

Table S1. Phenotypic and genotypic traits of *V. cholerae* O1 strains in this study

Year of isolation	Number of strains	Serotype	Phenotype			Genotype				Deduced biotype
			CCA	VP	PB	<i>ctxB</i>	<i>rstR</i>	<i>tcpA</i>	<i>rtxC</i>	
1961	1	Ogawa	+	-	R	E	E	E	+	Hybrid
1961	2	Ogawa	-	+	R	E	E	E	+	Hybrid
1961	2	Ogawa	+	+	S	E	E	E	+	Hybrid
1961	1	Ogawa	+	+	R	E	E	E	-	El Tor
1961	1	Ogawa	+	+	R	E	E	-	-	El Tor
1961	2	Ogawa	+	+	R	-	E	E	+	El Tor
1961	2	Ogawa	+	+	R	E	E	-	+	El Tor
1961	1	Ogawa	+	+	R	E	-	-	+	El Tor
1961	19	Ogawa	+	+	R	E	E	E	+	El Tor
1962	1	Inaba	+	+	R	E	E	E	+	El Tor
1962	1	Ogawa	+	+	R	-	-	-	+	El Tor
1962	1	Ogawa	+	+	S	E	E	E	+	Hybrid
1962	1	Ogawa	-	+	R	E	E	E	+	Hybrid
1962	6	Ogawa	+	+	R	E	E	E	+	El Tor
1963	1	Ogawa	+	+	R	E	E	E	+	El Tor
1963	1	Ogawa	+	+	R	-	-	-	+	El Tor
1963	1	Ogawa	-	+	R	E	E	E	+	Hybrid
1964	1	Ogawa	+	+	R	-	E	E	+	El Tor
1964	2	Ogawa	+	+	S	E	E	E	+	Hybrid
1964	1	Ogawa	+	-	R	-	-	-	+	Hybrid
1964	2	Ogawa	+	+	R	-	-	E	+	El Tor
1964	4	Ogawa	+	+	R	E	E	E	+	El Tor
1965	1	Ogawa	+	+	R	-	E	-	+	El Tor
1965	1	Ogawa	+	+	R	-	-	-	+	El Tor
1965	1	Ogawa	-	+	R	-	E	-	+	Hybrid
1965	1	Ogawa	-	+	R	-	E	E	+	Hybrid
1966	1	Ogawa	+	+	R	E	E	E	+	El Tor
1966	1	Ogawa	-	+	R	E	E	E	+	Hybrid
1974	1	Ogawa	-	+	R	E	E	E	+	Hybrid
1974	1	Ogawa	+	-	R	E	E	E	+	Hybrid
1974	1	Ogawa	-	+	R	-	-	-	+	Hybrid
1975	1	Inaba	+	+	R	-	-	-	+	El Tor
1977	1	Inaba	+	+	R	E	E	E	+	El Tor
1977	2	Ogawa	+	+	R	-	-	-	+	El Tor
1978	1	Inaba	+	+	R	E	E	E	+	El Tor
1978	1	Ogawa	+	+	R	E	-	-	+	El Tor
1978	1	Ogawa	-	-	R	E	E	E	+	Hybrid
1978	4	Ogawa	+	+	R	E	E	E	+	El Tor
1979	1	Inaba	+	+	R	E	E	-	+	El Tor
1979	1	Inaba	+	+	R	-	E	E	+	El Tor

1979	1	Ogawa	+	-	R	-	E	E	+	Hybrid
1979	1	Ogawa	+	+	S	-	E	E	+	Hybrid
1979	2	Ogawa	+	+	R	-	E	E	+	El Tor
1979	2	Inaba	+	+	R	E	E	E	+	El Tor
1979	2	Ogawa	+	+	S	E	E	E	+	Hybrid
1979	5	Ogawa	+	-	R	E	E	E	+	Hybrid
1979	20	Ogawa	+	+	R	E	E	E	+	El Tor
1980	1	Ogawa	+	+	R	E	E	E	+	El Tor
1980	1	Inaba	-	+	R	E	E	E	+	Hybrid
1980	1	Inaba	-	+	R	-	E	E	+	Hybrid
1980	1	Inaba	+	+	R	E	E	-	+	El Tor
1980	1	Inaba	+	+	R	-	E	E	+	El Tor
1980	2	Inaba	+	-	R	E	E	E	+	Hybrid
1980	18	Inaba	+	+	R	E	E	E	+	El Tor
1981	1	Inaba	-	-	S	E	E	E	+	Hybrid
1981	1	Inaba	-	-	S	-	E	-	+	Hybrid
1981	1	Inaba	+	+	R	E	-	E	+	El Tor
1981	3	Ogawa	+	+	R	-	E	E	+	El Tor
1981	1	Inaba	+	+	R	E	E	E	+	El Tor
1981	8	Ogawa	+	+	R	E	E	E	+	El Tor
1982	4	Inaba	+	+	R	E	E	E	+	El Tor
1983	1	Ogawa	+	+	R	E	E	E	+	El Tor
1983	1	Inaba	-	+	R	E	-	E	+	Hybrid
1983	4	Inaba	+	+	R	E	E	E	+	El Tor
1984	1	Inaba	+	+	R	-	E	E	+	El Tor
1984	1	Ogawa	-	+	R	E	E	E	+	Hybrid
1984	1	Inaba	-	+	R	E	E	E	+	Hybrid
1984	2	Inaba	+	-	R	E	E	E	+	Hybrid
1984	2	Ogawa	+	+	R	-	E	E	+	El Tor
1984	2	Ogawa	+	-	R	E	E	E	+	Hybrid
1984	8	Inaba	+	+	R	E	E	E	+	El Tor
1984	12	Ogawa	+	+	R	E	E	E	+	El Tor
1985	1	Ogawa	+	+	R	-	-	-	+	El Tor
1985	1	Inaba	+	+	R	E	E	E	+	El Tor
1985	1	Inaba	-	+	R	E	E	E	+	Hybrid
1985	2	Ogawa	+	-	R	E	E	E	+	Hybrid
1985	10	Ogawa	+	+	R	E	E	E	+	El Tor
1986	1	Ogawa	+	+	R	-	E	E	+	El Tor
1986	1	Inaba	-	-	R	E	E	E	+	Hybrid
1986	1	Inaba	-	-	S	-	E	E	+	Hybrid
1986	1	Inaba	+	+	R	E	E/C	E	+	El Tor
1986	1	Ogawa	+	+	R	-	E/C	E	+	El Tor
1986	7	Inaba	+	+	R	E	E	E	+	El Tor
1987	1	Ogawa	+	+	R	-	-	E	+	El Tor

1987	1	Inaba	+	-	R	E	E	E	+	Hybrid
1987	1	Inaba	+	+	R	E	E	E	+	El Tor
1987	2	Inaba	+	+	R	-	E	E	+	El Tor
1988	1	Ogawa	+	+	R	E	E	E	+	El Tor
1989	1	Inaba	+	+	R	E	E	E	+	El Tor
1990	1	Ogawa	+	+	R	-	E	E	-	El Tor
1990	2	Inaba	+	+	R	E	E	E	+	El Tor
1990	3	Ogawa	+	+	R	E	E	E	+	El Tor
1991	1	Inaba	+	+	R	-	E	E	+	El Tor
1991	1	Inaba	+	+	R	E	E	E	+	El Tor
1991	1	Ogawa	-	-	R	E	E	E	+	Hybrid
1991	1	Ogawa	+	+	R	-	E	E	+	El Tor
1991	1	Ogawa	+	+	R	E	E	-	+	El Tor
1991	6	Ogawa	+	+	R	E	E	E	+	El Tor
1992	1	Ogawa	+	+	R	-	E	E	+	El Tor
1992	1	Inaba	+	+	R	C	-	E	+	El Tor variant
1992	5	Ogawa	+	+	R	E	E	E	+	El Tor
1993	1	Ogawa	+	+	R	E	E	E	+	El Tor
1993	1	Ogawa	+	+	R	C	E	E	+	El Tor variant
1993	1	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
1993	1	Ogawa	+	+	R	-	E/C	E	+	El Tor variant
1993	1	Ogawa	+	-	R	E	E	E	+	Hybrid
1993	1	Ogawa	+	-	R	E	E/C	E	+	Hybrid
1993	1	Ogawa	+	-	R	C	E/C	E	+	Hybrid
1993	1	Inaba	+	+	R	-	E	-	+	El Tor
1993	1	Inaba	+	+	R	E	E	E	+	El Tor
1993	1	Inaba	+	-	R	C	E/C	E	+	Hybrid
1993	3	Ogawa	+	-	R	C	E	E	+	Hybrid
1994	1	Ogawa	+	+	R	E	E/C	E	+	Hybrid
1994	1	Ogawa	+	+	R	C	E	E	+	El Tor variant
1994	1	Ogawa	+	-	S	C	E/C	E	+	Hybrid
1994	1	Ogawa	-	-	R	C	E/C	E	+	Hybrid
1994	1	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
1995	1	Ogawa	+	-	R	C	C	E	+	Hybrid
1995	1	Ogawa	+	-	R	C	E	E	+	Hybrid
1995	1	Ogawa	+	-	R	C	E/C	E	+	Hybrid
1997	1	Ogawa	+	-	R	C	E/C	-	+	Hybrid
1998	1	Ogawa	-	+	R	C	C	E	+	Hybrid
1998	1	Ogawa	+	+	S	E	C	E	+	Hybrid
1998	1	Ogawa	-	-	R	C	C	E	+	Hybrid
1998	2	Ogawa	+	+	R	C	C	E	+	El Tor variant
1998	2	Ogawa	+	-	R	C	C	E	+	Hybrid
1998	1	Ogawa	+	-	R	C	E/C	E	+	Hybrid
1999	1	Inaba	+	+	R	-	-	E	+	El Tor

1999	1	Ogawa	+	+	R	-	C	E	+	El Tor variant
1999	1	Ogawa	+	-	R	C	E/C	E	+	Hybrid
1999	3	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
2000	1	Ogawa	+	+	R	E	E	E	+	El Tor
2000	1	Inaba	+	+	R	C	-	E	+	El Tor variant
2000	1	Ogawa	-	+	R	C	E/C	E	+	Hybrid
2000	1	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
2000	1	Ogawa	+	-	R	C	E/C	E	+	Hybrid
2000	1	Ogawa	-	-	S	C	C	E	+	Hybrid
2001	1	Inaba	+	+	R	E	C	E	+	Hybrid
2001	1	Inaba	-	+	R	C	C	E	+	Hybrid
2001	2	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
2001	3	Inaba	+	-	R	C	C	E	+	Hybrid
2001	4	Inaba	+	+	R	C	C	E	+	El Tor variant
2002	1	Ogawa	-	+	R	-	-	-	+	Hybrid
2002	1	Inaba	+	-	R	C	C	E	+	Hybrid
2002	2	Inaba	+	+	R	C	C	E	+	El Tor variant
2003	1	Inaba	+	+	R	C	C	E	+	El Tor variant
2004	1	Ogawa	-	+	R	-	C	-	+	Hybrid
2004	1	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
2004	1	Inaba	+	+	R	C	-	E	+	El Tor variant
2004	1	Inaba	+	+	R	-	-	-	+	El Tor
2005	1	Ogawa	+	+	R	-	-	-	+	El Tor
2005	1	Ogawa	+	+	R	-	E	E	+	El Tor
2005	1	Ogawa	+	+	R	C	E/C	E	+	El Tor variant
2005	1	Inaba	+	-	R	C	E	E	+	Hybrid
2005	1	Inaba	-	-	R	C	E	E	+	Hybrid
2005	2	Ogawa	+	+	R	C	C	E	+	El Tor variant
2005	9	Inaba	+	+	R	C	E	E	+	El Tor variant
2006	1	Ogawa	+	+	R	-	-	-	+	El Tor
2008	1	Ogawa	+	+	R	-	E	-	+	El Tor
2008	2	Ogawa	+	+	R	C	E	E	+	El Tor variant
2010	1	Ogawa	+	-	R	C	E	E	+	Hybrid
2010	1	Ogawa	+	+	R	C	E	E	+	El Tor variant

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CCA, chicken red blood cell agglutination; VP, Voges-Proskauer test; PB, susceptibility to 50 units of polymyxin B; R, resistant; S, sensitive; +, positive; -, negative; C, classical; E, El Tor