

1 **Table S2. Strains and plasmids used in this study**

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| 3  | <b>Strain/Plasmid</b>             | <b>Genotype</b>   | <b>Reference</b> <sup>1</sup> |
|----|-----------------------------------|---|-------------------------------|
| 4  | <b><i>V. vulnificus</i></b>       |   |                               |
| 5  | MO6-24/O                          | Clinical isolate  | (1)                           |
| 6  | <i>flaE::nptI</i>                 | MO6-24/O, <i>flaE</i> , Km <sup>R</sup>   | This study                    |
| 7  | $\Delta$ <i>flaF</i>              | MO6-24/O, $\Delta$ <i>flaF</i> , Km <sup>R</sup>  | This study                    |
| 8  | $\Delta$ <i>flaEF</i>             | MO6-24/O, $\Delta$ <i>flaEF</i> , Km <sup>R</sup>   | This study                    |
| 9  | $\Delta$ <i>flaABCD</i>           | MO6-24/O, $\Delta$ <i>flaABCD</i> , Km <sup>R</sup>   | This study                    |
| 10 | $\Delta$ <i>flaJ</i>              | MO6-24/O, $\Delta$ <i>flaJ</i> , Km <sup>R</sup>  | This study                    |
| 11 | $\Delta$ <i>flhA</i>              | MO6-24/O, $\Delta$ <i>flhA</i>  | This study                    |
| 12 | <i>flgK::Tn</i>                   | MO6-24/O, <i>flgK::mini-Tn lacZ1</i> -Km <sup>R</sup>   | (2)                           |
| 13 | <b><i>V. cholerae</i></b>         |   |                               |
| 14 | ATCC14033                         | Serovar O1, biotype ElTor, serotype Inaba   | ATCC                          |
| 15 | <b><i>V. parahaemolyticus</i></b> |   |                               |
| 16 | RIMD2210633                       | Serotype O3:K6  | ATCC/BAA-238                  |
| 17 | <b><i>E. coli</i></b>             |   |                               |
| 18 | DH5 $\alpha$                      | <i>f80dlacZ DM15 recA1 endA1 gyrA96 relA1 thi-1</i>   | Laboratory collection         |
| 19 |                                   | <i>hsdR17</i> (r <sub>k</sub> <sup>-</sup> m <sub>k</sub> <sup>-</sup> ) <i>supE44 deoR</i> $\Delta$ ( <i>lacZYA-argF</i> ) <i>U169</i> |                               |
| 20 | SM10 $\lambda$ pir                | <i>thi-1 thr leu tonA lacY supE recA::</i>  | (3)                           |
| 21 |                                   | Rp4-2-Tc::Mu $\lambda$ pir, OriT of RP4, Km <sup>R</sup>  |                               |
| 22 | JM109                             | <i>endA1 recA1 gyrA96 thi-1 hsdR17</i> (r <sub>k</sub> <sup>-</sup> m <sub>k</sub> <sup>-</sup> ) <i>relA1</i>                          | Promega                       |
| 23 |                                   | <i>supE44 (lac-proAB)</i> [F' <i>traD3 6proAB lacI</i> <sup>q</sup> Z M15]  |                               |
| 24 | BTH101                            | F <sup>-</sup> <i>cya-99 araD139 galE15 galK16 rpsL1 (Str<sup>r</sup>) hsdR2</i>  | Euromedex                     |
| 25 |                                   | <i>mcrA1 mcrB1</i>  |                               |
| 26 | <b>Plasmids</b>                   |   |                               |
| 27 | pHK0011                           | pRK415 with promoterless <i>luxAB</i> , Tc <sup>R</sup>   | (4)                           |
| 28 | pHK0011- <i>flaA</i>              | <i>flaA::luxAB</i> transcriptional fusion in pHK0011  | This study                    |
| 29 | pHK0011- <i>flaB</i>              | <i>flaB::luxAB</i> transcriptional fusion in pHK0011  | This study                    |
| 30 | pHK0011- <i>flaC</i>              | <i>flaC::luxAB</i> transcriptional fusion in pHK0011  | This study                    |
| 31 | pHK0011- <i>flaD</i>              | <i>flaD::luxAB</i> transcriptional fusion in pHK0011  | This study                    |
| 32 | pHK0011- <i>flaE</i>              | <i>flaE::luxAB</i> transcriptional fusion in pHK0011  | This study                    |

|    |                        |  |            |
|----|------------------------|--|------------|
| 33 | pHK0011-flaF           | <i>flaF::luxAB</i> transcriptional fusion in pHK0011             | This study |
| 34 | pBlueScript II SKII(+) | Cloning vector; Ap <sup>R</sup> , <i>lac</i> promoter, fl, ColE1 | Stratagene |
| 35 | pMflaE01               | pBlueScript SKII(+) with 1,156-bp region of <i>flaE</i>          | This study |
| 36 | pMflaE02               | pMflaE01 with 1.2-kb kanamycin resistance gene, Km <sup>R</sup>  | This study |
| 37 | pMflaE03               | pDM4 containing ApaI and SacI fragment of pMflaE02               | This study |
| 38 | pMflaF01               | pBlueScript SKII(+) with 780-bp upstream region of <i>flaF</i>   | This study |
| 39 | pMflaF02               | pMflaF01 with 910-bp downstream region of <i>flaF</i>            | This study |
| 40 | pMflaF03               | pMflaF02 with 1.2-kb kanamycin resistance gene, Km <sup>R</sup>  | This study |
| 41 | pMflaF04               | pDM4 containing ApaI and SacI fragment of pMflaF03               | This study |
| 42 | pMflaE_01              | pBlueScript SKII(+) with 768-bp upstream region of <i>flaE</i>   | This study |
| 43 | pMflaE_02              | pMflaE_01 with 854-bp downstream region of <i>flaE</i>           | This study |
| 44 | pMflaE_03              | pDM4 containing Sall and SacI fragment of pMflaE_02              | This study |
| 45 | pMflaB01               | pBlueScript SKII(+) with 820-bp upstream region of <i>flaB</i>   | This study |
| 46 | pMflaB02               | pMflaB01 with 550-bp downstream region of <i>flaB</i>            | This study |
| 47 | pMflaB03               | pMflaB02 with 1.2-kb kanamycin resistance gene, Km <sup>R</sup>  | This study |
| 48 | pMflaB04               | pDM4 containing ApaI and SacI fragment of pMflaB03               | This study |
| 49 | pMflaD01               | pBlueScript SKII(+) with 821-bp upstream region of <i>flaD</i>   | This study |
| 50 | pMflaD02               | pMflaD01 with 552-bp downstream region of <i>flaD</i>            | This study |
| 51 | pMflaD03               | pDM4 containing ApaI and XbaI fragment of pMflaD02               | This study |
| 52 | pMflaC01               | pBlueScript SKII(+) with 905-bp upstream region of <i>flaC</i>   | This study |
| 53 | pMflaC02               | pMflaC01 with 780-bp downstream region of <i>flaC</i>            | This study |
| 54 | pMflaC03               | pDM4 containing ApaI and SacI fragment of pMflaC02               | This study |
| 55 | pMflaA01               | pBlueScript SKII(+) with 780-bp upstream region of <i>flaA</i>   | This study |
| 56 | pMflaA02               | pMflaA01 with 600-bp downstream region of <i>flaA</i>            | This study |
| 57 | pMflaA03               | pDM4 containing Sall and XbaI fragment of pMflaA02               | This study |
| 58 | pSKflaJ01              | pBlueScript SKII(+) with 806-bp upstream region of <i>flaJ</i>   | This study |
| 59 | pSKflaJ02              | pSKflaJ01 with 651-bp downstream region of <i>flaJ</i>           | This study |
| 60 | pKAS-flaJ              | pKAS32 containing Sall and XbaI fragment of pSKflaJ02            | This study |
| 61 | pYflhA01               | pBlueScript SKII(+) with 590-bp upstream region of <i>flhA</i>   | This study |
| 62 | pYflhA02               | pYflhA01 with 890-bp downstream region of <i>flhA</i>            | This study |
| 63 | pYflhA03               | pYflhA02 with 1.2-kb kanamycin resistance gene, Km <sup>R</sup>  | This study |
| 64 | pYflhA04               | pDM4 containing ApaI and SpeI fragment of pYflhA03               | This study |

|    |                    |   |                   |
|----|--------------------|---|-------------------|
| 65 | pUC4K              | pUC4 with <i>nptI</i> ; Ap <sup>R</sup> , Km <sup>R</sup>                     | Pharmacia Biotech |
| 66 | pDM4               | Suicide vector; <i>oriR6K</i> , Cm <sup>R</sup>                               | (5)               |
| 67 | pKAS32             | Suicide vector; <i>rpsL</i> , Ap <sup>R</sup>                                 | (6)               |
| 68 | pQE30              | Expression vector, Ap <sup>R</sup>  | Qiagen            |
| 69 | pQE30-FlaA         | pQE30 containing 1,131-bp <i>V. vulnificus flaA</i> ORF                       | (7)               |
| 70 | pQE30-FlaB         | pQE30 containing 1,134-bp <i>V. vulnificus flaB</i> ORF                       | This study        |
| 71 | pQE30-FlaC         | pQE30 containing 1,158-bp <i>V. vulnificus flaC</i> ORF                       | This study        |
| 72 | pQE30-FlaE         | pQE30 containing 1,128-bp <i>V. vulnificus flaE</i> ORF                       | This study        |
| 73 | pQE30-FlaF         | pQE30 containing 1,134-bp <i>V. vulnificus flaF</i> ORF                       | This study        |
| 74 | pQE30-FlaAvc       | pQE30 containing 1,140-bp <i>V. cholerae flaA</i> ORF                         | This study        |
| 75 | pQE30-FlaEvc       | pQE30 containing 1,100-bp <i>V. cholerae flaE</i> ORF                         | This study        |
| 76 | pQE30-FlaCvp       | pQE30 containing 1,155-bp <i>V. parahaemolyticus flaC</i> ORF                 | This study        |
| 77 | pQE30-FlaEvp       | pQE30 containing 1,125-bp <i>V. parahaemolyticus flaE</i> ORF                 | This study        |
| 78 | pQE30-FlaFvp       | pQE30 containing 1,134-bp <i>V. parahaemolyticus flaF</i> ORF                 | This study        |
| 79 | pRK415             | IncP <i>ori</i> , broad-host-range vector <i>oriT</i> of RP4, Tc <sup>R</sup> | (8)               |
| 80 | pRK415-flaE        | pRK415 with 1,135bp VVMO6_02251   | This study        |
| 81 | pRK415-flaF        | pRK415 with 1,161bp VVMO6_00807   | This study        |
| 82 | pRK415-flhA        | pRK415 with 2,103bp VVMO6_00832   | This study        |
| 83 | pRK415-12661       | pRK415 with 1,403-bp VVMO6_01620 (in EPS-cluster I)                           | (9)               |
| 84 | pRK415-21579       | pRK415 with 2,313-bp VVMO6_03348 (in EPS-cluster II)                          | (9)               |
| 85 | pRK415-12305       | pRK415 with 2,285-bp VVMO6_01180 (in EPS-cluster III)                         | (9)               |
| 86 | pKT25              | BACTH plasmid for T25 fragment of   | Euromedex         |
| 87 |                    | adenylate cyclase (Km <sup>r</sup> )  |                   |
| 88 | pUT18c             | BACTH plasmid for T18 fragment of   | Euromedex         |
| 89 |                    | adenylate cyclase (Ap <sup>r</sup> )  |                   |
| 90 | pKT25- <i>zip</i>  | BACTH plasmid for T25 fragment fused to                                       | Euromedex         |
| 91 |                    | GCN4 leucine zipper   |                   |
| 92 | pUT18c- <i>zip</i> | BACTH plasmid for T18 fragment fused to                                       | Euromedex         |
| 93 |                    | GCN4 leucine zipper   |                   |
| 94 | pKT25-FlgL         | pKT25, T25- <i>flgL</i> fusion  | This study        |
| 95 | pKT25-FliD         | pKT25, T25- <i>fliD</i> fusion  | This study        |
| 96 | pKT25-FlaE         | pKT25, T25- <i>flaE</i> fusion  | This study        |

|     |             |                                 |            |
|-----|-------------|---------------------------------|------------|
| 97  | pKT25-FlaF  | pKT25, T25- <i>flaF</i> fusion  | This study |
| 98  | pKT25-FlaB  | pKT25, T25- <i>flaB</i> fusion  | This study |
| 99  | pUT18c-FlaB | pUT18c, T18- <i>flaB</i> fusion | This study |
| 100 | pUT18c-FlaE | pUT18c, T18- <i>flaE</i> fusion | This study |
| 101 | pUT18c-FlaF | pUT18c, T18- <i>flaF</i> fusion | This study |

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103 **<sup>1</sup> References**

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