

Plasmid pMRLB.7 Containing Gene Rv3875 (Protein Esat6) from *Mycobacterium tuberculosis*

Catalog No. NR-13280

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Product Description: NR-13280 is a recombinant expression vector containing *Mycobacterium tuberculosis* gene Rv3875, which encodes the early secretory antigenic target Esat6, also known as esxA. Gene Rv3875 was amplified by PCR and cloned into pET23b 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 10 kDa.

Lot: 58820548

Manufacturing Date: 25JAN2010

TEST	SPECIFICATIONS	RESULTS
PCR Amplification and Sequencing of Insert (285 bp)	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3875	Insert identical to <i>M. tuberculosis</i> , strain H37Rv gene Rv3875
Agarose Gel Electrophoresis Linearization with <i>Nde</i> I ² Linearization with <i>Xho</i> I ³ Digestion with <i>Nde</i> I and <i>Xho</i> I ^{2,3}	~ 4.0 kb ~ 4.0 kb ~ 0.3 kb (insert); ~ 3.7 kb (vector)	Pending Pending Pending
Concentration by PicoGreen® Measurement	0.7 to 1.5 µg in 25 to 100 µL per vial	1.2 µg in 29 µL per vial (41 µg/mL)
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	1.8
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)

³*Xho*I (New England BioLabs, Inc. R0146L)

Date: 11 AUG 2010

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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