Supplementary data
| Strains     | Description                                      | Source                                          |
|------------|--------------------------------------------------|------------------------------------------------|
| **D. dadantii** |                                                  |                                                |
| 3937 (A4922) | Wild-type strain isolated from Saintpaulia ionantha | Kotoujansky A, Lemattre M, Boistard P. Utilization of a thermosensitive episome bearing transposon TN10 to isolate Hfr donor strains of Erwinia carotovora subsp. chrysanthemi. J Bacteriol. 1982;150: 122–131. |
| Δhfq (A5292) | A4922 hfq::uidA-Kan<sup>R</sup>                   | C. Blanco                                       |
| ΔproQ (A6175) | A4922 proQ::Cm<sup>R</sup>                       | This work                                       |
| A6170       | A4922 + pBBr1-mcs4                               | This work                                       |
| A6171       | A4922 + pBBr1-mcs4::hfq                         | This work                                       |
| A6172       | A4922 + pBBr1-mcs4::proQ                        | This work                                       |
| A6173       | A5292 + pBBr1-mcs4                              | This work                                       |
| A6174       | A5292 + pBBr1-mcs4::hfq                         | This work                                       |
| A6176       | A6175 + pBBr1-mcs4                              | This work                                       |
| A6177       | A6175 + pBBr1-mcs4::proQ                        | This work                                       |
| A6178       | A5292 + pBBr1-mcs4::proQ                        | This work                                       |
| A6179       | A6175 + pBBr1-mcs4::hfq                         | This work                                       |
| **E. coli** |                                                  |                                                |
| DH5α        | F<sup>+</sup> ΔlacZΔ(lacZYA-argF)U169 deoR recA1 endA1 hsdR17 (rK-1, mk+) phoA supE44 λ-thi-1 gyrA96 relA1/F<sup>+</sup> proAB+lacIqZAM15 Tn10-Tc | Lab collection                                 |
| **Phages**  |                                                  |                                                |
| PhiEC2      | General transducing phage of Dickeya dadantii     | Resibois et al, 1984                           |
| Plasmids                  | Description                                                                 | Source                  |
|--------------------------|------------------------------------------------------------------------------|-------------------------|
| pKD3                     | Cm<sup>R</sup>                                                               | Lab collection          |
| pGEM-T                   | Cloning vector, Amp<sup>R</sup>                                              | Promega                 |
| pGEM-T-ΔproQ-BglII       | pGEM-T with the proQ coding region containing BglII site                    |                         |
| pGEM-T-proQ::Cm          | pGEM-T with the proQ coding region containing chloramphenicol resistance cassette | This work               |
| pBBR1-mcs4               | Amp<sup>R</sup>                                                             | (Kovach et al., 1995)   |
| pBBR1-mcs4::proQ         | pBBR1-mcs4 containing proQ ±500bp                                           | This work               |
| pBBR1-mcs4::hfq          | pBBR1-mcs4 containing hfq ±500bp                                            | This work               |
| Primer | Sequence (5'-3') | Description |
|--------|-----------------|-------------|
| P1     | GTAGCGCGTTACTGTTTGAGCG | Forward primer located 500bp upstream proQ |
| P2     | GCTCATCCACGTTTGGCGGCCC | Reverse primer located 500 downstream proQ |
| P3     | GGAGATCTGAAATTCCTGATTACAACGG | Diverging with end of proQ; contains BgIII site |
| P4+P3' | CCCGTTTGAATCAGGAAATTTCAGATCTA/CGGAGGCAAACCTGGGCATGAAC | Diverging with start of proQ + reverse complement of P3; contains BgIII site |
| P5     | GCTAGCGTAGCGCGTTACTGTTTGAGCG | Forward primer located 500bp upstream proQ; contains NheI site |
| P6     | AAGCTTGCTAGCACGTAAAATTGGCGGCCC | Reverse primer located 500 downstream proQ; contains HindIII site |
| P7     | GCTAGCGTGTTCATCAGTTTGCGATTGC | Forward primer located 500bp upstream hfq; contains NheI site |
| P8     | AAGCTTCACCAGACCGTCGCCAGATGG | Forward primer located 500bp downstream hfq; contains HindIII site |
| Gene names | Forward primers | Reverse primers |
|------------|-----------------|-----------------|
| bcsA       | CCCCATTGGACAGTGAAAAAC | GGGCATAAACAACCCCAATGC |
| celZ       | TGCCGCTCTCTTTGGAT | CCCAGCCATTATTACCCCA |
| fliC       | CCCAGACCCACTGACAAA | TACCTTCAGCGGTCTGAACCC |
| hkl        | TAATGGCATAAGCTGGAAG | TCAGCGTCATCCTTTTCTG |
| hrpN       | TACGATTAAGCCGACATCG | GTATTAGCGACGACCCCAAG |
| kdgK       | AACACCGCGGTCTACATTC | GGCATCGTTCACCGCAGTATG |
| outC       | CTGCTGTGCTGCTCTTTTTC | AGAAACGCGCAATAGCGTAA |
| pelD       | TTTGGAAGGTAAAGGGCGACGTT | ATGGCAAATTCACCAACCGCTC |
| pelE       | AGCGAATCACCAAGCAGCCT | GGCCTTTGAGTGATACGGTT |
| proQ       | TTCTCCTGATCCGAAAAATCC | GGAAGCCAGTTGACCCCTGA |
| prtB       | AAACGGCAATCTGACCCTA | TTTTGTGGGCTGACCTCC |
| prtC       | ATGACGCTCAAACGCAATTA | AGCTGACCAGCTGACAAAT |
| rhlA       | GCATATTTCCGATCTGCACT | CCCAGGAAATCGACAGGATA |
A.

B.

Figure S1: Sequence alignment and secondary structure prediction of Hfq (A) and ProQ (B) protein homologs identified in *Escherichia coli*, *Dickeya dadantii*, *Pectobacterium atrosepticum*, *Erwinia amylovora*, *Salmonella typhimurium* and *Yersinia enterocolitica*. 
Figure S2: Genomic context and expression profiles of the *hfq* (A) and *proQ* (B) genes in *Dickeya dadantii* 3937. Genomic coordinates are given in the x-axis at the bottom of the figures. The normalized intensities (read coverage for the -TEX library and read start coverage for the +TEX library) are represented in the y-axis. Highlighted regions correspond to fragments used for plasmid complementation. Line colors represent the expression profiles, with sequencing conditions detailed in C.
Figure S3: Growth of the wild type, mutant and complemented strains in M63 minimal medium with stress. Overnight bacterial precultures in M63 with sucrose as the carbon source and ampicillin (to maintained plasmid into the cells) were diluted to an OD$_{600}$ of 0.03 in a similar medium with CaCl$_2$ 0.1 mM + polygalacturonic acid (PGA) 0.025 % w/v. A. Osmotic stress was induced by adding different concentrations of NaCl in the medium. OD$_{600}$ measurements of the culture were made at regular intervals to determine growth rates. A. Osmotic stress was induced by adding different concentrations of NaCl in the medium. OD$_{600}$ measurements of the culture were made at regular intervals to determine growth rates. B The pH effect on growth rate was analysed using M63 with sucrose buffered with malic acid at different pH ranging from 4.0 to 7.0 (abscissa). C Resistance to oxidative stress was analysed in the same medium by adding H$_2$O$_2$ concentrations ranging from 25 to 200 µM (abscissa). The lag time is represented instead of the growth rate because after the degradation of H$_2$O$_2$ by bacterial catalases, the growth rates are similar.
Figure S4: Expression levels in the double mutant strain and the double mutant strain complemented by Hfq or ProQ.
Figure S5: *D. dadantii* virulence assays 48h post infection. Virulence was evaluated on the *proQ* mutant with heterologous expression of *hfq*, and on the *hfq* mutant with heterologous expression of *proQ*. Chicory leaf assays were performed as described in the Materials and methods section with an incubation time of 48h, and weights of macerated tissues were measured. Representative examples of symptoms induced were shown.