

**Plasmid pMRLB78 Containing Gene ML0380 (Protein GroES) from *Mycobacterium leprae*****Catalog No. NR-19394**

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**Product Description:** NR-19394 is a recombinant expression vector containing *Mycobacterium leprae* gene ML0380, which encodes chaperonin protein GroES [also known as major cytoplasmic protein (MCP)]. Gene ML0380 was amplified by PCR and cloned into pET28 for expression in *Escherichia coli*, strain TOP10. The expressed protein is histidine-tagged and has an observed molecular weight of 10 kDa.

**Lot: 61002004****Manufacturing Date: 12MAY2011**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for the bulk lot pMRLB78 12.20.2010B is attached. This lot was received as dry pellets from CSU and rehydrated in TE buffer (10 mM Tris-HCl, 1 mM EDTA buffer, pH 8) at ATCC<sup>®</sup>. Approximately 100  $\mu$ L of a 0.01  $\mu$ g/ $\mu$ L solution was dispensed per vial yielding a final amount of 1  $\mu$ g per vial. A plasmid map for pET28 is attached.

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Recombinant Plasmid Quality Control Record

Plasmid designation pMRLB78 (pET28-GroES ML0380)  
 Lot Number pMRLB78 12.20.2010B

Notebook/Pgs JNKBook#1/pp.114-116,124  
JNKBook#2/pp10

Notebook detail Plasmid Prep pp. 111,114  
A260/280 and stock dilution pp. 116  
QC Gel pp 10

Media used LB Broth 50 µg/ml Kanamycin  
 Culture size 1 x 1L

Growth conditions: Temp 37°C Time 16 hr. Shaker speed 130 rpm

Plasmid prep type (mini/maxi, kit name or protocol) Qiagen Maxi Prep protocol  
 Plasmid prep detail: Maxi prep lysate and tip washing conditions  
Purification (Wash & elution)- Qia500 tips-

Strain used to produce plasmid TOP-10

*E. coli* ori? Y/N Y

Contains Mycobacterial ori? Y/N N

Final concentration Dried, 20 µg/tube  
 Number of batches 2 x 20 µg

Buffer TE Buffer

Method used for quantifying A260

QC gel

Restriction enzymes used in QC analysis NdeI, HindIII, & BamHI

Expected size of restriction fragments

Vector	<u>5.369kb pET28 NdeI + HindIII</u>
Insert	<u>0.239kb GroES NdeI + HindIII</u>
Other	<u>5.608kb linearized plasmid NdeI, HindIII and BamHI single digest</u>

Gel results All predicted bands visible JNK Book#2/ pp. 10

Gel description file number, % agarose, buffer ED GroES12011-05-06, 1.5% 1 X TAE  
 Sequence file: SequenceGroES.ppt

Plasmid Map: Attached

Generated by Jade Furuk Date 5/12/11

Supervisor John W. Spencer Date 5/12/11

pET28a (+)

