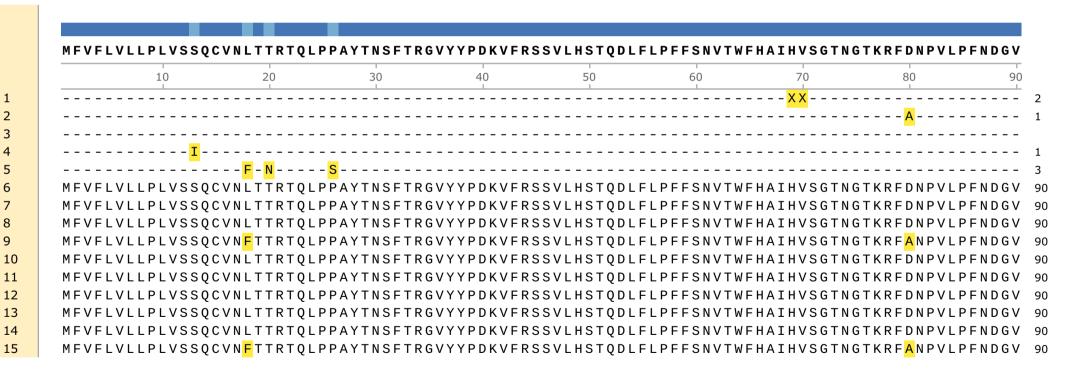
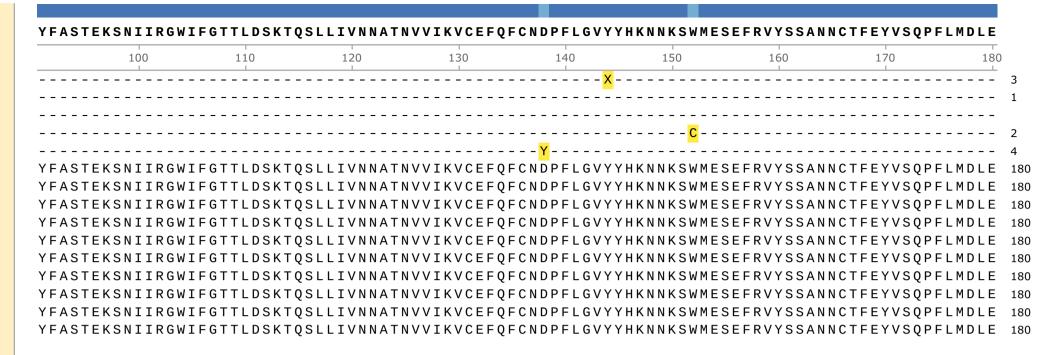
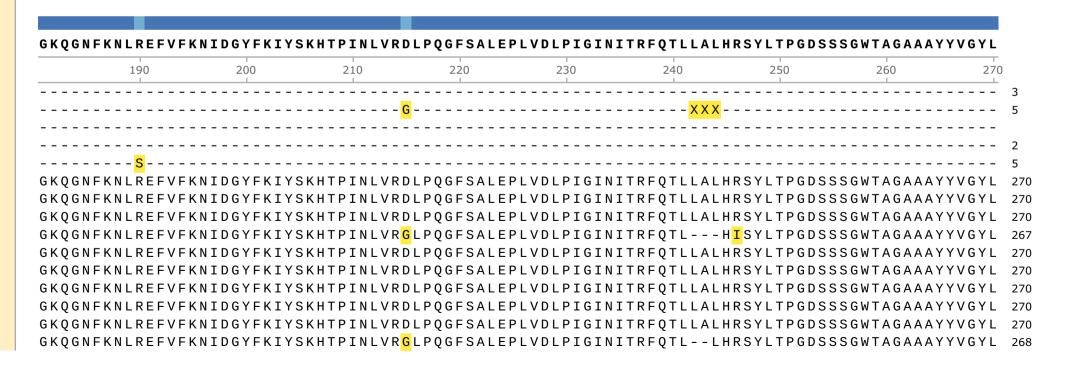
Aligned using an external algorithm

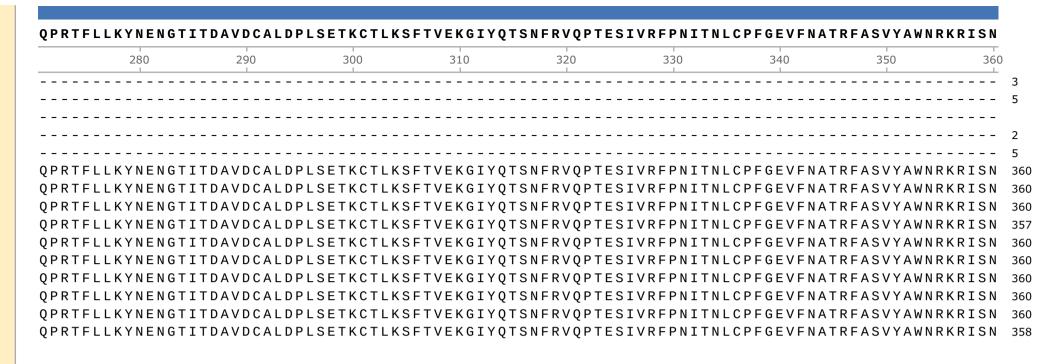
Consensus

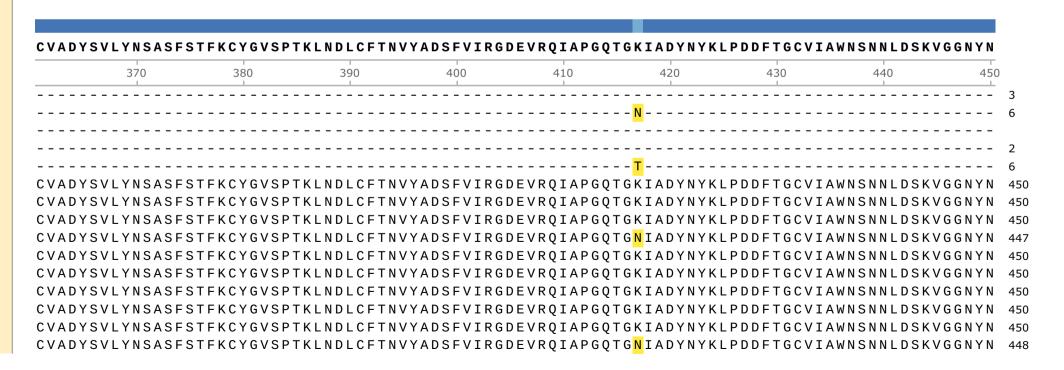
- **1.** B.1.1.7
- **2.** B.1.351
- **3.** B.1.427
- **4.** B.1.429
- **5.** P.1
- **6.** Ref YP 009724390.1 surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
- 7. Ref_QHD43416.1 surface glycoprotein [Severe acute respiratory syndrome coronavirus 2]
- 8. mRNA-1273 vaccine translated
- 9. mRNA-1273.351_vaccine_translated
- 0. BNT-162b2 vaccine translated
- 1. Ad26.COV2-S vaccine translated
- 2. NVX-CoV2373 vaccine translated
- 3. Sputnik V alleged unmodified YP 009724390.1
- 4. AZD1222 alleged unmodified YP 009724390.1
- **5.** AZD2816 modified YP_009724390.1 variants from B.1.351

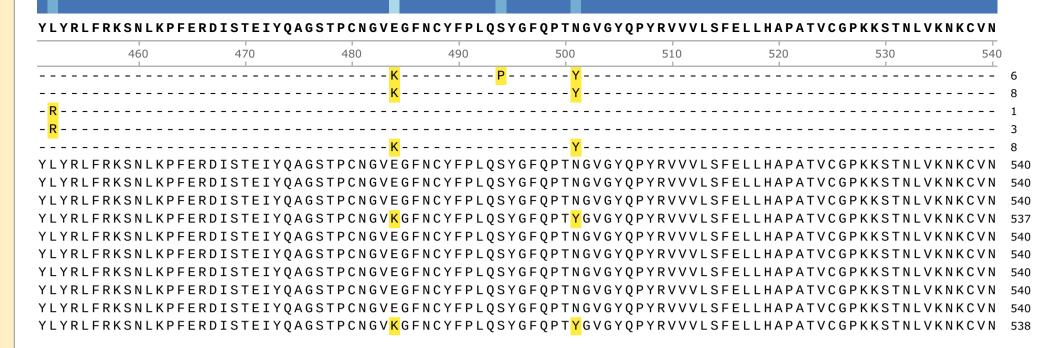


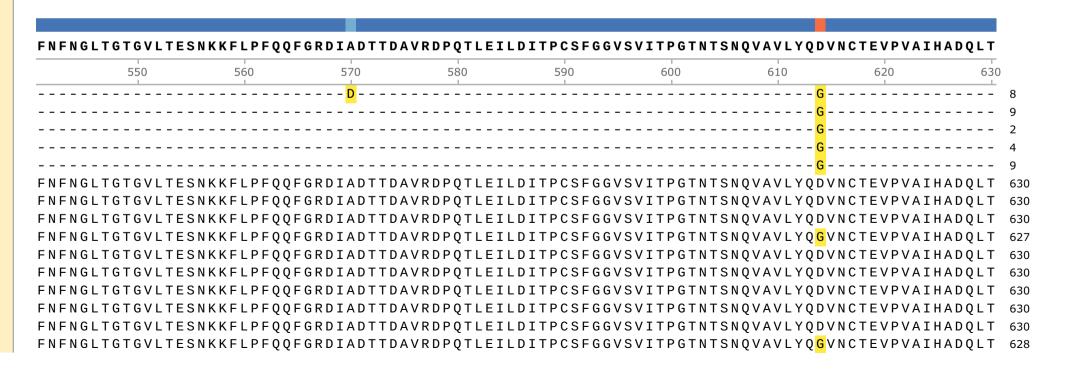


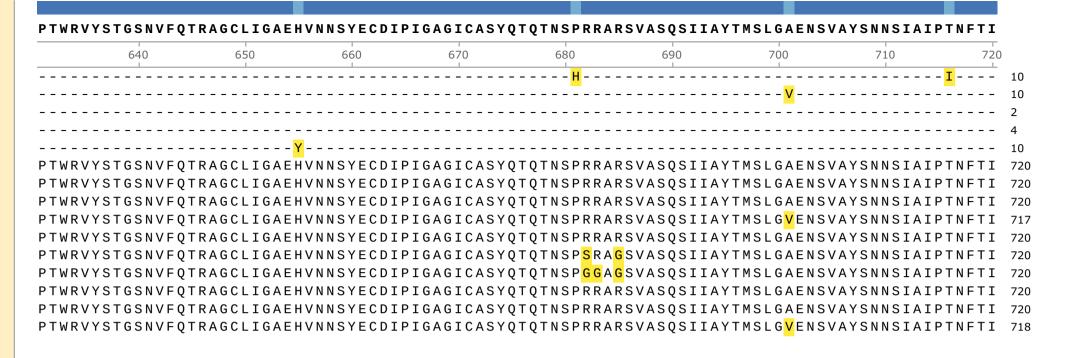






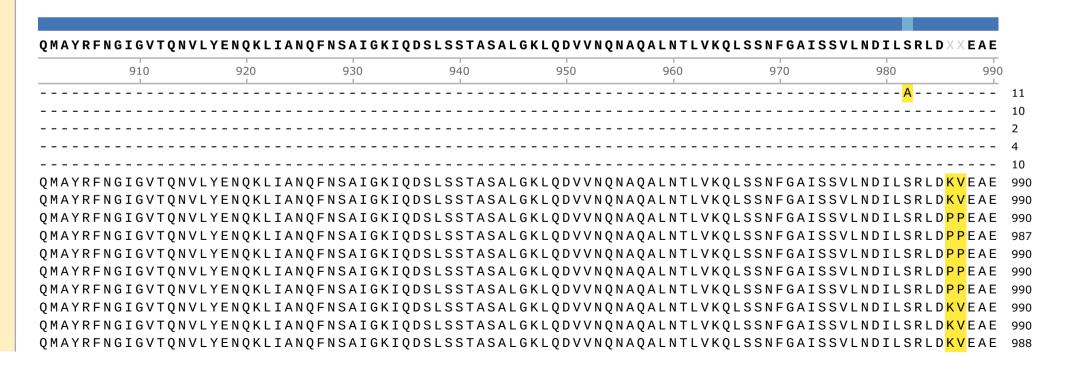


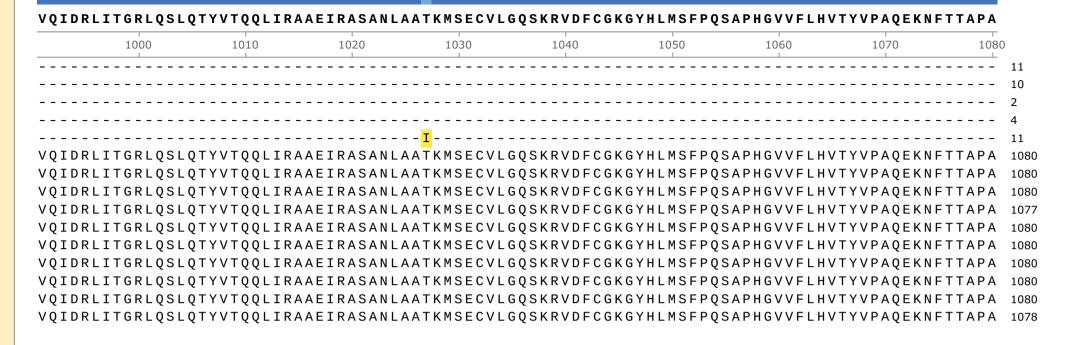




81	800	790	780	770	760	750	740	730
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNI	STECSNLLL	VDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	Q Y G S F C T Q L N F	OSTECSNLLL(SVDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNI	STECSNLLL	VDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNI	STECSNLLL	SVDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNE	STECSNLLL	VDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNI	STECSNLLL	VDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KQIYKTPPIK	KNTQEVFAQV	RALTGIAVEQ	YGSFCTQLNI)STECSNLLL(VDCTMYICG	TEILPVSMTKTS
ILPDPS	FGGFNFS	KOIYKTPPIK	KNTOEVFAOV	RALTGIAVEO	YGSFCTOLNI	STECSNLLL	SVDCTMYICG	TEILPVSMTKTS
		-	•	•	•			TEILPVSMTKTS
		-	•	-				TEILPVSMTKTS

820	830	840	850	860	870	880	890	9
(RSFIEDLLFN)		KOYGDCLGDI	AARDLICAOKF	NGLTVLPPLI	LTDEMIAOYT	SALLAGTITSO	GWTFGAGAAL	OIPFA
		_	_		-			-
(RSFIEDLLFN)		-	-		-			-
RSFIEDLLFN		KQYGDCLGDI.	AARDLICAQKF	NGLTVLPPLI	LTDEMIAQYT	SALLAGTITS	GWTFGAGAAL	QIPFA
KRSFIEDLLFN		KQYGDCLGDI.	AARDLICAQKF	NGLTVLPPLI	LTDEMIAQYT	SALLAGTITS	GWTFGAGAAL	QIPFA
RSFIEDLLFN		KQYGDCLGDI.	AARDLICAQKF	NGLTVLPPLI	LTDEMIAQYT	SALLAGTITS	GWTFGAGAAL	QIPFA
RSFIEDLLFN		KQYGDCLGDI.	AARDLICAQKF	NGLTVLPPLI	LTDEMIAQYT	SALLAGTITS	GWTFGAGAAL	QIPFA
RSFIEDLLFN		-	-					-





1090	1100	1110	1120	1130	1140	1150	1160	117
			The second secon					
) G K A H F P R E G V I	= V S N G T H W F V	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
OGKAHFPREGVE	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
OGKAHFPREGVI	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
OGKAHFPREGVI	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
OGKAHFPREGVI	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
OGKAHFPREGVE	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
GKAHFPREGVE	- VSNGTHWFV	TQRNFYEPQI	ITTDNTFVSG	NCDVVIGIVNI	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
GKAHFPREGVI	- VSNGTHWFV	TORNFYEPQI	ITTDNTFVSG	NCDVVIGIVNN	NTVYDPLQPE	LDSFKEELDKY	'FKNHTSPDV	DLGDIS
		•			_	LDSFKEELDKY		

1180	1190	1200	1210	1220	1230	1240	1250	1260
	<mark>N</mark>							
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	KYEQYIKWPWY	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	KYEQYIKWPWY	YIWLGFIAGL	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	KYEQYIKWPWY	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIQKEID	RLNEVAKNLNE	SLIDLQELG	(YEQYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD
INASVVNIOKEID	RLNEVAKNLNE	SLIDLOELG	(YEOYIKWPW)	/IWLGFIAGL:	IAIVMVTIMLO	CCMTSCCSCL	KGCCSCGSCCI	KFDEDD

GINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWPWYIWLGFIAGLIAIVMVTIMLCCMTSCCSCLKGCCSCGSCCKFDEDD

SEPVLKGVKLHYT

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		-	-	-	-	-	-	-	-	-	-	4	
		-	-	-	-	-	-	-	-	-	-	11	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1270	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ĒΡ	٧	L	K	G	٧	K	L	Н	Υ	Т	1273	
SE	ΞP	٧	L	Κ	G	٧	Κ	L	Н	Υ	Т	1271	

Consensus Threshold: >50%

Compare to: the consensus

Amino acids that don't match the reference are marked with yellow highlighting.

Created: 28 Jun 2021

Last Modified: 28 Jun 2021

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