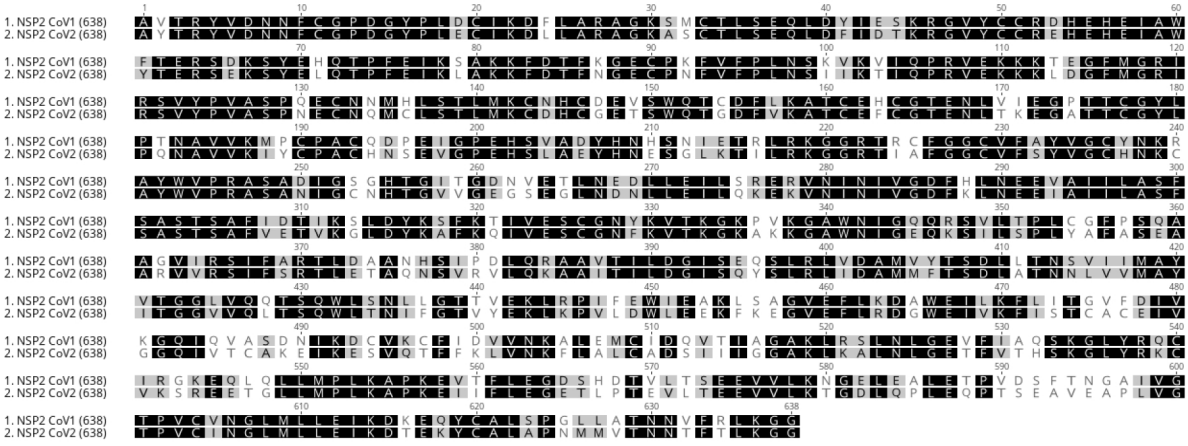
C1NH (SERPING1) and the contact system in COVID-19

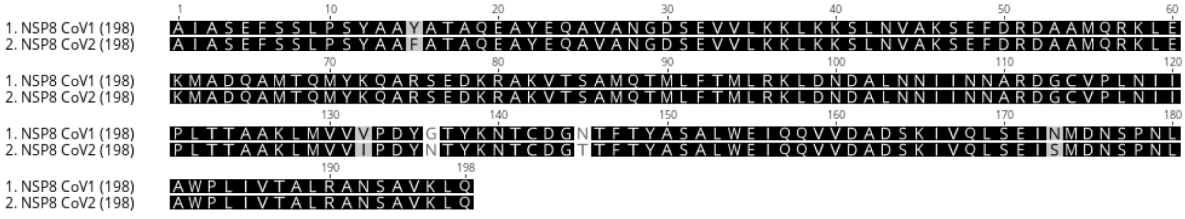
Supplementary Figures

Here we present the pairwise protein alignments performed with Geneious Prime software using MUSCLE program. The sequences were obtained from the NCBI GenBank, accession numbers NC_045512.2 and NC_004718.3 (SARS-CoV2 and SARS-CoV2, respectively). The translation was performed using BENCHLING platform.

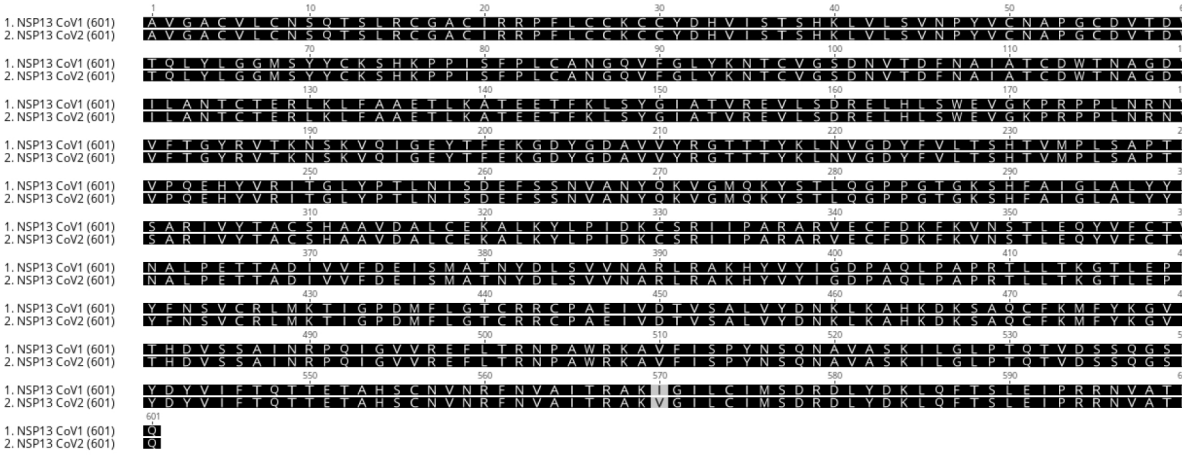
NSP2 (Non-structural protein 2, p65 homolog)



NSP8 (Non-structural protein 8)



NSP13 (NTPase/Helicase)



NSP14 (Non- structural protein 14, Guanine N7 methyltransferase)

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                    1         10        20        30        40        50        60
1. NSP14 CoV1 (527) AENVTGLFKDCSKIITGLHPTQAPTHLSVDIKFKTEGLCVDIPGIPKDMTYRRLISMMGF
2. NSP14 CoV2 (528) AENVTGLFKDCSKVITGLHPTQAPTHLSVDTKFKTEGLCVDIPGIPKDMTYRRLISMMGF
                    70        80        90       100       110       120
1. NSP14 CoV1 (527) KMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATRDAVGTNLPLQLGFSTGVNLVAV
2. NSP14 CoV2 (528) KMNYQVNGYPNMFITREEAIRHVRAWIGFDVEGCHATREAVGTNLPLQLGFSTGVNLVAV
                   130       140       150       160       170       180
1. NSP14 CoV1 (527) PTGYVDTENNTEFTRVNAKPPPGDQFKHLIPLMYKGLPWNVVRIKIVQMLSDTLKGLSDR
2. NSP14 CoV2 (528) PTGYVDTPNNTDFSRVSAKPPPGDQFKHLIPLMYKGLPWNVVRIKIVQMLSDTLKNLSDR
                   190       200       210       220       230       240
1. NSP14 CoV1 (527) VVFVLWAHGFELTSMKYFVKIGPERTCCLCDKRATCFSTSSDTYACWNHSVGFDYVYNPF
2. NSP14 CoV2 (528) VVFVLWAHGFELTSMKYFVKIGPERTCCLCDRRATCFSTASDTYACWHHSIGFDYVYNPF
                   250       260       270       280       290       300
1. NSP14 CoV1 (527) MIDVQQWGFTGNLQSNHDQHCQVHGNAHVASCDAIMTRCLAVHECFVKRVDWSVEYPIIG
2. NSP14 CoV2 (528) MIDVQQWGFTGNLQSNHDLYCQVHGNAHVASCDAIMTRCLAVHECFVKRVDWTIEYPIIG
                   310       320       330       340       350       360
1. NSP14 CoV1 (527) DELRVNSACRKVQHMVVKSALLADKFPVLHDIGNPKAIKCVPQAEVEWKFYDAQPCSDKA
2. NSP14 CoV2 (528) DELKINAACRKVQHMVVKAALLADKFPVLHDIGNPKAIKCVPQADVEWKFYDAQPCSDKA
                   370       380       390       400       410       420
1. NSP14 CoV1 (527) YKIEELFYSYATHHDKFTDGVCLF-WNCNVDRYPANAIVCRFDTRVLSNLNLPGCDGGSL
2. NSP14 CoV2 (528) YKIEELFYSYATHSDKFTDGVCLFKWNCNVDRYPANSIVCRFDTRVLSNLNLPGCDGGSL
                   430       440       450       460       470       480
1. NSP14 CoV1 (527) YVNKHAFHTPAFDKSAFTNLKQLPFFYYSDSPCESHGKQVVSDIDYVPLKSATCITRCNL
2. NSP14 CoV2 (528) YVNKHAFHTPAFDKSAFVNLKQLPFFYYSDSPCESHGKQVVSDIDYVPLKSATCITRCNL
                   490       500       510       520       528
1. NSP14 CoV1 (527) GGAVCRHHANEYRQYLDAYNMMISAGFSLWIIYKQFDTYNLWNTFTRLQ
2. NSP14 CoV2 (528) GGAVCRHHANEYRLYLDAYNMMISAGFSLWVYKQFDTYNLWNTFTRLQ
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ORF3b (3b protein)

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                    1         10        20        30        40        50        60
1. ORF3b CoV1 (154) MMPTTLFAGTHITMTTVYHITVSQIQLSLLKVTAFQHQNSKKTTKLVVILRIGTQVLKTM
2. ORF3b CoV2 (131) MMPTIFFAGILIVTTIVY-LTIVLLQLSLLQVMAQQVLFLNMTTRLVVILKNGN--LEKT
                    70        80        90       100       110       120
1. ORF3b CoV1 (154) SLYMAISPKFTTSLSLHKLLQTLVLKMLHSSSLTSLLKTHR-MCKYTQSTALQELLIQQW
2. ORF3b CoV2 (131) VLYYTVTSLQTITSCTQLNVQTLVLNMLPSSSTIKLLMSLKNMSKFTQSTVHPELLI-QW
                   130       140       150       155
1. ORF3b CoV1 (154) IQFMMSRRRLLACLCKHKKVSTNLCTHSFRKKQVR
2. ORF3b CoV2 (131) NQFMMNRRRLLACLC
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ORF7b (7b protein)

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                    1         10        20        30        40        45
1. ORF7b CoV1 (45)  MNELTLIDFYLCFLAFLLFLVLIMLIIFWFSLEIQDLEEPCTKV*
2. ORF7b CoV2 (43)  MIELSLIDFYLCFLAFLLFLVLIMLIIFWFSLELQDHNETCHA
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ORF14 (Uncharacterized protein 14)

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                    1         10        20        30        40        50        60
1. ORF14 CoV1 (70)  MLPPCYNFLKEQHCQKASTQREAEAAVKPLLAPHHVVAVIQEIQLLAAVGEILLLEWLAE
2. ORF14 CoV2 (73)  MLQSCYNFLKEQHCQKASTQKGAEAAVKPLLVPHHVVATVQEIQLQAAVGELLLLEWLAM
                    70   73
1. ORF14 CoV1 (70)  VVKLPSRYCC
2. ORF14 CoV2 (73)  AVMLLLLCCLTD
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