

Supplementary Information:

Variations in SXT elements in epidemic *Vibrio cholerae* O1 El Tor strains in China

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Supplement table 1. The predicted ORFs of every SXT genome and their identities

57	AHV1003	2255	1944	1909	956	4210	1627	143	1605	2605	Identities(%)				
ORF	Description	ORF	Description	ORF	Description	ORF	Description	ORF	Description	ORF	P. <i>mirabilis</i> strain HI4320	ICEs of <i>V.</i> <i>cholerae</i>			
43	TrhF	40	TrhF	40	TrhF	37	TrhF	37	TrhF	37	TrhF	37	99	97	
44	345	41	hypothetical	41	hypothetical	38	hypothetical	38	hypothetical	38	hypothetical	38	100	98	
45	TraC	42	TraC	42	TraC	39	TraC	39	TraC	39	TraC	39	100	97	
46	s054	43	Thiol	43	Thiol	40	Thiol	40	Thiol	40	Thiol	40	99	98	
47	s053(Ync)	44	Ync	44	Ync	41	Ync	41	Ync	41	Ync	41	100	99	
48	s052(Ynd)	45	Ynd	45	Ynd	42	Ynd	42	Ynd	42	Ynd	42	100	100	
49	TraA	46	TraA	46	TraA	43	TraA	43	TraA	43	TraA	43	100	98	
50	TraV	47	TraV	47	TraV	44	TraV	44	TraV	44	TraV	44	100	99	
51	TraB	48	TraB	48	TraB	45	TraB	45	TraB	45	TraB	45	100	98	
52	TraK	49	TraK	49	TraK	46	TraK	46	TraK	46	TraK	46	100	97	
53	TraE	50	TraE	50	TraE	47	TraE	47	TraE	47	TraE	47	100	99	
54	TraL	51	TraL	51	TraL	48	TraL	48	TraL	48	TraL	48	100	99	
55	hypothetical	52	hypothetical	52	hypothetical	49	hypothetical	49	hypothetical	49	hypothetical	49	100	100	
		53	ISPsy4		53	ISPsy4									
		54	hypothetical		54	hypothetical									
		55	hypothetical		55	hypothetical									
		56	Transposase		56	Transposase									
56	s043	57	s043	50	s043	50	s043	50	s043	50	s043	50	100	96	
57	234	58	234	58	234	51	234	51	234	51	234	51	100	98	
58	TraD	59	TraD	59	TraD	52	TraD	52	TraD	52	TraD	52	100	96	
59	TraI	60	TraI	60	TraI	53	TraI	53	TraI	53	TraI	53	100	95	
60	hypothetical	61	hypothetical	61	hypothetical	54	hypothetical	54	hypothetical	54	hypothetical	54	hypothetical		
61	hypothetical	62	hypothetical	62	hypothetical	55	helicase	55	helicase	55	helicase	55	helicase		
62	protease	63	Mrr	63	Mrr	56	Helicase	56	Helicase	56	Helicase	56	Helicase		
63	hypothetical	64	McrC	64	hypothetical	57	plasmid	57	plasmid	57	plasmid	57	plasmid		
64	Type II RM	65	enzyme	65	ATPase	58	helicase	58	helicase	58	helicase	58	helicase		
65	hypothetical	66	Type I RM	66	Type I RM	59	hypothetical	59	hypothetical	59	hypothetical	59	hypothetical		
			subunit R		subunit R										
66	hypothetical	67	bstXI	67	bstXI										
67	hypothetical	68	Type I RM	68	Type I RM										
			subunit S		subunit S										
68	COGs	69	Type I RM	69	Type I RM										
			subunit M		subunit M										
		70	COGs	70	hypothetical										
			COG2378												
69	hypothetical	71	hypothetical	71	hypothetical	60	hypothetical	60	hypothetical	60	hypothetical	60	hypothetical	100	96
70	polymerase	72	polymerase	72	polymerase	61	polymerase	61	polymerase	61	polymerase	61	polymerase	97	99
			III		III										
71	hypothetical	73	hypothetical	73	hypothetical	62	hypothetical	62	hypothetical	62	hypothetical	62	hypothetical	96	100
72	UmuD	74	UmuD	74	UmuD	63	UmuD	63	UmuD	63	UmuD	63	UmuD	97	100
73	'rumB	75	'rumB	75	rumB	64	rumB	64	rumB	64	rumB	64	rumB	97	100
74	s021	76	s021	76	s021	65	s021	65	s021	65	s021	65	s021	—	100
75	tnpA	77	tnpA'	77	tnpA	66	tnpA	66	tnpA	66	tnpA	66	tnpA	—	100
76	hypothetical	78	hypothetical	78	hypothetical	67	hypothetical	67	hypothetical	67	hypothetical	67	hypothetical	—	100
77	sul2	79	sul2	79	sul2	68	sul2	68	sul2	68	sul2	68	sul2	—	100
78	strA	80	strA	80	strA	69	strA	69	strA	69	strA	69	strA	—	100

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79 strB	81 strB	81 strB	70 strB	70 strB	70 strB	70 strB	70 strB	70 strB	70 strB	70 strB	—	100
					71 Permease	71 Permease	71 Permease					
					72 tetA	72 tetA	72 tetA					
					73 tetR	73 tetR	73 tetR					
					74 MerR	74 MerR	74 MerR					
					75 StrB	75 StrB	75 StrB					
80 tnpB	82 tnpB	82 tnpB	71 tnpB	71 tnpB	76 tnpB	76 tnpB	76 tnpB	71 tnpB	71 tnpB	71 tnpB	—	100
81 tetR	83 tetR	83 tetR	72 s015	72 s015	77 s015	77 s015	77 s015	72 s015	72 s015	72 s015	—	
82 tetA	84 tetA	84 tetA	73 folR	73 folR	78 folR	78 folR	78 folR	73 folR	73 folR	73 folR	—	
			74 s013	74 s013	79 s013	79 s013	79 s013	74 s013	74 s013	74 s013	—	
			75 transposase	75 transposase	80 transposase	80 transposase	80 transposase	75 transposase	75 transposase	75 transposase	—	
			76 dhfR	76 dhfR	81 dhfR	81 dhfR	81 dhfR	76 dhfR	76 dhfR	76 dhfR	—	
			77 transposase	77 transposase							—	
			78 dhfR	78 dhfR							—	
83 tnpB	85 tnpB	85 tnpB	79 tnpB	79 tnpB	82 tnpB	82 tnpB	82 tnpB	77 tnpB	77 tnpB	77 tnpB	—	100
84 tnpA	86 tnpA	86 tnpA	80 tnpA	80 tnpA	83 tnpA	83 tnpA	83 tnpA	78 tnpA	78 tnpA	78 tnpA	—	99
	87 mphR			81 oxidoreductas	84 RTX	84 CheW						
				e								
				88 mrx	82 Sensory	85 tnpA	85 CheB					
				89 mphK	83 arcB		86 heatrepeat					
				90 hypothetical	84 tnpA		87 CheR					
				91 hypothetical			88 CheY					
				92 hypothetical			89 CheA					
				93 transposase			90 tnpA					
85 tnp	94 tnp	87 tnp	81 tnp	85 tnp	86 tnp	91 tnp	84 tnp	79 tnp	79 tnp	79 tnp	—	100
86 UmuC	95 UmuC	88 UmuC	82 UmuC	86 UmuC	87 UmuC	92 UmuC	85 UmuC	80 UmuC	80 UmuC	80 UmuC	—	100
87 hypothetical	96 hypothetical	89 hypothetical	83 hypothetical	87 hypothetical	88 hypothetical	93 hypothetical	86 hypothetical	81 hypothetical	81 hypothetical	81 hypothetical	—	
88 hypothetical	97 hypothetical	90 hypothetical	84 hypothetical	88 hypothetical	89 hypothetical	94 hypothetical	87 hypothetical	82 hypothetical	82 hypothetical	82 hypothetical	—	
89 s003	98 s003	91 s003	85 s003	89 s003	90 s003	95 s003	88 s003	83 s003	83 s003	83 s003	—	
90 s002	99 s002	92 s002	86 s002	90 s002	91 s002	96 s002	89 s002	84 s002	84 s002	84 s002	—	
91 integrase	100 integrase	93 integrase	87 integrase	91 integrase	92 integrase	97 integrase	90 integrase	85 integrase	85 integrase	85 integrase	—	
92 MutL	101 MutL	94 MutL	88 MutL	92 MutL	93 MutL	98 MutL	91 MutL	86 MutL	86 MutL	86 MutL	—	
93 hypothetical	102 hypothetical	95 hypothetical	89 hypothetical	93 hypothetical	94 hypothetical	99 hypothetical	92 hypothetical	87 hypothetical	87 hypothetical	87 hypothetical	—	