Supplemental Data for Chapter 5. Nonsynonymous Amino Acid Changes Within 31 SARS-CoV-2 Consensus Sequences

Gene Location	NSP1	NSP2		NSP3						NSP4	ORF1ab NSP5				NSP7	NSP10	NSP12			NSP13		NSP14		NSP15	Spike			ORF3a	M	ORF8				N				ORF10
Nucleotide Change	C335T	C1059T	C1437T	G3483T	G4184T	A4197G	C4320T	G5990A	G8131T	C8832T	C10188T	C10319T	C10377T	A10788G	C11916T	G13127A	A13712G	C14024T	C14408T	C14770TA	C17747T	A17858G	G18972T	C18998T	C19901T	T22304C	A23403G	C23718T	G25563T	C26542T	G27915A	C27964T	C28099T	T28144C	C28310T	G28392T	C28821A	28881-28883	C29627T
Nonsynonymous Amino Acid Change	R24C	T265I	S391F	G1073V	V1295F	E1311G	A1352V	E1909K	K2622N	A2856V	T3308I	L3352F	P3371L	D3508G	S3884L	G4288R	K4483R	A4587V	P4715L	Q4835K	P5828L	Y5865C	K6236N	A6245V	A6546V	Y248H	D614G	T719I	Q57H	T7I	G8R	S24L	S69L	L84S	P13S	R40L	S183Y	G203-204KR	R24C
UT2		X																	X								X		X									
UT3																			X								X		X									
UT5		X										X							X								X		X	X		X						
UT8																			X								X		X		X								
UT9																			X								X		X		X								
UT10		X										X					X		X								X		X			X							
UT11		X										X		X					X								X		X			X							
UT12		X																	X								X		X										
UT14		X																	X								X		X										
UT15		X						X							X				X	X				X			X		X						X				
UT18		X								X									X								X		X							X			
UT19																											X		X										
UT20		X			X						X								X								X		X			X							
UT21				X									X								X	X												X					
UT22																			X								X		X										
UT23		X																	X							X	X		X							X			
UT27		X							X										X								X		X										
UT28		X							X										X								X		X										
UT29		X	X																X								X		X			X	X						
UT30		X					X												X								X		X										
UT31	X	X									X								X								X		X			X							X
UT32		X																	X								X		X			X							
UT33		X							X										X								X		X										
UT34		X				X										X			X								X		X										
UT35		X																	X								X		X										
UT36																			X				X															X	
UT38		X				X													X						X		X		X										
UT39		X				X										X			X								X		X										
UT40		X																X	X								X	X	X										
UT44		X																	X								X		X										
UT45		X																	X								X		X										