

**TABLE S3** Primers used in this study

Purpose	Primer	Sequence	Description
pGEM695;	M9 (arcA_fwd)	CCTCTCAGAATGCTACTCTCC	Primer for mutagenesis
pGEM696;	M10 (arcA_rev)	GCACCTGTTACGAGCAAGCTG	Primer for mutagenesis
pGEM611;	M17 (arcC_fwd)	CACATGTTCTCATCACTGAA	Primer for mutagenesis
pGEM612;	M18 (arcC_rev)	GTCCCCTGTACCAACTCCCG	Primer for mutagenesis
pGEM905;	M23 (arcT_fwd)	CTTCCCAGAAGGCGCAATGC	Primer for mutagenesis
pGEM615;	M24 (arcT_rev)	GGAAAAACATATGCAGCC	Primer for mutagenesis
pGEM707;	M55 (arcA_rev_invPCR <i>Bam</i> HI)	GAAGACCTGAATTGGATCCGAAGACATGTAT	Primer for mutagenesis; <i>Bam</i> HI
pGEM719;	M56 (arcA_fwd_invPCR <i>Hind</i> III)	GAACGTGAAGAAGCTTAATCGCTGTTCTCGATATTCG	Primer for mutagenesis, <i>Hind</i> III
pGEM699;	M59 (arcC_rev_invPCR <i>Bam</i> HI)	GGGTCAGAAGAAAGGATCCCATTTCCTCCCAAAGCTAC	Primer for mutagenesis; <i>Bam</i> HI
pGEM700;	M60 (arcC_fwd_invPCR <i>Hind</i> III)	CCAAAAGTAGAAGCAGCTAAAGCTTTTGTCAATGGTCGTCC	Primer for mutagenesis, <i>Hind</i> III
pGEM703;	M63 (arcT_rev_invPCR <i>Bam</i> HI)	TTGAGTACTGAAGGATCCGAAATCAAGGTT	Primer for mutagenesis; <i>Bam</i> HI
pGEM704;	M64 (arcT_fwd_invPCR <i>Hind</i> III)	GTGCCGTTCTAGAAGCTTTGTACCGTGCTATGG	Primer for mutagenesis, <i>Hind</i> III
pGEM699;	P586 (SP_0893frw KO)	GATAACTTCGGTGGGCAAGA	Primer for mutagenesis
pGEM700	P587 (SP_0893rev KO)	GCAATTCGAGATTGGTTTCG	Primer for mutagenesis
	P588 (SP_0893invPCR_rev)	GTAGTGGATCCGCGTATAAGTTGGTGGCG	Primer for mutagenesis; <i>Bam</i> HI
	P589 (SP_0893invPCR_fwd)	CTGTCTTATCAAGCTTGAAGATGCAGATAC	Primer for mutagenesis, <i>Hind</i> III
pGEM703;	P590 (SP_1203fwd)	GATAACTTCGGTGGGCAAGA	Primer for mutagenesis
pGEM704	P591 (SP_1203rev)	GCAATTCGAGATTGGTTTCG	Primer for mutagenesis
	P594 (SP_1203invPCR_rev)	CGATTGGATCCTCTGTACCAATCTTC	Primer for mutagenesis; <i>Bam</i> HI
	P595 (SP_1203invPCR_fw)	GCCAGAAGCTTGAAGTCTAGCAGAGGAAATC	Primer for mutagenesis, <i>Hind</i> III
pGEM708;	M27 (argR_fwd)	GTGACAAGCTATCTCCGATAACAG	Primer for mutagenesis
pGEM709	M28 (argR_rev)	CTGAGTCCGATGAACATACTGG	Primer for mutagenesis
	M65 (argR_rev_invPCR <i>Bam</i> HI)	ATTAACTGATGAGGATCCCTTTTTCTCATA	Primer for mutagenesis; <i>Bam</i> HI
	P595 (SP_2077invPCR_fwd)	GGAAGATCGATTGCTAGATTGATGAAAG	Primer for mutagenesis, <i>Cl</i> I
<i>ermB</i>	T99	CCCGGGGAAATTTTGATATCGATGGATCCGAATTCGACGGTTCGTGTCTGCTG	Primer for mutagenesis; <i>Bam</i> HI
	T100	CCCGGGGAAATTTTGATATCGATAAGCTTGAATTCGACGGTTCGTGTCTGCTG	Primer for mutagenesis, <i>Hind</i> III
pGEM867;	P370	CGGGATCCGCAAATAAAGCAGTAAATGAC	Primer for mutagenesis
pGEM868	P721	GACTCTAGAGGATCCCCGGGTCAACAGACACTCATCCACATTC	Primer for mutagenesis
	P913	CTATTTGGGGATCGATTCTCTATCCTCAGG	Primer for mutagenesis
	P1121	GCGTCTACGCTGACTGTATA	Primer for mutagenesis
pET698	P596 (SP_2148fwd)	GGGCGCTAGCTCTTCACATCCAATTCAGGTC	S primer for ArcA expression vector; <i>Nhe</i> I
	P597 (SP_2148rev)	GCGGCCAAGCTTACTTCTTCACGTC	AS primer for ArcA expression vector; <i>Hind</i> III
pET883	P726 (SP_2150fwd)	GGGCGCTAGCACAAATTCAGTATTCCAAGG	S primer for ArcB expression vector; <i>Nhe</i> I
	P727 (SP_2150rev)	GCGGCCAAGCTTATACTTTAGGAATATAAAG	AS primer for ArcB expression vector; <i>Hind</i> III
pET885	P728 (SP_2151fwd)	GGGCGCTAGCGCAAATCGTAAAAATGTAG	S primer for ArcC expression vector; <i>Nhe</i> I
	P729 (SP_2151rev)	GCGGCCGAGCTCTTATCCTTTTTCAATAATG	AS primer for ArcC expression vector; <i>Sac</i> I
pET702	P584 (SP_0893fwd)	GGGCGCTAGCAATAAATCAGAACACCGCCAC	S primer for ArgR2 expression vector; <i>Nhe</i> I
	P585 (SP_0893rev)	GCGGCCAAGCTTATTCTTCAAAGAAAAATG	AS primer for ArgR2 expression vector; <i>Hind</i> III
pET706	P592 (SP_1203fwd)	GGGCGCTAGCAATAAAAAAGAGAGACTTG	S primer for AhrC expression vector; <i>Nhe</i> I
	P593 (SP_1203rev)	GCGGCCAAGCTTACCAATTTTTACTTG	AS primer for AhrC expression vector; <i>Hind</i> III
pET711	P552 (SP_2077fwd)	GGGCGCTAGCAGAAAAAGAGATCGTCATCAG	S primer for ArgR1 expression vector; <i>Nhe</i> I
	P553 (SP_2077rev)	GCGGCCAAGCTTACTTATCTTTTCATCAAATC	AS primer for ArgR1 expression vector; <i>Hind</i> III
RT-PCR	M56	GAACGTGAAGAAGCTTAATCGCTGTTCTCGATATTCG	S primer for RT-PCR FI

	M10	GCACCTGTTACGAGCAAGCTG	AS primer for RT-PCR FI
	M58	GCTACACTTGGTAAGCTTTATATTCTAAA GTATAATTTAG	S primer for RT-PCR FII
	M59	GGGTCAGAAGAAAGGATCCCATTTCCTCC CAAAGCTAC	AS primer for RT-PCR FII
	M60	CCAAAAGTAGAAGCAGCTAAAGCTTTTGT CAATGGTCGTCC	S primer for RT-PCR FIII
	P558	CAATAATACGGTGTAAGATGAAGGCATC	AS primer for RT-PCR FIII
	M62	CCTTCTTCCTTGGAAGCTTCCTTCATTC CTATAAAA	S primer for RT-PCR FIV
	M22	GCCAATCTGCTTCATCACCTGATGG	AS primer for RT-PCR FIV
	522	CTCGTTACGGTGGTCTTGGT	S primer for RT-PCR Enolase
	523	GTAGTCAGCAGCAGCAGCAG	AS primer for RT-PCR Enolase
	P584	GGGCGCTAGCAATAAATCAGAACACCGCC AC	S primer for RT-PCR of <i>argR2</i>
	P585	GCGCCAAGCTTATTCTCAAAGAAAAAT G	AS primer for RT-PCR of <i>argR2</i>
Northern Blot	P611 (NB_arcA_fwd)	TGCCGACTATCTTGAAAGG	S primer for arcA probe
	P704 (NBarcA_T7)	CTAATACGACTCACTATAGGGAGAAGCAA ATTCAAAGGCCAAAA	AS primer for arcA probe
	P933 (NB_arcB_fwd)	GTCTTTCAGCTCACTTGAAAG	S primer for arcB probe
	P934 (NB_arcB_T7)	CTAATACGACTCACTATAGGGAGAGCACC TGTACGAGCAAGC	AS primer for arcB probe
	P935 (NB_arcC_fwd)	GTTGAAACAGCTAAGCATCTTG	S primer for arcC probe
	P936 (NB_arcC_T7)	CTAATACGACTCACTATAGGGAGACGCCA GCCACGGCCAGCATC	AS primer for arcC probe
	P613 (NB_arcD_fwd)	CAGCGCAACTATGGGTATCA	S primer for arcDT probe
	P705 (NB_arcD_T7)	CTAATACGACTCACTATAGGGAGAACGCG CTTTTTGAACTGAAT	AS primer for arcDT probe
EMSA	P952	GAGCATCTTCCAAGAAAGG	<i>arcA</i> promoter region
	P1136	CAGATCCAAGTGATAACCAG	<i>arcA</i> promoter region
	M60	CCAAAAGTAGAAGCAGCTAAAGCTTTTGT CAATGGTCGTCC	<i>arcD</i> promoter region
	P558	CAATAATACGGTGTAAGATGAAGGCATC	<i>arcD</i> promoter region
	P964	ATAGCGTCTTTGCTCATCCG	<i>enolase</i> promoter region
	P965	TTCAAGTGTTGGGTACCGC	<i>enolase</i> promoter region