Supplementary

Fig. S1. Phylogenetic relationship of the \textit{phaR} gene of 64 \textit{Bacillus} species. The \textit{phaR} gene of \textit{Kyrpidia tusciae} was assigned as an outgroup. The numbers represented on the tree are bootstrap values expressed as a percentage of $1 \times 10^4$ replications.
Fig. S2. Multiple sequence alignment of 63 Bacillus strains containing phaR genes. Asterisks represent conserved positions.

| Accession | Sequence |
|-----------|----------|
| CP007626  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| HQ864320  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP000764  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009686  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP010005  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP012483  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009351  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP010106  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009941  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009369  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009590  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009628  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP008712  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AP014833  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP007618  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009902  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009981  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009544  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP007704  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP010322  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009313  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009414  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009476  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009697  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009541  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009315  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009328  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009335  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009605  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009595  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP007665  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009598  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP000001  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009968  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP011746  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP003187  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| DQ002951  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP010088  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AE017355  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP003747  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| Q486135   | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP002508  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP000227  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AB077026  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AB525763  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP003687  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP001746  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP006863  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP000903  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP009746  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP01982   | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AB525784  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP001983  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| AF109909  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP010586  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |
| CP003017  | AAA---TTCCATCAATGAACTGAAACTAGCTTATGACAAGACCCGAAACATTTTGG |

Consensus: 61 **-**-******-**--******-**--******-**-**-**-**-**-**-**-**-**
| Accession  | Sequence                      |
|-----------|-------------------------------|
| CP007626  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| HQ864320  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP007674  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009686  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP010005  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP012483  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP010186  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009941  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009369  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009628  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP008712  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009318  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP000485  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009641  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009300  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP002091  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| AP014833  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP007618  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009902  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009981  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009654  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP010322  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009341  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009325  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009476  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009311  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009464  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009541  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009328  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009720  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009335  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009596  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP007666  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009598  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009561  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009968  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP001746  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP003187  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| DQ000291  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP010088  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| AE017355  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| DQ486135  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP002508  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP002227  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| AB525763  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP003687  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP006863  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009933  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP009746  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP001982  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| AB525784  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP001983  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| AP109999  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP010586  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| CP003017  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| consensus  | TTTTTTTTTTTTTTTTTTTTTTTTTTTT |
| Accession | Sequence |
|-----------|----------|
| CP007626  | CTAGATTTGAATTTGTTTTATCAGAAGATGTTGAATGATGCAACAAAAGGCTATTTAGAA |
| HQ864320  | CTAGATTTGAACTTGTTTTATCAGAAGATGTTAAATGATGCAACAAAGGGCTATTTAGAA |
| CP005686  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP010005  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP012483  | CTAGATTTGAATTTGTTTTATCAGAAGATGTTGAATGATGCAACAAAAGGCTATTTAGAA |
| CP009361  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009628  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009941  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009351  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009106  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009369  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009686  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009902  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009641  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP009300  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAAGCTATTTAGAA |
| CP002091  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AP014833  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP007618  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP000485  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009641  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009318  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009981  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009544  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009325  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009476  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009497  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009464  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009541  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009328  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009720  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009335  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009959  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009596  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP007666  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009598  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009968  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP001746  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP003187  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP010233  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP010088  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AE017355  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP003747  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| DQ486135  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP002508  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP000227  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AB077026  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AB8525763 | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP003687  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP006863  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009903  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP009746  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP001982  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AB8525784 | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP001983  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| AP109999  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP010586  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |
| CP003017  | CTAGATTTGAATTTGTTTTATCAAAAAGCATTAAATGATACGACAAAAAATTATTTAGAG |

**consensus**

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Table S1. Microorganisms for the phylogenetic analysis and primers design.

| No. | Organism  | Accession No | Strain                | Family     | phaR (bp) |
|-----|-----------|--------------|-----------------------|------------|-----------|
| 1   | *B. anthracis* | CP 007618    | 2000031021            | *Bacillaceae* | 483       |
| 2   | *B. anthracis* | CP 009902    | 2002013094            | *Bacillaceae* | 483       |
| 3   | *B. anthracis* | CP 009981    | Ames_BA1004           | *Bacillaceae* | 483       |
| 4   | *B. anthracis* | CP 009544    | BA 1015               | *Bacillaceae* | 483       |
| 5   | *B. anthracis* | CP 007704    | BFV genome            | *Bacillaceae* | 483       |
| 6   | *B. anthracis* | CP 010322    | Canadian_bison        | *Bacillaceae* | 483       |
| 7   | *B. anthracis* | CP 002091    | H 9401                | *Bacillaceae* | 531       |
| 8   | *B. anthracis* | CP 009331    | K 3                   | *Bacillaceae* | 483       |
| 9   | *B. anthracis* | CP 009341    | Ohio ACB              | *Bacillaceae* | 483       |
| 10  | *B. anthracis* | CP 009325    | PAK-1                 | *Bacillaceae* | 483       |
| 11  | *B. anthracis* | CP 009476    | Pasteur               | *Bacillaceae* | 483       |
| 12  | *B. anthracis* | CP 009697    | RA 3                  | *Bacillaceae* | 483       |
| 13  | *B. anthracis* | AP 014833    | Shikan-NIID           | *Bacillaceae* | 531       |
| 14  | *B. anthracis* | CP 009464    | SK-102                | *Bacillaceae* | 483       |
| 15  | *B. anthracis* | CP 009541    | Sterne                | *Bacillaceae* | 483       |
| 16  | *B. anthracis* | C P009315    | Turkey 32             | *Bacillaceae* | 483       |
| 17  | *B. anthracis* | CP 009598    | V770-NP-1R            | *Bacillaceae* | 483       |
| 18  | *B. anthracis* | C P007666    | Vollum                | *Bacillaceae* | 483       |
| 19  | *B. anthracis* | CP 009328    | Vollum 1B             | *Bacillaceae* | 483       |
| 20  | *B. cereus*   | CP 009941    | 03BB87                | *Bacillaceae* | 483       |
| 21  | *B. cereus*   | CP 009318    | 03BB102               | *Bacillaceae* | 483       |
| 22  | *B. cereus*   | CP 009641    | 03BB108               | *Bacillaceae* | 483       |
| 23  | *B. cereus*   | CP 009596    | 3 a                   | *Bacillaceae* | 483       |
| 24  | *B. cereus*   | CP 009628    | ATCC 4342             | *Bacillaceae* | 483       |
| No. | Organism         | Accession No | Strain    | Family     | phaR (bp) |
|-----|------------------|--------------|-----------|------------|-----------|
| 25  | *B. cereus*      | CP 001746    | CI        | Bacillaceae| 531       |
| 26  | *B. cereus*      | CP 009300    | D 17      | Bacillaceae| 483       |
| 27  | *B. cereus*      | CP 000001    | E 33L     | Bacillaceae| 483       |
| 28  | *B. cereus*      | CP 009968    | E 33L     | Bacillaceae| 483       |
| 29  | *B. cereus*      | CP 003187    | F 837/76  | Bacillaceae| 483       |
| 30  | *B. cereus*      | CP 009369    | FM1       | Bacillaceae| 483       |
| 31  | *B. cereus*      | CP 009686    | FORC_005  | Bacillaceae| 483       |
| 32  | *B. cereus*      | CP 003747    | FRI-35    | Bacillaceae| 483       |
| 33  | *B. cereus*      | CP 008712    | FT 9      | Bacillaceae| 483       |
| 34  | *B. cereus*      | CP 009590    | G 9241    | Bacillaceae| 483       |
| 35  | *B. cereus*      | CP 012483    | NJ-W      | Bacillaceae| 483       |
| 36  | *B. cereus*      | CP 000227    | Q1        | Bacillaceae| 483       |
| 37  | *B. cereus*      | CP 009605    | S 2-8     | Bacillaceae| 483       |
| 38  | *B. cereus*      | DQ 486135    | SPV PHA   | Bacillaceae| 483       |
| 39  | *B. cereus*      | AB 525763    | -         | Bacillaceae| 483       |
| 40  | *B. cytotoxicus* | CP 000764    | NVH 391-98| Bacillaceae| 483       |
| 41  | *B. megaterium*  | CP 001982    | DSM 319   | Bacillaceae| 600       |
| 42  | *B. megaterium*  | CP 010586    | Q 3       | Bacillaceae| 600       |
| 43  | *B. megaterium*  | CP 001983    | QM B 1551 | Bacillaceae| 600       |
| 44  | *B. megaterium*  | AB 525784    | ATCC 14581| Bacillaceae| 600       |
| 46  | *B. megaterium*  | AF 109909    | PHA gene cluster | Bacillaceae| 600       |
| 47  | *B. mycoides*    | CP 007626    | 219298    | Bacillaceae| 483       |
| 48  | *B. mycoides*    | HQ 864320    | DFC 1     | Bacillaceae| 483       |
| 49  | *B. pseudofirmus*| CP 001878    | OF 4      | Bacillaceae| 498       |
| 50  | *B. thuringiensis*| CP 010088  | 97-27     | Bacillaceae| 483       |
Table S1. (cont.)

| No. | Organism            | Accession No | Strain   | Family         | phaR (bp) |
|-----|---------------------|--------------|----------|----------------|-----------|
| 51  | B. thuringiensis    | AE 017355    | 97-27    | Bacillaceae    | 483       |
| 52  | B. thuringiensis    | CP 000485    | Al Hakam | Bacillaceae    | 531       |
| 53  | B. thuringiensis    | CP 010005    | HD 1     | Bacillaceae    | 483       |
| 54  | B. thuringiensis    | CP 010106    | HD 521   | Bacillaceae    | 483       |
| 55  | B. thuringiensis    | CP 009720    | HD 682   | Bacillaceae    | 483       |
| 56  | B. thuringiensis    | CP 009351    | HD 1002  | Bacillaceae    | 483       |
| 57  | B. thuringiensis    | CP 009335    | HD 1011  | Bacillaceae    | 483       |
| 58  | B. thuringiensis    | CP 003687    | MC 28    | Bacillaceae    | 522       |
| 59  | B. thuringiensis    | CP 002508    | YBT-020  | Bacillaceae    | 483       |
| 60  | B. thuringiensis    | DQ 000291    | R1       | Bacillaceae    | 531       |
| 61  | B. toyonensis       | CP 006863    | BCT-7112 | Bacillaceae    | 483       |
| 62  | B. weihenstephanensis| CP 000903 | KBAB4    | Bacillaceae    | 483       |
| 63  | B. weihenstephanensis| CP 009746 | WSBC 10204 | Bacillaceae | 483       |
| 64  | Kyrpidia tusciae    | CP 002017    | DSM 2912 | Alicyclobacillaceae | 441       |
| 65  | Bacillus sp.        | AB 077026    | INT 005  | Bacillaceae    | 483       |