

Table S1. Target genes and oligonucleotide primers utilized in the study.

<i>Vibrio</i> species	Target Gene Specie/Virulence ^a	Primers ^b	Sequence	Ampl (bp)	References ^c
<i>V. cholera</i>	<i>toxR</i> -C (S)	toxR-F	CCTTCGATCCCCCTAAGCAATAC	779	Rivera et al., 2001 ^c
		toxR-R	AGGGTTAGCAACGATGCGTAAG		
	<i>ctxA</i> (V)	ctxA-F	CGGGCAGATTCTAGACCTCCTG	564	Fields et al., 1992 ^d
		ctxA-R	CGATGATCTTGGAGCATTCCCAC		
	<i>ctxB</i> (V)	ctxB-F	GGTTGCTTCTCATCATCGAACCAC	460	Olsvik et al. (1993) ^e
		ctxB-R	GATACACATAATAGAATTAAGGATG		
	<i>stn/sto</i> (V)	stn/sto67-F stn/sto194-R	GCTGGATTGCAACATATTTTCGC TCGCATTTAGCCAAACAGTAGAAA	172	Rivera et al., 2001 ^c
<i>V. parahaemolyticus</i>	<i>toxR</i> -P (S)	toxR-F	GTCTTCTGACGCAATCGTTG	368	Kim et al., 1999 ^f
		toxR-R	ATACGAGTGTTGCTGTCATG		
	<i>tdh</i> (V)	tdh-F	GTAAAGGTCTCTGACTTTTGGAC	269	Bej et al., 1999 ^g
		tdh-R	TGGAATAGAACCTTCATCTTCACC		
	<i>trh</i> (V)	trh-F	TTGGCTTCGATATTTTCAGTATCT	500	Bej et al., 1999 ^g
		trh-R	CATAACAAACATATGCCCATTTCCG		
<i>V. vulnificus</i>	<i>vvhA</i> (S)	Vvh785-F Vvh1303-R	CCGCGGTACAGTTGGCGCA CGCCACCCACTTTCGGGCC	519	Han & Ge, 2010 ^h

^aSpecie markers (S), virulence markers (V);

^bOligonucleotide primers and PCR conditions: a small amount of the purified strain was picked from the plate and transferred in 100 µL of sterile H₂O. The DNA was extracted by the boiling method at 100°C for 15 min, stored 2-3 min at -20°C and then centrifuged at 5000 × g at 4°C for 15 min, recovering the supernatant. Bacterial lysates were stored at -20°C until use. For the PCR reactions 1 µL of each lysate was suspended with 2.5 µL 10X PCR Rxn Buffer (Invitrogen, Carlsbad, CA, USA), 1 µL MgSO₄ (Invitrogen), 0.5 µL dNTPs 100 Mm (Invitrogen), 1 µL of each primer, 0.2 µL of Taq-DNA Polymerase (Invitrogen), and sterile H₂O to the mark of 25 µL. PCR reactions were electrophoresed at 100 V for 30 min on 1.5% agarose gel utilizing tris-acetate-ethylenediaminetetraacetic acid (TAE) buffer (Sigma Aldrich, St. Louis, MO, USA); Gel Red Nucleic Acid Stain (Biotium, Hayward, CA, USA) was utilized as fluorescent nucleic acid stain, and bromophenol blue with 30% glycerol in PCR water and TrackIt™ 100 bp DNA Ladder (Invitrogen) as loading buffer. The PCR products were evidenced by the transilluminator Bio-Rad Gel Doc™ XR, Trans-UV at 302 nm;

^cRivera, I.N.; Chun, J.; Huq, A.; Sack, R.B.; Colwell, R.R. Genotypes Associated with Virulence in Environmental Isolates of *Vibrio cholerae*. *Appl. Environ. Microb.* **2001**, *67*, 2421-2429, [https://doi: 10.1128/AEM.67.6.2421-2429.2001](https://doi.org/10.1128/AEM.67.6.2421-2429.2001); ^dFields, P.I.; Popovic, T.; Wachsmuth, K.; Olsvik, O. Use of polymerase chain reaction for detection of toxigenic *Vibrio cholerae* O1 strains from the Latin American cholera epidemic. *J. Clin. Microbiol.* **1992**, *30*, 2118-2121, [https://doi: 10.1128/jcm.30.8.2118-2121.1992](https://doi.org/10.1128/jcm.30.8.2118-2121.1992); ^eOlsvik, O.; Wahlberg, J.; Petterson, B.; Uhlén, M.; Popovic, T.; Wachsmuth, I.K.; Fields, P.I. Use of automated sequencing of polymerase chain reaction-generated amplicons to identify three types of cholera toxin subunit B in *Vibrio cholerae* O1 strains. *J. Clin. Microbiol.* **1993**, *31*, 22–25, [https://doi: 10.1128/jcm.31.1.22-25.1993](https://doi.org/10.1128/jcm.31.1.22-25.1993); ^fKim, Y.B.; Okuda, J.; Matsumoto, C.; Takahashi, N.; Hashimoto, S.; Nishibuchi, M. Identification of *Vibrio parahaemolyticus* strains at the species level by PCR targeted to the *toxR* gene. *J. Clin. Microbiol.* **1999**, *37*, 1173-1177, [https://doi: 10.1128/JCM.37.4.1173-1177.1999](https://doi.org/10.1128/JCM.37.4.1173-1177.1999); ^gBej, A.K.; Patterson, D.P.; Brasher, C.W.; Vickery, M.C.; Jones, D.D.; Kaysner, C.A. Detection of total and hemolysin-producing *Vibrio parahaemolyticus* in shellfish using multiplex PCR amplification of *tl*, *tdh* and *trh*. *J. Microbiol. Meth.* **1999**, *36*, 215-225, [https://doi: 10.1016/s0167-7012\(99\)00037-8](https://doi.org/10.1016/s0167-7012(99)00037-8); ^hHan, F.; Ge, B. Multiplex PCR assays for simultaneous detection and characterization of *Vibrio vulnificus* strains. *Lett. Appl. Microbiol.* **2010**, *5*, 234-240. [https://doi: 10.1111/j.1472-765X.2010.02887.x](https://doi.org/10.1111/j.1472-765X.2010.02887.x).