

Supplementary Materials

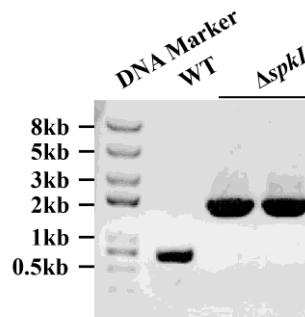


Figure S1 PCR testification of complete segregation of $\Delta spkI$
The electrophoretic band in WT was 682bp, and the corresponding PCR product in $\Delta spkI$ should be 1655bp.

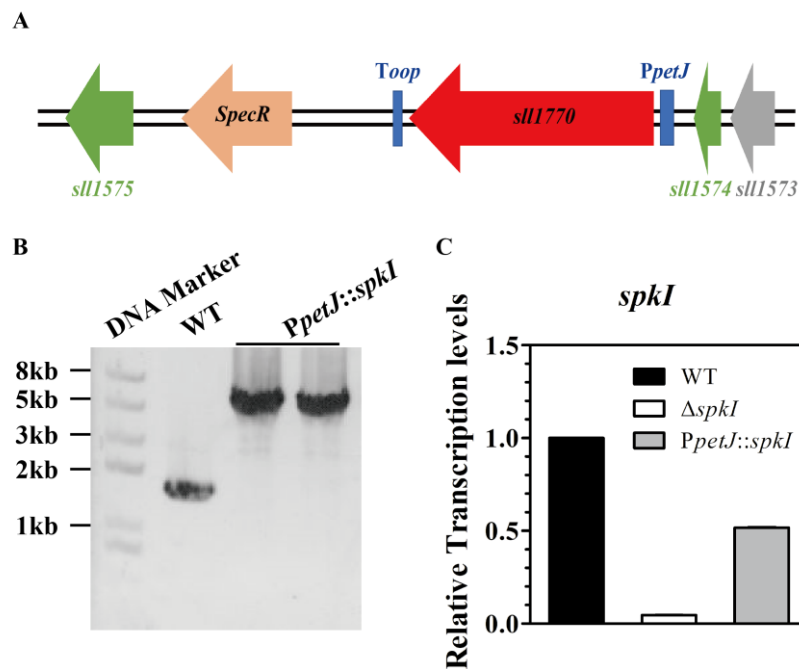


Figure S2 Construction of the complementary strain and transcription analysis of gene *spkI*

A, Cloning scheme of complementary strain *PpetJ::spkI* ;

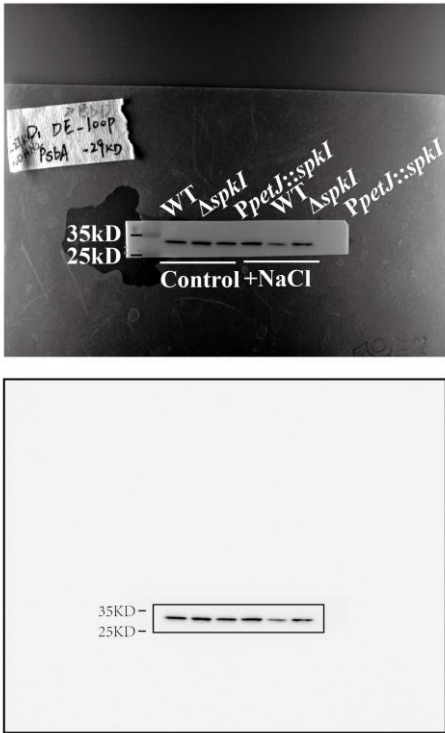
B, PCR verification of segregation of *PpetJ::spkI*, the PCR product in WT and *PpetJ::spkI* is 1512bp and 4600bp respectively ;

C, Relative transcription analysis of *spkI* gene in all strains.

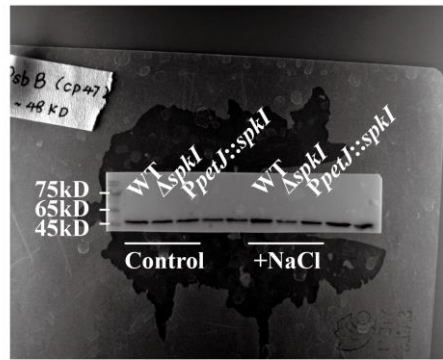
Table S1 Primer pairs used in this study

Gene name	Forward primer (5'-3')	Reverse primer (5'-3')
<i>ocp</i> (<i>slr1963</i>)	ATTTTCCCTAACACCCTAGCG	TGATCTTCGGCATTGAGTTGG
<i>frp</i> (<i>slr1964</i>)	CAAAACGCCACGAAATTGATG	CCAGGGCCTTAATTTTAGATTGC
<i>cpcG1</i> (<i>slr2051</i>)	AACTACCGCTTCGTTGAGCA	TAAAGGGCAATTCACCCGCT
<i>apcA</i> (<i>slr2067</i>)	AAATGTATCGTTCCTCGGC	CGAAGTCAAAGTAGGCAGAGG
<i>apcB</i> (<i>slr1986</i>)	AAAGAAACCTACAACCTCCCTCG	GCAGATGTAGTCGAGGTAAACG
<i>slr0328</i>	ACGCCCAGATTGACCAAG	CTTCCCTGCACCCGATAAC
<i>psaK2</i> (<i>sll0629</i>)	CTTTGGCTTGCCGGAATTG	CTAGACCCAACACCATGCC
<i>slr1128</i>	TCCCCGTAACATTCTTTCCAC	CCGCCTCTAATCCTTCATCTAG
<i>isiA</i> (<i>sll0247</i>)	CAAACCTATGGCAACGACAC	TCAAACAGGGTAAAGGCTCC
<i>rnpB</i> (<i>slr1469</i>)	GGACTACCCAAAACACTGC	CAATAATCCCAGCTTGGCT
<i>spkI</i> -up	ACGCCGCCGCCGTTG	AGTGGTGGTCTGTTCCGTT
<i>spkI</i> -down	AAGGCACTATTACCCACCTG	CAAGCCAAATGGATTGAGA
Δ <i>spkI</i> segregation	GGTCGCACCTATGTAATCCC	TTCACCACCACATCTTCGCC
<i>spkI</i> -ox	GTGTCTGCCCTATCCACTAA	TTAAAACATCCGGTCCTGT
<i>PpetJ::spkI</i> segregation	AGGGGAAGGCTGGCTCTC	CAACCAGCGGGGACCATA

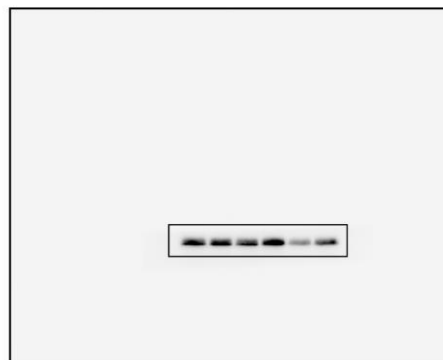
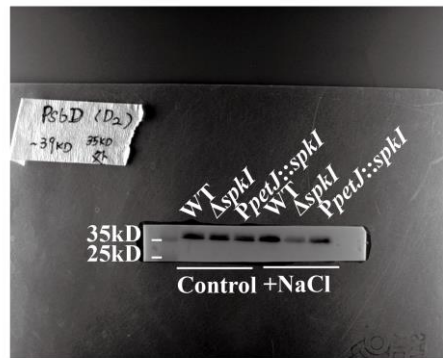
Western blot original images



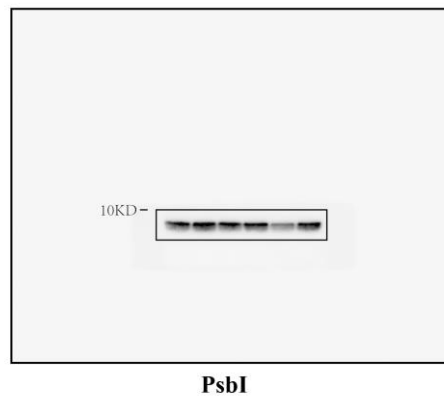
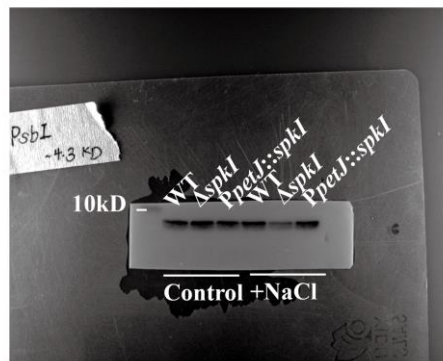
D1

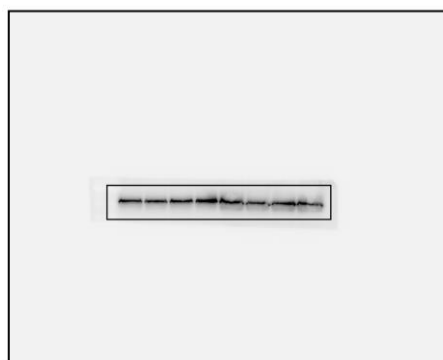
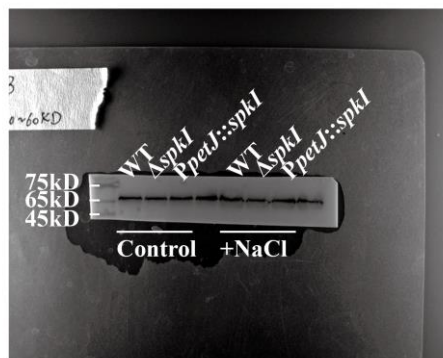


PsbB

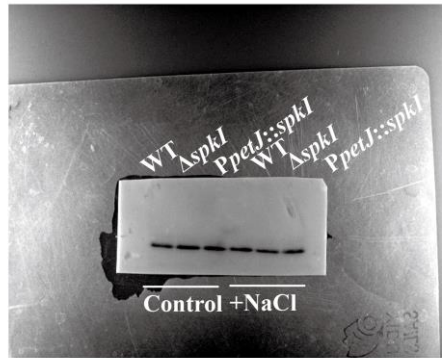


PsbD

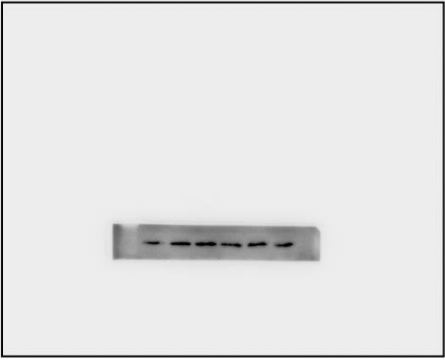
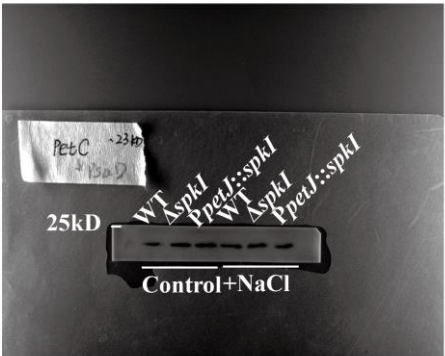




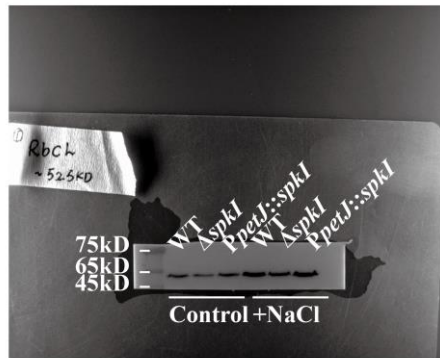
PsaB



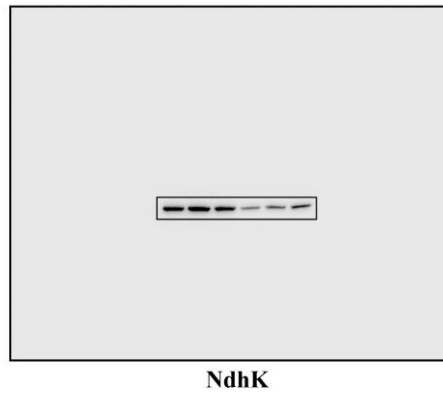
APC



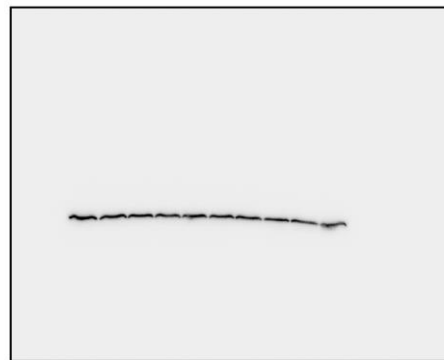
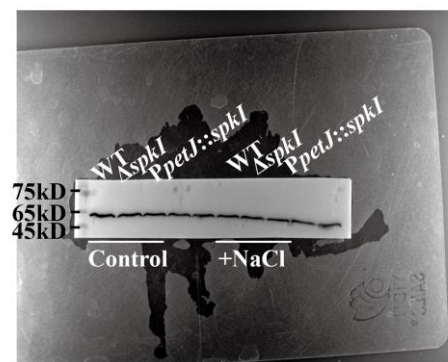
PetC



RbcL



NdhK



AtpB