

**Table S1.** Bacterial strains and media used in this study

Strain	Genotype	Source	Medium
<i>V. parahaemolyticus</i> ATCC17802	<i>opaR, vpadF, ureC, tlh</i>	ATCC, United States	TSB
<i>V. parahaemolyticus</i> B1-22	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B3-8	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B4-13	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B4-28	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B6-13	<i>opaR, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B7-16	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B9-31	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B9-42	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B10-61	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> B11-3	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> L5-1	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> L7-7	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> L7-45	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> L10-15	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N2-8	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N2-11	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N2-20	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N2-25	<i>opaR, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-2	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-3	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-11	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-13	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-29	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-30	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-32	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N3-33	<i>opaR, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N4-9	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N4-26	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N4-31	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N4-46	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N5-15	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N6-7	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N6-10	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N6-16	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N6-26	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N7-3	<i>opaR, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N7-9	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N7-45	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N7-69	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N8-9	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N8-13	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N8-35	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N9-24	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N9-31	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N10-20	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> N10-48	<i>opaR, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> Q5-6	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> Q8-2	<i>opaR, vpadF</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> Q8-7	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>V. parahaemolyticus</i> Q8-15	<i>opaR, vpadF, tlh</i>	LS-SHOU, China	TSB
<i>Vibrio alginolyticus</i> ATCC17749	-	ATCC, United States	TSB
<i>Vibrio alginolyticus</i> ATCC33787	-	ATCC, United States	TSB
<i>Vibrio fluvialis</i> ATCC33809	-	ATCC, United States	Marine 2216
<i>Vibrio harvey</i> ATCC BAA-1117	-	ATCC, United States	Marine 2216

<i>Vibrio harvey</i> ATCC33842	-	ATCC, United States	Marine 2216
<i>Vibrio metschnikovii</i> ATCC 700040	-	ATCC, United States	Marine 2216
<i>Vibrio mimicus</i> bio-56759	-	Biobw, China	TSB
<i>Vibrio vulnificus</i> ATCC27562	-	ATCC, United States	TSB
<i>Vibrio vulnificus</i>	-	DL, China	LB
<i>Aeromonas hydrophila</i> ATCC35654	-	ATCC, United States	TSB
<i>Aeromonas hydrophila</i>	-	-	LB
<i>Enterobacter cloacae</i> ATCC13047	-	ATCC, United States	TSB
<i>Enterobacter cloacae</i>	-	SJAM, China	LB
<i>Escherichia coli</i> ATCC8739	-	ATCC, United States	TSB
<i>Escherichia coli</i> ATCC25922	-	ATCC, United States	LB
<i>Escherichia coli</i> K12	-	IIM, China	TSB
<i>Enterobacter sakazakii</i> CMCC45401	-	Biobw, China	TSB
<i>Klebsiella oxytoca</i> 0707-27	-	LS-SHOU, China	EE
<i>Klebsiella pneumoniae</i> 0717-1	-	LS-SHOU, China	EE
<i>Klebsiella pneumoniae</i> 1202	-	LS-SHOU, China	EE
<i>Klebsiella variicola</i> 0710-01	-	LS-SHOU, China	EE
<i>Lactobacillus casei</i> D31	-	LS-SHOU, China	MRS
<i>Lactobacillus casei</i> T9	-	LS-SHOU, China	MRS
<i>Lactobacillus casei</i> K17	-	LS-SHOU, China	MRS
<i>Listeria monocytogenes</i> ATCC19115	-	ATCC, United States	BHI
<i>Pseudomonas aeruginosa</i> ATCC9027	-	ATCC, United States	TSB
<i>Pseudomonas aeruginosa</i> ATCC27853	-	ATCC, United States	TSB
<i>Salmonella enterica</i> subsp. Enterica-Leminor et popoff	-	ATCC, United States	TSB
ATCC13312			
<i>Staphylococcus aureus</i> ATCC 25923	-	ATCC, United States	TSB
<i>Staphylococcus aureus</i> ATCC 8095	-	ATCC, United States	TSB
<i>Staphylococcus aureus</i> ATCC29213	-	ATCC, United States	TSB
<i>Staphylococcus aureus</i> ATCC6538	-	ATCC, United States	TSB
<i>Staphylococcus aureus</i> ATCC6538P	-	ATCC, United States	TSB
<i>Shigella dysenteriae</i> CMCC51252	-	ATCC, United States	TSB
<i>Salmonella</i> spp.	-	-	TSB
<i>Shigella flexneri</i> CMCC51572	-	GCCC, China	TSB
<i>Shigella flexneri</i> ATCC12022	-	ATCC, United States	TSB
<i>Shigella flexneri</i> CMCC51574	-	GCCC, China	TSB
<i>Salmonella paratyphi</i> -ACMCC50093	-	GCCC, China	TSB
<i>Shigella sonnei</i> ATCC25931	-	ATCC, United States	TSB
<i>Shigella sonnet</i> CMCC51592	-	GCCC, China	TSB
<i>Salmonella typhimurium</i> ATCC15611	-	ATCC, United States	TSB
<i>Staphylococcus aureus</i>	-	-	LB
<i>V.cholerae</i> ATCC39315	-	ATCC, United States	*
<i>V.cholerae</i> GIM1.449	-	GCCC, China	TSB
<i>V.cholerae</i> 805-38	-	LS-SHOU, China	TSB
<i>V.cholerae</i> 717-01	-	LS-SHOU, China	TSB
<i>V.cholerae</i> 805-29	-	LS-SHOU, China	TSB
<i>V.cholerae</i> 805-32	-	LS-SHOU, China	TSB
<i>V.cholerae</i> 717-25	-	LS-SHOU, China	TSB

\* , genomic DNA available. -, unknown. ATCC: American Type Culture Collection, United States; DL: Dishui Lake, Shanghai, China; GCCC, Guangdong Culture Collection Center, Guangzhou, China; IIM, Institute of Industrial Microbiology, Shanghai, China; LS-SHOU, Laboratory stock, Shanghai Ocean University, Shanghai, China; SJAM, Shanghai Jiangyang Aquatic Market, Shanghai, China; Virulence-associated gene : *opaR*, *vpadF*, *ureC*, and *tlh*.

**Table S2.** Target gene sequences in some representative *V. parahaemolyticus* strains used in this study.

<i>V. Parahaemolyticus</i> strain	Gene	NCBI accession number	<i>V. Parahaemolyticus</i> strain	Gene	NCBI accession number
B1-22	<i>opaR</i>	MZ819080	N4-26	<i>tlh</i>	OL409136
B3-8	<i>opaR</i>	OK490369	N7-19	<i>tlh</i>	OL409137
B4-13	<i>opaR</i>	OL362198	N8-9	<i>tlh</i>	OL409138
B4-28	<i>opaR</i>	OL362204	N8-13	<i>tlh</i>	OL409139
B7-16	<i>opaR</i>	OL362205	N8-36	<i>tlh</i>	OL409140
B9-42	<i>opaR</i>	OL362199	N4-31	<i>tlh</i>	OL409141
B10-61	<i>opaR</i>	OL362206	N7-3	<i>tlh</i>	OL409142
B11-3	<i>opaR</i>	OL362200	N7-9	<i>tlh</i>	OL409143
L7-45	<i>opaR</i>	OL362201	N7-45	<i>tlh</i>	OL409144
L10-15	<i>opaR</i>	OL362202	N9-24	<i>tlh</i>	OL409145
N2-8	<i>opaR</i>	OL362207	N9-31	<i>tlh</i>	OL409146
N2-11	<i>opaR</i>	OL362203	N10-20	<i>tlh</i>	OL409147
N2-20	<i>opaR</i>	OL422814	N10-48	<i>tlh</i>	OL409148
N3-13	<i>opaR</i>	OL422815	B4-28	<i>vpadF</i>	OL409149
N3-32	<i>opaR</i>	OL422816	N4-9	<i>vpadF</i>	OL409150
N3-33	<i>opaR</i>	OL422817	N7-9	<i>vpadF</i>	OL409151
N6-10	<i>opaR</i>	OL422818	L5-1	<i>vpadF</i>	OL409152
N9-31	<i>opaR</i>	OL422819	L7-7	<i>vpadF</i>	OL409153
Q5-6	<i>opaR</i>	OL422820	N3-2	<i>vpadF</i>	OL409154
Q8-15	<i>opaR</i>	OL422821	N3-13	<i>vpadF</i>	OL409155
B6-13	<i>tlh</i>	OL409129	N3-30	<i>vpadF</i>	OL409156
L7-7	<i>tlh</i>	OL409130	N4-31	<i>vpadF</i>	OL409157
L7-45	<i>tlh</i>	OL409131	N4-46	<i>vpadF</i>	OL409158
N2-25	<i>tlh</i>	OL409132	N6-26	<i>vpadF</i>	OL409159
N3-2	<i>tlh</i>	OL409133	N7-19	<i>vpadF</i>	OL409160
N3-3	<i>tlh</i>	OL409134	ATCC17802	<i>ureC</i>	CP014047.2
N4-9	<i>tlh</i>	OL409135			