

1 **Supplementary Appendix**

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3 **CARB-17 family of β -lactamases mediated intrinsic resistance to penicillins in *Vibrio***
4 ***parahaemolyticus***

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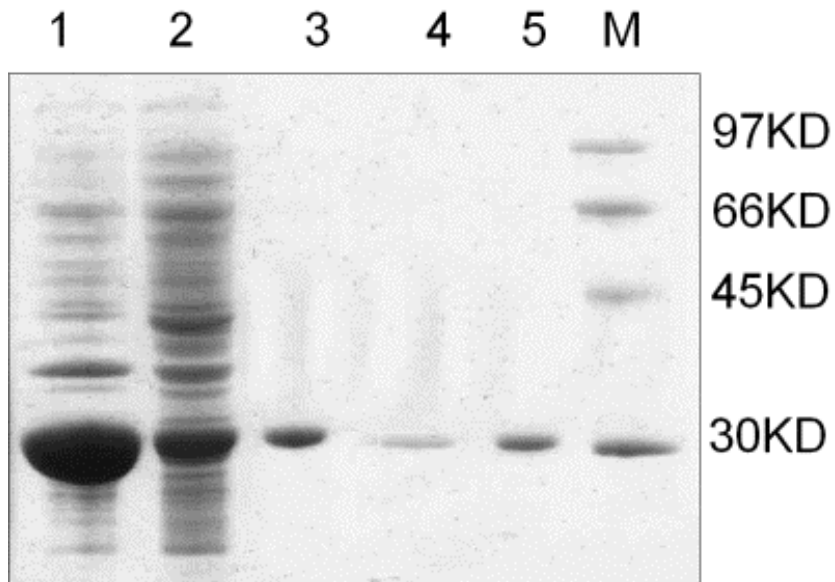
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28 **Supplementary Figure 1. Purification of mBla_{V110}.** *E. coli* expressing His-mBla_{V110}

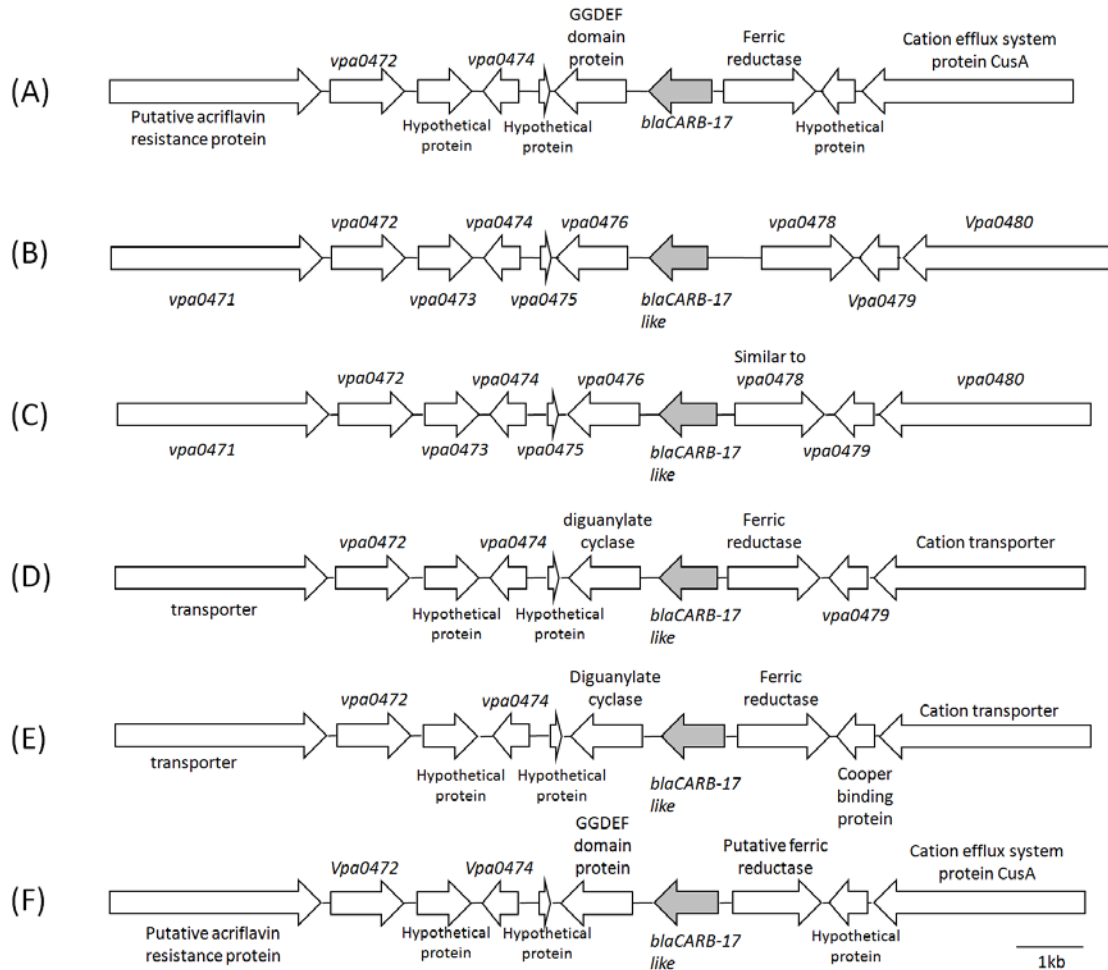
29 was broken by French press and separated as the insoluble fraction (lane 1) and soluble

30 fraction (lane 2). His-mBla_{V110} was purified via the Ni-NTA column (lane 3), treated with

31 thrombin to remove the His tag (lane 4) and followed by size exclusion column (lane 5).

32 M: molecular marker.

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35 **Figure 2. Comparison of genetic backgrounds of *bla*_{CARB-17} and *bla*_{CARB-17-like} genes**

36 **from different *V. parahaemolyticus* strains.** (A) *V. parahaemolyticus* V110

37 chromosome 2; (B) *V. parahaemolyticus* RIMD 2210633 chromosome 2; (C) *V.*

38 *parahaemolyticus* BB22OP chromosome 2; (D) *V. parahaemolyticus* O1:K33 str.

39 CDC_K4557 chromosome 2; (E) *V. parahaemolyticus* O1:Kuk str. FDA_R31

40 chromosome 2; (F) *V. parahaemolyticus* UCM-V493 chromosome 2. *Vpa0471*:

41 multidrug efflux membrane fusion protein; *Vpa0472*: long-chain fatty acid transport

42 protein; *Vpa0473*: hypothetical protein; *Vpa0474*: spermidine n1-acetyltransferase;

43 *Vpa0475*: hypothetical protein (GGDEF family protein with GAF sensor); *Vpa0476*:

- 44 hypothetical protein; *Vpa0477*: β -lactamase; *Vpa0478*: oxidoreductase; *Vpa0479*:
- 45 hypothetical protein; *Vpa0480*: cation efflux system transmembrane protein.