

**Table S1 Features of GIs, prophages and ICE distributed on chromosome 1 and chromosome 2 of *Vibrio parahaemolyticus* LC**

| Replicon     | Names  | Size (Kb) | G+C (%) | No. of CDSs | Representative gene products  | Potential function       |
|--------------|--------|-----------|---------|-------------|---|--------------------------|
| Chromosome 1 | GI-1   | 20.9      | 42.61   | 23          | S-type pyocin; colicin immunity protein   | Resistance               |
|              | GI-2   | 40.7      | 39.38   | 39          | Bacterial sugar transferase; Polysaccharide biosynthesis protein  | Metabolism               |
|              | GI-3   | 44.7      | 41.68   | 38          | Putative AbiEii toxin; antitoxin component of TA system   | Virulence                |
|              | GI-4   | 18.6      | 46.69   | 29          | Cytochrome c oxidase subunit; sensor histidine kinase RcsC  | Metabolism               |
|              | GI-5   | 93.2      | 40.33   | 113         | Addiction module toxin, Txe/YoeB family; antitoxin YefM; ParE toxin, putative AbiEii toxin, Type VI; secretion system VasI, virulence-associated E family protein | Virulence and resistance |
|              | GI-6   | 23.7      | 46.18   | 25          | Isochorismatase family; FtsX-like permease family   | Metabolism               |
|              | GI-7   | 64.6      | 46.24   | 67          | Multiple proteins of conjugative transfer system  | Virulence                |
|              | GI-8   | 20.6      | 43.04   | 23          | Phage integrase family; inovirus Gp2  | Metabolism               |
|              | GI-9   | 10.5      | 41.26   | 12          | Serine recombinase PinR; phosphoglycolate phosphatase   | Metabolism               |
|              | GI-10  | 27        | 43.93   | 28          | Restriction-modification methylase; immunity protein 49   | Resistance               |
| Chromosome 2 | proP-1 | 48        | 41.7    | 64          | DNA adenine methyltransferase YhdJ; Leucine efflux protein  | Metabolism               |
|              | ICE    | 56.7      | 46.33   | 52          | Aerobic cobaltochelataase subunit; anaerobic nitric oxide reductase transcription; cardiolipin synthase   | Metabolism               |
|              | GI-11  | 55.2      | 43.11   | 51          | Endonuclease/phosphatase family; multiple proteins of conjugative transfer system   | Metabolism               |
|              | GI-12  | 27.1      | 43.24   | 30          | D12 class N6 adenine-specific DNA methyltransferase; guanosine monophosphate reductase  | Metabolism               |
|              | GI-13  | 10.6      | 40.5    | 9           | Adenosine deaminase; trypsin  | Metabolism               |
|              | proP-2 | 10.7      | 40.94   | 11          | Replicase family; phage regulatory protein CII  | Metabolism               |