

Supplementary Materials

Supplementary Figures

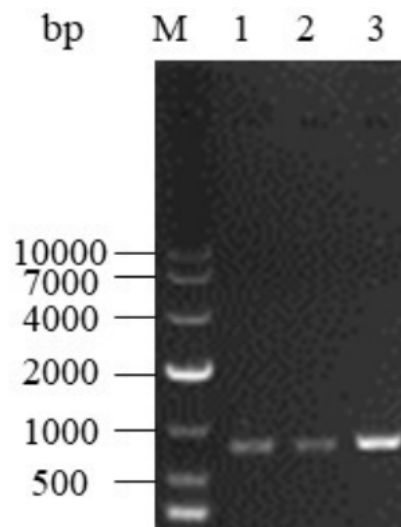


Figure S1. PCR amplification of *orbF* gene. M: 10000 DNA marker; lane 1 to lane 3: PCR product (*orbF*). The PCR product of *orbF* is 714 bp.

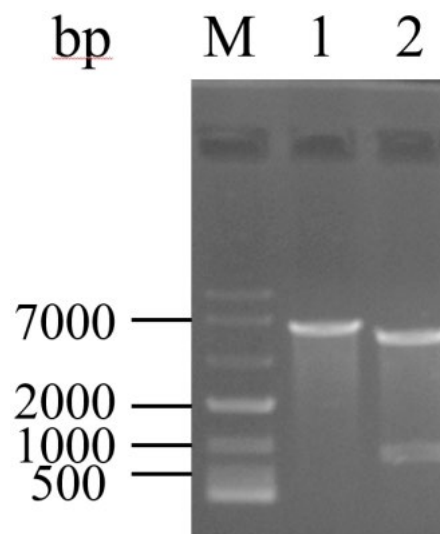


Figure S2. Enzyme analysis of pET-28a-*orbF*. M: 10000 DNA marker; lane 1: pET-28a-*orbF*; lane 2: pET-28a (the top strip, 5369bp) and *orbF* (the bottom strip, 714bp).

Supplementary Tables

Table S1 Strains and plasmids used in this study

Strains/Plasmids	Description	Source
Strains		
<i>Bacillus cereus</i> BC1	Isolated from pasteurized milk	Lab collection
<i>E. coli</i> DH5 α	Storage plasmids	Invitrogen
<i>E. coli</i> BL21	Host for protein expression	Invitrogen
BC1 $\Delta orbF$	In-frame deletion of <i>orbF</i> in <i>Bacillus cereus</i> BC1	This work
BC1 $\Delta orbF :: orbF$	Ectopic expression gene <i>orbF</i> in $\Delta orbF$	This work
BL21/ <i>orbF</i>	<i>E. coli</i> BL21 containing pET-28a- <i>orbF</i> , host for OrbF expression	This work
Plasmids		
pMarA-TnYLB-1	Construct transposon mutagenesis library	[20]
pHT304-TS	Knockout gene	[24]
pHT304	Complement gene	[25]
pHT304-TS- <i>orbF</i>	Knockout the gene <i>orbF</i>	This work
pHT304- <i>orbF</i>	Complement the gene <i>orbF</i>	This work
pET-28a	Expression of protein	Invitrogen
pET-28a- <i>orbF</i>	Expression of OrbF	This work
pMD19T	Ligation of promoter	Invitrogen
pMD19T-Promoter	Ligation of promoter	This work

Table S2 Primers used in this study

Primers	Sequence (5'-3')	Note
oIPCR-F	GCTTGTA AATTCTATCATAATTG	Confirm transposon insertion site
oIPCR-R	AGGGAATCATTGAAGGTTGG	
<i>orbF</i> -F	ctcgagtgcggccgcaagcttATGAAAGATATACGTATCCTTA	Amplification of <i>orbF</i> gene
<i>orbF</i> -R	atgggtcgcggatccgaattcTCAGTCTTCAAGCTTTTCACCTA	
<i>orbF</i> up-F	ACCATGATTACGCCAAGCTTTCAACTAGGTGCTTTAAGTTATTTG	Amplification of <i>orbF</i> up homologous arm, Knockout gene <i>orbF</i>
<i>orbF</i> up-R	CAGGTGAAGATATGAAAGATGTGAAAAGCTTGAAGACTGATAAAAC	
<i>orbF</i> down-F	TCAGTCTTCAAGCTTTTCACATCTTTCATATCTTCACCTGCTTC	Amplification of <i>orbF</i> down homologous arm, Knockout gene <i>orbF</i>
<i>orbF</i> down-R	CGACGTTGTAAAACGACGGCCAGTGAATTCAACTCTCCAATAAAGTTAGTTTGTC	
<i>orbF</i> -CP-F	ACCATGATTACGCCAAGCTTATGAAAGATATACGTATCCTTA	Amplification of <i>orbF</i> gene for complementation
<i>orbF</i> -CP-R	AAACGACGGCCAGTGAATTCTCAGTCTTCAAGCTTTTCACCTA	
09870-F	GTGTAGGAGCGGTTACTACT	RT-qPCR
09870-R	TTAATGCAGAAGGCCCCATC	RT-qPCR
02475-F	AATGGTTAGGTTTCTTTGCT	RT-qPCR
02475-R	CCTGAACCAATTGCACCTAA	RT-qPCR
20040-F	CACGCATTGCGTCAGTAATA	RT-qPCR
20040-R	ATGGTATTCATATTCACCCT	RT-qPCR
12220-F	TGATACACTAAAATACCTAA	RT-qPCR
12220-R	AAATATATGTTACCCCTCGA	RT-qPCR
20050-F	GAAACCAACGTTTGTAACGC	RT-qPCR

20050-R	AAACGTTAGCGATTGTTGCA	RT-qPCR
18065-F	GCACAAC TTCAGCACCTTCT	RT-qPCR
18065-R	CATGGGGAATCAGATAGATT	RT-qPCR
fliE-F	TGTAGTTGAGGGGAAAAAGT	RT-qPCR
fliE-R	TACCCCTTTAGTTAGTAAAT	RT-qPCR
flgK-F	TGGCAAAAAATCCAGAACAA	RT-qPCR
flgK-R	TGCTTCCACTGTATCTAAGT	RT-qPCR
flhA-F	AGAGTTATTAGCGCATGAAG	RT-qPCR
flhA-R	AACGAGTGCGAATGGTAGAA	RT-qPCR
flgG-F	TGAGAAGAGTGAGATGTTAA	RT-qPCR
flgG-R	TGCTGCCTTAATAATGAACG	RT-qPCR
fliH-F	ATGAACAAATGGAACAGATG	RT-qPCR
fliH-R	TGCTAAATGAAATGATTGAT	RT-qPCR
fliP-F	AAGGACTTGGGGTAATGAAT	RT-qPCR
fliP-R	CACATCACTCTTCAGTTGCC	RT-qPCR
flgB-F	GATGAATAAAAGTAGTGCAT	RT-qPCR
flgB-R	ATTTACTGTCGGCAAGTGCA	RT-qPCR
fliQ-F	AAGTCTGATTGTCGTTATTA	RT-qPCR
fliQ-R	GAGGACAATACTCGCCATTT	RT-qPCR
motP-F	GTCTAAAAAGCACGGCTTGC	RT-qPCR

motP-R	ATCGTAACCGCTTAACATTA	RT-qPCR
24915-F	ACAACATTTTGAATCGATCC	RT-qPCR
24915-R	GCGGAAGAGGCGTCTAAGCA	RT-qPCR
motB-F	GAGGTGACGCTGAAACAAGT	RT-qPCR
motB-R	AGGGATTAATGGTGACAATA	RT-qPCR
08250-F	AGTGGAAACTGAGATTGTAG	RT-qPCR
08250-R	TAACTGGCTGATTAAAAGC	RT-qPCR
fliM-F	GTCACAGACGTTATCAGCGC	RT-qPCR
fliM-R	CGGCATTTTCTCCACATATT	RT-qPCR
17405-F	ACATGACTAATTGTCTTAGT	RT-qPCR
17405-R	TACGAAAGAAATTGAAGAAG	RT-qPCR
motA-F	TGACCTAACTTTTCAATATC	RT-qPCR
motA-R	GCTATTTTTTCACAAGCTGG	RT-qPCR
fliN-F	TATTGATACTGTTTCAGATA	RT-qPCR
fliN-R	AACATCGCCAACTTTTAACT	RT-qPCR
fliG-F	ATATAATCTGATCGGTAAAT	RT-qPCR
fliG-R	CAAGCAATAACAGATGAATT	RT-qPCR
05470-F	CATTTACAATAAAGTAGCGG	RT-qPCR
05470-R	ATTCAGGTTTTAACATGAAT	RT-qPCR
26465-F	GTGGAAAGATAATCAAGCAC	RT-qPCR

26465-R	CGGCATCGGGATGGTCCTCG	RT-qPCR
02195-F	TATGACGTCACCGAAAGATT	RT-qPCR
02195-R	CTGTTTGTCTAAGATGATT	RT-qPCR
10660-F	TGAATTATTAATGGCAGCTC	RT-qPCR
10660-R	TAGACTTTTGTTTCATGCCT	RT-qPCR
09340-F	GATAATTATTTACATTGCAC	RT-qPCR
09340-R	AGCTGCCATCCCTGCCCCTA	RT-qPCR
10665-F	TCGATTTATGTTGTCGTTGT	RT-qPCR
10665-R	GAATACAACGGATTTTATA	RT-qPCR
09335-F	AGTGGGCTCTTGAGCGGAGG	RT-qPCR
09335-R	CTCCACCATTATCGGGGATA	RT-qPCR
