

FIGURE S10.

1

SARS_CoV_2 1 MFVFL-VLIPLVSSQCVNL-----TTRTQLPPAYTNSF-----
 OC43 1 **LI*LIS**TAFAVIGD*KCTSDTSYINDKD*GP**IS*DTVDVTNGLGTYVLDREVYL

2

SARS_CoV_2 33 -----TRGVYYPDKVFRSSVLHSTQDLFLPF-----
 OC43 61 NNTLFLNGYYP*S*ST*RNMAKLG***L*RLWFKP**L*DF-----

3

SARS_CoV_2 82 PVLFPNDGVYFASTEKSNIRGWIFGTTLDSKTQSLLIIVNNAATNVVI-----
 OC43 102 -----IN*I--**KVKNTKV*KDRVMYSEFPAI*IGSTF**TSYS**VQPRTINSTQDGYN

4

SARS_CoV_2 129 -----KVCEFPFCNDPFLGVYHYKNNKSWMESEFRVYSSANNCTFEYVSQPFLMDLE
 OC43 156 KLOGLLEVS**QYNM*EY*Q--TIC*P*LGHRKELWHLDTGVVS*LYK---RN*TY*VN

5

SARS_CoV_2 181 GKQGNFKNIREFVFKNIDGYFKIYSKHTPINLVRLDPQGFSALEPLVDLPIGINITRFQT
 OC43 211 AD-----YLY*H*YQEG*T*YA*FTD*GV---*T-----KF*FNVYL-----

6

SARS_CoV_2 241 LLALHRSYLTTPGDSSSGWTAGA-AAYVGYLQPRTFLLKYNENGTITDAVDCALDPLSET
 OC43 245 GM**SHY*VM*LTCN*KVKN*FTLE*W*TP*TS*QY**AF*QD*I*FN**MS*FM**I

7

SARS_CoV_2 300 KCTLKSFTVEKGIYQTSNFRVQPTESIVRFPNITNLCPFGVEFNATRFASVYAWNRRKRI
 OC43 305 **KTQ*IAPPT*V*ELNGYT***IADVY*RKLNLPN*NIEAWL*DKSVP*PLN*E**TF*

8

SARS_CoV_2 360 NCVADYSVLYNSASFSTFKCYGVSPTRLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIA
 OC43 365 **NFM*S*MSFIOADS*T*NNIDAA*IYGM**SSITI*K*A*PNGRKVDLQ*NL*YLO

9

SARS_CoV_2 420 DYNKLPDDFTGCVIAVNSNLDKSKVG----GNYNLYRLFRKSNLKPFEFDISTEIQQA
 OC43 425 SF**RIDTTA*S*QLY*LPAANVS*SRFNPSTW*KRFGFIED*VF**RPA*GVL*NHDVV

10

SARS_CoV_2 476 GSTPCNGVEGENCYFPLQ--S--YGFQPTNGVGYQPYRVVLSFELLHAPATV-----
 OC43 485 YAQH*FKAPKNF*PCK*NGSCVGS*PGKN**I*TC*AGTNY*TCDN*CT*DPITFKATGT

11

SARS_CoV_2 525 -----CGP-----
 OC43 545 YKCPQTKSLVGI GEHCSGLAVKSDYCGGNSCT*R*QAFGLWSADSLQGDKNIFANFIL

12

SARS_CoV_2 528 -----KKSTNLVKNKCVNFNFNGLTGTGVLTESNKKFL-PFQQFGRDIADT
 OC43 605 HDVNSGLTCSTDLQ*AN*DIILGV**YDLY*IL*Q*IFV*V*ATYYNSW*NLLY*SNGN

13

SARS_CoV_2 573 TDAVRDPQTLIILDITPCSFGGVSVITPGTNTSNQMAVLYQDVNCTEVPVAIHADQLTPT
 OC43 665 LYGF**YI*NRTFM*RS*YS*R**AAFHA--N*SEP*L*FRNIK*NY*FNNSLTR**Q*-

14

SARS_CoV_2 633 WRVYSTGSNVFQTRAGCLIGAEHVN--N*SYECDIPIGAGICASYQTQTNPPRRARSVASQ
 OC43 722 -----I*Y*DSYL**VVN*YNSTAISVQT**LTV*S*Y*VD*SKN-----**S*GAIIT

15

SARS_CoV_2 691 SIIAYTMSLGAENSVAYS-----NNSIAIPTNFTISVTTEILPVSMTKTSVDCTMYICG
 OC43 771 GYRFTNFEPFTV**ND*L*EPVGGLYE*Q**SE**GNME*FIQT*SP*VTI**AAFV**

16

SARS_CoV_2 745 DSTECNLLQYGSFCTQLNRALTGIAVEQDKNTQEVF-AQVKQIYKTPPIKDFGGFNFS
 OC43 831 *YAA*KSQ*VE*****DNI*AI**EVNELL*TTQLQ*ANSLMNGVTLSTKL**GVN**VD

17

SARS_CoV_2 804 QILP-----DPSKPSKRSFIEDLLFNKVTLADAGFIKQYGDCLGDIARDLICAQK
 OC43 891 D*NFSPLVGLGCLGSEC**A*S**A*****D**K*S*V**VEA*NN*T*GAELI*****V*S

18

SARS_CoV_2 855 FNGLTVLPPLLTDEMAIQYTSALLAGTITSGWTFGAGAAIQIPFAMQMA YRFNGIGVTQN
 OC43 951 YK*IK*****SENQ*SG**L*ATSASLFPL**AA----AGV**YLVNQ**I**L**MD

19

SARS_CoV_2 915 VLYENQKLIANQFNSAIGKIQDSLSTASALGKLQDVVNQNAQALNTLVKQLSSNFGAIS
 OC43 1007 **SQ*****A**N*LYA**EGFDA*N**V*I*A**A**E**N*LQ*****NR*****

20

SARS_CoV_2 975 SVLNDILSRLDKVEAEVQIDRLITGRQLQSLQTYVTQQLIRAAEIRASANLAATKMSECVL
 OC43 1067 AS*QE*****AL**A*****N**TA*NA**S**SDSTLVKF**AQ*ME*VN**K

21

SARS_CoV_2 1035 GQSKRVDFCGKGYHLSFPQSAPHGVVFLHVTVYVPAQEKNFTTAPAICHGDK-AHFPREG
 OC43 1127 S**S*IN**N*N*II*LV*N**Y*LY*I*FS**TKYVTARVS*GL*IA*DRGIA*KS*

22

SARS_CoV_2 1094 VFVSNHGWTFVTRNFYEPQIITDNTFVSGNCDVVIGIVNNTVYDPLQPELDSFKEELD
 OC43 1187 Y**NVNNT*MY*GSGY*Y*EP**EN*VV*MST*A*NYTKAPYVMLNTSI*N*PD*****

23

SARS_CoV_2 1154 KYFKNHTSPVDLGDISGINASVVNIQKEIDRLNEVAKNLNESLIDLQELGKYEQYIKWP
 OC43 1247 QW**Q**VAP**S-LDY**VTFLDL*V*MN**Q*AI*V**Q*Y*N*KDI*T**Y*V***

24

SARS_CoV_2 1214 WYIWLGFIAGLIAIVMVTIMLCCMTSC-CSCLKGCCSCGSCCKFDEDDSEPVLGKVKLHY
 OC43 1306 **V**LICLAGV*MLVLLFFI**C*G*GT**F*K---*G**DDYTG*Y*Q*L*I*TSHD--

SARS_CoV_2 1273 T
 OC43 1361 D