**Table S1. Strains used in this study**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strain** | **Notes** | | | **Reference/Source** |
|  | |  |
| ***Escherichia coli*** |  | | |  |
| JM109 | *recA1, endA1, gyrA96, thi, hsdR17, supE44, relA1,* Δ*(lac-proAB), mcrA,* [*F′ traD36 proAB lacIq lacZ* Δ*M15*] | | | [1] |
| S17-1 | *thi*-1 *pro hsdR*− *hsdM*+ *recA*::RP4-2-Tcr::Mu; KmR | | | [2] |
| ***Yersinia enterocolitica*** |  | | |  |
| 8081 | Wild-type, serotype O:8, biotype 1B, pYV+, sequenced strain | | | [3] |
| 8081 Δ*yenI* | *yenI* chromosomal deletion mutant derived from 8081, CmR | | | This study |
| 8081 Δ*yenR* | *yenR* chromosomal deletion mutant derived from 8081, KmR | | | This study |
| 8081 Δ*ycoR* | *ycoR* chromosomal deletion mutant derived from 8081, SmR | | | This study |
| 8081 Δ*yenR*/*ycoR* | *yenR*/*ycoR* chromosomal deletion double mutant derived from 8081, KmR, SmR | | | This study |
| 8081 Δ*yenI*/*yenR*/*ycoR* | *yenI*/*yenR/ycoR* chromosomal deletion triple mutant derived from 8081, CmR, KmR, SmR | | | This study |
| 8081 PspyA Δ*yenI* | *spyA* promotor fused to *luxCDABE* inserted into *Y. enterocolitica* 8081 Δ*yenI* | | | This study |
| 8081 PspyA Δ*yenR*/*ycoR* | *spyA* promotor fused to *luxCDABE* inserted into *Y. enterocolitica* 8081 Δ*yenR*/*ycoR* | | | This study |
| 8081 PspyA Δ*yenI*/*yenR*/*ycoR* | *spyA* promotor fused to *luxCDABE* inserted into *Y. enterocolitica* 8081 Δ*yenR*/*ycoR* Δ*yenI*/*yenR*/*ycoR* | | | This study |

**Table S2. Plasmids used in this study**

|  |  |  |
| --- | --- | --- |
| **Plasmid** | **Description** | **Reference/**  **Source** |
| pGEMT/easy | Ampicillin resistant PCR product cloning vector | Promega |
| pBluescript SKII+ | Ampicillin resistant cloning vector | Stratagene |
| pDM4 | Chloramphenicol resistant suicide vector | [4] |
| pBlue*lux* | Ampicillin resistant promoter-less *luxCDABE* cassette in a multisite polylinker | [5] |
| pHG327 | Ampicillin resistant low-copy number vector. | [6] |
| pUC4K | Source of kanamycin resistance cassette | Pharmacia |
| pACYC184 | Source of chloramphenicol resistance cassette | [7] |
| pHP45Ω | Source of streptomycin resistance cassette | [8] |
| pME3087 | Tetracycline resistant low-copy number vector. | [9] |
| pAJD434 | λ red recombinase vector | [10] |
| pYK801 | pDM4 containing *PspyA::luxCDABE* | This study |
| pME::*yenI* | pME3087 carrying *yenI* for complementation | This study |
| pME::*yenRycoR* | pME3087 carrying *yenR* and *ycoR* for complementation | This study |

**Table S3. Primers used in this study**

|  |  |
| --- | --- |
| **Name** | **Primer sequence (5’-3’)** |
|  | **Amplification of QS genes** |
| *yenR*f | gtgaggatatgttatacc |
| *yenR*r | gagagtacatcaggttg |
| *yenI*f | ctgcactcgctaagtctc |
| *yenI*r | ccaagcacgcaataagg |
| *ycoR*f | ggattttattaaggaggtg |
| *ycoR*r | ccaagtaagggagcatag |
|  |  |
|  | **Primers for mutagenesis** |
| *yenR*Kan-f | aattgtattgttacattatacacagagtagaattggcctattatgataattgaaagccacgttgtgtctcaa |
| *yenR*Kan-r | aagtttcaactctatgccaagccttattgcgtgcttggcatttaaaacaccttagaaaaactcatcgagcat |
| *yenI*Cm-f | cgtgtacgatgttgttttaattaaataactttggtttttattatgttaaaagttgatcggcacgtaagaggt |
| *yenI*Cm-r | agcacgcaataaggcttggcatagagttgaaacttattaaacctatttaatttacgccccgccctgccactc |
| *ycoR*Sm-f | ctcgaaaaatacagaaaaatcagatatgcatatgcaataatgaataagagagttttcatggcttgttatgac |
| *ycoR*Sm-r | ggatggatcaagaaaacacttggccattatctttgtatactaggaataaacttatttgccgactaccttggt |
|  |  |
|  | **Primers to amplify the *ycoR* locus** |
| *ycoR*flankF | cacaatctcactcaaggc |
| *ycoR*flankR | gcgtatccagatccatc |
|  |  |
|  | **Primers for QRT-PCR** |
| *dnaE*-f | ccaccggacaggtcagctt |
| *dnaE*-r | aactcacgggcggtcattt |
| *invA*-f | cggtgaccacagggcttatt |
| *invA*-R | tgatcgacccccagtgtaatg |
| *yadA*-f | cattgcggttggtgctagtg |
| *yadA*-r | agcgcccacagcaactg |
| *spyA*-f | gatgcgactgatcctcaagct |
| *spyA*-r | tgcaggtcgggaacatagc |

**Table S4. List of AHLs with percentage of the total**

|  |  |
| --- | --- |
| **AHLs** | **Percentage** |
| C4-HSL | 0.6164 |
| C6-HSL | 27.4266 |
| C8-HSL | 0.2626 |
| C12-HSL | 0.0337 |
| C14-HSL | 0.2009 |
| 3-oxo-C6-HSL | 62.4219 |
| 3-oxo-C8-HSL | 1.2484 |
| 3-oxo-C7-HSL | 5.1498 |
| 3-oxo-C10-HSL | 0.0071 |
| 3-oxo-C12-HSL | 0.0371 |
| 3-oxo-C14-HSL | 0.0808 |
| 3-OH-C4-HSL | 0.7140 |
| 3-OH-C6-HSL | 1.7127 |
| 3-OH-C8-HSL | 0.0417 |
| 3-OH-C12-HSL | 0.0275 |
| 3-OH-C14-HSL | 0.0188 |

*N*-butanoylhomoserine lactone (C4-HSL), C8-HSL, *N*-dodecanoylhomoserine (C12-HSL), *N*-tetradecanoylhomoserine lactone (C14-HSL), *N*-(3-oxoheptanoyl)homoserine lactone (3-oxo-C7-HSL), 3-oxo-C8-HSL, *N*-(3-hydroxybutanoyl)homoserine lactone (3-OH-C4-HSL), *N*-(3-hydroxyhexanoyl)homoserine lactone (3-OH-C6-HSL), *N*-(3-hydroxyoctanoyl)homoserine lactone (3-OH-C8-HSL), *N*-(3-hydroxydecanoyl)homoserine lactone (3-OH-C12-HSL), and *N*-(3-hydroxytetradecanoyl)homoserine lactone (3-OH-C14-HSL)).

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