

Table S2. Primers used for species confirmation, multilocus sequence typing (MLST), and PCR typing of virulence genes.

Gene/Target	Primer	Sequence (5' to 3')	Amplicon size (bp)	T _a (°C)	References
Species confirmation, characterization and subtyping					
<i>toxR</i>	UtoxF	GASTTTGTTTGCGYGARCAAGGTT	640	59	Bauer et al. (2007)
	VctoxR	GGTTAGCAACGATGCGTAAG			
<i>ctxA</i>	ctxA1	CTCAGACGGGATTTGTTAGGCACG	301		Shirai et al. (1991); Chatterjee et al. (2009)
	ctxA2	TCTATCTCTGTAGCCCCTATTACG			
<i>rfb</i> O1 cluster	O1F	GTTTCACTGAACAGATGGG	192		Hoshino et al. (1998); Mantri et al. (2006); Shuan et al. (2009)
	O1R	GGTCATCTGTAAGTACAAC			
<i>rfb</i> O139 cluster	O139F	AGCCTCTTTATTACGGGTGG	449		
	O139R	GTCAAACCCGATCGTAAAGG			
Multilocus Sequence Typing (MLST)					
<i>adk</i>	V-chol-adk F	CATCATTCTTCTCGGTGCTC	592	59	Octavia et al. (2013)
	V-chol-adk R	AGTGCCGTCAAAC TTCAGGTA			
<i>gyrB</i>	V-chol-gyrB F	GTACGTTTCTGGCCTAGTGC	749	58	Octavia et al. (2013)
	V-chol-gyrB R	GGGTCTTTTCTCTGACAATC			
<i>mdh</i>	V-chol-mdh F	ATGAAAGTCGCTGTTATTGG			Octavia et al. (2013)
	V-chol-mdh R1 ^a	GCCGCTTGCCCATAGAAAG	692	62	
	V-chol-mdh R2	TAGCTTGATAGGTTGGG	810	51	
<i>metE</i>	V-chol-metE F	CGGGTGACTTTGCTTGGT	827	56	Octavia et al. (2013)
	V-chol-metE R	CAGATCGACTGGGCTGTG			
<i>pntA</i>	V-chol-pntA F1 ^a	CTTTGATGGAAAACTCTCA	740	52	Octavia et al. (2013)
	V-chol-pntA F2	GGCCAGCCCAAAATCCT	758	52	
	V-chol-pntA R	GATATTGCCGTCTTTTCTT			
<i>purM</i>	V-chol-purM F	GGTGTGATATTGATGCAGG	734	58	Octavia et al. (2013)
	V-chol-purM R	GGAATGTTTTCCAGAAAGCC			
<i>pyrC</i>	V-chol-pyrC F	ATCATGCCTAACACGGTTCC	726	57	Octavia et al. (2013)
	V-chol-pyrC R	TTCAAACACTTCGGCATA			
PCR typing of virulence genes					
<i>chxA</i>	VC-chxA-F	TGTGTGATGATGCTTCTGG	2000	52	Awasthi et al. (2013)
	VC-chxA-R	TTATTTTCAGTTCATCTTTTCGC			
	VC-Cholix-fo	GCAACAACACTGAAAACGAG	397	56	This study
	VC-Cholix-re	TCCTCATCAATCGCCAATTC			
<i>hlyA</i> ^{CL/ET}	hlyA-489F	GGCAAACAGCGAAACAAATACC	727/738	60	Rivera et al. (2001); Singh et al. (2001)
<i>hlyA</i> ^{ET}	hlyA-744F	GAGCCGGCATTTCATCTGAAT	481		
<i>hlyA</i> ^{CL/ET}	hlyA-1184R	CTCAGCGGGCTAATACGGTTTA			
<i>mshA</i>	VC0409-F	ATTCTCGGTATCTTGCCGTC	459	62	Rahman et al. (2008)
	VC0409-R	ACAAGCAGTTCCAGCAACCC			

Table continued					
Gene/Target	Primer	Sequence (5' to 3')	Amplicon size (bp)	T _a (°C)	References
PCR typing of virulence genes					
<i>ompU</i>	ompU-F ompU-R	ACGCTGACGGAATCAACCAAAG GCGGAAGTTTGGCTTGAAGTAG	869	60	Rivera et al. (2001); Singh et al. (2001)
<i>rstR</i> ^{Calc}	VC-rstR-calc-F VC-rstR-calc-R	CCAGCATTTTCTGTTTCTTG GGCAACAAAGCACATTAAAG	104	56	Rahman et al. (2008)
<i>rstR</i> ^{CL}	VC-rstR-class-F VC-rstR-class-R	CTCATCAGCAAAGCCTCCATC TAGCAAATGGTATCGGCGTTG	241	62	Rahman et al. (2008)
<i>rstR</i> ^{ET}	VC1455-F VC1455-R	AGCCAACCAAAGAAAGGCAAT TCATCTGTGGCCCATCTTC	186	62	Rahman et al. (2008)
<i>rtxA</i> ^b	VC1451-F VC1451-R	GATTCTTCCGTTCAAGCTCCG TGGTTCAGGCTGTTGCACAC	2571	63	Schirmeister et al. (2014)
<i>rtxC</i>	VC1450-F VC1450-R	TGCAAATCTCACATTAGCGCA CCACTGCACCTTTCGGATACA	430	63	Schirmeister et al. (2014)
<i>tcpA</i> ^{CL/ET}	tcpA-F_Class-ET	CACGATAAGAAAACCGGTCAAGAG		60	Mantri et al. (2006)
<i>tcpA</i> ^{CL}	tcpA-R_class	TTACCAAATGCAACGCCGAATG	620		
<i>tcpA</i> ^{ET}	tcpA-R_ET	AATCATGAGTTCAGCTTCCCGC	823		
TTSS <i>vcS2</i>	TTSS_vcsC2-A TTSS_vcsC2-B	CGTTACCGATGCTATGGGT AGAAGTCGGTTGTTTCGGTAA	535	60	Chatterjee et al. (2009)
TTSS <i>vcS2</i>	TTSS_vcsN2-A TTSS_vcsN2-B	CAGTTGAGCCAATTCCATT GACCAAACGAGATAATG	484	55	Chatterjee et al. (2009)
TTSS <i>vcS2</i>	TTSS_vcsV2-A TTSS_vcsV2-B	TTTGGCTCACTTGATGGG GCCACATCATTGCTTGCT	742	55	Chatterjee et al. (2009); Dziejman et al. (2005)
TTSS <i>vspD</i>	TTSS_vspD-A TTSS_vspD-B	AACTCGAAGAGCAGAAAAAAGC CTTCCCGCTTTTGATGAAATG	422	55	Chatterjee et al. (2009); Dziejman et al. (2005)
VSP-1	Vch-VspI-fo Vch-VspI-re	GCTCTCGCCAGCAAGGAGCTG CCGTCGAAGTGAACGGCGAAC	1700	60	Rahman et al. (2008)
VSP-2	Vch-VspII-fo Vch-VspII-re	TGCCCATTCCGCTAAGTGTTT GCAAAAGCACTGCGTAAACTG	800	60	Rahman et al. (2008)

Calc, Calcutta; CL, Classical; ET, El Tor; T_a, annealing temperature.

^a alternative primer

^b VC1451 of *Vibrio cholerae* O1 biovar El Tor str. N16961.

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