## Plasmid pMRLB. 1 Containing Gene Rv0440 (Protein GroEL2) from Mycobacterium tuberculosis

## Catalog No. NR-13276

This reagent is the tangible property of the U.S. Government.
Product Description: NR-13276 is a recombinant expression vector containing Mycobacterium tuberculosis gene Rv0440, which encodes the chaperonin family protein GroEL2. Gene Rv0440 was amplified by PCR and cloned into pET23b for expression in Escherichia coli.

Lot: 06.EC.11.16
Manufacturing Date: 16NOV2006

| TEST | SPECIFICATIONS | RESULTS |
| :---: | :---: | :---: |
| Agarose Gel Electrophoresis (see attached QC Gel) ${ }^{1}$ Linearization with Ndel Digestion with Ndel and HindIII | $\begin{aligned} & \sim 5.28 \mathrm{~kb} \\ & \sim 1.62 \mathrm{~kb} \text { (insert); } \sim 3.66 \mathrm{~kb} \text { (vector) } \end{aligned}$ | Pending Pending |
| Concentration by $\mathrm{OD}_{260}$ | Report results | $0.1 \mu \mathrm{~g} / \mu \mathrm{L}$ |
| Absorbance Ratio ( $\mathrm{OD}_{260} / \mathrm{OD}_{280}$ ) | Report results | 1.9 |

${ }^{1}$ Performed by Colorado State University under the TB Vaccine Testing and Research Materials Contract (NIH)

Date: 31 AUGUST 2009
Signature: Signature on File
Title: Technical Manager, BEI Authentication or designee

ATCC ${ }^{\circledR}$, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of $A T C C^{\circledR}$ 's knowledge.

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## QC gel

Restriction enzymes used in QC analysis Nde I, HindIII
Expected size of restriction fragments

| Vector | $\underline{3.66 \mathrm{~kb} \mathrm{pET} 23 \mathrm{~b}}$ |
| :--- | :--- |
| Insert | $\underline{1.62 \mathrm{~kb} \text { groEL2 }}$ |
| Other | $\underline{5.28 \mathrm{~kb} \text { linearized plasmid }}$ |

Gel description (file number, \% agarose, buffer) pMRLB1.dh1, 0.8\%, TAE

Molecular weight markers
$1 \mathrm{~kb}+$ (Invitrogen)
RE Digest and Gel:
Lane
$1 \quad 1 \mathrm{~Kb}+$ marker
2 pMRLB1 uncut
3 pMRLB1/NdeI
$4 \mathrm{pMRLB} 1 / \mathrm{NdeI} / \mathrm{HindIII}$

 Date 11.26 .06

Date $\qquad$

