

Plasmid pMRLB.68 Containing Gene Rv3846 (Protein SodA) from *Mycobacterium tuberculosis*

Catalog No. NR-15617

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

Product Description: NR-15617 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv3846, which encodes the protein superoxide dismutase (SodA). Gene Rv3846 was amplified by PCR and cloned into pDEST17 for expression in *Escherichia coli*. The gene was cloned without a signal sequence. The expressed protein is histidine-tagged and has an observed molecular weight of 25 kDa.

Lot¹: 58967605

Manufacturing Date: 07FEB2011

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing of Insert (820 bp)	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3846	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3846
Agarose Gel Electrophoresis Digestion with <i>Nde</i> I ² Digestion with <i>Hind</i> III ⁴ Digestion with <i>Nde</i> I and <i>Hind</i> III ^{2,4}	~ 5.260 kb; ~ 0.066 ³ kb ~ 4.814 kb; ~ 0.512 kb ~ 0.62 kb (insert); ~ 5.3 kb (vector)	~ 5.260 kb; ~ 0.066 ³ kb (Figure 1) ~ 4.814 kb; ~ 0.512 kb (Figure 1) ~ 0.62 kb; ~ 5.3 kb (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1 µg in 26 µL per vial (36 µg/mL)
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.0	1.9
Effective Bacterial Transformation	≥ 100 colonies per 10 ng	≥ 100 colonies per 10 ng

¹Produced in *Escherichia coli* MAX Efficiency[®] DH5α[™] cells (Invitrogen[™] 18258-012) and extracted using the Qiafilter Plasmid Midi Kit (QIAGEN[®] 12243)

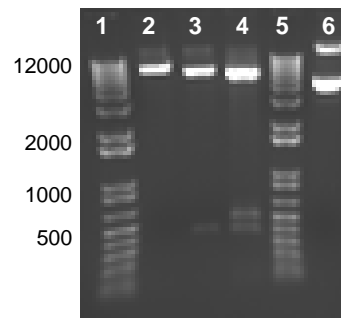
²*Nde*I (New England BioLabs, Inc. R0111L)

³The size is too small to visualize on the gel.

⁴*Hind*III (New England BioLabs, Inc. R0104M)

Figure 1: Agarose Gel of Undigested and Restriction Enzyme Digested NR-15617.

Lane 1 and 5: Invitrogen[™] TrackIt 1 Kb Plus DNA Ladder[™]
Lane 2: NR-15617 digested with *Nde*I
Lane 3: NR-15617 digested with *Nde*I and *Hind*III
Lane 4: NR-15617 digested with *Hind*III
Lane 6: Undigested NR-15617



Date: 14 FEB 2014

Signature:

Title:

Technical Manager, BEI Authentication or designee

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