

Viral protein	Amino acid position	2021-22 North-Eastern Italian strains	OP850 023 Italy/Calabria/2022	MW62 7239 Italy/Calabria/2020	2008 Italian strains	2011 Italian strains	AF4047 57 Italy/Tuscany/1998	MT863 559 France/2015	OU9538 97 Spain/2020	JF71906 9 Spain/2010	AY70141 3 Morocco/2003	AJ96562 8 Portugal/2004	DQ7865 73 France/2004	NC_009 942 USA/1999
C	S100L	S	S	S	S	S	S	S	S	S	S	S	S	S
preM	I35T	I	I	I	I	I	I	I	I	I	I	I	I	I
E	V24I	V	V	V	V	V	V	V	V	V	V	V	V	V
	A51T	A	I	I	A	A	A	A	A	A	A	A	A	A
	R93K	K	R	R	R	R	R	K	R	R	R	R	R	R
	T126I	T	T	T	T	T	T	T	T	T	T	T	T	I
	I159V	I	I	I	I	I	I	I	I	I	I	I	I	V
	F167L	F	F	F	F	F	F	F	F	F	F	F	F	L
NS1	A27V	A	A	A	A	A	A	A	A	A	A	V	A	A
	S70A	S	S	S	S	S	S	S	S	S	S	S	S	A
	P138S	P	P	P	P	P	P	P	P	P	P	P	S	P
	K141R	K	K	K	K	K	K	K	K	K	K	K	R	K
	I184V	I	V	I	I	I	I	I	I	I	I	I	I	I
	V188I	V	V	V	V	V	V	V	V	V	I	V	V	V
	L198M	L	M	L	L	L	L	L	L	L	L	L	L	L
	Q338R	Q	Q	Q	Q	Q	Q	Q	Q	R	Q	Q	Q	Q
	F17V	F	F	F	F	F	F	F	F	F	F	V	F	F
NS2A	I85V	I	I	I	V	I	I	I	I	I	I	I	I	I
	H119Y	H	H	H	H	H	H	H	H	H	Y	H	H	H
	R122H	H	R	R	R	R	R	R	R	R	R	R	R	R
	I158V	I	I	I	I	I	I	I	I	V	I	I	I	I
	G211R	G	G	G	G	G	G	G	R	G	G	G	G	G
	L159M	L	L	L	L	L	L	L	L	L	L	M	L	L
NS2B	M99T	M	I	I	M	M	M	M	M	M	M	M	M	M
NS3	F46L	F	F	F	F	F	F	F	F	F	L	F	F	F

