

Table S6: SNPs observed in YFV

ID of SNP	Samples	Reference					Our sequences					
		Sites in Genome	Gene	Sites in Gene	Nucleotides	Codons	Amino Acids	Sites in Codons	Amino acids	Major nucleotides	Codons	Amino Acids
1	YF-BJ1/8D	900	M	417	T	GCT	A	3	139	C	GCC	A
2	YF-BJ1/8D	1974	E	999	C	CCC	P	3	333	T	CCT	P
3	YF-BJ1/8D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
4	YF-BJ1/8D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
5	YF-BJ1/8D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
6	YF-BJ1/8D	7320	NS4b	432	A	GTA	V	3	144	G	GTG	V
7	YF-BJ1/8D	9783	NS5	2142	T	TCT	S	3	714	C	TCC	S
8	YF-BJ1/9D	900	M	417	T	GCT	A	3	139	C	GCC	A
9	YF-BJ1/9D	1974	E	999	C	CCC	P	3	333	T	CCT	P
10	YF-BJ1/9D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
11	YF-BJ1/9D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
12	YF-BJ1/9D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
13	YF-BJ1/9D	7320	NS4b	432	A	GTA	V	3	144	G	GTG	V
14	YF-BJ1/9D	9783	NS5	2142	T	TCT	S	3	714	C	TCC	S
37	YF-BJ5/6D	900	M	417	T	GCT	A	3	139	C	GCC	A
38	YF-BJ5/6D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
39	YF-BJ5/6D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
40	YF-BJ5/6D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
41	YF-BJ5/6D	9003	NS5	1362	C	AAC	N	3	454	T	AAT	N
42	YF-BJ5/10D	900	M	417	T	GCT	A	3	139	C	GCC	A
43	YF-BJ5/10D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
44	YF-BJ5/10D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
45	YF-BJ5/10D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
46	YF-BJ5/10D	9003	NS5	1362	C	AAC	N	3	454	T	AAT	N
47	YF-BJ5/14D	900	M	417	T	GCT	A	3	139	C	GCC	A
48	YF-BJ5/14D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
49	YF-BJ5/14D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
50	YF-BJ5/14D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
51	YF-BJ5/14D	9003	NS5	1362	C	AAC	N	3	454	T	AAT	N
52	YF-BJ2/16D	900	M	417	T	GCT	A	3	139	C	GCC	A
53	YF-BJ2/16D	2352	E	1377	A	GCA	A	3	459	C	GCC	A
54	YF-BJ2/16D	3470	NS1	1016	A	AAA	K	2	339	G	AGA	R
55	YF-BJ2/16D	3918	NS2a	408	C	ATC	I	3	136	A	ATA	I
56	YF-BJ2/16D	4278	NS2b	96	A	ATA	I	3	32	G	ATG	M
57	YF-BJ2/16D	6463	NS4a	22	G	GTC	V	1	8	A	ATC	I
58	YF-BJ2/16D	7320	NS4b	432	A	GTA	V	3	144	G	GTG	V
59	YF-BJ2/16D	8094	NS5	453	C	TCC	S	3	151	T	TCT	S
60	YF-BJ2/16D	8340	NS5	699	T	GTT	V	3	233	C	GTC	V
61	YF-BJ2/16D	10160	NS5	2519	T	GTT	V	2	840	C	GCT	A
62	YF-BJ4/13D	667	M	184	G	GAT	D	1	62	T	TAT	Y
63	YF-BJ4/13D	746	M	263	G	AGG	R	2	88	C	ACG	T
64	YF-BJ4/13D	840	M	357	G	CAG	Q	3	119	C	CAC	H
65	YF-BJ4/13D	900	M	417	T	GCT	A	3	139	C	GCC	A
66	YF-BJ4/13D	1881	E	906	C	GAC	D	3	302	T	GAT	D
67	YF-BJ4/13D	2352	E	1377	A	GCA	A	3	459	C	GCC	A

68	YF-BJ4/13D	3197 NS1	743	G	GGA	G	2	248 A	GAA	E
69	YF-BJ4/13D	3207 NS1	753	G	GTG	V	3	251 A	GTA	V
70	YF-BJ4/13D	3248 NS1	794	A	AAT	N	2	265 T	ATT	I
71	YF-BJ4/13D	3256 NS1	802	T	TGG	W	1	268 G	GGG	G
72	YF-BJ4/13D	3258 NS1	804	G	TGG	W	3	268 A	TGA	*
73	YF-BJ4/13D	3918 NS2a	408	C	ATC	I	3	136 A	ATA	I
74	YF-BJ4/13D	4206 NS2b	24	G	TTG	L	3	8 A	TTA	L
75	YF-BJ4/13D	4276 NS2b	94	A	ATA	I	1	32 G	GTA	V
76	YF-BJ4/13D	4598 NS3	26	C	CCT	P	2	9 T	CTT	L
77	YF-BJ4/13D	4954 NS3	382	G	GCA	A	1	128 T	TCA	S
78	YF-BJ4/13D	4955 NS3	383	C	GCA	A	2	128 T	GTA	V
79	YF-BJ4/13D	4956 NS3	384	A	GCA	A	3	128 C	GCC	A
80	YF-BJ4/13D	4977 NS3	405	T	AGT	S	3	135 G	AGG	R
81	YF-BJ4/13D	5015 NS3	443	A	GAA	E	2	148 G	GGA	G
82	YF-BJ4/13D	5018 NS3	446	T	GTG	V	2	149 C	GCG	A
83	YF-BJ4/13D	5066 NS3	494	T	GTG	V	2	165 C	GCG	A
84	YF-BJ4/13D	5225 NS3	653	G	AGA	R	2	218 C	ACA	T
85	YF-BJ4/13D	5277 NS3	705	G	GAG	E	3	235 A	GAA	E
86	YF-BJ4/13D	5302 NS3	730	G	GAT	D	1	244 T	TAT	Y
87	YF-BJ4/13D	5306 NS3	734	T	GTG	V	2	245 C	GCG	A
88	YF-BJ4/13D	5307 NS3	735	G	GTG	V	3	245 C	GTC	V
89	YF-BJ4/13D	6463 NS4a	22	G	GTC	V	1	8 A	ATC	I
90	YF-BJ4/13D	7213 NS4b	325	C	CCT	P	1	109 A	ACT	T
91	YF-BJ4/13D	7271 NS4b	383	T	ATT	I	2	128 A	AAT	N
92	YF-BJ4/13D	7320 NS4b	432	A	GTA	V	3	144 G	GTG	V
93	YF-BJ4/13D	7566 NS4b	678	T	ACT	T	3	226 C	ACC	T
94	YF-BJ4/13D	7627 NS4b	739	A	AAA	K	1	247 G	GAA	E
95	YF-BJ4/13D	8493 NS5	852	A	AGA	R	3	284 G	AGG	R
96	YF-BJ4/13D	8626 NS5	985	T	TTG	L	1	329 C	CTG	L
97	YF-BJ4/13D	10160 NS5	2519	T	GTT	V	2	840 C	GCT	A
98	YF-BJ4/13D	10356 NS5	2715	C	ATC	I	3	905 T	ATT	I
99	YF-FZ2/D16	900 M	417	T	GCT	A	3	139 C	GCC	A
100	YF-FZ2/D16	1540 E	565	G	GAC	D	1	189 C	CAC	H
101	YF-FZ2/D16	1634 E	659	G	GGG	G	2	220 T	GTG	V
102	YF-FZ2/D16	1846 E	871	A	ACT	T	1	291 C	CCT	P
103	YF-FZ2/D16	1865 E	890	A	TAC	Y	2	297 T	TTC	F
104	YF-FZ2/D16	1869 E	894	G	AAG	K	3	298 C	AAC	N
105	YF-FZ2/D16	1873 E	898	T	TGC	C	1	300 G	GGC	G
106	YF-FZ2/D16	2352 E	1377	A	GCA	A	3	459 C	GCC	A
107	YF-FZ2/D16	3751 NS2a	241	T	TCC	S	1	81 A	ACC	T
108	YF-FZ2/D16	3918 NS2a	408	C	ATC	I	3	136 A	ATA	I
109	YF-FZ2/D16	3948 NS2a	438	T	AAT	N	3	146 C	AAC	N
110	YF-FZ2/D16	6435 NS3	1863	T	GGT	G	3	621 C	GGC	G
111	YF-FZ2/D16	6463 NS4a	22	G	GTC	V	1	8 A	ATC	I
112	YF-FZ2/D16	6495 NS4a	54	G	AAG	K	3	18 A	AAA	K
113	YF-FZ2/D16	6637 NS4a	196	G	GGA	G	1	66 C	CGA	R
114	YF-FZ2/D16	7320 NS4b	432	A	GTA	V	3	144 G	GTG	V
115	YF-FZ2/D16	7634 NS4b	746	G	GGG	G	2	249 A	GAG	E
116	YF-FZ2/D16	9075 NS5	1434	G	ATG	M	3	478 A	ATA	I
117	YF-FZ2/D16	9077 NS5	1436	G	TGG	W	2	479 A	TAG	*
118	YF-FZ2/D16	9084 NS5	1443	G	GGG	G	3	481 A	GGA	G
119	YF-FZ2/D16	9966 NS5	2325	C	GAC	D	3	775 T	GAT	D
120	YF-FZ2/D16	10317 NS5	2676	G	AGG	R	3	892 A	AGA	R

121	YF-FZ4/D7	861 M	378	T	GTT	V	3	126 C	GTC	V
122	YF-FZ4/D7	900 M	417	T	GCT	A	3	139 C	GCC	A
123	YF-FZ4/D7	1662 E	687	C	CAC	H	3	229 T	CAT	H
124	YF-FZ4/D7	2038 E	1063	A	ATT	I	1	355 C	CTT	L
125	YF-FZ4/D7	2183 E	1208	C	ACA	T	2	403 A	AAA	K
126	YF-FZ4/D7	2352 E	1377	A	GCA	A	3	459 C	GCC	A
127	YF-FZ4/D7	2500 NS1	46	G	GGA	G	1	16 A	AGA	R
128	YF-FZ4/D7	2632 NS1	178	G	GTT	V	1	60 C	CTT	L
129	YF-FZ4/D7	2648 NS1	194	A	CAC	H	2	65 G	CGC	R
130	YF-FZ4/D7	2650 NS1	196	G	GAG	E	1	66 A	AAG	K
131	YF-FZ4/D7	2665 NS1	211	A	AGG	R	1	71 C	CGG	R
132	YF-FZ4/D7	2676 NS1	222	G	GAG	E	3	74 T	GAT	D
133	YF-FZ4/D7	2707 NS1	253	G	GAC	D	1	85 C	CAC	H
134	YF-FZ4/D7	3604 NS2a	94	G	GTA	V	1	32 T	TTA	L
135	YF-FZ4/D7	3649 NS2a	139	A	ACA	T	1	47 C	CCA	P
136	YF-FZ4/D7	3664 NS2a	154	G	GTG	V	1	52 T	TTG	L
137	YF-FZ4/D7	3665 NS2a	155	T	GTG	V	2	52 G	GGG	G
138	YF-FZ4/D7	3918 NS2a	408	C	ATC	I	3	136 A	ATA	I
139	YF-FZ4/D7	4490 NS2b	308	C	GCC	A	2	103 T	GTC	V
140	YF-FZ4/D7	4621 NS3	49	T	TGT	C	1	17 G	GGT	G
141	YF-FZ4/D7	4646 NS3	74	A	TAT	Y	2	25 T	TTT	F
142	YF-FZ4/D7	4838 NS3	266	G	GGG	G	2	89 A	GAG	E
143	YF-FZ4/D7	4903 NS3	331	G	GTT	V	1	111 A	ATT	I
144	YF-FZ4/D7	4983 NS3	411	C	ACC	T	3	137 A	ACA	T
145	YF-FZ4/D7	4998 NS3	426	T	ATT	I	3	142 A	ATA	I
146	YF-FZ4/D7	6463 NS4a	22	G	GTC	V	1	8 A	ATC	I
147	YF-FZ4/D7	7312 NS4b	424	C	CAT	H	1	142 T	TAT	Y
148	YF-FZ4/D7	7313 NS4b	425	A	CAT	H	2	142 C	CCT	P
149	YF-FZ4/D7	7320 NS4b	432	A	GTA	V	3	144 G	GTG	V
150	YF-FZ4/D7	8112 NS5	471	G	GAG	E	3	157 C	GAC	D
151	YF-FZ4/D7	8385 NS5	744	A	ACA	T	3	248 T	ACT	T
152	YF-FZ4/D7	8424 NS5	783	A	ATA	I	3	261 G	ATG	M
153	YF-FZ4/D7	9225 NS5	1584	T	GGT	G	3	528 G	GGG	G
154	YF-FZ4/D7	9622 NS5	1981	C	CGA	R	1	661 T	TGA	*
155	YF-FZ6/D20	549 M	66	G	ACG	T	3	22 T	ACT	T
156	YF-FZ6/D20	900 M	417	T	GCT	A	3	139 C	GCC	A
157	YF-FZ6/D20	1074 E	99	A	GTA	V	3	33 G	GTG	V
158	YF-FZ6/D20	2352 E	1377	A	GCA	A	3	459 C	GCC	A
159	YF-FZ6/D20	3918 NS2a	408	C	ATC	I	3	136 A	ATA	I
160	YF-FZ6/D20	4395 NS2b	213	T	TCT	S	3	71 C	TCC	S
161	YF-FZ6/D20	4811 NS3	239	C	GCT	A	2	80 G	GGT	G
162	YF-FZ6/D20	5442 NS3	870	G	GAG	E	3	290 A	GAA	E
163	YF-FZ6/D20	5562 NS3	990	C	TTC	F	3	330 T	TTT	F
164	YF-FZ6/D20	6109 NS3	1537	T	TAT	Y	1	513 C	CAT	H
165	YF-FZ6/D20	6129 NS3	1557	G	AAG	K	3	519 A	AAA	K
166	YF-FZ6/D20	6463 NS4a	22	G	GTC	V	1	8 A	ATC	I
167	YF-FZ6/D20	6967 NS4b	79	C	CCA	P	1	27 T	TCA	S
168	YF-FZ6/D20	7320 NS4b	432	A	GTA	V	3	144 G	GTG	V
169	YF-FZ6/D20	8288 NS5	647	C	ACT	T	2	216 T	ATT	I
170	YF-FZ6/D20	8359 NS5	718	C	CTG	L	1	240 A	ATG	M
171	YF-FZ6/D20	8370 NS5	729	G	AGG	R	3	243 A	AGA	R
172	YF-FZ6/D20	8436 NS5	795	T	AGT	S	3	265 C	AGC	S
173	YF-FZ6/D20	9184 NS5	1543	T	TAC	Y	1	515 C	CAC	H

174	YF-FZ6/D20	9253 NS5	1612	G	GGG	G	1	538 T	TGG	W
175	YF-FZ6/D20	10422 NS5	+66	G	-	-	-	A	-	-
176	YF-FZ6/D20	10424 NS5	+68	A	-	-	-	C	-	-
177	YF-FZ6/D20	10428 NS5	+72	T	-	-	-	A	-	-
178	YF-FZ6/D20	10429 NS5	+73	A	-	-	-	T	-	-
179	YF-FZ6/D20	10432 NS5	+76	T	-	-	-	C	-	-
180	YF-FZ6/D20	10434 NS5	+78	A	-	-	-	T	-	-
181	YF-FZ6/D20	10435 NS5	+79	G	-	-	-	A	-	-
182	YF-FZ6/D20	10436 NS5	+80	A	-	-	-	G	-	-
183	YF-FZ6/D20	10439 NS5	+83	C	-	-	-	A	-	-
184	YF-FZ6/D20	10440 NS5	+84	C	-	-	-	A	-	-
185	YF-FZ6/D20	10441 NS5	+85	G	-	-	-	C	-	-
186	YF-FZ6/D20	10442 NS5	+86	G	-	-	-	C	-	-
187	YF-FZ6/D20	10444 NS5	+88	A	-	-	-	G	-	-
188	YF-FZ6/D20	10445 NS5	+89	T	-	-	-	G	-	-
189	YF-FZ6/D20	10447 NS5	+91	A	-	-	-	T	-	-
190	YF-FZ7/D15	443 C	323	T	GTA	V	2	108 C	GCA	A
191	YF-FZ7/D15	900 M	417	T	GCT	A	3	139 C	GCC	A
192	YF-FZ7/D15	1043 E	68	C	GCC	A	2	23 T	GTC	V
193	YF-FZ7/D15	2258 E	1283	C	ACA	T	2	428 G	AGA	R
194	YF-FZ7/D15	2303 E	1328	A	CAG	Q	2	443 G	CGG	R
195	YF-FZ7/D15	2334 E	1359	G	ACG	T	3	453 C	ACC	T
196	YF-FZ7/D15	2352 E	1377	A	GCA	A	3	459 C	GCC	A
197	YF-FZ7/D15	2704 NS1	250	G	GTA	V	1	84 T	TTA	L
198	YF-FZ7/D15	2736 NS1	282	G	AAG	K	3	94 T	AAT	N
199	YF-FZ7/D15	3578 NS2a	68	G	AGA	R	2	23 T	ATA	I
200	YF-FZ7/D15	3918 NS2a	408	C	ATC	I	3	136 A	ATA	I
201	YF-FZ7/D15	4329 NS2b	147	T	GAT	D	3	49 C	GAC	D
202	YF-FZ7/D15	5001 NS3	429	G	GTG	V	3	143 A	GTA	V
203	YF-FZ7/D15	5003 NS3	431	A	AAC	N	2	144 T	ATC	I
204	YF-FZ7/D15	5025 NS3	453	G	GGG	G	3	151 C	GGC	G
205	YF-FZ7/D15	5258 NS3	686	C	ACC	T	2	229 A	AAC	N
206	YF-FZ7/D15	5459 NS3	887	C	CCT	P	2	296 A	CAT	H
207	YF-FZ7/D15	6463 NS4a	22	G	GTC	V	1	8 A	ATC	I
208	YF-FZ7/D15	6648 NS4a	207	T	ATT	I	3	69 A	ATA	I
209	YF-FZ7/D15	7320 NS4b	432	A	GTA	V	3	144 G	GTG	V
210	YF-FZ7/D15	7707 NS5	66	A	CAA	Q	3	22 C	CAC	H
211	YF-FZ7/D15	8151 NS5	510	G	AAG	K	3	170 A	AAA	K
212	YF-FZ7/D15	8303 NS5	662	A	TAC	Y	2	221 G	TGC	C
213	YF-FZ7/D15	9304 NS5	1663	A	ATG	M	1	555 T	TTG	L
214	YF-FZ7/D15	9630 NS5	1989	T	GCT	A	3	663 C	GCC	A
215	YF-FZ7/D15	9818 NS5	2177	G	AGG	R	2	726 A	AAG	K
216	YF-FZ7/D15	9839 NS5	2198	G	AGA	R	2	733 A	AAA	K
217	YF-FZ7/D15	9863 NS5	2222	G	AGA	R	2	741 A	AAA	K