





O55 and O157 Details					Outgroup Strain Details <sup>g</sup>																Note <sup>f</sup>										
event	CB9615 block <sup>a</sup>	Sakai block <sup>a</sup>	EDL933 block <sup>a</sup>	type	Event Lineage <sup>b</sup>	Inferred ancestral <sup>c</sup>	Support level <sup>d</sup>	D1 Sd197	K-12	HS	ATCC 8739	UIMN026	IAI39	SMS 3-5	E2348/69	536	ED1a	CFT073	S88	APEC O1		UTI89	E24377A	IAI1	SE11	F5 8401	F2a 2457T	F2a 301	SS Ss046	B4 S6227	B18 BS512
179	-	+	+	del	CB9615	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
180	-	+	+	ins	O157	-	+++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
181	+	-	-	ins	CB9615	-	++++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
182	-	-	-	ins	EDL933	-	++	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
183	+	-	+	del	Sakai	+	+++	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
184	-	+	+	ins	O157	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
185	+	-	-	del	O157	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
186	+	-	-	indel	O55/O157	?	+/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
187	-	+	+	del	CB9615	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
188	+	-	-	del	O157	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
189	-	+	-	ins	Sakai	-	+++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
190	-	+	+	del	CB9615	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
191	+	-	-	ins	CB9615	-	++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
192	+	-	-	ins	CB9615	-	++	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
193	-	+	-	ins	Sakai	-	++++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
194	-	+	+	ins	O157	-	+++	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
195	-	+	+	del	CB9615	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
196	+	-	-	ins	CB9615	-	++++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
197	-	+	+	ins	O157	-	++++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
198	-	+	+	ins	O157	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
199	+	-	-	ins	CB9615	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200	-	+	+	del	CB9615	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
201	+	-	-	del	O157	+	++++	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
202	+	-	-	ins	CB9615	-	++++	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>a</sup> "+" indicates the block present, "-" indicates the block absent

<sup>b</sup> O157: allocated to the lineage to the ancestor of EDL933 and Sakai; Sakai/EDL933: allocated to the divergence between Sakai and EDL933 (strain not specified); O55/O157: allocated to the divergence between O55 and O157 lineages (lineage not specified).

<sup>c</sup> presence or absence of indel block in O55/O157 ancestor as inferred from outgroup analysis.

<sup>d</sup> Level of support for allocation of indel blocks as given in previous column

++++ agreement is high - 8 or more outgroup strains with expected type and at most 1 with the opposite, and D1 Sd197 agrees or site not present

+++ agreement good - 4 or more outgroup strains with expected type and at most 1 with the opposite, and D1 Sd197 agrees or site not present

++ agreement in D1 Sd197 regardless of situation with other outgroup strains

+ no conflict but very limited support as either the block and nearby sequence absent in D1 Sd197, and/or outgroup support less than given above

+/- no conflict but no support (the block and its nearby sequence not present in any outgroup OR both alternative lineages supported equally).

- not independent indel as in O-antigen related recombination event

<sup>e</sup> +/- indicates presence or absence of the block. Blank means site not present.

<sup>f</sup> Special reasons affecting allocation: "O antigen" means within major O-antigen related recombination; "part of phage" means within a phage that is inserted