

Table S2. Selective pressure analysis on SARS-CoV-2 lineages BF.7 and BQ.1.1

	<i>nsp1 (BF.7)</i>	<i>nsp1 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	85 (M,V)
	<i>nsp2 (BF.7)</i>	<i>nsp2 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	630 (N)	/
	<i>nsp3 (BF.7)</i>	<i>nsp3 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	180 (Q, H); 1329 (N; D)	/
Negatively selected sites (w for sites < 1) HYPHY	135 (D); 1445 (C); 1591 (C); 1594 (C); 1603 (V)	79 (L); 460 (F); 1741 (L; F)
	<i>nsp4 (BF.7)</i>	<i>nsp4 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	290 (V)	223 (H); 290 (V)
	<i>nsp5 (BF.7)</i>	<i>nsp5 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	48 (D); 216 (D)	/
	<i>nsp6 (BF.7)</i>	<i>nsp6 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/

Negatively selected sites (w for sites < 1) HYPHY	133 (D)	/
	<i>nsp7 (BF.7)</i>	<i>nsp7 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	/
	<i>nsp8 (BF.7)</i>	<i>nsp8 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	/
	<i>nsp9 (BF.7)</i>	<i>nsp9 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	105 (S)
	<i>nsp10 (BF.7)</i>	<i>nsp10 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	113 (K)	/
	<i>nsp11 (BF.7)</i>	<i>nsp11 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	/
	<i>nsp12 (BF.7)</i>	<i>nsp12 (BQ.1.1)</i>
Positively selected sites	/	/

(w for sites > 1) HYPHY

Negatively selected sites
(w for sites < 1) HYPHY

105 (R)

/

Positively selected sites
(w for sites > 1) HYPHY

nsp13 (BF.7)

nsp13 (BQ.1.1)

Negatively selected sites
(w for sites < 1) HYPHY

128 (E); 202 (K); 390 (R); 462 (K); 560 (R)

/

Positively selected sites
(w for sites > 1) HYPHY

nsp14 (BF.7)

nsp14 (BQ.1.1)

Negatively selected sites
(w for sites < 1) HYPHY

41 (D); 53 (R); 485 (R)

/

Positively selected sites
(w for sites > 1) HYPHY

nsp15 (BF.7)

nsp15 (BQ.1.1)

Negatively selected sites
(w for sites < 1) HYPHY

/

79 (I); 218 (M, T); 230 (Y)

Positively selected sites
(w for sites > 1) HYPHY

nsp16 (BF.7)

nsp16 (BQ.1.1)

Negatively selected sites
(w for sites < 1) HYPHY

2 (S); 7 (P)

7 (P); 199 (A)

Positively selected sites
(w for sites > 1) HYPHY

ORF3a (BF.7)

ORF3a (BQ.1.1)

Negatively selected sites
(w for sites < 1) HYPHY

/

130 (C)

E (BF.7)

E (BQ.1.1)

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites / /
(w for sites < 1) HYPHY

M (BF.7) ***M (BQ.1.1)***

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites / /
(w for sites < 1) HYPHY

N (BF.7) ***N (BQ.1.1)***

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites 158 (V); 309 (P) /
(w for sites < 1) HYPHY

ORF6 (BF.7) ***ORF6 (BQ.1.1)***

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites / /
(w for sites < 1) HYPHY

ORF7a (BF.7) ***ORF7a (BQ.1.1)***

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites 79 (A) /
(w for sites < 1) HYPHY

ORF7b (BF.7) ***ORF7b (BQ.1.1)***

Positively selected sites / /
(w for sites > 1) HYPHY

Negatively selected sites / /
(w for sites < 1) HYPHY

	<i>ORF8 (BF.7)</i>	<i>ORF8 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	121 (I; L; T)
Negatively selected sites (w for sites < 1) HYPHY	/	/
	<i>ORF10 (BF.7)</i>	<i>ORF10 (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	/	/
Negatively selected sites (w for sites < 1) HYPHY	/	/
	<i>Spike (BF.7)</i>	<i>Spike (BQ.1.1)</i>
Positively selected sites (w for sites > 1) HYPHY	408 (R, S); 440 (N; K)	452 (L; R)
Negatively selected sites (w for sites < 1) HYPHY	138 (D); 146 (H, Y); 508 (Y); 619 (E)	457 (R); 1216 (I)