

Antisense RNA Knockdown and Genomic Deletion of *wecD* Sensitizes *Escherichia coli* to Bacteriophage T7 Infection

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SUPPLEMENTAL MATERIAL

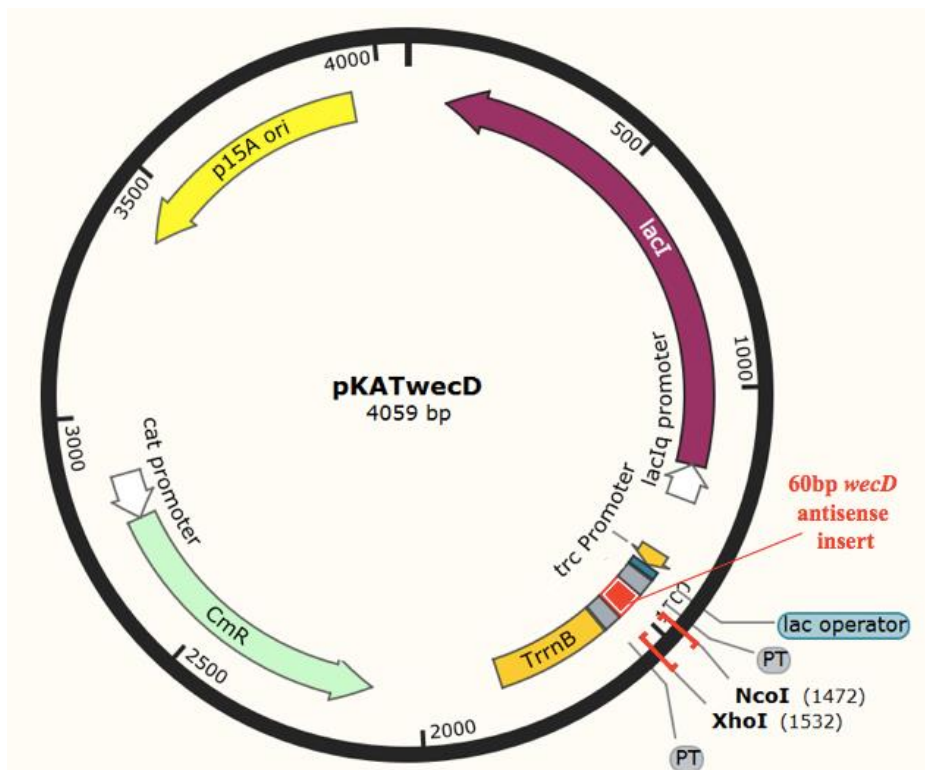


FIG. S1 pKAT*wecD* plasmid map depicting the 60 base pair *wecD* antisense insert, restriction enzyme sites of NcoI and XhoI, and paired termini (PT).

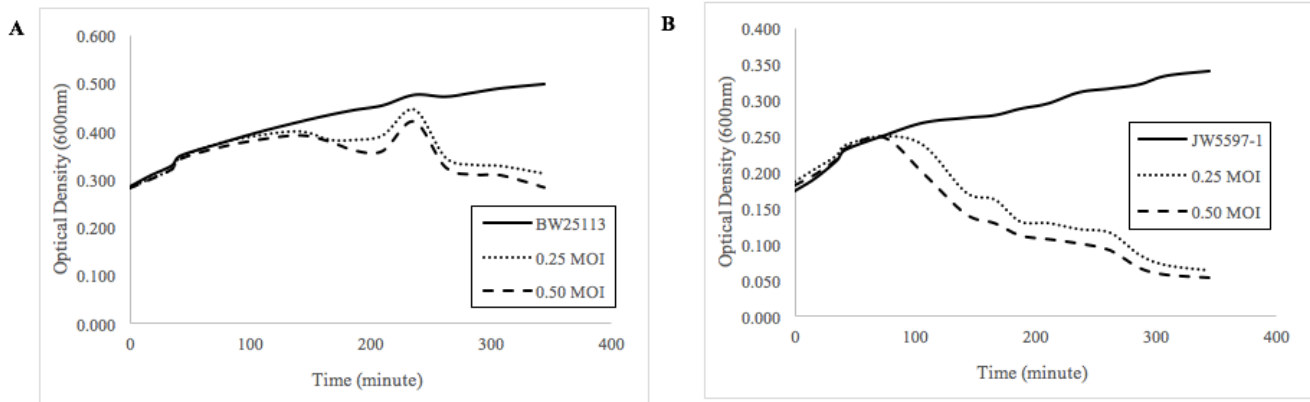


FIG. S2 The effect of *wecD* genomic deletion on bacteriophage T7 infectivity at 0.25 and 0.5 MOI. (A) Parent/WT strain BW25113. (B) *wecD* genomic deletion JW5597-1 strain. The optical density of cultures was measured at 600 nm for 330 minutes.

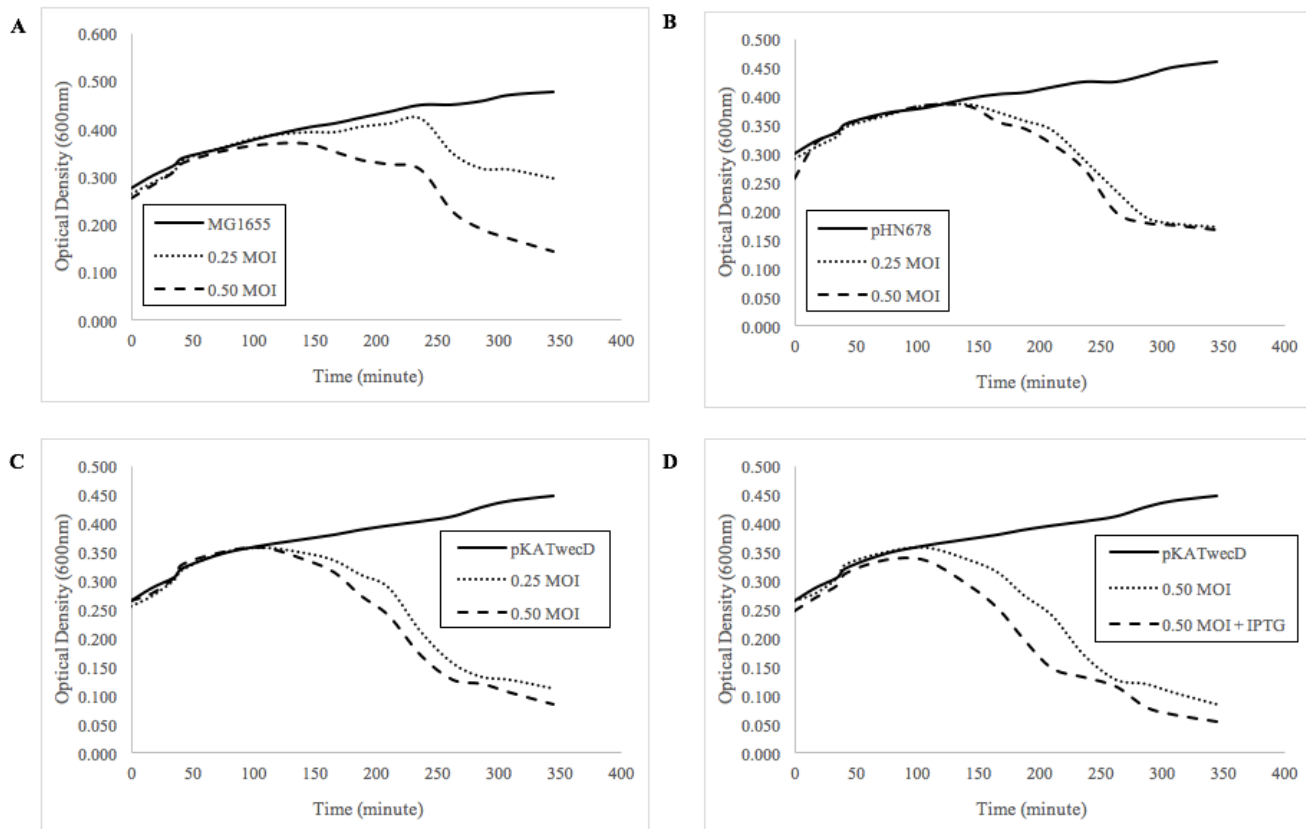


FIG. S3 The effect of *wecD* asRNA knockdown on bacteriophage T7 infectivity at 0.25 and 0.5 MOI. (A) WT MG1655 strain. (B) MG1655 transformed with pHN678 plasmid. (C) MG1655 transformed with pKAT*wecD* plasmid, without IPTG induction (D) MG1655 transformed with pKAT*wecD* plasmid, with 1 mM IPTG induction. The optical density of cultures was measured at 600 nm for 330 minutes.

Sequence of pKAT*wecD*, regions around the *wecD* antisense

***wecDas60f* sequence**

NNNNCTGTTGNNNTANTCNTCCGGCTCGTATAATGTGGTGGAAATTGTGAGCGGATAACAATTcagGaggAAtt
 AACCATGCAGTGGTGGTGGTGGTGGTGCATGGTGGcGCGGACGGGCACGAAGTAACTCCAGCAGATATTG
 GCGGTAGCCAGTTTTCTCGAGCACACCACCACCACCTGCATGGTTAATTCCTCTACTAGTTTTGGN
 GGATGAGAGAAGATTTTCAGCCTGATACAGATAAATCAGAACGCAGAAGCGGTCTGATAAAACAGAATT
 GCCTGGCGGCAGTAGCNGGNNGGTCCCACCTGACCCCATGCCGAACCTCAGAAGTGAAACGCCGTAGTGCC
 GATGGTAGTGTGGGGTCTCCCATGCGAGAGTAGGGAACTGCCAGGCATCAATAAAACGAAAGGCTCAG
 TCGAAAGACTGGGCCTTTCTGTTTTATCTGAGGGGGAGGCAGAATAATGATCATATCGTCAATTATTACCTC
 CACGGGAGAGCCTGAGCAAACTGGCCTCAGGCATTTGAGAAGCACACGGTCACACTGCTTCCGGTAGTC
 AATAAACCGGTAAACCAGCAATAGACATAAGCGGCTATTTAACGACCCTGCCCTGAACCGACGACCGGGTC
 GAATTTGCTTTCGAATTTCTGCCATTTCATCCGCTTATTATCACTTATTAGGGCTAGCAACCAGGCGTTAAG
 GGCACCAATAACTGCCTTAAAAAATACGCCCGCCCTGCCACTCATCGCAGTACTGTTGTANNNTAA
 GCATTCTGCCGACATGNAANCATCACAACGGCATGATGAACCTGAATGCCAGCGGNATCAGCACCTTGT
 CGCCTTGCGTATAATATTGCCCATCGNGAAANCAGGGGCGNANAGTTGTCCATATTNCCACGTTTAAATCA
 AACTGNAAAACCTACCCAGGGATTGGCTTGAANCGAAAACATATTCTCATTAAACCTTTAGGGAAATAGNN
 NGGTTTTACCGGTANACNNCACATCTTGNNAAATATGNGNAGAANTGCNAAATCGNCGTNGNNNTCNTTC
 AGNAGNNANGANNNGTTNNNGTTTGCTCATGGAAACGGNNGNANNAGGGNGGACNNNTCCCNATCN
 CNNNN

CAT GGT GGC GCG GAC GGG CAC GAA GTA ACT CCA
 GCA GAT ATT GGC CGT AGC CAG TTT TCC

Sequence ID: Query_170659 Length: 60

Score	Expect	Identities	Gaps	Strand
111 bits(60)	1e-29	60/60(100%)	0/60(0%)	Plus/Plus
Query 115	catggtggCGCGGACGGGCACGAAGTAACTCCAGCAGATATTGGCCGTAGCCAGTTTTCC	174		
Sbjct 1	CATGGTGGCGGGACGGGCACGAAGTAACTCCAGCAGATATTGGCCGTAGCCAGTTTTCC	60		

FIG. S4 NCBI BLAST alignment results of pKAT*wecD* sequences (around the *wecD* antisense region) and *wecDas60f* insert sequence.