

**Supplemental Table S2.**

List of the 233 SARS-CoV-2 epitopes with sequences shared with human proteins given in capital letters

| A     | B     | C               | A     | B     | C                 |
|-------|-------|-----------------|-------|-------|-------------------|
| 956   | N     | AEGSRGGSQA      | 37515 | N     | ILLDRLNql         |
| 999   | S     | aeiRASANLA      | 37544 | S     | ILLQYGSfc         |
| 1220  | S     | aevqidrli       | 37583 | orf1b | llmpiltlt         |
| 1221  | S     | aevqidrlit      | 37724 | S     | LLQYGSfct         |
| 1349  | ORF7b | AFLFLVLI        | 37766 | orf1a | LLSAGIFGA         |
| 1350  | ORF7b | AFLFLVLIMLIIFw  | 38043 | orf1b | lmierfvsl         |
| 1946  | orf1a | AIILASFSA       | 38353 | S     | IntLVKQLSSNFGAi   |
| 2027  | orf1b | aimtrclav       | 38831 | S     | LQDVVNQNAQALNTL   |
| 2431  | N     | ALALLLLDr       | 38855 | S     | lqipfamqm         |
| 2682  | orf1b | ALLADKfpv       | 38874 | orf1b | LQLGFSTGv         |
| 2801  | S     | alntlvkql       | 38881 | N     | LQLPQGtl          |
| 2802  | N     | ALNTPKdhi       | 38990 | S     | lqslqtyvtQQLIRA   |
| 2855  | orf1a | aLRANSAvk       | 39003 | S     | lqtyvtQQLIRAAEI   |
| 2998  | orf1a | alweiqqv        | 39576 | N     | lsprwyfyy         |
| 3589  | S     | aphgvvflhv      | 40459 | orf1b | LVL SVNpyv        |
| 3810  | N     | APSASAFFgm      | 40677 | M     | lwlwpvtl          |
| 3939  | S     | aQALNTLvk       | 40685 | M     | IWPVTLAcf         |
| 3956  | N     | AQFAPSASA       | 41962 | ORF7b | mLIIFWFSL         |
| 3982  | S     | aqkfnGLTVLPPLLT | 42093 | orf1b | mlwckdghv         |
| 4307  | N     | asaffgmsr       | 42128 | orf1b | mmisagfsl         |
| 4321  | S     | ASANLAATk       | 42260 | orf1a | mpaswvmri         |
| 4936  | N     | ATEGALNTPK      | 42648 | N     | msriGMEVTPSGTWI   |
| 5149  | M     | aTSRTLsYY       | 42873 | S     | mTSCCSCLk         |
| 5150  | M     | aTSRTLsYYK      | 42972 | orf1b | mvMCGGSLyv        |
| 5209  | orf1b | ATVVIGtsk       | 43024 | M     | mwSFNPETni        |
| 5447  | orf1a | AVLQSGFRK       | 44501 | N     | nkhidayktFPPTep   |
| 5908  | S     | ayrfngiGVTQNVly | 44814 | S     | nlNESLIDL         |
| 6184  | ORF7a | celyhyqecv      | 44913 | M     | nlVIGFLFL         |
| 6668  | S     | cmTSCCSCLk      | 44927 | orf1b | nlwnftl           |
| 7289  | S     | cvnfnfnGLTGTGVl | 45000 | orf1b | nmlRIMASL         |
| 9006  | S     | DKYFKNhtspdvldg | 46414 | orf1a | nvlawlyaa         |
| 10112 | S     | DSFKEELDKY      | 47041 | S     | PCSFGGVsvitpgtn   |
| 16156 | S     | fiaGLIAIV       | 48051 | M     | PKEITVATSRTLsYY   |
| 16498 | ORF7b | FLAFLFLV        | 48052 | M     | PKEITVATSRTLsYYKI |
| 16499 | ORF7b | FLAFLFLVL       | 50166 | S     | PYRVVLSF          |
| 16500 | ORF7b | FLAFLFLVLIMLII  | 50311 | S     | QALNTLVKQLSSNFGAi |
| 16537 | orf1a | FLCLFLPSL       | 50560 | ORF7a | qecvrGTTVLLKEPC   |
| 16632 | orf1a | flgrymsal       | 50641 | S     | qelgkyeqyi        |
| 16716 | ORF7b | FLLFLVLIIm      | 51112 | S     | qipfamqmayrfngi   |
| 16717 | ORF7b | FLLFLVLImI      | 51442 | orf1a | qlmcqpill         |
| 16718 | ORF7b | FLLFLVLIMLIIFWF | 51443 | orf1a | qlmcQPILL         |
| 16737 | orf1a | fLLNKEMyl       | 51482 | N     | qlpQGTTLPk        |
| 16743 | orf1a | FLLPSLATV       | 51999 | S     | qPYRVVLSF         |
| 16779 | orf1a | FLNGSCgsv       | 52057 | S     | QQLIRAAEIRASANL   |

|       |       |                    |       |       |                  |
|-------|-------|--------------------|-------|-------|------------------|
| 16786 | orf1a | FLNRFTttl          | 52114 | N     | qQQGQTVtk        |
| 16820 | orf1a | fLPRVFSaV          | 52129 | N     | qqQQGQTVtk       |
| 16953 | ORF7b | flvLIMLI           | 52672 | S     | qtyvtQQLIRAAEIR  |
| 16954 | ORF7b | flvLIMLIIFWFSLe    | 52851 | M     | qwnlVIGFLF       |
| 16972 | M     | flwllwpvt          | 54183 | orf1b | RILGAGCFV        |
| 16973 | M     | flwllwpvtl         | 54507 | S     | rLDKVEAEV        |
| 16974 | M     | flwllWPVTLACFVL    | 54680 | S     | rLNEVAKNL        |
| 17341 | S     | fpnitnlcpf         | 54725 | S     | RLQSLQtyv        |
| 17354 | orf1b | FPPTSFGPL          | 54847 | orf1b | rlyydsmsy        |
| 17385 | N     | fpRGQGVPI          | 55444 | orf1b | RQLLFVvev        |
| 17657 | orf1a | frYMNSQGI          | 56252 | S     | rVDFCGKgy        |
| 18103 | orf1a | ftyaSALWEI         | 56634 | M     | ryrignykl        |
| 18133 | orf1b | fVDGVPFvv          | 56979 | N     | SASAFFgmsr       |
| 18422 | ORF7b | fylcflafl          | 57395 | E     | seeTGTLIV        |
| 18423 | ORF7b | fylcFLAFL          | 57544 | M     | seLVIGAVi        |
| 18514 | S     | gAALQIPFamqmayr    | 57856 | M     | SFNPETNIL        |
| 20907 | S     | GLIAIVmvti         | 59161 | S     | slIDLQELGK       |
| 21347 | N     | gmsrigmev          | 59312 | orf1a | SLLSVLLSM        |
| 21996 | M     | grcDIKDLPKEITVATSR | 59778 | M     | smwSFNPET        |
| 22144 | S     | GRLQSLQty          | 60242 | N     | sprwyfyyl        |
| 22322 | S     | gsfctqlnr          | 60380 | N     | sQASSRSSSR       |
| 22856 | N     | gtTLPKGFy          | 61229 | S     | SSNFGAISSVLNDIL  |
| 22916 | orf1b | gvampnlyk          | 61254 | orf1b | ssnVANYQK        |
| 23200 | S     | gvvflhvtv          | 62221 | S     | SVLNDILSR        |
| 23215 | orf1a | GVYDYLvst          | 62331 | ORF7a | svSPKLFIr        |
| 23293 | S     | gwtFGAGAALQIPFa    | 63951 | S     | TGRLQSLQtyvtqql  |
| 23436 | S     | gyqPYRVVVl         | 64827 | orf1a | tlGVYDYLv        |
| 24313 | ORF6  | hlvdfqvti          | 64850 | orf1b | tligdcav         |
| 24466 | ORF7a | hpladnkfal         | 65132 | orf1b | tlvpqehyv        |
| 25542 | N     | idayktFPPTPKKd     | 65176 | orf1b | tmadlvayl        |
| 25571 | ORF7b | idfylcflaf         | 65763 | N     | TPSGTWlty        |
| 25662 | S     | idrLITGRLQSLQty    | 65906 | S     | tqNVLYENqk       |
| 26198 | S     | IGAGICAsy          | 66407 | M     | TSRTLSYYK        |
| 26710 | S     | iittdntfv          | 66409 | M     | TSRTLSYYKLGASQRv |
| 26759 | M     | IKDLPKEITVATSRt    | 66706 | N     | tTLPKGFya        |
| 26973 | orf1a | iLASFSAST          | 66710 | orf1b | TTLPVNvaf        |
| 27078 | orf1b | iLGLPTQTV          | 66952 | M     | TVATSRTLSY       |
| 27083 | orf1a | ILGTVSwnl          | 67078 | orf1a | tvlsfcafa        |
| 27089 | orf1b | ilhcanfnv          | 69392 | orf1a | vlawlyaav        |
| 27182 | N     | illnkhida          | 69657 | S     | VLNDILSRl        |
| 27516 | ORF7b | IMLIIFWFSL         | 69716 | orf1b | VLQAVGacv        |
| 28050 | orf1b | IPRRNVATl          | 69720 | N     | VLQLPQGttl       |
| 28199 | orf1a | iqpgqtfsv          | 69721 | N     | VLQLPQGTTLPKGFy  |
| 28464 | orf1b | isDYDYRYy          | 69758 | orf1a | vlsfcav          |
| 28511 | S     | iSGINASVVNIQKEI    | 69850 | orf1b | vLWAHGFEI        |
| 29127 | M     | iTVATSRt           | 69929 | orf1b | vMCGGSLyv        |
| 29237 | orf1b | IVDTVSALv          | 70575 | S     | vqidrlitr        |
| 31833 | orf1b | klFAAETLK          | 70718 | S     | vrfpntnl         |

|       |       |                  |        |       |                    |
|-------|-------|------------------|--------|-------|--------------------|
| 31846 | ORF7a | klfIRQEEV        | 71461  | N     | VTPSGTWlty         |
| 32060 | orf1b | klnvgydyfv       | 71635  | orf1b | vvdkyfdcy          |
| 32183 | orf1b | klsgyatv         | 71663  | S     | vvflhvtv           |
| 32240 | orf1a | klwaqcvql        | 71917  | orf1b | vvyrgtty           |
| 32390 | orf1b | kmQRMLLEK        | 72717  | S     | wLGFIAGLIAIVmvt    |
| 32976 | orf1b | kqfdtynlw        | 72759  | M     | wlWPVTLA           |
| 33667 | N     | ktFPPTPEPK       | 72972  | M     | WPVTLACFVL         |
| 33668 | N     | ktFPPTPEPKK      | 73668  | ORF7a | yegnspfhpl         |
| 34763 | ORF7b | LAFLFLVLIIMLIIF  | 73751  | S     | yeqyikwpwy         |
| 34851 | N     | LALLLLDRL        | 74209  | orf1a | yiFFASFYy          |
| 35205 | S     | LDKYFKNhtspdvdl  | 74577  | ORF7b | ylcFLAFL           |
| 35671 | M     | leqwnlvigf       | 74578  | ORF7b | ylcFLAFLFLVLIIm    |
| 35797 | M     | lFARTRSmw        | 74593  | orf1b | YLDAYNmmi          |
| 35912 | ORF7b | LFLVLIIMLIIFWFS  | 74850  | orf1b | yLNTLTLAV          |
| 36075 | S     | LGDISGINASVVNIQ  | 75508  | orf1b | yqkvgmqky          |
| 36103 | S     | LGFIAGLIAIVmvti  | 76120  | orf1b | ytmadlvya          |
| 36477 | ORF7b | lidfylcl         | 76266  | orf1b | yvfCTVNAL          |
| 36481 | S     | IIDLQELGKy       | 100048 | S     | gAALQIPFamqmayrf   |
| 36724 | S     | LITGRLQSL        | 100300 | S     | mayrfngiGVTQNVly   |
| 37144 | orf1b | LLDDFVEIi        | 100428 | S     | QLIRAAEIRASANLAATk |
| 37279 | ORF7b | LLFLVLIIm        | 125100 | N     | illnkhid           |
| 37280 | ORF7b | LLFLVLIImli      | 190494 | N     | meVTPSGTWI         |
| 37281 | ORF7b | LLFLVLIIMLIIFWFS | 193464 | N     | GMEVTPSGTWI        |
| 37468 | orf1b | LLDDFVEI         | 193498 | N     | ILLDRLNq           |
| 37473 | N     | LLDRLNql         |        |       |                    |

A: Epitopes listed as IEDB ID number and detailed at IEDB ([www.iedb.org](http://www.iedb.org)) [15, 50].

B: SARS-CoV proteins [19], (<https://www.uniprot.org/uniprot/?query=proteome:UP000464024&sort=score>

C: Epitope sequences given in 1-letter code.