

Plasmid pMRLB.46 Containing Gene Rv3874 (Protein Cfp10) from *Mycobacterium tuberculosis*

Catalog No. NR-13297

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

Product Description: NR-13297 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv3874, which encodes a 10 kDa culture filtrate protein, Cfp10. Gene Rv3874 was amplified by PCR and cloned into pET23b for expression in *Escherichia coli*.

Lot¹: 58791993

Manufacturing Date: 03SEP2009

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing of Insert (300 bp)	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3874	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3874
Agarose Gel Electrophoresis Linearization with <i>NdeI</i> ² Linearization with <i>HindIII</i> ³ Linearization with <i>SacI</i> ⁴ Digestion with <i>NdeI</i> and <i>HindIII</i>	~ 3.9 kb ~ 3.9 kb ~ 3.9 kb ~ 0.302 kb (insert); ~ 3.6 kb (vector)	~ 3.9 kb (Figure 1) ~ 3.9 kb (Figure 1) ~ 3.9 kb (Figure 1) ~ 0.302 kb; ~ 3.6 kb (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1.4 µg in 25 µL per vial (57 µg/mL)
Absorbance Ratio (OD₂₆₀/OD₂₈₀)	Report results	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)

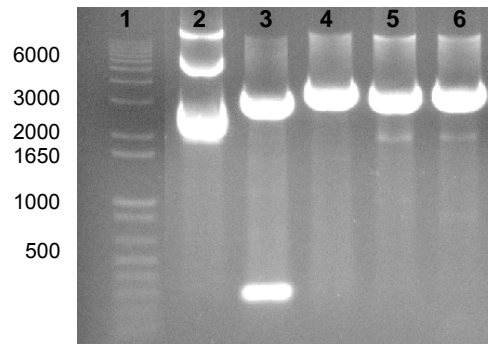
²*NdeI* (New England BioLabs, Inc. R0111L)

³*HindIII* (New England BioLabs, Inc. R0104M)

⁴*SacI* (New England BioLabs, Inc. R0157L)

Figure 1: Agarose Gel of Undigested and Restriction Enzyme Digested NR-13297.

Lane 1: Invitrogen[™] TrackIt 1 Kb Plus DNA Ladder[™]
Lane 2: Undigested NR-13297
Lane 3: NR-13297 digested with *NdeI* and *HindIII*
Lane 4: NR-13297 digested with *NdeI*
Lane 5: NR-13297 digested with *HindIII*
Lane 6: NR-13297 digested with *SacI*



Date: 28 OCT 2010

Signature:

Title: Technical Manager, BEI Authentication or designee

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