

Plasmid pMRLB.61 Containing Gene Rv0432 (Protein SodC) from *Mycobacterium tuberculosis* for Expression in *Mycobacterium smegmatis*

Catalog No. NR-13311

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

Product Description: NR-13311 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv0432, which encodes a probable periplasmic superoxide dismutase, SodC. Gene Rv0432 was amplified by PCR and cloned into pVV16 for expression in *Mycobacterium smegmatis*.

Lot¹: 58730808

Manufacturing Date: 08MAR2010

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing of Insert (723 bp)	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv0432	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv0432
Agarose Gel Electrophoresis Linearization with <i>Nde</i> I ² Linearization with <i>Hind</i> III ³ Digestion with <i>Nde</i> I and <i>Hind</i> III ^{2,3}	~ 5.8 kb ~ 5.8 kb ~ 0.7 kb (insert); ~ 6.5 kb (vector)	~ 5.8 kb (Figure 1) ~ 5.8 kb (Figure 1) ~ 0.7 kb; ~ 6.5 kb (Figure 1)
Concentration by PicoGreen[®] Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1.6 µg in 57 µL per vial (28 µg/mL) ⁴
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	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 Mega Kit (QIAGEN[®] 12181)

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

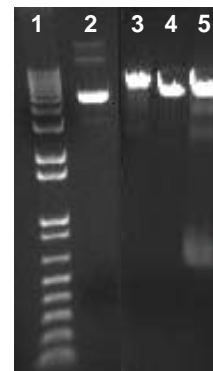
³*Hind*III (New England BioLabs, Inc. R0104M)

⁴The µg of DNA in the vials is greater than required by current specifications.

Figure 1: Agarose Gel of Undigested and Restriction Enzyme Digested NR-13311.

Lane 1: Invitrogen[™] TrackIt 1 Kb Plus DNA Ladder[™]
Lane 2: Undigested NR-13311
Lane 3: NR-13311 digested with *Nde*I
Lane 4: NR-13311 digested with *Hind*III
Lane 5: NR-13311 digested with *Nde*I and *Hind*III

12000
6000
4000
2000
1650
1000
500



Date: 17 MAY 2010

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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