**Catalog No. NR-13405**

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**Contributor:**
NIH - TB Vaccine Testing and Research Materials Contract

**Product Description:**
NR-13405 is a shuttle vector that can be used for gene expression in either *Escherichia coli* or *Mycobacterium tuberculosis*. The pMCSU3 vector contains origins of replication for both organisms, *Escherichia coli* bacteriophage λ attR sites, a *Mycobacterium BCG* hsp60 promoter region, as well as the genes that confer resistance to kanamycin (Km), hygromycin B (Hyg) and chloramphenicol (Cm). The recommended antibiotic concentrations in culture are 50 µg/mL Km or 200 µg/mL Hyg.

**Material Provided:**
Each vial contains approximately 1 µg of plasmid DNA in 10 mM Tris-HCl, pH ~ 8.0. The concentration is shown on the Certificate of Analysis.

**Packaging/Storage:**
NR-13405 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 pMCSU3 for Gene Expression in *Mycobacterium tuberculosis* and *Escherichia coli*, NR-13405.”

**Biosafety Level:** 1


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