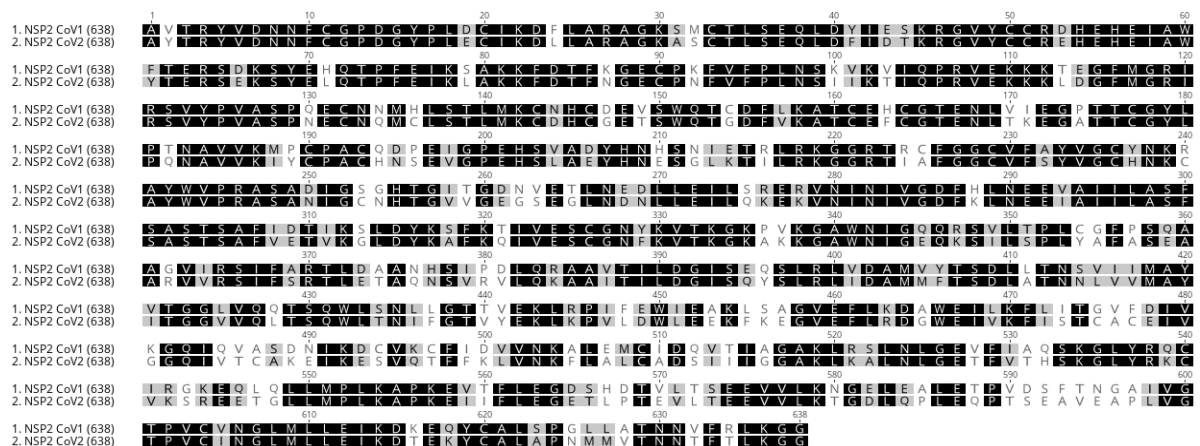# C1NH (SERPING1) and the contact system in COVID-19-associated coagulopathy
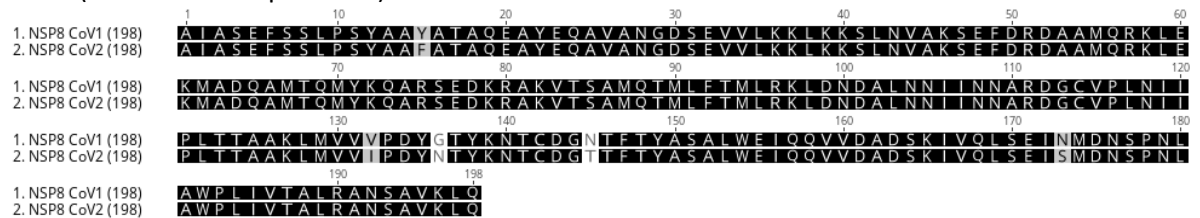
Supplementary Figures

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.
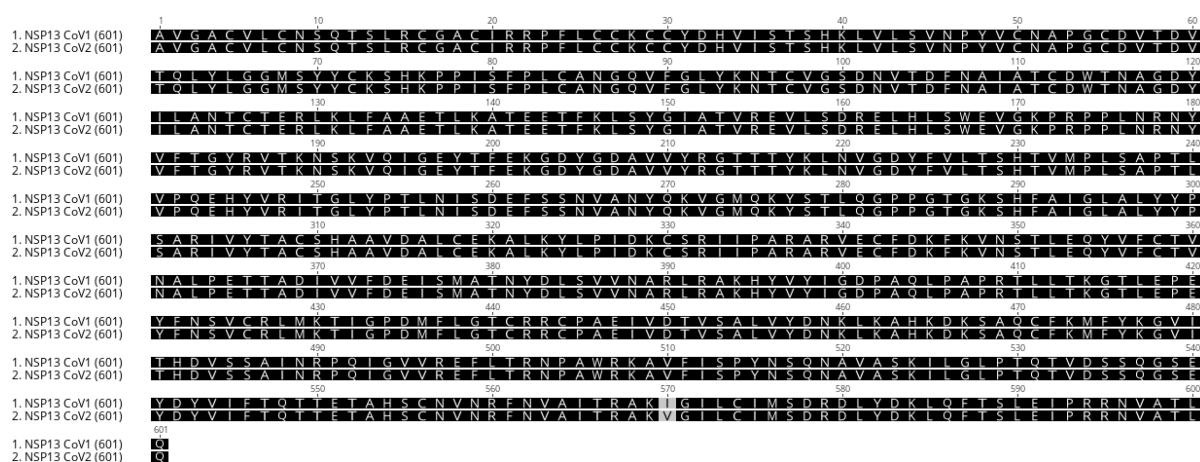
NSP2 (Non-structural protein 2, p65 homolog)

NSP8 (Non-structural protein 8)

NSP13 (NTPase/Helicase)

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

```
                  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)  GGAVCRHHANEYRQYLDAYNMMISAGFSLWIYKQFDTYNLWNTFTRLQ
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)  MNELTLIDFYLCFLAFLLFLVLIMLIIFWFSLEIIQDLEEPCTKV*
2. ORF7b CoV2 (43)  MIELSLIDFYLCFLAFLLFLVLIMLIIFWFSLELQDHNETCHA
```

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)  AVMLLLCCCLTD
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