

Plasmid pMRLB.51 Containing Gene Rv3763 (Protein LpqH) from *Mycobacterium tuberculosis*

Catalog No. NR-13302

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Product Description: NR-13302 is a recombinant expression vector containing *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv, gene Rv3763, which encodes the conserved 19 kDa lipoprotein antigen precursor, LpqH. Gene Rv3763 was amplified by PCR and cloned into pET23b for expression in *Escherichia coli*.

Lot¹: 59415500

Manufacturing Date: 24NOV2010

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing of Insert (476 bp)²	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3763	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3763 ²
Agarose Gel Electrophoresis Linearization with <i>Nde</i> I ³ Linearization with <i>Hind</i> III ⁴ Digestion with <i>Nde</i> I and <i>Hind</i> III ^{3,4}	~ 4.1 kb ~ 4.1 kb ~ 0.5 kb (insert); ~ 3.6 kb (vector)	~ 4.1 kb (Figure 1) ~ 4.1 kb (Figure 1) ~ 0.5 kb; ~ 3.6 kb (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1.1 µg in 51 µL per vial (22 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

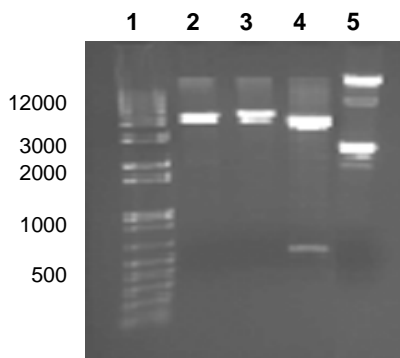
¹Produced in *Escherichia coli* MAX Efficiency[®] DH5α[™] cells (Invitrogen[™] 18258-012) and extracted using the Qiagen Plasmid Midi Kit (QIAGEN[®] 12145)

²The start and stop codons were not included in the alignment since they were modified to accommodate the restriction enzyme cut sites. The complete Rv3767 gene sequence is 480 bp.

³*Nde*I (New England BioLabs, Inc. R0111L)

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

Figure 1: Agarose Gel of Undigested and Restriction Enzyme Digested NR-13302



Lane 1: Invitrogen[™] TrackIt 1 Kb Plus DNA Ladder[™]
 Lane 2: NR-13302 digested with *Hind*III
 Lane 3: NR-13302 digested with *Nde*I
 Lane 4: NR-13302 digested with *Nde*I and *Hind*III
 Lane 5: Undigested NR-13302

Certificate of Analysis for NR-13302

Date: 22 MAR 2011

Signature:



Title: Technical Manager, BEI Authentication or designee

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