Visualization of Germination Proteins in Putative Bacillus cereus Germinosomes

Primer names	Primers sequence $(5' \rightarrow 3')$	Restriction sites
P_RB-F	CCG <u>GAATTC</u> CACCTTCCCTATATCCGCT ¹	EcoR I
P_RB-R	CG <u>GGATCC</u> TCTCACCCCTAACATATATC ¹	BamH I
RB-F	CG <u>GGATCC</u> TGAGGTGAAATGAGCAATGA ¹	BamH I
RB-fuse-GFP-R	CTCGCCCTTGCTCACCATGCTGCCGCTGCCGCTGCCAG	
	GTGTATCGGTTGAAGA ²	
RB-fuse-GFP-F	TCTTCAACCGATACACCTGGCAGCGGCAGCGGCAGC	
	ATGGTGAGCAAGGGCGAG ²	
GFP-F	GC <u>TCTAGA</u> ATGGTGAGCAAGGGCGAG ¹	Xba I
GFP-R	CCCAAGCTTTTACTTGTACAGCTCGTCCAT ¹	Hind III
RA-F	CG <u>GGATCC</u> ATGTTCGGTTTATCATCT	BamH I
AC-fuse-B-R	CATTGCTCATTTCACCTCACTATTCCCCGATTCCAGATT	
AC-fuse-B-F	AATCTGGAATCGGGGAATAGTGAGGTGAAATGAGCAA	
	TG	
P_D-F	GC <u>TCTAGA</u> ACAACCATAAAGAACAGAGC	Xba I
D-fuse-mSi-R	TTCTCCTTTACTCACCATGCTGCCGCTGCCGCTGCCCTG	
	TTCTTCCTTCTTCG	
D-fuse-mSi-F	CGAGAAGAAGGAAGAACAGGGCAGCGGCAGCGGCAG	
	CATGGTGAGTAAAGGAGAA	
mSi-R	CCG <u>GAATTC</u> TTATTTGTATAGTTCATCCAT	EcoR I
315-F	ATGTTGTGGGAATTGTGAG	
315-R	AAGGCGATTAAGTTGGGT	

Table S1. Primers used in this study

¹The restriction sites are underlined.

² The linker sequence are in bold.



Figure S1. Validation of recombinant plasmids and pHT315-derived *B. cereus* strains. (A) Validation of recombinant plasmids with digestion analysis. Lane M, GeneRuler 1 kb DNA ladder (ThermoFisher Scientific). Lane 1, intact plasmid pHT315-PgerR-gerRB-SGFP2; lane 2, the gerRB-SGFP2 1.7 kb band and the vector backbone of the 6.5 kb plasmid pHT315-PgerR-gerRB-SGFP2 cut with *EcoR* I/*Hind* III; lane 3, intact plasmid pHT315-PaphA3'-SGFP2; lane 4, PaphA3'-SGFP2 1.2 kb band and the vector backbone of the 6.5 kb plasmid pHT315-PgerR2 cut with *EcoR* I/*Hind* III; lane 5, intact plasmid pHT315-*PaphA3'-SGFP2* cut with *EcoR* I/*Hind* III; lane 5, intact plasmid pHT315-*gerRB-SGFP2*; Lane 6, the gerRB-SGFP2 of 1.8 kb band and the vector backbone of the 6.5 kb plasmid pHT315-gerRB-SGFP2 cutting with *Bam*H I/*Hind* III; lane 7, intact plasmid pHT315. (B) Validation of pHT315-derived *B. cereus* strains. Lane 1, the expected 2.6 kb band was amplified from *B. cereus* carrying pHT315-*gerRB-SGFP2* strain; lane 2, the expected 1.4 kb band was amplified from *B. cereus* carrying pHT315-*PgerR-SGFP2* strain; lane 4, the expected 1.3 kb band was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*PaphA3'-SGFP2* strain; lane 4, the expected 2.0 kb band in the left lane was amplified from *B. cereus* carrying pHT315-*Pa*



Figure S2. Confirmation of *PgerR* function by examining expression of protein SGFP2 in *B. cereus* dormant spores. Phase-contrast (A, C) and fluorescence microscopy images (B, D) of *B. cereus* dormant spores: (A, B) wild-type spores; (C, D) spores carrying pHT315-PgerR-SGFP2. All panels are at the same magnification, and the scale bar is 5 µm.



Figure S3. Schematic diagram of integration plasmid pSG1164-*gerRB-SGFP2*. The fusion gene *gerRB-SGFP2* was used to attempt a single crossover integration of the plasmid into the wild-type *gerR* locus in the *B. cereus* chromosome, although this was not successful.