

Detailed annotation of Omicron mutations										
mutation (nuc)	mutation (aa)	BA.1	BA.1.1	BA.2	BA.3*					
T670G	S135R					NSP1	ORF1a			
C2790T	T842I							NSP3		
A2832G	K856R					NSP4				
G4184A	G1307S								NSP5	
6513_6515del	SL2083I									NSP6
G8393A	A2710T					NSP12				
C9344T	L3027F							NSP13		
C9534T	T3090I								NSP14	
C9866T	L3201F					NSP15				
C10029T	T3255I							NSP16		
C10449A	P3395H					NSP17				
C11235T	A3657V						NSP18			
G11287T	L3674F					NSP19				
11288_11296del	SGF3675-3677del						NSP20			
T11296G	F3677L					NSP21				
A11537G	I3758V						NSP22			
C14408T	P4715L					NSP23				
C17410T	R5716C						NSP24			
A18163G	I5967V					NSP25				
C19955T	T2163I						NSP26			
C21618T	T19I					NSP27				
21633_21641del	LPPA24S						NSP28			
C21762T	A67V					NSP29				

21765_21770del	HV69-70del					S gene	NTD	
C21846T	T95I							
G21987A	G142D							
21987_21995del	VYY143-145del							
22194_22196del	NL211I							
T22200G	V213G						RBD	
22205GAGCCAGAAins	214EPEins							
G22578A	G339D							
G22597A	R346K							
C22674T	S371F							
T22673C, C22674T	S371L							
T22679C	S373P							
C22686T	S375F							
A22688G	T376A							
G22775A	D405N							
A22786T	R408S							
G22813T	K417N							
T22882G	N440K							
G22898A	G446S							
G22992A	S477N							
C22995A	T478K							
A23013C	E484A						RBM	
A23040G	Q493R							
G23048A	G496S							
A23055G	Q498R							

A23063T	N501Y							
T23075C	Y505H							
C23202A	T547K						SD1	
A23403G	D614G						SD2	
C23525T	H655Y							
T23599G	N679K							
C23604A	P681H							S1/S2
C23854A	N764K							
G23948T	D796Y							
C24130A	N856K							
A24424T	Q954H							
T24469A	N969K							
C24503T	L981F							
C26060T	T223I						ORF3a	
C26270T	T9I					E gene		
A26530G	D3G					M gene		
C26577G	Q19E							
G26709A	A63T							
G27382C, A27383T, T27384C	D61L					ORF6		
C28311T	P13L					N gene		
28362_28370del	ERS31del							
G28881A, G28882A	R203K							
G28883C	G204R							
A29510C	S413R							

* Due to the small number of BA.3 genomes sequenced, there may be inaccuracies in the listed mutations