

Oral Immunization of Rabbits with *S. enterica Typhimurium* Expressing *Neisseria gonorrhoeae*
Filamentous Phage Φ 6 Induces Bactericidal Antibodies Against *N. gonorrhoeae*

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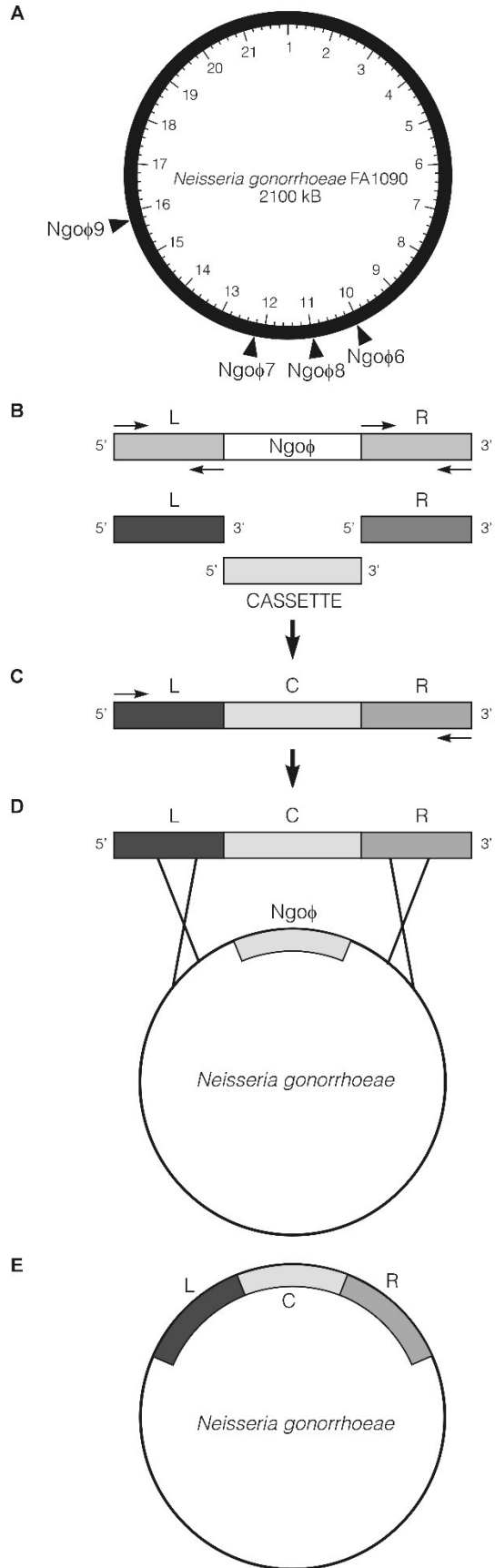
Supplemental TABLE 1

Primers used in this study

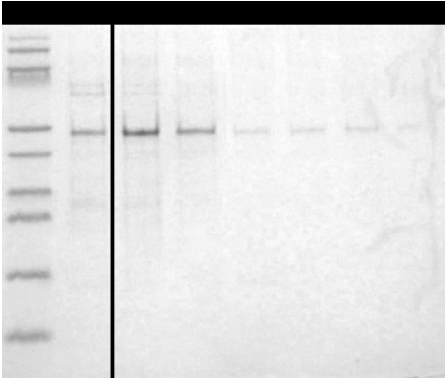
Primer	Sequence (5' → 3')	Use
ORF9F ORF9R	AAC TTTCGACGTGTCCGGGA ACTTATGGAGACGGA AAGGCGCGGTGCTGATTGTTGGCGAAGCGCACTA	Cloning of ORF9 of NgoΦ6 into pET28a
PhageΦ9R PhageΦ9F	TTATTGATTCAATCGGTGTCTTTCC TTACGCCGATTTGTAACGCGATGGA	Detection of the presence of phage NgoΦ9
PhageΦ8R PhageΦ8F	ATGGGCTTAAAGTGTCTGCCGAAA TTACGCCGATTTGTAACGCGATGGA	Detection of the presence of phage NgoΦ8
PhageΦ7R PhageΦ7F	ATGATGACGATTTTCATACGCGCGGC TTACGCCGATTTGTAACGCGATGGA	Detection of the presence of phage NgoΦ7
PhageΦ6R PhageΦ6F	TTTCATTTCCGGATTCCCACTTTTCG ATGCGTAACGCCGTAGGATTGGATA	Detection of the presence of phage NgoΦ6
Φ6LF Φ6LR	TCCGAACCTTTGAAGCAA CACTAAGCTTGGGATTACCCTTTTATATGCGGATAT	Amplification of the left flank of NgoΦ6
Φ6RF Φ6RR	CACTCTGCAGCAGCGTTGCGAGGCTTAAGC GCCGGCCGCCCGGACT	Amplification of the right flank of NgoΦ6
Φ7LF Φ7LR	GTCCTCGCCTCGCTCG GTGAAGCTTTTGCCGGTGTATTGGTAGG	Amplification of the left flank of NgoΦ7
Φ7RF Φ7RR	CACTCTGCAGAAATCGGTAAATTTGCGT AGGGTTGGGCGGGACCCATTTCCCTTCTC	Amplification of the right flank of NgoΦ7
Φ8LF Φ8LR	GACCCATTTCCCTTCCCTC GTGAAGCTTTCCCGAAAGGAAAAAAGG	Amplification of the left flank of NgoΦ8
Φ8RF Φ8RR	CTCACTGCAGTATATCGATCCATCC GATGATGACGATTTTCATAC	Amplification of the right flank of NgoΦ8
Φ9LF Φ9LR	TATTAACACATAAAAAACAAAGGA GTGAAGCTTCGATAAATCCCGAAAGG	Amplification of the left flank of NgoΦ9
Φ9RF Φ9RR	CTCACTGCAATAAAATTCACAAAAATT GTTCCGGCGGTGTTCCGCCG	Amplification of the right flank of NgoΦ9
Omega-PstFR Omega-HindIIIF	CAGTCTGCAGGAGTTAAGCCGCGCCGCGAA GACCTCGAGTTGCAAACCGAAGCTTGTG	Amplification of the spectinomycin cassette
0F16NheI 9FQER	CTAGCTAGCATTTATCTGTTTACGGGAACAT GCAAGCTTTTAGGACTTTCCGCCCATTC	Cloning of Orf9 into pET21A
ChlorF ChlorR	ATCGTTTAAACGTTGATCGGCACGTAAGAG ATCGTTTAAATAGCACAGGCGTTTAAGGG	Amplification of the chloramphenicol cassette
KanF KanR	CACTAAGCTTTATCTGGACAAGGAAAACGC CACTCTGCAGGGTGAATCGAAATCTCGTGA	Amplification of the Kanamycin cassette

Fig.S1. Schematic of method used to delete NgoΦ6, NgoΦ7, NgoΦ8 and NgoΦ9 from

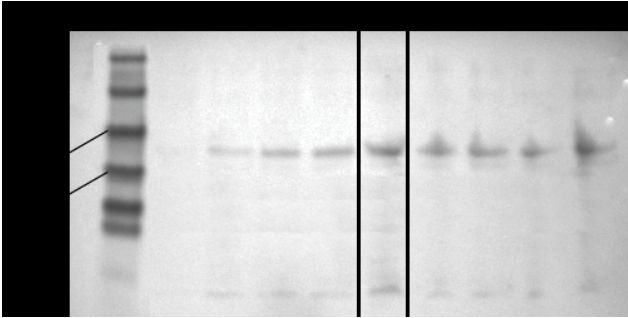
FA1090. (A) Locations of the filamentous phage sequences on the FA1090 genome as determined by (28). (B) General scheme for removing phage sequences. Two amplicons (L-left and R-right) flanking each phage sequences were obtained by PCR and after digestion with HindIII (left flank DNA) and PstI (right flank DNA) ligated with the donor of antibiotic resistance cassette to produce a fragment (C). The ligation product containing antibiotic cassette integrated into left and right flanks of phages DNA was amplified by PCR using appropriate primers. Panel D indicates that the integration of the amplified DNA after *N. gonorrhoeae* transformation and selection of antibiotic resistant transformant (Panel E).



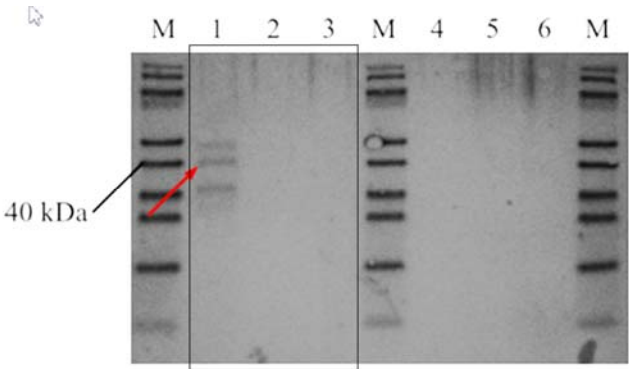
Construction of Figure 1:
Lanes M and 1



Lane 2



Lane 3, 4 and 5



Final image:

