Table S3 Primers used in this study

Primers	**Nucleotide sequence (5′ →3′)**	**The amplified fragment or the utilization**
L*tfmR*-F L*tfmR*-R	CGGGATCC CCAGCACGATCAGATCATCGGT GCTCTAGA GGCGCGATTTAACCATACGC	425-bp DNA sequence upstream of *tfmR* (XOCgx_1556), used for construction of *tfmR* deletion mutant.
R*tfmR*-F R*tfmR*-R	GCTCTAGA GCTGACGTGGTGAGATCGAA CCAAGCTT AGCTACTTTGATTTTGGCGTG	309-bp DNA sequence downstream of *tfmR* (XOCgx_1556), used for construction of *tfmR* deletion mutant.
C*tfmR*-F C*tfmR*-R	CCAAGCTT ATGAACGACACCACCGACTCCA GCTCTAGA TCACCCAGGAATCAACGTCTGGATCA	606-bp DNA fragment containing the full length *tfmR* gene. Used for complemented tests.
pET32*tfmR*-F pET32*tfmR*-R	CGGGATCC ATGAACGACACCACCGACTCCA CCAAGCTT CCCAGGAATCAACGTCTGGATCA	606-bp DNA fragment of the *tfmR*-coding sequence. Cloned into expression vector pET-32a for protein overproduction.
L*tfmR*-flag-F L*tfmR*-flag-R	CGGGATCC CCAGCACGATCAGATCATCGGT TCATGATCTTTATAATCACCGTCATGGTCTTTGTA GTCCCCAGGAATCAACGTCTGGAT	1069-bp DNA fragment containing 38-bp Flag-coding sequence, 606-bp DNA fragmen of *tfmR* ORF sequence and 425-bp DNA sequence upstream of *of the tfmR* start codon. Used for constructing *Xoc* strain producing TfmR::3×Flag protein.
R*tfmR*-flag-F R*tfmR*-flag-R	ACGGTGATTATAAAGATCATGACATCGACTACAA GGATGACGATGACAAGTGAGCTGACGTGGTGAG ATCG CCAAGCTT AGCTACTTTGATTTTGGCGTG	365-bp DNA fragment containing 50-bp Flag-coding sequence, 3-bp stop codon and 309-bp downstream sequence of the *tfmR* stop codon. Used for constructing *Xoc* strain producing TfmR::3×Flag protein.
RpfG-EM-F RpfG-EM-R	TGCTGCAGCTGAAGGTCAGG FAM-CCTCCTGAAACATCCTGCAT	193-bp DNA fragment composed of 173-bp upstream and 20-bp downstream sequences of *rpfG* start codon. Used for EMSA assays.
RpfF-EM-F RpfF-EM-R	TTGGCAAGATCCTGCGCCG FAM-GGGTTGAACAGCAGACATGG	241-bp DNA fragment composed of 223-bp upstream and 18-bp downstream sequences of *rpfF* start codon. Used for EMSA assays.
RpfC-EM-F RpfC-EM-R	GTTTCGGCAGTGAGGCCATG FAM-CCATGTCAGTGGAGACTTCAT	276-bp DNA fragment composed of 255-bp upstream and 21-bp downstream sequences of *rpfC* start codon. Used for EMSA assays.
RpfG-NOEM-F RpfG-NOEM-R	TGCTGCAGCTGAAGGTCAGG CCTCCTGAAACATCCTGCAT	193-bp DNA fragment composed of 173-bp upstream and 20-bp downstream sequences of *rpfG* start codon. Used for 次 competition experiments for unlabeled probes in EMSA assays.
HrpX-EM-F HrpX-EM-R	TGTTCTGTGCACGACACTGCTG FAM-CGCAGAGATCGCTGCAAAGT	246-bp DNA fragment composed of 210-bp upstream and 36-bp downstream sequences of *hrpX* start codon. Used for EMSA assays.
HrpX-NOEM-F HrpX-NOEM-R	TGTTCTGTGCACGACACTGCTG CGCAGAGATCGCTGCAAAGT	246-bp DNA fragment composed of 210-bp upstream and 36-bp downstream sequences of *hrpX* start codon. Used for competition experiments for unlabeled probes in EMSA assays.

HutG-EM-F HutG-EM-R	GTTGGCAGCTCTCATGCAGC FAM-CGTTCATTGCTGCGCTCCAT	191-bp DNA fragment composed of 184-bp upstream and 7-bp downstream sequences of *hutG* start codon. Used for EMSA assays.
RpfG-ivtF RpfG-ivtR	TGCTGCAGCTGAAGGTCAGG GATGTCCTCGATGACATGGCG	323-bp DNA fragment containing 173-bp upstream of *rpfG* start codon and 150-bp *rpfG*-coding sequence. Used for In vitro transcription assays.
fRpfG-ivtF fRpfG-ivtR	ATGCAGGATGTTTCAGGAGGTC GATGTCCTCGATGACATGGCG	150-bp *rpfG*-coding sequence. Used for In vitro transcription assays.
HrpX-ivtF HrpX-ivtR	TGTTCTGTGCACGACACTGCTG TCATCGTCGGCTCCATCGGC	371-bp DNA fragment containing 210-bp upstream of *hrpX* start codon and 161-bp *hrpX*-coding sequence. Used for In vitro transcription assays.
fHrpX-ivtF fHrpX-ivtR	ATGATCCTTTCGACCTACTTTGCA TCATCGTCGGCTCCATCGGC	161-bp *hrpX*-coding sequence. Used for In vitro transcription assays.
HutG-ivtF HutG-ivtR	GTTGGCAGCTCTCATGCAGC CACCCACCAATCGGTATCGC	334-bp DNA fragment containing 184-bp upstream of *hutG* start codon and 150-bp *hutG*-coding sequence. Used for In vitro transcription assays.
RpfG-chipF RpfG-chipR	TGCTGCAGCTGAAGGTCAGG CCTCCTGAAACATCCTGCAT	193-bp DNA fragment containing 173-bp upstream sequence of *rpfG* start codon and 20-bp *rpfG*-coding sequence, used for ChIP-qPCR assays.
HrpX-chipF HrpX-chipR	TGTTCTGTGCACGACACTGCTG CGCAGAGATCGCTGCAAAGT	246-bp DNA fragment containing 210-bp upstream sequence of *hrpX* start codon and 36-bp *hrpX*-coding sequence, used for ChIP-qPCR assays.
HutG-chipF HutG-chipR	GTTGGCAGCTCTCATGCAGC CGTTCATTGCTGCGCTCCAT	191-bp DNA fragment containing 184-bp upstream sequence of *hutG* start codon and 7-bp *hutG*-coding sequence, used for ChIP-qPCR assays.
RpfG-PGUSF RpfG-PGUSR	CGGAATTC TGCTGCAGCTGAAGGTCAGG CGGGATCC CATAGCGGTTGCTCCTCTATTC	176-bp DNA fragment containing 173-bp upstream sequence of *rpfG* start codon and 3-bp start codon sequence, used for GUS enzyme activity tests.
HrpX-PGUSF HrpX-PGUSR	CGGAATTC TGTTCTGTGCACGACACTGCTG CGGGATCC CATGCCGGTCTCTCTCTTGG	213-bp DNA fragment containing 210-bp upstream sequence of *hrpX* start codon and 3-bp start codon sequence, used for GUS enzyme activity tests.
HrpG-PGUSF HrpG-PGUSR	CGGAATTC GATGAGCGCGAGTTAAAGCCAA CGGGATCC CATCAGGTGGGCGTCCCG	239-bp DNA fragment containing 236-bp upstream sequence of *hrpG* start codon and 3-bp start codon sequence, used for GUS enzyme activity tests.
16SF 16SR	GCCTAACACATGCAAGTCGAACGGC AATATTCCCCACTGCTGCCTCCCG	325-bp DNA fragment of the 16S rDNA sequence, used for RT-qPCR.
rpfG-F *rpfG*-R	ATGACCAGATGTCTGCGCGGAC GAATTCCAGACCGTCCATGCCG	173-bp DNA fragment of the *rpfG*-coding sequence, used for RT-qPCR.
rpfC-F *rpfC*-R	GAAACAACGTCTGTCAGGCCGG GATACCACCAGCTCGCCAACCA	165-bp DNA fragment of the *rpfC*-coding sequence, used for RT-qPCR.
rpfF-F *rpfF*-R	ATTGAAGAACCGCAGCGTGAGG AGTACCACGTGTGGTGCCAGCA	170-bp DNA fragment of the *rpfF*-coding sequence, used for RT-qPCR.
hrpG-F *hrpG*-R	GCACACGGATCGGCGTTTCT GCAACTGGCGTCGAAGACCA	168-bp DNA fragment of the *hrpG*-coding sequence, used for RT-qPCR.

hrpX-F *hrpX*-R	CCTATACGAGCAGGATGCTGGTT GCGTCTTCGGCCTCTTCTTGATAT	169-bp DNA fragment of the *hrpX*-coding sequence, used for RT-qPCR.
bfd-F *bfd*-R	GGTGCAATTGGTTCCGGTCC AATTGGACCCACAGCCGGTG	162-bp DNA fragment of the *bfd*-coding sequence, used for RT-qPCR.
0778-F 0778-R	TCCTTCTTCCAGCCCTTCGC CATTGGTGGTGCGGATCAGA	173-bp DNA fragment of the *XOCgx_0778*-coding sequence, used for RT-qPCR.
0420-F 0420-R	ATGAAGCGTGCAATTGTGCTGC CGCTGCGTCTTCCACCTTCT	126-bp DNA fragment of the *XOCgx_0420*-coding sequence, used for RT-qPCR.
1445-F 1445-R	AACAAGGAACGGCCGGTTGT CGCCCGGGAAATGGATATCG	184-bp DNA fragment of the *XOCgx_1445*-coding sequence, used for RT-qPCR.
1554-F 1554-R	GTCGGTTTCGAAGGCGAGCT TCAGCGTGGACGTGGGTGAT	164-bp DNA fragment of the *fadE*-coding sequence, used for RT-qPCR.
2726-F 2726-R	AGAACCACCCTGGAGAACCTGA ATGGATGGTGGTCGACGACG	195-bp DNA fragment of the *XOCgx_2726*-coding sequence, used for RT-qPCR.
3051-F 3051-R	CGTCCGCTGGCACAACTTGT AGCGAGCCCAGACCAAGCAA	168-bp DNA fragment of the *gumE*-coding sequence, used for RT-qPCR.
3121-F 3121-R	GCTTCGGTGTCGCAATCGCT TGCATTGGTGGTGGTGTCATCT	185-bp DNA fragment of the *pstA*-coding sequence, used for RT-qPCR.
4080-F 4080-R	TAACGCGCTCTATCTGCCAGG TGCTGGGTCATGGTCACCTG	175-bp DNA fragment of the *XOCgx_4080*-coding sequence, used for RT-qPCR.
4385-F 4385-R	CAACACCGCGCATTCCCAAG GAAGTGGCCGAACTACCCGA	165-bp DNA fragment of the *XOCgx_4385*-coding sequence, used for RT-qPCR.
2651-F 2651-R	ATTACACCGGCGTCACTGTC ATAGAAGCCACGGCACAGGT	152-bp DNA fragment of the *feoB*-coding sequence, used for RT-qPCR.
0022-F 0022-R	GCCGCGCGCTGTCTTTGTTA TCGGCCGCCGGATAGTGATA	160-bp DNA fragment of the *XOCgx_0022*-coding sequence, used for RT-qPCR.
2486-F 2486-R	CAATCTACCGACCGCTGCCA AAGCTCGCGCTGCAGGTTCT	160-bp DNA fragment of the *flgM*-coding sequence, used for RT-qPCR.
3136-F 3136-R	GTCGGCCCGCTTGAAGGTAT CGTCGAAGCGGTAATAGGCC	203-bp DNA fragment of the *XOCgx_3136*-coding sequence, used for RT-qPCR.
1907-F 1907-R	ACACCGGTGCCGATTTACCG CGCGATTGACGTCGATGACC	168-bp DNA fragment of the *hutG*-coding sequence, used for RT-qPCR.
1557-F 1557-R	TGAGCGTGAAGATTTCATGCG GACAGATCGTACGGAACCGGA	198-bp DNA fragment of the *XOCgx_1557*-coding sequence, used for RT-qPCR.
hrpB-F *hrpB*-R	CCGTTGTTGCCGCAGATTCG GCGGCTCCAGCATCACGATC	151-bp DNA fragment of the *hrpB*-coding sequence, used for RT-qPCR.
xopN-F *xopN*-R	TGCGGGCATCCATGAGATCG GATTGCAAGTGGCTGGCCGA	171-bp DNA fragment of the *xopN*-coding sequence, used for RT-qPCR.
hrcQ-F *hrcQ*-R	ATGCGGCTTCGTGACACATT CATTCCCGCGATCGAAACGC	166-bp DNA fragment of the *hrcQ*-coding sequence, used for RT-qPCR.
hrcT-F *hrcT*-R	TGTCGCTGTTGACCCTGCTG CCGTCTGGATCTTCACCAGC	177-bp DNA fragment of the *hrcT*-coding sequence, used for RT-qPCR.
hrpD6-F *hrpD6*-R	TCGATGCAATGACCGATGCG CATGCAGGACGCTGAAGTCG	186-bp DNA fragment of the *hrpD6*-coding sequence, used for RT-qPCR.

xopW-F *xopW*-R	ATTCCGGCAGCTCCGACG GGCCTACAGGACGAGACTCA	180-bp DNA fragment of the *xopW*-coding sequence, used for RT-qPCR.
gumD-F *gumD*-R	ATGCTTTTGGCAGACTTGAG AATCGCCAGCCGATACG	189-bp DNA fragment of the *gumD*-coding sequence, used for RT-qPCR.
fliS-F *fliS*-R	ATGTACGGTTCCAATCGTCAAT AAGTGACCGACGATTGCGC	209-bp DNA fragment of the *fliS*-coding sequence, used for RT-qPCR.
fliD-F *fliD*-R	TACCGTGGTGTCTACCCTGG CATCGGTCGGCACCGTGGCC	197-bp DNA fragment of the *fliD*-coding sequence, used for RT-qPCR.
fliC-F *fliC*-R	TGAACGCTCAGCGTAACCTC ACAGCGAGATGCCGTCGTTG	189-bp DNA fragment of the *fliC*-coding sequence, used for RT-qPCR.
pKG-F pKG-R	CCAAGCTT ATGCAGGATGTTTCAGGAGGTC GCTCTAGA TCACACCCCGGGTCGCGCCGATG	1137-bp DNA fragment containing the full length *rpfG* gene. Used for constitutive expression tests.
pKX-F pKX-R	CCAAGCTT ATGATCCTTTCGACCTACTTTGCAGC GCTCTAGA TTACCGTTGCAAGGTTTCCATCGG	1431-bp DNA fragment containing the full length *hrpX* gene. Used for constitutive expression tests.
LXOCgx_0458-F LXOCgx_0458-R	CGGGATCC TCGATCGCCTTGACAGTAATC GCTCTAGA GAGGCTATAGCCGGGCGTGG	437-bp DNA sequence upstream of XOCgx_0458, used for construction of XOCgx_0458 deletion mutant.
RXOCgx_0458-F RXOCgx_0458-R	GCTCTAGA TTGCTCGAGTTGATGGTGGCGTG CCAAGCTT TGCATGGGTGTGATTCGGTGA	354-bp DNA sequence downstream of XOCgx_0458, used for construction of XOCgx_0458 deletion mutant.
LXOCgx_1016-F LXOCgx_1016-R	CGGAATTC ACGGTGTGCACCAGGTTGTG GCTCTAGA GCCGCCAATACTAGACCATC	443-bp DNA sequence upstream of XOCgx_1016, used for construction of XOCgx_1016 deletion mutant.
RXOCgx_1016-F RXOCgx_1016-R	GCTCTAGA GCACCGCGCTGAGGGCCCCC CCAAGCTT CATCTTGTGACCGGCCGACA	342-bp DNA sequence downstream of XOCgx_1016, used for construction of XOCgx_1016 deletion mutant.
LXOCgx_2380-F LXOCgx_2380-R	CGGGATCC TCAGCTCCCCACGTGCACGC GCTCTAGA AAACGTGGAAAGCGGGTGAA	471-bp DNA sequence upstream of XOCgx_2380, used for construction of XOCgx_2380 deletion mutant.
RXOCgx_2380-F RXOCgx_2380-R	GCTCTAGA TTGGGGCCCTCTCCAGCAAC CCAAGCTT AGCTGGTTCCTGGCCTTGAG	331-bp DNA sequence downstream of XOCgx_2380, used for construction of XOCgx_2380 deletion mutant.
LXOCgx_2451-F LXOCgx_2451-R	CGGGATCC TTCCAGCGCCTGGATCATCA GCTCTAGA GCGCGGGCCTAAAGCTCAAT	468-bp DNA sequence upstream of XOCgx_2451, used for construction of XOCgx_2451 deletion mutant.
RXOCgx_2451-F RXOCgx_2451-R	GCTCTAGA ACGTTCCACAAGAGGCTTATC CGAAGCTT ACGGGGCGATCTTCTTGTAC	374-bp DNA sequence downstream of XOCgx_2451, used for construction of XOCgx_2451 deletion mutant.
LXOCgx_2936-F LXOCgx_2936-R	CGGGATCC AATTCGTCTTCCTCCATGCGCCGGTAGA GCTCTAGA GGCGGTAGACTATACCGTAC	502-bp DNA sequence upstream of XOCgx_2936, used for construction of XOCgx_2936 deletion mutant.
RXOCgx_2936-F RXOCgx_2936-R	GCTCTAGA ATGATTGCCCTGCTCCGCTCATT CCAAGCTT AGCTGGCCCTGCGCCTGCAG	336-bp DNA sequence downstream of XOCgx_2936, used for construction of XOCgx_2936 deletion mutant.
LXOCgx_3699-F LXOCgx_3699-R	CGGGATCC ATAGCGGAATATCCGCATCGC GCTCTAGA GGGCGGCGGTCTGCAGGGGG	422-bp DNA sequence upstream of XOCgx_3699, used for construction of XOCgx_3699 deletion mutant.
RXOCgx_3699-F RXOCgx_3699-R	GCTCTAGA TCCCGAAACAGCACTGCCCCG CCAAGCTT TGTCTGGATGCGGCGGTCGA	331-bp DNA sequence downstream of XOCgx_3699, used for construction of XOCgx_3699 deletion mutant.
LXOCgx_3726-F LXOCgx_3726-R	CGGGATCC GTGCATGGATCACGATGCTGGCAA GCTCTAGA GTGATCGGCTCGGTCAACGG	468-bp DNA sequence upstream of XOCgx_3726, used for construction of XOCgx_3726 deletion mutant.
RXOCgx_3726-F RXOCgx_3726-R	GCTCTAGA GCAAGGCGCGCATGGTTGCA CCAAGCTT TTCCACAGCCAAGCCCGCCA	363-bp DNA sequence downstream of XOCgx_3726, used for construction of XOCgx_3726 deletion mutant.

LXOCgx_4067-F LXOCgx_4067-R	CGGGATCC ACTGGCCGTTCTTCCGCACC GCTCTAGA GGTCGCCGTTGCTTTGCCGT	446-bp DNA sequence upstream of XOCgx_4067, used for construction of XOCgx_4067 deletion mutant.
RXOCgx_4067-F RXOCgx_4067-R	GCTCTAGA CACCGGCCATATGCGCCCGC CCAAGCTT CGGACAGCGCCTGGTTGTGG	365-bp DNA sequence downstream of XOCgx_4067, used for construction of XOCgx_4067 deletion mutant.

[§]The underlined sequences indicate the restriction sites for *Bam*HI, *Eco*RI, *Hin*dIII, *Xba*I, and *Xho*I, respectively.