

S1 Table. Primers used in this study.

Primer	Sequence ^a	Purpose
glnRA_969F	GGGTGGAGGTGCAAGCATG	construction of Δ GlnR and GlnR+/ Δ GlnR
glnRA_2033R	TTTCTCGAGTTTCCTCCTTTCATTGTC	construction of Δ GlnR
glnRA_2389F	TACGCATGCAAATACGTAACGTGGAATT	
glnRA_3403R	GGTGAACGATTGCGTCCCG	construction of Δ GlnR and GlnR+/ Δ GlnR
glnR_C_1945R	GACGCATGCTAAACTTTACTTTTTGTAAAAAATTTTCG	construction of GlnR+/ Δ GlnR
glnR_C_1946F	CTCCTGCAGGAGTTTATGTCAGGAAATATGACAT	
pmrA_3574F	CATGCCAATCACACCTAAAGC	construction of Δ PmrA and PmrA+/ Δ PmrA
pmrA_4544R	AATGGATCCGAATAATCTTCGTTTCTT	construction of Δ PmrA
pmrA_4827F	GGA CT CGAGGCCATTGAATTCTGAAGAC	
pmrA_5860R	CTGGCAGCAGGTTTTCAAGG	construction of Δ PmrA and PmrA+/ Δ PmrA
pmrA_C_4860R	CTTGCATGCTTATTTGTCTTCAGAATTCAATGGCC	construction of PmrA+/ Δ PmrA
pmrA_C_4861F	CACCTGCAGAAAAGAGTGGAACACTTTGGTTC	
qPCR_16s_F	TGGAATCCATGTGTAGCGG	qPCR of 16s RNA
qPCR_16s_R	CCTGCCCGGGAACGTATTC	
qPCR_citB_F	TCAATTCTTACGGTAGCCGTCG	qPCR of <i>citB</i>
qPCR_citB_R	TTTACGCACAACCATTGG	
qPCR_gdhA_F	CTCTTACTGGCCAACCAATC	qPCR of <i>gdhA</i>
qPCR_gdhA_R	CACCACCTGCAGGTGTGAA	
qPCR_glnA_F	TGTTGAAATCCCAGCTAC	qPCR of <i>glnA</i>
qPCR_glnA_R	CAGTTGGATTCATGATAGC	
qPCR_glnP_F	CTGGCGATTCCATGTACAAC	qPCR of <i>glnP</i>
qPCR_glnP_R	CGACATTGCTTCCTTTAC	
qPCR_glnQ_F	CTACCATGCACTTCGTAA	qPCR of <i>glnQ</i>
qPCR_glnQ_R	AGA ACT GTTGAGCTCGTG	
qPCR_nrgA_F	TCGCGATTATGACCGTC	qPCR of <i>nrgA</i>
qPCR_nrgA_R	CCCATAAAGGTTGGATAC	

MBP_glnR_F	<u>GGGAATTC</u> ATGAAAGAAAAAGAGCTTCGAC	construction of MBP-
MBP_glnR_R	GTT <u>CTGCAG</u> TTACATACGTAAACCACCAAGA	GlnR
MBP_pmrA_F	<u>CTGGATCC</u> ATGGAAAAAGAAACGAAGATT	construction of MBP-
MBP_pmrA_R	CAC <u>CTGCAG</u> TTATTTGTCTTCAGAATTC AAT	PmrA
EMSA_citB_F	CTATTTTTATGTTATAAAACATAACATAAAATGCAAGCTT	EMSA probes
EMSA_citB_R	AAGCTTGCATTTTTATGTTATGTTTTATAACATAAAAATAG	
EMSA_gdhA_F	TTAATCTAATGAATGTTATTTTTTATAACATGAAAGAATA	
EMSA_gdhA_R	TATTCCTTCATGTTATAAAAAATAACATTCATTAGATTAA	
EMSA_glnP_F	TATAGACTGTTATGTAAGGAAATATAACATCTATTATTAA	
EMSA_glnP_R	TTAATAATAGATGTTATATTTTCCTTACATAACAGTCTATA	
EMSA_glnQ_F	GTATAACAATATAATGTTAGAAAAGCTAACAATAAATTTA	
EMSA_glnQ_R	TAAATTTATGTTAGCTTTTCTAACATTATATTGTTATAC	
EMSA_glnR_F	GTTTAGAGTTTATGTCAGGAAATATGACATATAGGCTTGA	
EMSA_glnR_R	TCAAGCCTATATGTCATATTTCTGACATAAACTCTAAAC	
EMSA_nrgA-1_F	TACCTCCCTTTATGTTATATAATATAACATTATTCCTAAA	
EMSA_nrgA-1_R	TTTAGGAATAATGTTATATTATATAACATAAAGGGAGGTA	
EMSA_nrgA-2_F	CTTTTTTGTTATATGTTATGTTTTTTAACATTTCTATCTA	
EMSA_nrgA-2_R	TAGATAGAAATGTTAAAAAACATAACATATAACAAAAAA G	
EMSA_pmrA_F	TAAACATTTTATGTAGAAAACTACATTTATTGTAATATA	
EMSA_pmrA_R	TATATTACAATAAATGTAGTTTTTCTACATAAAATGTTTA	
EMSA_gdhA_Con_F	TTAATCTAATGAACAattTTTTTTAAtctatTGAAAGAATA	EMSA control probes with mutated bases in the GlnR box
EMSA_gdhA_Con_R	TATTCCTTTCaAtagaTAAAAAaattgTTCATTAGATTAA	
EMSA_glnQ_Con_F	GTATAACAATATAAAtgatGAAAAGCattagATAAATTTA	
EMSA_glnQ_Con_R	TAAATTTATctaatGCTTTTCatcaaTTATATTGTTATAC	
EMSA_glnR_Con_F	GTTTAGAGTTTAccattGGAAATActtctTATAGGCTTGA	
EMSA_glnR_Con_R	TCAAGCCTATAagaagTATTTCCaatggTAAACTCTAAAC	

^a Inserted restriction sites are underlined. The mutated bases in the GlnR box are in lower case.

CTCGAG, the XhoI recognition sequence; GCATGC, the SphI recognition sequence; CTGCAG, the PstI recognition sequence; GGATCC, the BamHI recognition sequence; GAATTC, the EcoRI recognition sequence.