

## Supplementary Information

### **Amyloidogenic proteins in the SARS-CoV & SARS-CoV-2 proteomes**

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### Supplementary tables:

**Supplementary table 1:** Distribution of APRs in SARS-CoV-2 structural proteins.

<b>SARS-CoV-2 protein (length in amino acids) (NCBI/Uniprot accession ID)</b>	<b>MetAmyl (% of APRs)</b>	<b>FISH Amyloid (% of APRs)</b>	<b>AGGRESCAN (% of APRs)</b>	<b>FoldAmyloid (% of APRs)</b>	<b>CamSol (% of hydrophobicity)</b>
<b>Spike glycoprotein</b> (1273) (YP_009724390.1)	1-20, 28-33, 42-52, 58-73, 88-97, 105-110, 114-121, 124-132, 139-145, 166-176, 192-205, 226-236, 262-272,	35-39, 54-58, 89-93, 116-120, 125-129, 139-146, 167-171, 179-183, 200-204,	1-8, 10-16, 31-38, 40-47, 50-56, 58-70, 86-91, 100-109, 114-133, 140-145, 162-167, 189-208, 231-247, 260-271,	1-10, 34-38, 53-69, 100-108, 116-120, 126-135, 141-146, 174-178, 190-195, 235-244,	1-10, 55-68, 117-121, 125-134, 263-269, 431-436, 487-492, 508-516, 540-544, 592-598, 608-613, 692-698, 717-

284-289, 302-308, 311-336, 347-352, 357-384, 390-409, 428-437, 443-448, 472-477, 495-500, 507-517, 523-528, 534-544, 546-554, 583-600, 605-622, 635-645, 651-660, 670-675, 687-697, 703-708, 717-727, 729-744, 756-763, 767-772, 776-786, 801-806, 822-830, 855-861, 869-875, 879-885, 906-918, 939-944, 947-952, 958-963, 969-981, 991-998, 1003-1013, 1029-1037, 1056-1071, 1075-1081, 1092-1107, 1119-1137, 1159-1164, 1171-1181,	266-270, 325-329, 365-370, 373-377, 399-403, 406-410, 446-450, 469-473, 482-486, 502-506, 540-544, 550-554, 558-562, 591-599, 609-613, 689-693, 783-789, 822-826, 914-918, 953-957, 1001-1005, 1059-1068, 1127-1132, 1175-1180, 1206-1210, 1228-1232 <b>(15.47%)</b>	303-311, 331-336, 338-354, 362-383, 390-400, 428-437, 448-457, 484-490, 508-520, 584-588, 590-599, 610-617, 666-671, 688-698, 716-727, 729-745, 751-759, 761-768, 783-787, 797-805, 817-833, 853-861, 864-870, 872-896, 898-914, 961-982, 1000-1013, 1044-1052, 1058-1068, 1097-1101, 1124-1137, 1171-1179, 1207-1212, 1214-1249, 1266-1273 <b>(45.01%)</b>	264-269, 274-278, 327-331, 348-353, 366-370, 389-395, 431-436, 450-457, 487-492, 507-519, 539-543, 560-564, 582-586, 609-613, 691-697, 718-722, 738-743, 751-755, 780-784, 799-804, 819-825, 875-880, 894-907, 993-999, 1005-1014, 1047-1051, 1060-1067, 1101-1105, 1127-1132, 1210-1239 <b>(23.72%)</b>	724, 738-742, 752-761, 884-889, 895-899, 1004-1010, 1059-1068, 1101-1106, 1127-1135, 1211-1242 <b>(15.16%)</b>
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	1221-1255, 1236-1273 <b>(51.76%)</b>				
<b>Envelope</b> (75) (YP_009724392.1)	1-6, 9-63 <b>(81.3%)</b>	10-14, 16-23, 25-29, 55-59 <b>(30.66%)</b>	1-6, 11-53, 55-61 <b>(74.67%)</b>	11-51, 56-60 <b>(61.34%)</b>	12-34, 39-50, 54-59 <b>(54.6%)</b>
<b>Membrane</b> (222) (YP_009724393.1)	5-10, 21-40, 43-52, 60-82, 92-102, 118-123, 136-145, 167-173, 187-197, 208-213, 216-222 <b>(52.7%)</b>	25-29, 44-56, 69-73, 99-103, 108-112, 201-205 <b>(17.11%)</b>	19-38, 43-58, 60-108, 118-122, 124-131, 135-149, 171-181, 216-222 <b>(59%)</b>	18-39, 44-60, 62-77, 81-105, 108-112, 118-122, 126-132, 138-147, 176-180, 197-202, 218-222 <b>(57.65%)</b>	21-38, 46-79, 81-100 <b>(32.4%)</b>
<b>Nucleocapsid</b> (419) (YP_009724391.1)	12-17, 49-58, 108-113, 128-135, 154-162, 241-251, 265-275, 332-337, 346-355, 387-396, 412-417 <b>(22.19%)</b>	70-75, 159-163, 238-244, 348-352, 385-389, 405-409 <b>(7.87%)</b>	49-56, 107-116, 126-137, 156-161, 218-226, 310-322, 327-336, 348-356 <b>(18.37%)</b>	51-55, 85-89, 106-113, 130-134, 156-160, 219-226, 313-317, 329-333, 350-355, 392-396 <b>(13.6%)</b>	51-56, 107-113, 131-134, 156-160, 330-334 <b>(5.48%)</b>

**Supplementary table 2:** Distribution of APRs in SARS-CoV-2 accessory proteins.

SARS-CoV-2 protein (length in	MetAmyl	FISH Amyloid	AGGREGSCAN (% of APRs)	FoldAmyloid (% of APRs)	CamSol (% of APRs)
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<b>amino acids) (NCBI accession ID)</b>	<b>(% of APRs)</b>	<b>(% of APRs)</b>			
<b>ORF3a</b> (275) (YP_009724397.2)	6-17, 31-36, 43-67, 72- 97, 109- 125, 153- 158, 160- 172, 185- 191, 196- 207, 211- 216, 220- 237, 243- 249, 251- 260, 268- 275, <b>(62.9%)</b>	44-53, 76- 80, 86-90, 109-117, 119-125, 142-146, 166-170, 212-216, 224-233, 254-258 <b>(24%)</b>	1-14, 31-35, 37-41, 43-67, 73-103, 105- 132, 141-158, 160-171, 197- 218, 227-236 <b>(80%)</b>	1-10, 43-57, 77-97, 103- 116, 118-133, 139-152, 154-159, 201-210, 212-217, 228-235, 244-248 <b>(45.45%)</b>	5-13, 42-57, 78- 98, 106-118, 127-131, 143- 151, 165-169, 202-206, 213- 217, 227-234 <b>(27.63%)</b>
<b>ORF3b</b> (22) (P0DTF1)	8-22 <b>(68.18%)</b>	9-17 <b>(40.9%)</b>	4-22 <b>(86.36%)</b>	1-22 <b>(100%)</b>	2-22 <b>(95.4%)</b>
<b>ORF6</b> (61) (YP_009724394.1)	4-41 <b>(62.29%)</b>	7-11, 14-19, 28-37 <b>(34.4%)</b>	1-39 <b>(63.93%)</b>	1-10, 12-22, 24-38 <b>(59.01%)</b>	1-21, 24-35 <b>(54.09%)</b>
<b>ORF7a</b> (121) (YP_009724395.1)	3-15, 23-32, 35-40, 55- 66, 69-77, 93-115 <b>(60.33%)</b>	5-9, 17-21, 100-111 <b>(18.18%)</b>	1-18, 26-33, 55-66, 100-116 <b>(45.45%)</b>	1-13, 16-22, 54-61, 73-77, 98-116 <b>(42.97%)</b>	1-13, 56-66, 99- 114 <b>(33.05%)</b>
<b>ORF7b</b> (43) (YP_009725296.1)	2-12, 18-31 <b>(58.1%)</b>	12-28 <b>(39.53%)</b>	1-32 <b>(74.41%)</b>	1-32 <b>(74.41%)</b>	7-32 <b>(60.46%)</b>

<b>ORF8</b> (121) (YP_009724396.1)	1-17, 20-33, 37-42, 46- 51, 57-67, 71-91, 95- 105, 113- 121 <b>(78.51%)</b>	2-10, 76-80, 107-111 <b>(15.7%)</b>	1-15, 39-49, 57-61, 71-84, 96-103, 114- 121 <b>(50.41%)</b>	1-12, 39-49, 58-62, 81-88, 97-104, 113- 121 <b>(43.8%)</b>	1-15, 78-88, 117-121 <b>(25.61%)</b>
<b>ORF9b</b> (97) (P0DTD2)	18-24, 30- 35, 37-47, 71-80, 89- 97 <b>(44.32%)</b>	40-45 <b>(6.18%)</b>	20-24, 44-50, 74-79, 90-97 <b>(26.8%)</b>	20-25, 42-48, 69-73, 91-95 <b>(23.71%)</b>	71-76, 92-97 <b>(12.37%)</b>
<b>ORF10</b> (38) (YP_009724396.1)	2-8, 11-18, 25-38 <b>(76.3%)</b>	23-27, 31- 35 <b>(23.68%)</b>	1-9, 11-20, 25- 38 <b>(86.84%)</b>	1-20, 31-37 <b>(71.05%)</b>	1-20, 32-38 <b>(63.15%)</b>
<b>ORF14</b> (73) (P0DTD3)	3-9, 27-42, 49-54, 65- 73 <b>(52%)</b>	39-44 <b>(8.21%)</b>	34-39, 50-71 <b>(38.35%)</b>	29-38, 51-72 <b>(43.83%)</b>	2-7, 33-40, 59- 72 <b>(38.35%)</b>

**Supplementary table 3:** Distribution of APRs in SARS-CoV-2 non-structural proteins.

<b>SARS-CoV-2 protein (length in amino acids) (NCBI accession ID)</b>	<b>MetAmyl (% of APRs)</b>	<b>FISH Amyloid (% of APRs)</b>	<b>AGGRESCAN (% of APRs)</b>	<b>FoldAmyloid (% of APRs)</b>	<b>CamSol (% of APRs)</b>
<b>NSP1</b> (180) (YP_009725297.1)	10-31, 50-61, 66-74, 84-89, 101-111, 114-119	59-66, 92-96, 105-114 <b>(12.77%)</b>	1-5, 20-31, 52- 58, 68-72, 84- 93, 103-108,	18-22, 25-29, 68-72, 83-88, 105-109, 116- 124	15-20, 105-109 <b>(6.11%)</b>

	<b>(36.66%)</b>		110-114, 116-122 <b>(31.67%)</b>	<b>(19.44%)</b>	
<b>NSP2 (638)</b> (YP_009725298.1)	46-53, 57-62, 94-105, 118-123, 134-139, 155-161, 182-193, 223-238, 248-263, 278-288, 292-313, 318-334, 339-344, 362-372, 378-401, 415-431, 433-442, 468-489, 492-503, 509-519, 525-535, 575-581, 598-608 <b>(44%)</b>	184-189, 257-261, 363-368, 424-428, 433-440, 458-462, 468-472, 494-498, 560-564 <b>(7.83%)</b>	78-82, 97-105, 118-124, 136-142, 158-162, 182-190, 225-241, 282-286, 291-315, 353-371, 382-445, 447-451, 463-487, 494-520, 524-528, 557-561, 571-576, 603-614, 625-632 <b>(42.31%)</b>	1-5, 48-52, 58-62, 92-96, 134-139, 186-191, 228-235, 241-245, 294-299, 362-370, 397-408, 415-421, 430-439, 460-464, 467-474, 496-501, 503-508, 603-612 <b>(19.43%)</b>	92-98, 123-128, 186-192, 226-235, 295-299, 351-355, 414-431, 434-439, 482-486, 496-500, 504-508, 602-608 <b>(12.85%)</b>

<p style="text-align: center;"><b>NSP3 (1945)</b> (YP_009725299.1)</p>	1-8, 10-17, 20-27, 39-48, 52-66, 102- 108, 144- 149, 166- 175, 179- 191, 198- 212, 220- 225, 234- 242, 272- 277, 279- 291, 295- 304, 331- 336, 341- 361, 367- 374, 393- 398, 417- 429, 434- 442, 451- 462, 467- 486, 504- 512, 516- 521, 526- 545, 548- 554, 570- 585, 593- 602, 604- 620, 633- 640, 652- 670, 682- 692, 702- 707, 715- 722, 730- 737, 745-	10-14, 20-24, 201-205, 209-213, 218-222, 371-375, 379-383, 434-439, 452-456, 476-480, 504-508, 533-537, 580-584, 596-600, 716-720, 746-750, 755-760, 785-789, 823-827, 946-950, 964-968, 1010-1014, 1068-1072, 1106-1110, 1148-1153, 1253-1258, 1335-1339, 1396-1400, 1409-1413, 1423-1428, 1433-1437, 1456-1460, 1509-1513, 1518-1522, 1537-1541,	16-23, 42-46, 51-66, 68-73, 82-89, 98-106, 185-189, 201- 219, 237-245, 248-252, 281- 291, 295-301, 330-339, 341- 365, 367-374, 417-421, 432- 442, 453-458, 461-465, 468- 483, 530-538, 550-558, 573- 580, 582-586, 600-618, 632- 637, 648-653, 667-672, 684- 689, 735-740, 742-758, 763- 771, 824-830, 843-848, 857- 868, 891-903, 912-916, 928- 935, 946-957, 986-991, 1029- 1034, 1045- 1050, 1062- 1071, 1107- 1112, 1137- 1142, 1152- 1157, 1172- 1177, 1188- 1199, 1252-	83-90, 100- 106, 244-248, 294-299, 324- 329, 342-349, 353-359, 435- 440, 479-483, 506-510, 534- 540, 553-562, 602-608, 614- 619, 632-637, 646-650, 694- 698, 707-711, 748-755, 799- 803, 814-818, 825-830, 856- 866, 879-884, 891-899, 915- 919, 930-935, 959-954, 1108-1115, 1139-1143, 1172-1176, 1189-1197, 1255-1259, 1276-1281, 1337-1345, 1351-1364, 1409-1428, 1433-1437, 1458-1463, 1488-1494, 1496-1505, 1507-1555, 1561-1582,	21-25, 41- 45, 53-59, 101-106, 199-205, 239-244, 534-540, 551-555, 604-608, 629-638, 752-756, 762-771, 858-865, 892-899, 915-920, 931-935, 1191- 1195, 1348- 1363, 1410- 1429, 1432- 1437, 1458- 1467, 1470- 1474, 1489- 1505, 1507- 1554, 1564- 1583, 1720-
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757, 759-768, 775-780, 783-789, 797-804, 808-813, 842-847, 863-868, 891-896, 899-908, 928-938, 942-950, 965-972, 975-981, 1002-1008, 1025-1031, 1045-1051, 1054-1060, 1062-1075, 1112-1117, 1136-1142, 1147-1155, 1171-1176, 1189-1194, 1206-1212, 1225-1230, 1243-1259, 1284-1289, 1319-1324, 1327-1343, 1346-1351, 1360-1367, 1380-1392, 1395-1400, 1404-	1547-1551, 1571-1577, 1615-1619, 1644-1648, 1720-1724, 1776-1780, 1813-1817, 1855-1859 <b>(11.41%)</b>	1259, 1282-1286, 1298-1315, 1327-1351, 1353-1364, 1383-1398, 1404-1441, 1455-1468, 1470-1479, 1485-1557, 1559-1585, 1604-1608, 1610-1624, 1636-1647, 1671-1678, 1720-1727, 1738-1749, 1751-1758, 1770-1786, 1788-1793, 1795-1799, 1807-1820, 1833-1838, 1856-1861, 1888-1900, 1927-1945 <b>(42.5%)</b>	1591-1595, 1614-1619, 1630-1635, 1670-1674, 1683-1688, 1701-1705, 1720-1725, 1741-1756, 1813-1817, 1835-1839, 1854-1859, 1891-1896 <b>(22.51%)</b>	1725, 1741-1746, 1777-1783, 1891-1895, 1933-1938 <b>(14.7%)</b>
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	1437, 1443- 1448, 1453- 1477, 1486- 1499, 1501- 1525, 1529- 1543, 1549- 1556, 1563- 1595, 1603- 1613, 1615- 1623, 1634- 1648, 1668- 1687, 1699- 1706, 1718- 1728, 1738- 1746, 1758- 1773, 1775- 1787, 1791- 1798, 1810- 1819, 1821- 1826, 1828- 1837, 1846- 1852, 1857- 1862, 1880- 1885, 1928- 1941 <b>(51.61%)</b>				
<b>NSP4 (500)</b> (YP_009725300.1)	9-35, 39-44, 48-54, 57-62, 90-105, 109- 114, 120- 137, 147- 152, 154- 161, 166-	16-24, 40-44, 52-56, 117- 121, 128- 133, 257- 261, 288- 293, 297- 301, 336-	1-28, 41-49, 90- 103, 114-122, 124-135, 137- 157, 170-181, 193-201, 203- 217, 236-240, 253-269, 275-	4-9, 11-29, 72- 76, 89-97, 100-104, 118- 127, 190-194, 211-215, 253- 257, 262-271, 290-306, 312-	12-31, 90- 94, 100- 104, 119- 124, 128- 132, 253- 258, 264- 271, 286-

	171, 175-183, 208-218, 231-239, 253-266, 280-299, 311-320, 323-363, 373-389, 393-398, 402-412, 434-439, 444-449, 458-463, 483-488, 491-500 <b>(57.6%)</b>	347, 358-362, 403-412, 419-423, 444-448, 484-491 <b>(18.2%)</b>	306, 309-332, 334-338, 340-370, 375-409, 411-427, 430-436, 438-453, 494-500 <b>(65.8%)</b>	333, 342-354, 358-371, 373-385, 389-396, 398-405, 417-422, 426-430, 434-440, 442-449 <b>(40%)</b>	302, 314-352, 360-385, 387-396, 417-421, 495-500 <b>(31.6%)</b>
<b>NSP5</b> (306) (YP_009725301.1)	13-26, 33-47, 65-86, 89-94, 101-118, 123-128, 141-162, 166-176, 196-215, 223-228, 246-251, 254-262, 280-285, 296-306 <b>(56.2%)</b>	103-107, 139-143, 155-159, 301-306 <b>(6.86%)</b>	15-23, 30-38, 70-78, 80-90, 101-107, 109-121, 135-141, 143-166, 199-218, 221-225, 227-238, 254-269, 281-287, 295-301 <b>(51.3%)</b>	29-44, 56-60, 74-78, 84-89, 102-106, 112-117, 154-165, 200-212, 217-222, 231-235, 260-264 <b>(27.45%)</b>	16-24, 66-71, 112-117, 157-162, 199-212, 232-236, 302-306 <b>(16.6%)</b>
<b>NSP6</b> (290) (YP_009725302.1)	15-31, 48-54, 72-82, 103-108, 113-129, 141-155, 165-	26-30, 35-39, 41-45, 77-84, 90-94, 120-125, 150-154, 165-	10-43, 45-72, 74-86, 88-102, 109-129, 139-156, 161-197,	11-26, 31-45, 47-61, 64-73, 76-86, 88-100, 112-118, 120-127, 138-155,	12-39, 43-59, 66-72, 78-89, 91-95, 115-125, 141-

	226, 241-251, 275-290 <b>(55.8%)</b>	169, 171-181, 199-203, 211-219 <b>(23.79%)</b>	199-250, 269-281, 283-290 <b>(82.41%)</b>	162-170, 180-203, 208-246, 267-271, 273-277 <b>(67.24%)</b>	155, 163-172, 176-185, 187-204, 207-232, 237-245 <b>(57.5%)</b>
<b>NSP7</b> (83) (YP_009725303.1)	6-18, 28-33, 51-63 <b>(38.55%)</b>	14-18 <b>(6%)</b>	8-19, 29-33, 38-42, 50-63 <b>(43.37%)</b>	10-16, 27-31, 37-41, 53-61 <b>(31.32%)</b>	9-17, 30-34, 55-61 <b>(25.3%)</b>
<b>NSP8</b> (198) (YP_009725304.1)	31-36, 44-49, 81-88, 102-107, 114-172, 182-190 <b>(42.92%)</b>	129-133, 182-186 <b>(5%)</b>	5-9, 11-16, 34-38, 86-96, 122-132, 148-158, 184-191 <b>(28.78%)</b>	88-96, 115-122, 127-133, 151-156, 180-188 <b>(19.69%)</b>	58-61, 89-93, 128-132, 147-151, 182-187 <b>(10.6%)</b>
<b>NSP9</b> (113) (YP_009725305.1)	28-33, 61-68, 72-77, 85-90, 101-106 <b>(28.31%)</b>	-	38-46, 64-68, 85-94, 100-110 <b>(30.97%)</b>	29-33, 40-44, 51-55, 86-92 <b>(19.46%)</b>	87-91 <b>(4.42%)</b>
<b>NSP10</b> (139) (YP_009725306.1)	9-18, 337-47, 50-58, 72-81, 98-103, 107-123 <b>(45.32%)</b>	15-19 <b>(3.59%)</b>	10-22, 39-48, 54-58, 70-79, 94-99, 109-127 <b>(45.32%)</b>	14-21, 42-47, 73-81, 117-122 <b>(20.86%)</b>	13-20, 71-78, 116-122 <b>(15.1%)</b>
<b>NSP11</b> (13) (YP_009725312.1)	8-13 <b>(46.1%)</b>	6-10 <b>(38.46%)</b>	6-13 <b>(61.53%)</b>	-	8-13 <b>(46.1%)</b>
<b>NSP12</b> (932) (YP_009725308.1)	6-16, 25-32, 34-39, 41-47, 65-73, 75-81, 85-90, 111-	6-10, 34-38, 77-81, 110-114, 146-150, 203-	9-19, 29-37, 39-53, 67-76, 123-132, 142-150, 173-177, 186-	6-10, 30-37, 46-50, 67-73, 100-106, 120-133, 144-151,	201-205, 239-245, 308-323, 335-345,

116, 142-152, 171-176, 185-193, 198-207, 229-239, 243-249, 313-325, 329-347, 352-357, 359-369, 392-401, 404-411, 421-428, 435-440, 467-480, 490-498, 526-531, 535-540, 554-568, 577-592, 601-609, 632-638, 641-650, 659-664, 670-680, 689-710, 715-720, 762-790, 813-821, 826-831, 842-849, 855-865, 880-888, 925-932	207, 329-333, 337-341, 352-356, 371-375, 491-495, 559-563, 569-573, 585-590, 671-675, 692-697, 775-779, 784-788, 828-832, 843-847, 884-888 <b>(11.48%)</b>	192, 199-207, 218-222, 233-242, 244-250, 265-271, 283-287, 310-321, 329-338, 340-351, 366-377, 396-406, 422-430, 436-440, 464-480, 530-535, 538-547, 557-566, 582-594, 596-606, 628-643, 647-652, 662-676, 689-705, 742-792, 838-847, 855-867, 879-888, 899-905, 919-926, 928-932 <b>(44.52%)</b>	172-176, 184-188, 190-194, 202-206, 214-218, 238-247, 266-275, 281-292, 306-319, 331-336, 346-350, 370-375, 394-400, 405-409, 438-443, 454-460, 467-474, 492-496, 504-508, 513-517, 526-530, 544-548, 628-639, 650-655, 664-668, 725-733, 743-751, 753-758, 763-768, 784-789, 791-795, 826-830, 842-846, 854-862, 879-890, 900-907, 921-926 <b>(33.15%)</b>	395-399, 438-443, 469-474, 559-565, 691-701, 763-768, 784-791, 880-886, 902-906 <b>(10.4%)</b>
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	<b>(44.2%)</b>				
<b>NSP13 (601)</b> (YP_009725308.1)	1-11, 24-50, 55-65, 67-74, 79-101, 106- 111, 120- 126, 144- 159, 179- 185, 187- 199, 205- 214, 216- 233, 235- 240, 245- 252, 262- 267, 289- 294, 300- 310, 330- 362, 366- 376, 382- 387, 394- 401, 421- 429, 447- 457, 474- 486, 491- 501, 508- 515, 520- 526, 528- 538, 541- 551, 560- 578, 587- 592, 596-601 <b>(59%)</b>	41-45, 191- 195, 255- 259, 266- 270, 295- 299, 395- 399, 421- 425, 478- 482, 494- 498, 542-546 <b>(8.31%)</b>	1-11, 24-34, 36- 46, 59-70, 83- 95, 107-111, 133-137, 146- 156, 177-186, 212-216, 219- 233, 243-253, 290-299, 301- 313, 319-323, 327-332, 351- 363, 367-377, 380-384, 394- 401, 420- 433,448-454, 471-484, 495- 501, 507-513, 522-525, 540- 549, 565-578, 585-590 <b>(46.08%)</b>	4-8, 18-33, 62- 66, 69-73, 120-124, 163- 167, 178-187, 223-228, 245- 251, 291-300, 303-308, 353- 359, 370-374, 395-399, 426- 430, 453-457, 470-478, 497- 501, 508-513, 542-547, 559- 565, 571-577 <b>(24.45%)</b>	2-9, 44- 48, 65-69, 222-230, 252-256, 292-299, 305-309, 355-361, 543-547, 571-575 <b>(10.48%)</b>

<p style="text-align: center;"><b>NSP14 (527)</b> (YP_009725309.1)</p>	<p>3-19, 24-33, 35-43, 100- 105, 108- 127, 159- 171, 179- 187, 194- 202, 205- 211, 214- 223, 229- 236, 240- 245, 259- 265, 275- 280, 285- 290, 311- 321, 325- 333, 346- 351, 377- 386, 394- 402, 416- 421, 432- 441, 443- 448, 455- 479, 502-514 <b>(47%)</b></p>	<p>38-42, 114- 118, 160- 164, 194- 201, 232- 236, 380- 384, 417- 421, 459- 463, 491-495 <b>(9.1%)</b></p>	<p>9-13, 15-19, 52- 65, 82-92, 107- 120, 152-157, 159-172, 178- 202, 228-238, 240-246, 271- 296, 298-303, 312-326, 363- 372, 379-389, 400-404, 431- 436, 438-442, 444-449, 461- 466, 468-479, 495-515 <b>(45.73%)</b></p>	<p>50-60, 71-75, 81-89, 147- 155, 159-169, 181-188, 196- 200, 207-211, 225-229, 233- 243, 245-249, 258-262, 274- 282, 284-288, 290-294, 313- 317, 348-352, 365-370, 381- 387, 397-401, 403-407, 443- 447, 491-497, 506-513, 515- 522 <b>(33.20%)</b></p>	<p>114-122, 181-187, 224-230, 233-239, 381-387, 442-447, 503-512 <b>(10.24%)</b></p>
<p style="text-align: center;"><b>NSP15 (346)</b> (YP_09725310.1)</p>	<p>7-14, 22-43, 51-56, 79-88, 94-106, 114- 123, 129- 134, 139- 156, 162- 197, 231- 240, 273- 280, 285-</p>	<p>23-28, 76-80, 82-86, 100- 104, 119- 123, 139- 144, 164- 169, 175- 179, 184- 188, 275- 279, 301-307</p>	<p>1-7, 24-32, 35- 39, 51-56, 68- 77, 79-85, 96- 106, 119-124, 143-147, 163- 174, 180-184, 230-241, 245- 256, 273-280,</p>	<p>55-59, 83-88, 120-124, 132- 136, 211-216, 222- 226, 230- 238, 249-253, 277-281, 292- 301, 326-333, 339-343 <b>(21.38%)</b></p>	<p>82-86, 98- 104, 117- 122, 248- 252, 292- 296, 319- 323, 327- 332 <b>(10.98%)</b></p>

	298, 301-306, 309-331, 336-342 <b>(56.93%)</b>	<b>(17.34%)</b>	289-304, 306-334 <b>(46.24%)</b>		
<b>NSP16</b> (298) (YP_009725311.1)	43-49, 53-58, 66-72, 78-84, 115-122, 124-131, 135-142, 148-158, 162-172, 190-198, 202-210, 225-230, 237-242, 258-263, 270-276, 286-295 <b>(42.28%)</b>	27-31, 48-52, 109-113, 124-129, 204-208, 225-229, 278-282 <b>(12%)</b>	38-61, 63-71, 84-89, 124-131, 149-161, 163-172, 179-197, 203-211, 222-233, 238-250, 252-261, 269-279, 290-294 <b>(50%)</b>	15-23, 48-59, 63-70, 84-90, 124-130, 149-159, 185-195, 204-211, 221-232, 269-274 <b>(30.53%)</b>	66-70, 150-156, 186-196, 206-210, 225-231 <b>(16.1%)</b>

**Supplementary table 4:** Predicted APRs in structural proteins of SARS-CoV.

<b>SARS-CoV Protein (length in amino acids) (UniProt ID)</b>	<b>MetAmyl (% of APRs)</b>	<b>FISH Amyloid (% of APRs)</b>	<b>AGGRESCAN (% of APRs)</b>	<b>FoldAmyloid (% of APRs)</b>	<b>CamSol (Degree of hydrophobicity)</b>
<b>Spike Glycoprotein</b> (1255) (P59594)	61-76, 87-92, 97-107, 111-130, 146-153, 159-173, 191-207, 211-216, 224-229, 231-239, 249-259, 271-276,	3-10, 39-43, 58-62, 112-118, 160-164, 192-201, 252-256, 292-296, 352-357, 393-397, 403-407, 433-437, 500-	1-12, 54-60, 62-68, 83-88, 97-106, 111-129, 137-142, 152-169, 189-201, 224-239, 247-258, 287-291, 310-316, 318-323, 325-334, 336-341, 349-370, 377-	1-10, 52-64, 99-103, 123-128, 150-155, 183-187, 193-198, 232-237, 251-256, 261-265, 314-318, 353-363, 376-381,	1-10, 59-66, 114-118, 158-162, 194-198, 250-256, 355-364, 418-422, 483-488, 494-501, 525-530, 578-584, 595-599, 657-663, 675-680, 697-706, 734-743,

	287-295, 298-311, 313-323, 328-339, 344-374, 377-394, 399-408, 419-424, 428-433, 456-461, 482-503, 509-514, 523-530, 532-540, 573-586, 594-612, 624-633, 637-646, 659-667, 672-679, 685-690, 700-706, 708-725, 738-745, 763-768, 783-788, 804-812, 837-843, 851-865, 888-900, 912-927, 929-934, 940-945, 951-963, 973-980, 985-995, 7011-1019, 1038-1053, 1057-1063, 1074-1087, 1101-1119, 1141-1146, 1153-1163, 1197-1227, 1230-1237, 1245-1255 <b>(52.19%)</b>	504, 516- 520, 523- 530, 536- 540, 545- 549, 577- 585, 595- 599, 765- 769, 804- 808, 896- 900, 935- 939, 983- 987, 1041- 1050, 1075- 1079, 1093- 1097, 1109- 1115, 1157- 1162, 1188- 1192, 1210- 1214 <b>(14.42%)</b>	387, 415-425, 471-476, 478- 492, 494-506, 508-512, 532- 537, 576-585, 592-601, 637- 641, 652-665, 669-685, 690- 696, 698-709, 711-716, 718- 723, 733-741, 743-747, 775- 788, 799-815, 835-843, 846- 852, 854-878, 880-896, 943- 964, 982-995, 1026-1034, 1040-1050, 1073-1084, 1086-1093, 1095-1101, 1106-1119, 1153-1161, 1189-1194, 1196-1231, 1248-1255 <b>(53.46%)</b>	417-424, 438-444, 473-478, 493-503, 525-529, 595-599, 661-667, 675-679, 700-704, 720-725, 733-737, 762-766, 780-786, 801-807, 876-889, 975-981, 987-996, 1029-1033, 1042-1049, 1083-1087, 1090-1094, 1109-1114, 1192-1221 <b>(21.44%)</b>	854-858, 866- 871, 877-881, 986-992, 1041- 1050, 1076- 1086, 1109- 1114, 1193-1224 <b>(16.09%)</b>
<b>Envelope (76) (P59637)</b>	1-6, 9-63 <b>(80.26%)</b>	10-14, 16- 23, 25-29 <b>(23.68%)</b>	1-5, 11-53, 55- 62 <b>(73.6%)</b>	11-51, 56-60 <b>(60.53%)</b>	12-37, 39-50, 54-59 <b>(57.89%)</b>



<b>Membrane</b> (221) (P59596)	4-9, 20-27, 34-39, 42- 53, 59-72, 74-81, 83- 101, 117- 132, 135- 147, 166- 172, 191- 196, 215- 221 <b>(55.2%)</b>	24-28, 43- 48, 68-72, 98-102, 107- 111, 140- 144, 200- 204, <b>(16.28%)</b>	18-37, 42-57, 59-107, 117- 121, 123-130, 134-147, 170- 180, 216-221 <b>(58.37%)</b>	17-38, 43-59, 61-75, 80- 104, 107-111, 117-121, 137-146, 175-179, 196-201, 217-221 <b>(52.04%)</b>	20-37, 45-78, 80-99 <b>(32.57%)</b>
<b>Nucleocapsid</b> (422) (P59595)	13-18, 50- 59, 109- 114, 129- 136, 156- 162, 233- 240, 242- 252, 266- 276, 333- 338, 347- 338, 347- 356, 389- 397 <b>(21.8%)</b>	71-76, 160- 164, 239- 245, 349- 353, 386-390 <b>(6.63%)</b>	50-57, 108- 117, 127-138, 218-227, 311- 323, 328-336, 349-353 <b>(15.87%)</b>	52-56, 86-90, 107-114, 131-135, 220-227, 314-318, 330-334, 351-356 <b>(11.14%)</b>	52-57, 108-114, 131-135, 331- 335 <b>(5.45%)</b>

**Supplementary table 5:** Predicted APRs in accessory proteins of SARS-CoV.

<b>SARS-CoV</b> <b>Proteins (length in</b> <b>amino acids)</b> <b>(UniProt ID)</b>	<b>MetAmyl</b> <b>(% of APRs)</b>	<b>FISH</b> <b>Amyloid</b> <b>(% of</b> <b>APRs)</b>	<b>AGGRESCAN</b> <b>(% of APRs)</b>	<b>FoldAmyloid</b> <b>(% of APRs)</b>	<b>CamSol</b> <b>(% of APRs)</b>
<b>ORF3a</b> (274) (P59632)	7-16, 27-36, 45-67, 76-97, 103-119, 143-152, 161-174, 185-190, 196-213, 216-221, 229-237, 242-248, 250-255, 267-274 <b>(60.58%)</b>	49-55, 77- 81, 86-91, 104-114, 142-146, 214-220, 228-233 <b>(17.15%)</b>	1-16, 31-35, 37-41, 43-67, 69-132, 141- 150, 160-168, 198-216, 227- 236 <b>(59.48%)</b>	1-10, 43-57, 61-65, 69-73, 75-97, 103- 117, 119-132, 139-152, 154-159, 199-213, 229-235 <b>(47.08%)</b>	4-8, 42-57, 76-98, 104- 118, 126- 131, 143- 151, 199- 211, 228-234 <b>(34.30%)</b>
<b>ORF3b</b> (154) (P59633)	3-37, 43-61, 67-76, 79-87, 116-121, 137-148	16-25, 46- 50, 116-121 <b>(13.63%)</b>	4-34, 44-67, 71-88, 93-97, 116-123 <b>(55.84%)</b>	4-8, 12-21, 25-31, 46-52, 61-65, 75-89,	7-30, 46-51, 81-86, 116- 122 <b>(27.92%)</b>

	(59.09%)			112-125, 128-134 (45.45%)	
<b>ORF6</b> (63) (P59634)	4-26, 28-41 (58.73%)	7-11, 14-18, 29-34 (25.39%)	1-39 (61.90%)	1-10, 12-40 (61.90%)	1-19, 24-35 (49.20%)
<b>ORF7a</b> (122) (P59635)	3-17, 23-32, 56-64, 100- 118 (43.44%)	5-11, 17-21, 101-105, 108-113 (18.85%)	1-18, 26-33, 55-67, 101-118 (65.9%)	1-13, 16-22, 63-67, 73-77, 99-117 (40.16%)	1-15, 56-66, 100-115 (34.42%)
<b>ORF7b</b> (44) (Q7TFA1)	5-12, 18-35 (59%)	12-28 (38.63%)	5-33 (65.9%)	5-32 (63.64%)	7-32 (59.09%)
<b>ORF8a</b> (39) (Q7TFA0)	1-25 (61.53%)	2-6 (12.8%)	1-21 (53.8%)	1-22 (54.41%)	2-21 (51.28%)
<b>ORF8b</b> (84) (Q80H93)	2-10, 26-32, 34-49, 73-81 (48.8%)	6-10 (5.95%)	1-9, 17-28, 33- 39, 54-63, 72- 80 (55.95%)	1-9, 18-23, 28-38, 56-64, 73-79 (50%)	17-25, 74-78 (16.66%)
<b>ORF9b</b> (98) (P59636)	4-9, 19-27, 41-48, 72-81, 90-98 (42.8%)	41-46 (6.12%)	12-17, 21-25, 45-50, 52-56, 75-80, 91-98 (36.73%)	21-26, 43-49 (13.27%)	73-79, 93-97 (12.24%)
<b>ORF14</b> (70) (Q7TLC7)	35-44, 49-54, 58-66 (35.71%)	36-44, 48- 52 (20%)	35-41, 44-48, 50-57, 59-64 (37.14%)	35-39, 51-60 (21.43%)	33-40 (11.42%)

**Supplementary table 6:** Predicted APRs in non-structural proteins of SARS-CoV.

<b>SARS-CoV (UniProt ID: P0C6X7) Proteins (length in amino acids)</b>	<b>MetAmyl (% of APRs)</b>	<b>FISH Amyloid (% of APRs)</b>	<b>AGGRESCAN (% of APRs)</b>	<b>FoldAmyloid (% of APRs)</b>	<b>CamSol (% of APRs)</b>
<b>Nsp1</b> (180)	2-31, 50-55, 66-74, 82-90, 100-115 (38.88%)	4-11, 59-66, 105-109 (11.66%)	1-8, 20-31, 52- 58, 68-74, 85- 93, 98-108, 117-121 (32.77%)	2-7, 18-22, 25-29, 68-72, 104-109, 116- 124 (20%)	15-20, 103- 109 (7.22%)
<b>Nsp2</b> (638)	1-6, 29-36, 46-53, 92- 108, 118-123, 149-154, 166-173, 182- 190, 225-239, 279-288, 291-312, 318-332,	38-42, 100- 104, 168- 172, 292- 297, 318- 322, 326- 330, 362- 366, 413- 418, 447- 52, 458-	97-104, 118- 124, 137-141, 182-188, 226- 242, 282-286, 291-324, 358- 371, 384-393, 400-425, 433- 445, 447-461, 464-484, 494-	22-26, 48-52, 58-62, 92-96, 134-139, 150- 158, 227-236, 241-245, 271- 275, 285-289, 294-299, 365- 370, 398-406, 415-420, 431-	227-236, 295-299, 413-424, 468-479, 496-501, 600-608 (8.46%)

	339-344, 348-354, 358-372, 384-394, 404-431, 437-442, 447-452, 454-462, 471-488, 494-506, 509-518, 525-533, 536-541, 557-564, 568-574, 576-581, 593-608 <b>(48.74%)</b>	462, 470- 480, 511- 515, 560- 564, <b>(11.59%)</b>	506, 509-515, 523-534, 572- 576, 593-601, 603-612, 625- 632 <b>(38.7%)</b>	435, 445-452, 466-475, 496- 501, 507-511, 527-531, 536- 540, 548-552, 606-612, 631- 635 <b>(23.2%)</b>	
<b>Nsp3</b> (1922)	1-10, 12-18, 21-28, 39-67, ,83-90, 103- 109, 151-157, 185-191, 197-207, 213-219, 257-263, 273-279, 309-314, 320-337, 342-350, 372-384, 393-405, 444-450, 452-462, 482-488, 508-516, 525-530, 549-561, 569-584, 588-597, 603-616, 628-646, 628-646, 662-667, 681-686, 691-697, 707-712, 724-736, 738-743, 752-757,	5-9, 11-15, 196-205, 319-323, 331-335, 435-439, 455-459, 552-556, 577-581, 588-593, 682-686, 723-727, 762-766, 800-804, 932-927, 941-945, 987-991, 1045-1046, 1083-1087, 1115-1119, 1125-1130, 1149-1153, 1323-1327, 1373-1377, 1410-1414, 1548-1552, 1555-1559, 1592-1596, 1621-1625, 1697-1701, 1787-1791, 1799-1803,	43-47, 52-67, 83-91, 102- 108, 144-148, 193-205, 215- 222, 258-267, 273-279, 302- 306, 308-317, 319-334, 345- 351, 393-397, 408-418, 444- 459, 480-485, 507-514, 526- 534, 549-562, 571-587, 589- 601, 608-613, 631-637, 643- 647, 660-665, 695-699, 713- 717, 719-734, 742-748, 774- 780, 819-825, 833-846, 868- 879, 905-912, 922-934, 937- 944, 958-968, 1022-1032, 1039-1046, 1113-1119, 1129-1134, 1149-1154, 1165-1174, 1229-1235,	23-27, 53-58, 84-92, 101- 107, 200-205, 215-219, 289- 293, 303-307, 323-328, 331- 336, 343-350, 411-416, 443- 447, 455-459, 510-514, 529- 538, 547-559, 578-584, 591- 595, 608-613, 622-626, 670- 674, 683-687, 692-696, 728- 732, 776-780, 791-796, 802- 807, 833-843, 856-861, 868- 876, 892-896, 907-912, 926- 931, 1024- 1028, 1116- 1120, 1127- 1133, 1149- 1153, 1166- 1174, 1232- 1236, 1321- 1326, 1328- 1341, 1384- 1407, 1409-	54-60, 85-89, 215-221, 322-328, 331-336, 510-514, 527-531, 577-583, 605-614, 744-748, 835-842, 869-875, 908-912, 943-947, 1150-1154, 1168-1172, 1326-1341, 1387-1414, 1447-1451, 1465-1472, 1476-1481, 1485-1503, 1505-1516, 1519-1531, 1541-1560, 1566-1570, 1697-1702, 1718-1723, 1831-1835 <b>(12.90%)</b>

	760-766, 775-782, 8181-826, 833-840, 844-850, 868-885, 905-914, 918-927, 938-949, 952-967, 994-1001, 1018-1037, 1044-1051, 1102-1109, 1113-1119, 1124-1131, 1148-1162, 1182-1194, 1220-1237, 1240-1247, 1261-1266, 1279-1291, 1296-1302, 1306-1315, 1319-1345, 1359-1367, 1372-1378, 1383-1389, 1396-1416, 1420-1425, 1432-1438, 1444-1453, 1463-1473, 1475-1482, 1487-1492, 1501-1512, 1514-1519, 1525-1533, 1540-1560, 1562-1572, 1580-1590, 1592-1600, 1614-1625, 1645-1658, 1676-1683, 1695-1705, 1705-1723, 1735-1750, 1752-1765, 1769-1775, 1787-1814,	1897-1871, 1909-1914, <b>(9.26%)</b>	1258-1263, 1273-1292, 1294-1302, 1304-1310, 1323-1328, 1330-1341, 1360-1375, 1381-1418, 1440-1445, 1447-1456, 1462-1534, 1536-1562, 1564-1570, 1581-1585, 1587-1600, 1616-1624, 1648-1655, 1697-1704, 1715-1726, 1728-1735, 1747-1763, 1765-1776, 1783-1797, 1833-1838, 1866-1877, 1904-1922 <b>(41.4%)</b>	1414, 1447- 1452, 1477- 1482, 1484- 1501, 1504- 1532, 1538- 1559, 1568- 1572, 1591- 1596, 1609- 1613, 1647- 1651, 1660- 1665, 1678- 1682, 1697- 1702, 1718- 1733, 1790- 1794, 1811- 1816, 1831- 1836, 1868- 1873, 1897- 1903 <b>(23.99%)</b>	
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	1823-1829, 1834-1839, 1857-1862, 1865-1871, 1897-1902, 1905-1917 <b>(49.58%)</b>				
<b>Nsp4</b> (500)	1-8, 13-36, 53-58, 86- 104, 109-114, 120-137, 147-152, 154-161, 166-171, 208-218, 229-239, 250-278, 280-302, 307-312, 323-367, 372-387, 393-398, 402-412, 444-449, 483-488, 491-500 <b>(56.2%)</b>	22-26, 52- 56, 90-95, 117-121, 128-133, 229-233, 257-261, 264-268, 325-329, 336-347, 349-353, 358-362, 377-385, 406-410, 419-423, 444-448, 484-491 <b>(20.2%)</b>	1-28, 30-35, 90-103, 113- 122, 124-135, 137-159, 170- 181, 193-201, 203-217, 230- 240, 250-269, 275-307, 309- 313, 315-332, 334-338, 340- 370, 375-399, 401-427, 430- 436, 439-453, 494-500 <b>(72.4%)</b>	7-35, 72-76, 92-97, 99- 104, 118-127, 190-194, 211- 215, 253-257, 262-270, 290- 307, 319-333, 342-354, 358- 371, 373-387, 389-405, 417- 422, 426-430, 436-440, 442- 449 <b>(39.2%)</b>	3-8, 14-33, 90-94, 119- 124, 128- 132, 253- 258, 264- 272, 286- 302, 316- 335, 337- 354, 360- 387, 390- 395, 417- 421, 495-500 <b>(31.4%)</b>
<b>Nsp5</b> (306)	13-26, 35-47, 63-82, 89-94, 101-118, 123-128, 141-162, 166-176, 196-215, 223-228, 246-251, 254-262, 280-287, 296-306 <b>(55.55%)</b>	65-69, 103- 107, 139- 143, 155- 159, 301- 306 <b>(8.49%)</b>	15-23, 31-35, 68-78, 80-84, 101-107, 109- 121, 143-166, 199-218, 221- 225, 227-238, 254-269, 281- 287, 295-301 <b>(46.07%)</b>	29-33, 36-44, 56-60, 74-78, 84-89, 102- 106, 112-117, 154-165, 200- 212, 217-222, 231-235, 260- 264 <b>(26.8%)</b>	16-24, 65-71, 112-117, 157-162, 201-212, 232-236, 302-306 <b>(16.33%)</b>
<b>Nsp6</b> (290)	6-11, 19-40, 45-52, 72-82, 113-118, 123-129, 141-155, 164-185, 187-197, 199-226, 241-251, 264-269, 283-290	17-30, 33- 37, 41-45, 77-84, 90- 94, 120- 125, 150- 154, 171- 183, 211- 219, <b>(24.13%)</b>	9-43, 45-72, 74-86, 88-102, 110-129, 139- 156, 161-197, 199-250, 267- 281, 283-290 <b>(83.44%)</b>	11-26, 31-38, 40-45, 47-60, 64-73, 76-86, 88-99, 112- 127, 138-155, 162-170, 180- 203, 208-246, 267-271, 273- 277 <b>(66.56%)</b>	12-29, 31-40, 43-58, 66-73, 77-89, 91-95, 115-125, 141-153, 163-172, 176-204, 207-232, 237-245 <b>(57.93%)</b>

	<b>(55.51%)</b>				
<b>Nsp7</b> (83)	6-18, 28-33, 51-63 <b>(38.55%)</b>	14-18 <b>(6%)</b>	8-19, 29-33, 38-42, 50-63 <b>(43.37%)</b>	10-16, 27-31, 37-41, 53-61 <b>(31.33%)</b>	9-17, 30-34, 55-61 <b>(25.30%)</b>
<b>Nsp8</b> (198)	31-36, 44-49, 81-88, 102- 107, 114-124, 126-135, 145-172, 182-190 <b>(42.42%)</b>	182-186 <b>(3.62%)</b>	5-9, 11-15, 34- 38, 86-96, 122- 132, 148-158, 184-191 <b>(28.2%)</b>	88-96, 115- 122, 127-131, 151-156, 180- 188 <b>(18.69%)</b>	89-93, 128- 133, 147- 151, 182-187 <b>(11.11%)</b>
<b>Nsp9</b> (113)	28-33, 61-68, 72-77, 85-90, 101-106 <b>(28.31%)</b>	-	39-45, 64-68, 85-94, 100-110 <b>(30.08%)</b>	29-33, 40-44, 51-55, 86-92 <b>(19.47%)</b>	87-91 <b>(4.42%)</b>
<b>Nsp10</b> (139)	9-18, 37-47, 50-58, 72-81, 98-103, 107- 123 <b>(45.32%)</b>	15-19 <b>(3.59%)</b>	10-22, 39-48, 54-58, 70-79, 94-99, 113-127 <b>(42.44%)</b>	14-20, 42-47, 73-81, 117- 122 <b>(20.14%)</b>	13-19, 73-78, 116-122 <b>(14.38%)</b>
<b>NSP11</b> (13)	4-13 <b>(76.9%)</b>	6-10 <b>(38.46%)</b>	6-13 <b>(61.53%)</b>	6-10 <b>(38.46%)</b>	8-13 <b>(46.1%)</b>
<b>Nsp12</b> (932)	4-16, 25-32, 34-39, 41-47, 66-73, ,85- 91, 93-98, 111-116, 142-152, 171-176, 185-193, 198-207, 220-239, 243-49, 313- 325, 329-347, 352-357, 359-369, 392-401, 404-411, 421-428, 435-440, 467-480, 490-498, 526-531, 535-540, 554-568, 577-592, 601-609, 632-638, 659-664, 670-680,	34-38, 77- 81, 110- 114, 146- 150, 203- 207, 230- 234, 329- 333, 337- 341, 352- 356, 371- 375, 491- 495, 559- 563, 569- 573, 585- 590, 671- 675, 692- 697, 775- 779, 784- 788, 828- 832, 843- 847, 884- 888 <b>(11.48%)</b>	7-19, 29-37, 39-53, 66-75, 89-93, 97-103, 123-132, 142- 150, 173-177, 187-192, 199- 207, 218-226, 233-242, 244- 250, 265-271, 282-287, 310- 321, 329-338, 340-351, 366- 377, 396-406, 422-430, 436- 440, 464-480, 530-535, 538- 547, 557-566, 582-594, 596- 607, 628-638, 662-676, 689- 705, 742-763, 773-792, 838- 847, 855-867, 879-888, 899- 905, 919-926, 928-932 <b>(44.7%)</b>	6-10, 30-37, 46-50, 67-73, 99-105, 120- 133, 144-151, 172-176, 190- 194, 202-206, 214-218, 238- 247, 266-275, 280-292, 306- 319, 331-336, 346-350, 370- 375, 394-400, 405-409, 438- 443, 454-460, 467-474, 492- 496, 504-508, 513-517, 526- 530, 544-548, 628-639, 650- 655, 664-668, 725-733, 743- 751, 753-758, 783-789, 791- 795, 826-830, 842-846, 854- 862, 879-890, 900-907, 921- 926	239-245, 308-320, 335-345, 395-399, 438-443, 469-474, 560-565, 691-701, 785-791, 880-886, 902-906 <b>(9.01%)</b>

	689-710, 715-720, 742-747, 761-769, 773-780, 782-790, 813-821, 842-849, 855-865, 880-888, 925-932 <b>(44.52%)</b>			<b>(32.19%)</b>	
<b>Nsp13</b> (601)	1-11, 24-50, 55-65, 67-74, 79-101, 106- 111, 120-126, 144-159, 179-185, 187-199, 205-214, 216-233, 235-240, 245-252, 262-267, 289-294, 300-310, 330-336, 346-376, 382-387, 394-401, 421-429, 447-457, 474-486, 491-501, 508-515, 520-526, 528-538, 541-551, 560-568, 570-578, 587-592, 596-601 <b>(58.9%)</b>	41-45, 191- 195, 255- 259, 266- 270, 295- 299, 395- 399, 421- 425, 478- 482, 494- 498, 542- 546 <b>(8.31%)</b>	1-11, 24-34, 36-46, 59-70, 83-95, 107- 111, 133-137, 146-156, 177- 186, 212-216, 219-233, 243- 253, 290-299, 301-313, 319- 323, 327-332, 351-363, 367- 377, 380-384, 394-401, 420- 433, 448-454, 471-484, 495- 501, 507-513, 522-528, 540- 549, 565-578, 585-590 <b>(46.08%)</b>	4-8, 18-33, 62-66, 69-73, 120-124, 163- 167, 178-187, 223-228, 245- 251, 291-300, 303-308, 353- 359, 370-374, 395-399, 426- 430, 453-457, 470-478, 497- 501, 508-513, 542-547, 559- 565, 571-577 <b>(24.46%)</b>	2-9, 44-48, 65-69, 222- 230, 252- 256, 292- 299, 305- 309, 354- 361, 543- 547, 571-575 <b>(10.48%)</b>
<b>Nsp14</b> (527)	3-19, 24-43, 100-105, 108-128, 159-171, 179-187, 194-202, 205-211, 214-224,	38-42, 114- 118, 160- 164, 194- 201, 232- 236, 293- 297, 380- 384, 417- 421, 459-	9-19, 28-38, 52-65, 82-92, 107-120, 152- 157, 159-172, 178-202, 228- 238, 240-246, 271-296, 312- 326, 363-369,	50-60, 71-75, 81-89, 147- 155, 159-169, 181-188, 196- 200, 225-229, 233-243, 245- 249, 274-282, 284-288, 313-	28-32, 114- 122, 181- 187, 226- 230, 233- 239, 380- 387, 442- 447, 503-512 <b>(10.81%)</b>

	228-236, 240-245, 275-280, 285-290, 307-322, 325-333, 346-351, 377-386, 395-402, 416-421, 434-439, 443-448, 455-479, 502-512 <b>(56.9%)</b>	463, 507- 511 <b>(10.05%)</b>	379-389, 396- 404, 444-449, 461-466, 468- 479, 496-515 <b>(44.78%)</b>	317, 348-352, 365-370, 381- 387, 396-401, 403-407, 443- 447, 472-477, 492-497, 506- 513, 515-522 <b>(30.36%)</b>	
<b>Nsp15</b> (346)	5-14, 22-43, 51-56, 79-88, 94-106, 116- 125, 129-134, 139-153, 160-187, 190-197, 231-240, 273-280, 285-298, 301-306, 309-331, 336-342 <b>(56.64%)</b>	23-28, 34- 43, 65-69, 76-80, 82- 86, 95-104, 119-123, 139-144, 164-169, 175-179, 181-186, 275-279, 301-307 <b>(23.41%)</b>	1-7, 24-33, 35- 40, 51-56, 68- 77, 79-85, 96- 106, 116-124, 143-148, 162- 177, 180-184, 216-222, 230- 237, 245-254, 273-280, 289- 304, 306-334 <b>(49.44%)</b>	55-59, 83-88, 120-124, 132- 136, 212-216, 222-226, 230- 238, 249-253, 277-281, 292- 301, 326-333, 339-343 <b>(21.09%)</b>	82-86, 97- 102, 118- 122, 248- 252, 291- 296, 319-323 <b>(9.53%)</b>
<b>Nsp16</b> (298)	34-39, 43-49, 53-58, 66-72, 78-84, 115- 122, 124-131, 148-157, 162-172, 190-198, 2020-208, 225-230, 237-242, 258-263, 270-275, 285-297 <b>(41.27%)</b>	27-31, 48- 52, 109- 113, 124- 129, 204- 208, 225- 229, 278- 282, <b>(9.04%)</b>	38-61, 63-71, 84-89, 124- 131, 149-161, 163-172, 179- 197, 203-211, 225-233, 238- 250, 252-260, 270-279, 290- 294 <b>(48.32%)</b>	15-23, 48-59, 63-70, 84-90, 124-130, 149- 156, 185-195, 226-232, 269- 274 <b>(25.17%)</b>	50-62, 66-70, 150-156, 186-196, 225-231 <b>(14.42%)</b>

**Supplementary table 7:** NetChop 3.1 prediction of 20S proteasome cleavage site in structural proteins of SARS-CoV-2. The red colored residues represent the cleavage site while the underlined and bold residues are APRs predicted by FISH Amyloid server.



Protein Name	Distribution of predicted 20s proteasome cleavage sites	Distribution of cleavage sites in aggregation prone regions (APR)
Spike	<p>1-MFVFLVLLPLVSSQCVNLTTRTQQLPPAYTN-30  31-SFTRGVYYPDKVFRSSVLHSTQDLFLPFFS-60  61-NVTWFHAIHVSGTNGTKRFDNPVLPFNDGV-90  91-YFASTEKSNIIRGWIFGTTLDSTKQSLLIY-120  121-NNATNVVIKVCDFQFCNDPFLGVYYHKNNK-150  151-SWMESEFRVYSSANNCTFEYVSQPFLMDLE-180  181-GKQGNFKNLREFVFNIDGYEKIYSKHTPI-210  211-NLVRDLPQGFSALEPLVDLPIGINITRFQT-240  241-LLALHRSYLTPGDSSSGWTAGAAAYYVGYL-270  271-QPRTFLLKYNENGTITDAVDCALDPLSETK-300  301-CTLKSFVTEKGIYQTSNFRVQPTEIVRFP-330  331-NITNLCPFGEVFNATRFASVYAWNRRKRISN-360  361-CVADYSVLYNSASESTFKCYGVSPTKLNLDL-390  391-CFTNVYADSFVIRGDEVROIAPGQTGKIAD-420  421-YNKLPDDFTGCVIAWNSNNLDSKVGGNYN-450  451-YLRYLFRKSNLKPFERDISTEIQAGSTPC-480  481-NGVEGFNCYFPLQSYGFQPTNGVGYQPYRV-510  511-VVLSFELLHAPATVCGPKKSTNLVKNKCVN-540  541-FNFNGLTGTGVLTESNKKFLPFQFGRDIA-570  571-DTTDAVRDPQTEILDITPCSEGGVSVITP-600  601-GTNTSNQVAVLYQDVNCTEVPVAIHADQLT-630  631-PTWRVYSTGSNVFQTRAGCLIGAEHVNNNSY-660  661-ECDIPIGAGICASYQTQTNPRRARSVASQ-690  691-SIIAYTMSLGAENSVAYSNSIAIPTNFTI-720  721-SVTTEILPVSMTKTSVDCTMYICGDSTEC-750  751-NLLQYGSFCTQLNRALTGIAVEQDKNTQE-780  781-VFAQVKQIYKTPPIKDFGGFNFSQILPDPS-810  811-KPSKRSFIEDLLFNKVTLADAGFIKQYGDC-840  841-LGDIAARDLICAQKFNGLTVLPPLTDEMI-870  871-AQYTSALLAGTITSGWTFGAGAALQIPFAM-900  901-QMAYRFNGIGVTQNVLYENQKLIANQFNSA-930  931-IGKIQDSLSTASALGKLQDVVNQNAQALN-960  961-TLVKQLSSNFGAISSVLNDILSRDKVEAE-990  991-VQIDRLITGRLOSLOQTYVTQQLIRAAEIRAS-1020  1021-ANLAATKMSECVLGQSKRVDFCGKGYHLM-1050  1051-FPQSA PHGVVFLHVTYVPAQEKNF T TAPAI-1080  1081-CHDGKAHFPREGVVFVSNGTHWFVTQRNFYE-1110  1111-PQIITTDNTFVSGNCDVVIGIVNNTVYDPL-1140  1141-QPELDSFKEELDKYFKNHTSPDVDLGDIG-1170  1171-INASVVNIQKEIDRLNEVAKNLNESLIDLQ-1200  1201-ELGKYEQYIKWPWYIWLGFIAGLIAIVMVT-1230  1231-IMLCCMTSCCCLKGCCSCGSCCKFDEDD-1260  1261-EPVLKGVKLLHYT-1273</p>	<p>Total sites: 196 (15%)  Sites within APR: 34 (17.34%)  Sites outside APR: 162 (82.65%)</p>
Envelope	<p>1-MYSFVSEETGLIVNSVLLFLAFVVFLLVT-30  31-LAILTALRLCA YCCNIVN VSLVKP S F Y V Y S-60</p>	<p>Total sites: 17 (22%)</p>

	61-RVKNLNSSRVPDLLV-75	Sites within APR: 6 (35.30%) Sites outside APR: 11 (64.70%)
<b>Membrane</b>	1-MADSNGTITVEELKKLLEQWNLVIGFLFLT-30 31-WICLLQFAYANRN <u>RFLYIIKLIFLWLL</u> WPV-60 61-TLACFVLA <u>AVYRI</u> NWITGGIAIAMACLVGL-90 91-MWLSYFIAS <u>FRLE</u> FARTRSMWSENPETNILL-120 121- <u>NVPL</u> HGTILTRPLLESELVIGAVILRGHLR-150 151- <u>IAGHHLGR</u> CDIKDLPKEITVATSR <u>TL</u> SYK-180 181-LGASQRVAGDSGFAA <u>YSRYRIGN</u> YKLN <u>TDH</u> -210 211-SSSSDN <u>IALLVQ</u> -222	Total sites: 58 (26%) Sites within APR: 16 (27.59%) Sites outside APR: 42 (72.41%)
<b>Nucleocapsid</b>	1-MSDNGPQNQRNAPRITFGGPSDSTGSNQNG-30 31-ERSGARSKQRRPQGLPNNTASWFTALTQH-60 61-KEDLKFRGQGVPIINTNSSPDDQIGYYRRA-90 91-TRRIRGGDGKMKDLSRWYFYLLGTGPEAG-120 121-LPYGANKDGIWVATEGALNTPKDHIGTRN-150 151-PANNAAIV <u>LQLPQ</u> GTTLPKGFYAEGSRGGS-180 181-QASSRSSSRNSSRNSTPGSSRGTSARM-210 211-AGNGGDAALALLLLDRLNQLESKMSGK <u>GQQ</u> -240 241- <u>QOGQ</u> TVTKKSAEASKKPRQKRTATKAYNV-270 271-TQAFGRRGPEQTQGNFGDQELIRQGTDYKH-300 301-WPQIAQFAPSASAFFGMSRIGMEVTPSGTW-330 331-LTYTGAIKLDDKDPNFK <u>DOVIL</u> LNKHIDAY-360 361-KTFPTEPKKDKKKKADETQALPQ <u>ROKKQ</u> -390 391-TVTLPAADLDDFS <u>KQLQQ</u> SMSSADSTQA-419	Total sites: 39 (9.30%) Sites within APR: 4 (10.25%) Sites outside APR: 35 (89.74%)

**Supplementary table 8:** NetChop 3.1 prediction of 20S proteasome cleavage site in accessory proteins of SARS-CoV-2. The red colored residues represent the cleavage site while the underlined and bold residues are APRs predicted by FISH Amyloid server.

Protein Name	Distribution of predicted 20s proteasome cleavage sites	Distribution of cleavage sites in aggregation prone regions (APR)
<b>ORF3A</b>	1-MDLFMRIFTIGTVTLKQGEIKDATPSDFVR-30 31-ATATIPIQASLPFGWLVIGVALLAVFQSAS-60 61-KIITLKKRWQLALSKGVHFVCNLLL <u>LFVT</u> V-90 91-YSHLLLVAAGLEAPFLYLYALVYFLOSINF-120 121- <u>VRIMRL</u> WLCWKCRSKNPLLYDANYFLCWH-150 151-TNCYDYCIPYNSVTSSIVITSGDGTTPIS-180 181-EHDYQIGGYTEKWESEGVKDCVVLHSYFTSD-210 211-Y <u>QLY</u> STQLSTDTGVEHVTFIYNKIVDEP-240 241-EEHVQIHTIDGSSGVNPNVMEPIYDEPTTT-270 271-TSVPL-275	Total sites: 50 (18.18%) Sites within APR: 17 (34.0%) Sites outside APR: 33 (66.0%)
<b>ORF3B</b>	1-MMPTIFAGILIVTTIVYLTIV-22	Total sites: 6 (27.2%)

		Sites within APR: 2 (33.33%) Sites outside APR: 4 (66.66%)
<b>ORF6</b>	1-MFHLVDFQVTIAE <u>ILLI</u> MRTFKVSIWNLD-30 31- <u>YIINLI</u> KNLSKSLTENKYSQLDEEQPMEI-60 61-D	Total sites: 10 (16.39%) Sites within APR: 6 (60.0%) Sites outside APR: 4 (40%)
<b>ORF7A</b>	1-MKI <u>LFLAL</u> ITLATCE <u>LYHYQ</u> ECVRGTTVL-30 31-LKEPCSSGTYEENSPFHPLADNKFALTCFS-60 61-TQFAFACPDGVKHVYQLRARSVSPKLFIRQ-90 91-EEVQELYSP <u>IFLIVA</u> IVFITLCFTLKRKT-120 121-E	Total sites: 20 (16.52%) Sites within APR: 9 (45.0%) Sites outside APR: 11 (55.0%)
<b>ORF7B</b>	1-MIELSLIDFYLC <u>FLAFL</u> FLVLI <u>MLIIF</u> WF-30 31-SLELQDHNETCHA-43	Total sites: 19 (44.18%) Sites within APR: 12 (63.16%) Sites outside APR: 7 (36.84%)
<b>ORF8</b>	1-MKFLVFLGIITTVAAFHQECSLQSQCTQHQP-30 31-YVVDDPCPIHFYSKWYIRVGARKSAPLIEL-60 61-CVDEAGSKSPIQYIDIGNYTVSCLPFTINC-90 91-QEPKLGSLVVRCSFYED <u>FLEY</u> HDVRVVLDF-120 121-I	Total sites: 19 (15.70%) Sites within APR: 5 (26.31%) Sites outside APR: 14 (73.68%)
<b>ORF9B</b>	1-MDPKISEMHPALRLVDPQIQLA VTRMENA V-30 31-GRDQNNVGP <u>KVYPII</u> LRLGSPSLNMARKT-60 61-LNSLEDKAFQLTPIAVQMTKLATTEELPDE-90 91-FVVVTVK-97	Total sites: 12 (12.37%) Sites within APR: 1 (8.33%) Sites outside APR: 11 (91.66%)
<b>ORF10</b>	1-MGYINVFAFPFTIYSLLLCRMNSRNYIAQV-30 31- <u>DVVN</u> FNLT-38	Total sites: 9 (23.68%) Sites within APR: 2 (22.22%) Sites outside APR: 7 (77.77%)
<b>ORF14</b>	1-MLQSCYNFLKEQHQCQKASTQKGAEAAVKPL-30 31-LVPHHVVA <u>TVQEI</u> QLQA AVGELLLLEWLAM-60 61-AVMLLLLCCCLTD-73	Total sites: 13 (17.80%) Sites within APR: 1 (7.69%) Sites outside APR: 12 (92.31%)

**Supplementary table 9:** NetChop 3.1 prediction of 20S proteasome cleavage site in non-structural proteins of SARS-CoV-2. The red colored residues represent the cleavage site while the underlined and bold residues are APRs predicted by FISH Amyloid server.

Protein Name	Distribution of predicted 20s proteasome cleavage sites	Distribution of cleavage sites in aggregation prone regions (APR)
<b>NSP1</b>	1-MESLVPGFNEKTHVQLSLPVLQVRDVLVRG-30 31-FGDSVEEVLSEARQHLLKDGTCGLVEVEKGV-60	Total sites: 19 (10.5%)

	<p>61-LPOLEQPYVFIK<u>R</u>SDARTAPHGHVMVELVA-90  91-ELEGIOYGR<u>S</u>GETLGVLVPHVGEIPVAYRK-120  121-VLLRKNGNKGAGGHSYGADLKSFDLGDELG-150  151-TDPYEDFQENWNTKHSSGVTR<u>ELM</u>RELNGG-180</p>	<p>Sites within APR: 1  (5.26%)  Sites outside APR: 18  (94.74%)</p>
<p>NSP2</p>	<p>1-AYTRYVDNNFCGPDGYPLECIKDLLA<u>R</u>AGK-30  31-ASCTLSEQLD<u>F</u>IDTKRGVYCCREHEHEIAW-60  61-YTERSEKSYELQTPFEIKLAKK<u>F</u>DTFN<u>G</u>EC-90  91-PNFV<u>F</u>PLNSIIKTIQPRVEKKKLD<u>G</u>FMGRI-120  121-RSVYPVASPNECNQM<u>C</u>LSTLMKCDHCGETS-150  151-WQTGDFVKATCEFCGTENLTKEGATTCGYL-180  181-PQNA<u>V</u>VKIYCPACHNSEVGPEHSLAEYHNE-210  211-SGLKTILRKGGRTIAFGGCVFSYV<u>G</u>CHNKC-240  241-AYWVPRASANIGCNHT<u>G</u>VVGE<u>G</u>SEGLNDNL-270  271-LEILQKEKVNINIVGDFKLN<u>E</u>IAIILASF-300  301-SASTSAFVETV<u>K</u>GLDYKAFKQIV<u>E</u>SCGNFK-330  331-VTKGKAKKGAWNIGE<u>Q</u>SILSPLYAFASEA-360  361-AR<u>V</u>RSI<u>F</u>SR<u>T</u>LETAQNSVRVLQKAAITIL-390  391-DGISQYSLRLIDAM<u>M</u>FTSDLATNNLV<u>V</u>MAY-420  421-ITGGV<u>V</u>Q<u>L</u>TSQWLT<u>N</u>IEGTVYEKLKPVLDW-450  451-LEEK<u>F</u>KE<u>G</u>VE<u>F</u>LRDGWEI<u>V</u>K<u>F</u>ISTCACEIV-480  481-GGQIVTCAKEIKES<u>V</u>OT<u>F</u>FKLVNKFLALCA-510  511-DSIIIGGAKLKALNLGET<u>F</u>VTHSKGLYRK-540  541-VKSRE<u>T</u>GLLMPLKAPKEI<u>I</u>LE<u>G</u>ETLPTE-570  571-VLTEE<u>V</u>LKTGDLQPLEQ<u>P</u>TS<u>E</u>AVEAPLVG-600  601-TPVC<u>I</u>NGLM<u>L</u>LEIKDTEKYCALAPNMM<u>V</u>TN-630  631-NT<u>F</u>TLKGG-638</p>	<p>Total sites: 76  (11.91%)  Sites within APR: 7  (9.21%)  Sites outside APR: 69  (90.79%)</p>
<p>NSP3</p>	<p>1-APTK<u>V</u>TFGDDT<u>V</u>IEVQGYKS<u>V</u>NITFELDER-30  31-IDKVL<u>N</u>EKCSAYT<u>V</u>ELGTEVNEFACVVADA-60  61-VIKTLQPV<u>S</u>ELLTPLGIDLDEWS<u>M</u>ATY<u>L</u>F-90  91-DESGEFL<u>A</u>SHMY<u>C</u>SFYPPDEDEEEGDCEE-120  121-EEFEPSTQY<u>E</u>YGTEDDYQGKPLEFGATSAA-150  151-LQPEEQEEDWLD<u>D</u>DSQQT<u>V</u>GQDGS<u>E</u>DNQ-180  181-TTTI<u>Q</u>TIVEVQP<u>L</u>EMELTP<u>V</u>Q<u>T</u>IEVNS<u>F</u>-210  211-<u>S</u>G<u>Y</u>L<u>K</u>L<u>T</u><u>D</u>N<u>V</u><u>I</u>I<u>K</u>N<u>A</u>DIV<u>E</u>EAKKVKPTV<u>V</u>-240  241-<u>N</u>A<u>A</u>N<u>V</u><u>Y</u>L<u>K</u>H<u>G</u>G<u>V</u>A<u>G</u>ALNKATNNAMQVESD-270  271-DYI<u>A</u>TNGPLKVGGSCVLSGHNLAKHCLHVV-300  301-GPNVNKGEDIQLLKSAY<u>E</u>NFNQHEVLL<u>A</u>PL-330  331-LSAGIFGADPIHSLRVC<u>V</u>DTV<u>R</u>TNVY<u>L</u>AVF-360  361-<u>D</u>KNLY<u>D</u>KL<u>V</u>SS<u>F</u>LEM<u>K</u>SE<u>K</u>OVE<u>Q</u>KIAEIPK-390  391-EEVKPFITESKPSVEQRKQDDKKIKACVEE-420  421-VTTTLEETKFL<u>T</u>EN<u>L</u>LLY<u>I</u>DINGNLHP<u>D</u>SA-450  451-<u>T</u>L<u>V</u>SD<u>I</u>DITFLK<u>K</u>DAPY<u>V</u>GDV<u>V</u>QEG<u>V</u>L<u>T</u>A-480  481-VVIPTKKAGGTTEMLAKALRKVP<u>T</u>D<u>N</u>Y<u>I</u>TT-510  511-<u>Y</u>PGQ<u>L</u>NGYTV<u>E</u>EAKTVLKKCK<u>S</u>AF<u>Y</u>ILPS-540  541-IISNEKQEILGT<u>V</u>SWNL<u>R</u>EMLAHA<u>E</u>TR<u>K</u>L-570  571-MPVC<u>V</u>ETKA<u>I</u>V<u>S</u>T<u>I</u>Q<u>R</u>K<u>Y</u>KGIK<u>I</u>QEG<u>V</u><u>V</u><u>D</u><u>Y</u>-600  601-GAR<u>F</u>Y<u>F</u>YTSKTT<u>V</u>ASLINTL<u>N</u>DLNETLV<u>T</u>M-630</p>	<p>Total sites: 293  (15.05%)  Sites within APR: 51  (17.40%)  Sites outside APR: 242  (82.60%)</p>

631-PLGYVTHGLNLEEAARYMRS LKVPATVSVS-660  
661-SPDAVTAYNGYLTSSSKTPEEHFIETISLA-690  
691-GSYKDWSYSGQSTQLGIEFLKRGDKSVYYT-720  
721-SNPTTFHLDGEVITFDNLKTL LSLREVRTI-750  
751-KVFTTVDNINLHTQVV DMSMTYGQQFGPTY-780  
781-LDGADVTKIKPHNSHEGKTFYVLPNDDTLR-810  
811-VEAFEYYHTTDP SFLGRYMSALNHTKKWKY-840  
841-PQVNGLT SIKWADNNCYLATALTLQQIEL-870  
871-KFNPPALQDAYYRARAGEAANFCALILAYC-900  
901-NKTVGELGDVRETMSYLFQHANLDSCKRVL-930  
931-NVVCKTCGQQQTTLKGVEAVMYMGTLSYEQ-  
960  
961-FKKGVQIPCTCGKQATKYL VQQESPFVMM S-990  
991-APPAQYELKHGTFTCA SEYTGNYQCGHYKH-  
1020  
1021-ITSKETLYCIDGALLTKSSEYKGPITDV FY-1050  
1051-KENSYTTTIKPVTYKLDGVVCTEIDPKLDN-  
1080  
1081-YYK KDNSYFTEQPIDLVPNQYPNA SFDNF-  
1110  
1111-KFVCDNIK FADDLNQLTG YKKPASRELKVT-  
1140  
1141-FFPDLNGDVVAIDYKHYTPSFKKGAKLLHK-  
1170  
1171-PIVWHVNNATNKATYKPNTWCIRCLWSTKP-  
1200  
1201-VETSNSFDVLKSEDAQGM DN LACEDLK PVS-  
1230  
1231-EEVVENPTIQKDVLECNVKTTEVVGD IIL-1260  
1261-KPANNSLKITEEVGHTDLM AAYVDNSSLTI-  
1290  
1291-KKPNELSRVLGLKTLATHGLAAVNSVPWDT-  
1320  
1321-IANYAKPFLNKVVS TTTNIVTRCLNRVCTN-  
1350  
1351-YMPYFFLLLQLCTFTRSTNSRIKASMP TT-1380  
1381-IAKNTVKSVGKFCLEASFNYLKS PNFSKLI-1410  
1411-NIIWFLLLSVCLGSLIYSTAA LGVLM SNL-1440  
1441-GMP SYCTGYREGYLNSTNVTIATYCTGSIP-1470  
1471-CSVCLSGLDSDTYP SLETIQITISSFKWD1500  
1501-LTAFGLVAEWFLAYILFTRFFYV LGLAAIM-  
1530  
1531-QLFFSYFAVHFISNSWLMWLIINLVQMAPI-  
1560  
1561-SAMVRMYIFFASFYYVWKS YVHVVDGCNSS-  
1590  
1591-TCMMC YKRN RATRVECTTIVNGVR RSFYVY-  
1620  
1621-ANGGKGFCCLKHNWNCVNC DTFCAGSTFISD-  
1650  
1651-EVARDLSLQFKRPINPTDQSSYIVDSVTVK-1680

	<p>1681-NGSIHL YFDKAGQKTYERHLSHFVNLDNL-1710  1711-RANNTKGS L <u>PINVI</u> VFDGKSKCEESSAKSA-1740  1741-SVYYSQLMCQPILLDQALVSDVGDSAEVA-1770  1771-VKM <u>FDAYVNT</u> FSSSTFNVPMEK L KTLVATAE-1800  1801-AELAKN <u>VSLDNV</u> <u>LSTFI</u> SAARQGFV DSDVE-1830  1831-TKD VVECL <u>LKLSHQ</u> SDIEVTGDSCN <u>NYMLTY</u> -1860  1861-NKVENMTPRDLGACIDCS ARHINAQVAKSH-1890  1891-NIALIWN <u>VKDFMS</u> LSEQLRKQIRSAAKKNN-1920  1921-LPFK <u>LTCAT</u> TRQ <u>VVNV</u> VTTKIALKGG-1946</p>	
<p align="center"><b>NSP4</b></p>	<p>1-KIVNNWLKQLIK <u>VTLVFLF</u> <u>VAAIF</u> FYLITPV-30  31-HVMSKHTDF <u>SSEII</u> GYKAIDG <u>GVTRDI</u> AST-60  61-DTC <u>FANKHAD</u> FDTWFS <u>QRGGS</u> YTNDAKACPL-90  91-IAAVIT <u>RE</u> VGFV <u>VPGLPG</u> TIL <u>RRTNG</u> <u>GDFLH</u> -120  121-<u>FLPRV</u> <u>FSAVGNIC</u> YTPSKLIE YTD FATSAC-150  151-VLAAECTIFKDASGKPVYCY <u>YD</u> TNVLEGSV-180  181-A <u>YESLR</u> PDTRY <u>V</u> LMDGSIIQFPNTYLEGSV-210  211-RV <u>VTTFD</u> SEY <u>CRHGT</u> CERSEAGVC <u>V</u> STSGR-240  241-WV <u>LNN</u> DYYRSL <u>PGVFC</u> <u>GVD</u> AVN <u>LL</u> TNMFTP-270  271-LIQPIGALDISASIVAG <u>GIVAIV</u> VTCL <u>LAYY</u> -300  301-<u>FM</u> <u>FRRA</u> FGEYSHV <u>VAFNTLL</u> FLMSFTVLC-330  331-LTPV <u>YSFL</u> <u>PGVYS</u> <u>VIYLYL</u> TFYLTND <u>V</u> SFL-360  361-<u>AHIQ</u> <u>WVM</u> FTPLVPFWITIA <u>YIIC</u> ISTKHF-390  391-<u>YWF</u> FS <u>NYL</u> <u>KRRV</u> <u>V</u> <u>FNG</u> <u>V</u> <u>S</u> <u>F</u> <u>S</u> <u>T</u> <u>F</u> <u>E</u> <u>E</u> <u>A</u> <u>A</u> <u>L</u> <u>C</u> <u>T</u> <u>F</u> -420  421-<u>LLN</u> <u>KEM</u> YL <u>K</u> <u>L</u> <u>R</u> <u>S</u> <u>D</u> <u>V</u> <u>L</u> <u>L</u> <u>P</u> <u>L</u> <u>T</u> <u>Q</u> <u>Y</u> <u>N</u> <u>R</u> <u>Y</u> <u>L</u> <u>A</u> <u>L</u> <u>Y</u> <u>N</u> <u>K</u> -450  451-<u>YKY</u> FSGAMDTTSYRE <u>AAC</u> CHLAKALNDFSN-480  481-SG <u>SDVLY</u> <u>QPPQ</u> TSITS AVLQ-500</p>	<p align="center">Total sites: 109  (21.8%)  Sites within APR: 20  (18.34%)  Sites outside APR: 89  (81.66%)</p>
<p align="center"><b>NSP5</b></p>	<p>1-SGFRK <u>MA</u> FSGKVEGCMVQ <u>V</u> TCGTTTL <u>NGL</u> -30  31-WLDDV <u>VY</u> CPRHVICTSEDMLNPNY <u>ED</u> LLIR-60  61-KSN <u>HN</u> FLV <u>QA</u> GNVQLRVIGH <u>S</u> MQNCVLK <u>LK</u> -90  91-VDTANPKTPK <u>YKF</u> <u>VRIQ</u> PGQT <u>F</u> SVLACYNG-120  121-SPSGVYQ <u>CAM</u> <u>RPN</u> FTIK <u>G</u> <u>S</u> <u>FL</u> <u>NG</u> SCGSVGF-150  151-NIDY <u>DC</u> <u>V</u> <u>S</u> <u>F</u> <u>C</u> <u>M</u> <u>H</u> <u>H</u> <u>M</u> <u>E</u> <u>L</u> <u>P</u> <u>T</u> <u>G</u> <u>V</u> <u>H</u> <u>A</u> <u>G</u> <u>T</u> <u>D</u> <u>L</u> <u>E</u> <u>G</u> <u>N</u> -180  181-FYGP <u>FV</u> DRQTAQAAGTDTTIT <u>V</u> NV <u>LAW</u> LYA-210  211-AVING <u>DR</u> WFL <u>NR</u> FTTL <u>N</u> DFNLVAMKY <u>NYE</u> -240  241-PLT <u>Q</u> <u>D</u> <u>H</u> <u>V</u> <u>D</u> <u>I</u> <u>L</u> <u>G</u> <u>P</u> <u>L</u> <u>S</u> <u>A</u> <u>Q</u> <u>T</u> <u>G</u> <u>I</u> <u>A</u> <u>V</u> <u>L</u> <u>D</u> <u>M</u> <u>C</u> <u>A</u> <u>S</u> <u>L</u> <u>K</u> <u>E</u> -270  271-LLQNGMNGR <u>TIL</u> GSALLE <u>D</u> EFTPF <u>D</u> <u>V</u> <u>R</u> <u>Q</u> <u>C</u> -300  301-<u>SG</u> <u>V</u> <u>T</u> <u>F</u> <u>Q</u> -306</p>	<p align="center">Total sites: 45  (14.70%)  Sites within APR: 4  (8.88%)  Sites outside APR: 41  (91.12%)</p>
<p align="center"><b>NSP6</b></p>	<p>1-SAVK <u>R</u> <u>T</u> <u>I</u> <u>K</u> <u>G</u> <u>T</u> <u>H</u> <u>H</u> <u>W</u> <u>L</u> <u>L</u> <u>T</u> <u>I</u> <u>L</u> <u>T</u> <u>S</u> <u>L</u> <u>L</u> <u>V</u> <u>L</u> <u>V</u> <u>O</u> <u>S</u> <u>T</u> <u>Q</u> -30  31-<u>W</u> <u>S</u> <u>L</u> <u>F</u> <u>F</u> <u>F</u> <u>L</u> <u>Y</u> <u>E</u> <u>N</u> <u>A</u> <u>F</u> <u>L</u> <u>P</u> <u>F</u> <u>A</u> <u>M</u> <u>G</u> <u>I</u> <u>A</u> <u>M</u> <u>S</u> <u>A</u> <u>F</u> <u>A</u> <u>M</u> <u>M</u> <u>F</u> <u>V</u> -60  61-KHKHAF <u>L</u> <u>C</u> <u>L</u> <u>F</u> <u>L</u> <u>P</u> <u>S</u> <u>L</u> <u>A</u> <u>T</u> <u>V</u> <u>A</u> <u>Y</u> <u>F</u> <u>N</u> <u>M</u> <u>V</u> <u>Y</u> <u>M</u> <u>P</u> <u>A</u> <u>S</u> <u>W</u> -90  91-<u>V</u> <u>M</u> <u>R</u> <u>I</u> <u>M</u> <u>T</u> <u>W</u> <u>L</u> <u>D</u> <u>M</u> <u>V</u> <u>D</u> <u>T</u> <u>S</u> <u>L</u> <u>S</u> <u>G</u> <u>F</u> <u>L</u> <u>K</u> <u>D</u> <u>C</u> <u>V</u> <u>M</u> <u>Y</u> <u>A</u> <u>S</u> <u>A</u> <u>V</u> -120</p>	<p align="center">Total sites: 92  (31.72%)  Sites within APR: 30  (32.60%)  Sites outside APR: 62  (67.40%)</p>

	<p>121-<b>VLLIL</b>MTARTVYDDGARRVWTLMNVLTL<b>VY</b>-150</p> <p>151-<b>KVYY</b>GNALDQAISM<b>WAL</b>IISVTSN<b>YSGVVT</b>-180</p> <p>181-<b>TVMFL</b>ARGIV<b>FM</b>CV<b>EYCP</b>I<b>FFIT</b>GN<b>TLQ</b>CI-210</p> <p>211-<b>MLVYCFLGY</b>FCT<b>CY</b>GL<b>FCLLN</b>RY<b>FRL</b>TLG-240</p> <p>241-<b>VYDYL</b>VSTQ<b>EFR</b>YMNSQGLLPPKNSIDAFK-270</p> <p>271-L<b>NIKLL</b>GVGGKPCIKVATVQ-290</p>	
<b>NSP7</b>	<p>1-SKMSDVKCTSVVL<b>LSVLQQL</b>RV<b>ESS</b>SKL<b>WA</b>-30</p> <p>31-QCV<b>QL</b>HNDILL<b>AK</b>DTTEAF<b>EK</b>M<b>V</b>SLLSV<b>LL</b>-60</p> <p>61-SMQGAVDINKL<b>CE</b>EMLDN<b>R</b>ATLQ-83</p>	<p>Total sites: 9 (10.84%)</p> <p>Sites within APR: 1 (11.11%)</p> <p>Sites outside APR: 8 (88.89%)</p>
<b>NSP8</b>	<p>1-AIASEFSSLPSY<b>AA</b>FATA<b>QEA</b>YEQAVANGD-30</p> <p>31-SEVVLK<b>KLK</b>SLN<b>VAK</b>SEFDRDAAM<b>QR</b>KLE-60</p> <p>61-KMADQAM<b>TQ</b>MY<b>KQ</b>AR<b>SE</b>DKRAK<b>VTS</b>AM<b>QTM</b>-90</p> <p>91-L<b>FTML</b>R<b>KL</b>DNDALNNI<b>IN</b>AR<b>DGC</b>VPLN<b>II</b>-120</p> <p>121-PLTTAA<b>KL</b>M<b>VV</b>IPD<b>YNT</b>Y<b>KNT</b>CDGTT<b>FTYA</b>-150</p> <p>151-SALWEIQ<b>VV</b>D<b>AD</b>SKIV<b>QL</b>SEISMDNS<b>PNL</b>-180</p> <p>181-A<b>WPLIV</b>TAL<b>R</b>ANSA<b>VKL</b>Q-198</p>	<p>Total sites: 20 (10.10%)</p> <p>Sites within APR: 2 (10.0%)</p> <p>Sites outside APR: 18 (90.0%)</p>
<b>NSP9</b>	<p>1-NNELSPVAL<b>RQ</b>MS<b>CA</b>AGTTQTACTDDN<b>ALA</b>-30</p> <p>31-<b>YY</b>NTTKGGRFV<b>LAL</b>LSDLQDL<b>KWA</b>RF<b>PKSD</b>-60</p> <p>61-GTGT<b>IY</b>TELEPPCR<b>FV</b>TDTPKGPK<b>VKYL</b>YF-90</p> <p>91-<b>IKGL</b>NNLN<b>RGM</b>VLGSLAATV<b>R</b>LQ-113</p>	<p>Total sites: 16 (14.15%)</p> <p>Sites within APR: 0 (0.0%)</p> <p>Sites outside APR: 16 (100%)</p>
<b>NSP10</b>	<p>1-AGNATEVPANSTV<b>LSFCA</b>F<b>AV</b>DA<b>AKA</b>Y<b>KDY</b>-30</p> <p>31-LASGGQPITNC<b>VKML</b>CTHTGTG<b>QAI</b>TV<b>PE</b>-60</p> <p>61-ANMD<b>QES</b>FGGAS<b>CLY</b>CR<b>CH</b>IDHPN<b>PKGFC</b>-90</p> <p>91-DLKGKY<b>VQ</b>IP<b>TC</b>ANDPV<b>GFTL</b>KNTV<b>CTVC</b>-120</p> <p>121-<b>GMW</b>K<b>GY</b>GCSCD<b>QL</b>REP<b>MLQ</b>-139</p>	<p>Total sites: 17 (12.23%)</p> <p>Sites within APR: 2 (11.76%)</p> <p>Sites outside APR: 15 (88.24%)</p>
<b>NSP11</b>	<p>1-SADA<b>QSFL</b>NGFAV-13</p>	<p>Total sites: 2 (15.38%)</p> <p>Sites within APR: 1 (50%)</p> <p>Sites outside APR: 1 (50%)</p>
<b>NSP12</b>	<p>1-SADA<b>QSFLNR</b>VCGV<b>SAA</b>RLTPCGTGTSTDV-30</p> <p>31-<b>VYRA</b>F<b>DIY</b>NDKVAG<b>FA</b>K<b>FL</b>KT<b>NCC</b>RF<b>QEKD</b>-60</p> <p>61-EDDN<b>LID</b>SY<b>FVVKRH</b>T<b>S</b>NY<b>QHE</b>TIY<b>NLL</b>-90</p> <p>91-KDCPAV<b>AK</b>HDF<b>FKFR</b>IDG<b>DMVPH</b>ISRQ<b>RLT</b>-120</p> <p>121-KYT<b>MAD</b>L<b>VYAL</b>R<b>H</b>FDEGN<b>CD</b>TLKE<b>ILVTYN</b>-150</p> <p>151-<b>CCDD</b>DF<b>NK</b>KDWYDFVEN<b>PDIL</b>R<b>VYAN</b>L<b>GE</b>-180</p> <p>181-RVR<b>Q</b>ALL<b>KT</b>V<b>Q</b>FC<b>DAM</b>R<b>NAGIVGVLT</b>LD<b>NQ</b>-210</p> <p>211-DLNGNWYDFGDFIQTT<b>PG</b>SGVP<b>VVDSY</b>Y<b>SL</b>-240</p> <p>241-L<b>MPIL</b>T<b>L</b>RAL<b>TA</b>ESH<b>V</b>DTDLTK<b>PYIK</b>W<b>DL</b>-270</p> <p>271-<b>LK</b>YDFTEER<b>LKL</b>F<b>DRY</b>FK<b>YWD</b>Q<b>TY</b>HP<b>NCVN</b>-300</p> <p>301-CLDDRCIL<b>HCA</b>N<b>FNV</b>L<b>F</b>ST<b>VFP</b>P<b>TS</b>FG<b>PLV</b>-330</p> <p>331-<b>RKIF</b>V<b>DG</b>V<b>PFV</b>V<b>STGY</b>H<b>REL</b>G<b>VVHN</b>Q<b>DVN</b>-360</p>	<p>Total sites: 155 (16.63%)</p> <p>Sites within APR: 21 (13.54%)</p> <p>Sites outside APR: 134 (86.46%)</p>

	<p>361-LHSSRLSFKE<u>LLVYA</u>ADPAMHAASGNLLLD-390  391-KRTTCFSVAAL<u>TNNV</u>AFQTVKPGNFNKDFY-420  421-DFAVSKGFFKEGSSVELKHFFFAQDGNAAI-450  451-<u>SDYDYRYN</u>LPTMCDIRQLLFVVEVVDK<del>YF</del>-480  481-DCYDGGCINAN<u>QVIV</u>NNLDKSAGFPFNK<del>WG</del>-510  511-KARLYYDSMSYEDQDALFA<del>YTKR</del>NVIPTIT-540  541-<u>QMNLKYAISAKNR</u>ARTVAGV<u>SICSTM</u>TN<u>RQ</u>-570  571-<u>FHQKLLKSIAATR</u>GATV<u>VIGT</u>SKFYGGWHN-600  601-MLKTVYSDVENPHLMGWDYPKCDRAMPNML-  630  631-RIMASLVLAR<u>KHTTCCSL</u>SHRFYRLANECA-660  661-QVLSEMVCMCG<u>GSLYV</u>KPGGTSSGDATTA<del>YA</del>-  690  691-<u>NSVFNIC</u>QAVTANVNALLSTDG<del>NKIADKY</del>V-720  721-<u>RNLQHRLYECLY</u>RNRD<del>VD</del>TDFVNEFYAYLR-750  751-KHFSMMILSDDAVVCFNSTYASQGLV<u>ASIK</u>-780  781-NFK<u>SVLYYQ</u>NNVFMSEAKCW<u>TET</u>DLTKGPH-810  811-EFCSQHTMLVKQGDDYV<u>YLPYP</u>DPSRILGA-840  841-GC<u>FVDDI</u>VKT<u>DG</u>TLMIERFVSLAIDAYPLT-870  871-KHPNQEYADV<u>FHLYLQYIRKLH</u><u>DEL</u>TGHML-900  901-<u>DMYSV</u>MLTNDNTSR<del>Y</del>WEPEFYEA<del>MY</del>TPHTV-  930  931-LQ-932</p>	
<p>NSP13</p>	<p>1-AVGACVLCNSQTS<u>LRCGACI</u>RRPFLCCKCC-30  31-YDHVISTSHK<u>LVL</u>SVNPYVCNAPGCDVTDV-60  61-TQLYLGGMSYCKSHKPPISFPLCANGQVF-90  91-GLYKNTCVGSDN<u>VTDF</u>NAIATCDW<u>TN</u>AGDY-120  121-ILANTCTERLKLFAAETLKATEETFKLSYG-150  151-IATVREVLSDRELHLSWEVKGPRPPLNRNY-180  181-VFTGYRVTKNSKVQIGEYTF<u>EKG</u>DYGDVAVV-210  211-YRGTTTYKLVGDYFVLT<u>SHTV</u>MPLSAPTL-240  241-VPQEHYVRITGLYPTLN<u>IS</u>DEFSSNV<u>ANYQ</u>-270  271-KVGMQKYSTLQPPGTGKSHFAIGL<u>LAL</u>YYP-300  301-SARIVYTACSHAADV<u>DALCE</u>KALKYLPIDKC-330  331-SRIIPARARVECFDKFKVNSTLEQYVFCTV-360  361-NALPETTADIVV<u>FDEIS</u>MATNYDLSVVNAR-390  391-LRAKH<u>YVYI</u>GDPAQLPAPRTLLTKGTLEPE-420  421-<u>YFNSV</u>CRLMKTIGPDM<u>FLG</u>TCRRCPAEIVD-450  451-TVSA<u>LVY</u>DNKLKAHKDKSAQC<u>FKM</u>FYK<u>GVI</u>-  480  481-<u>THD</u>VSSAINR<u>PQIGVV</u>REFLTRNPAWRKAV-510  511-FISPYNSQNAVASKILGLPTQTVDSSQGSE-540  541-YDYV<u>IF</u>TQTTETAHSCNVNRFNVAITRAKV-570  571-GILC<u>MS</u>DRDLYDKLQFTSLEIPRRNVATL-600  601-Q</p>	<p>Total sites: 86  (14.30%)  Sites within APR: 9  (10.47%)  Sites outside APR: 77  (89.53%)</p>
<p>NSP14</p>	<p>1-AENV<u>TGL</u>FKDCSKVITGLHPTQAP<u>THL</u>SVD-30  31-TKFKTEGL<u>CV</u>DIPGIPKDMTYRRLISMMGF-60  61-KMNYQVNGYPNMFITREAIRHVR<u>AWI</u>GFD-90  91-VEGCHATREAVGTNLPLQLG<u>FSTG</u>VNLVAV-120  121-PTGYVDTPNNTDFSRVSAKPPPGDQFKHLI-150  151-PLMYKGLPWNV<u>VRI</u>KIVQMLSDTLKNLSDR-180</p>	<p>Total sites: 99  (18.78%)  Sites within APR: 11  (11.11%)  Sites outside APR: 88  (88.89%)</p>





<b>SP-CoV2</b>	1668.1	1548.3	1241	1387	1670	1554.2	1228.3	1402.6
<b>FP1-CoV</b>	1663	1560	NC	NC	1671.2	1562.5	NC	NC
<b>FP2-CoV</b>	1665.9	1551.7	1250	1390.4	1672.2	1556.1	1236.9	1399.3
<b>FP1-CoV2</b>	1657.4	1554.5	NC	1389	1672.7	1556	1235	1399
<b>FP2-CoV2</b>	1655.8	1554	1229	1385.5	1673.1	1552.2	1232.2	1396
<b>ORF10</b>	1665.6	1565	NC	NC	1673.2	1566.2	NC	1405.1

\*NC stands for not clear.

**Supplementary table 11.** Information of peptides and proteins used for *in vitro* aggregation assay.

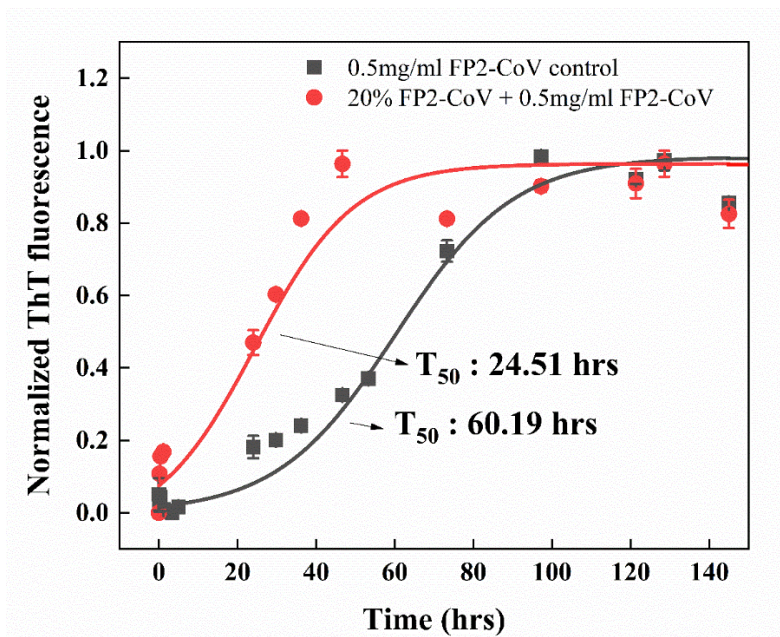
<b>Protein and peptide</b>	<b>UniProt ID</b>	<b>Sequence</b>	<b>Solvent</b>	<b>Concentration used for <i>in vitro</i> aggregation</b>
<b>SARS-CoV</b>				
S fusion peptide 1 (FP1-CoV)	P59594	NH <sub>2</sub> - SFIEDLLFNKVTLADAGF MKQY-COOH	Water	1 mg/ml
S fusion peptide 2 (FP2-CoV)	P59594	NH <sub>2</sub> - KQYGECLGDINARDLICA QKF-COOH	Water	1 mg/ml
NSP11-CoV	P0C6U8	NH <sub>2</sub> -SADASTFLNGFAV- COOH	20 mM Sodium phosphate buffer (pH 7.4)	3 mg/ml
<b>SARS-CoV-2</b>				
S signal peptide (SP-CoV2)	P0DTC2	NH <sub>2</sub> -MFVFLVLLPLVS- COOH	50% DMSO and 50% 20 mM phosphate buffer (pH 7.4)	0.5 mg/ml

S fusion peptide 1 (FP1-CoV2)	P0DTC2	NH <sub>2</sub> - SFIEDLLFNKVTLADAGFI KQY-COOH	50% DMSO and 50% 20 mM phosphate buffer (pH 7.4)	1 mg/ml
S fusion peptide 2 (FP2-CoV2)	P0DTC2	NH <sub>2</sub> - KQYGDCLGDIAARDLICA QKF-COOH	10% DMSO and 90% 20 mM phosphate buffer (pH 7.4)	1 mg/ml
ORF10 (full-length protein)	YP_009725 255.1	NH <sub>2</sub> - MGYINVFAFPFTIYSLLLC RMNSRNYIAQVDVNFN LT-COOH	60% DMSO and 40% 20 mM phosphate buffer (pH 7.4)	1 mg/ml
NSP6-p (Residues 91-112 of NSP6)	P0DTC1	NH <sub>2</sub> - VMRIMTWLDMVDTSLSG FKLKD-COOH	8% DMSO and 92% 20 mM phosphate buffer (pH 7.4)	1 mg/ml
NSP11-CoV2 (full-length)	P0DTC1	NH <sub>2</sub> -SADAQSFLNGFAV- COOH	20 mM phosphate buffer (pH 7.4) containing 50 mM NaCl	3 mg/ml

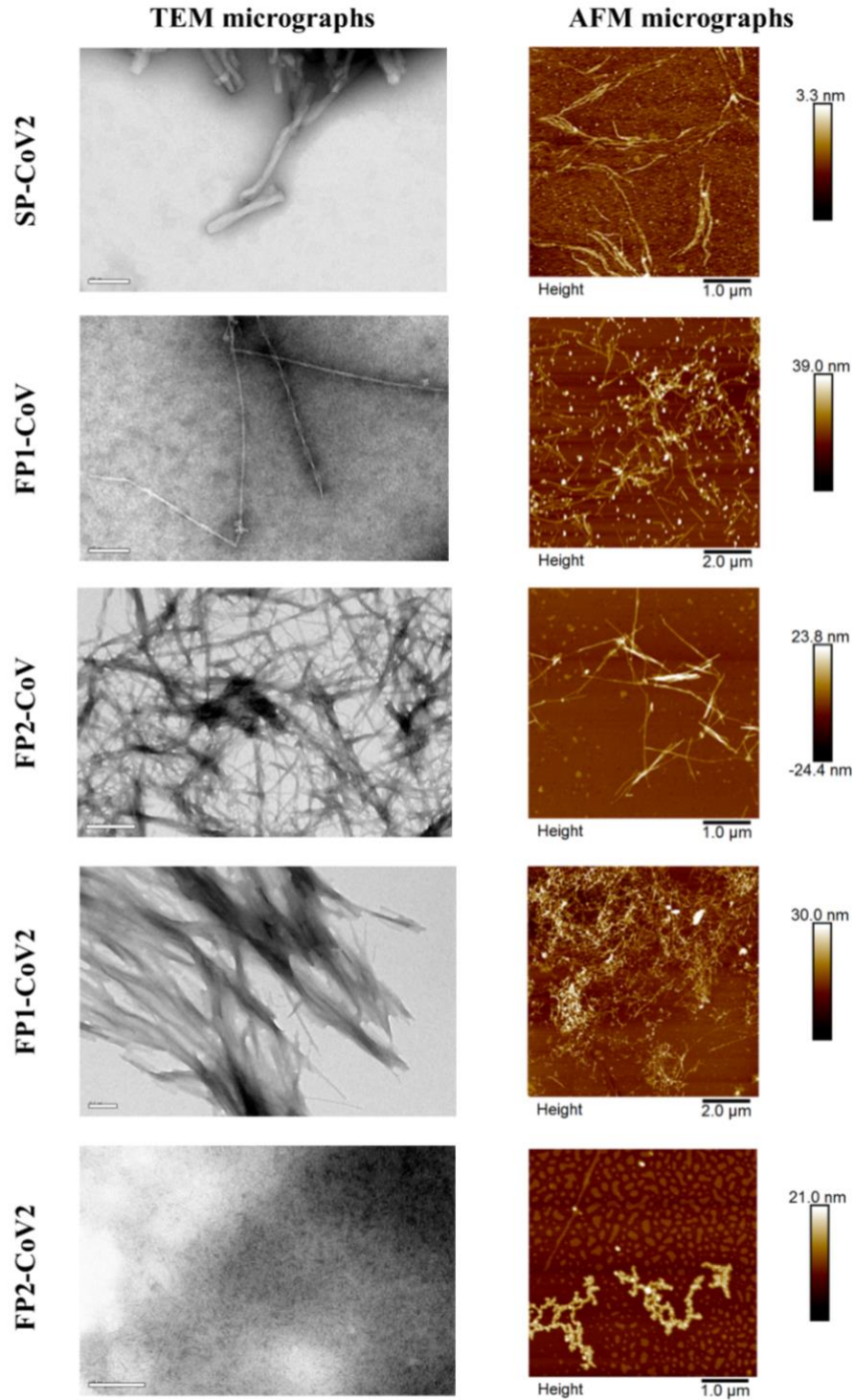
**Supplementary table 12.** Information of peptides given in mass spectrometry data in Supplementary Dataset.

Name of the peptide	Sample name	Sample ID	Purity	Molecular Weight (Da)
SP-CoV2	CV2_Signal Peptide	U1200FK090-6	92.6%	1377.78
FP1-CoV	CoV1_S_FP1	U083MGG030-1	97.5%	2550.93
FP2-CoV	CoV1_S_FP2	U083MGG030-3	90.7%	2385.73
FP1-CoV2	Fusion Peptide 1	U1200FK090-3	79%	2532.90
FP2-CoV2	Fusion Peptide 2	U1200FK090-5	Crude	2328.68
ORF10	Cov_ORF10	A3893-6	Crude	4449.24
NSP6-p	NSP6_90-112	U521TFI050-14	88.5%	2587.10
NSP11-CoV	NSP11_CoV1	U083MGG030-5	92.9%	1299.39
NSP11-CoV2	NSP11	U4944FD210-1	72.9%	1326.42

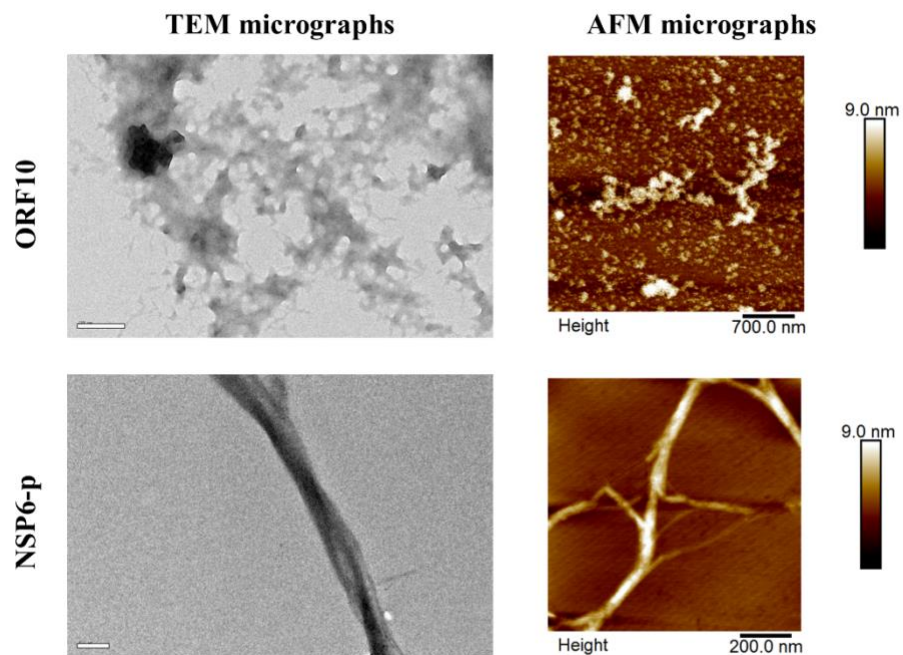
### Supplementary Figures:



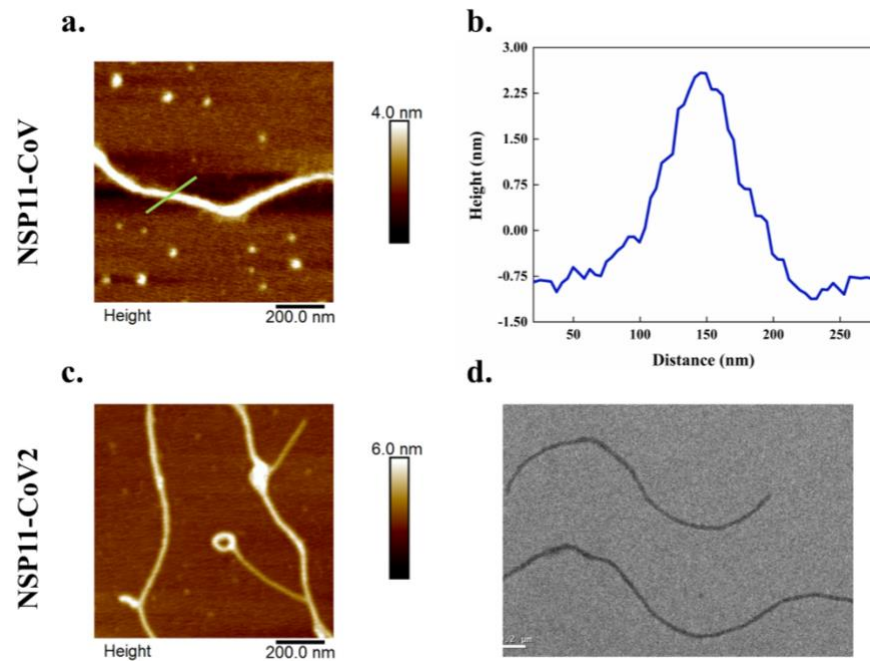
**Supplementary figure 1. Self-seeding activity of FP2-CoV peptide aggregates.** At 0.5 mg/ml concentration, the FP2-CoV peptide aggregation process has a  $T_{50}$  value of  $60.19 \pm \text{NC}$  hrs (at 1 mg/ml concentration,  $T_{50}$  is  $47.64 \pm 3.75$  hrs, as reported in the main manuscript). Upon addition of 20% FP2-CoV seeds (sonicated preformed amyloid fibrils), its  $T_{50}$  decreases to  $24.51 \pm \text{NC}$  hrs. The kinetics reactions are monitored using ThT fluorescence intensity at 490 nm, where dot (FP2-CoV + FP2-CoV seeds) and square symbols (FP2-CoV control) indicate the average value of two technical replicates and the error bar represents SEM of these replicates. The black- and red-coloured lines indicate the sigmoidal fittings of data points which determines the  $T_{50}$  values. These results show that the seeds catalyze the aggregation of peptides into amyloids. NC stands for not calculated. The source data are given in the Source Data file.



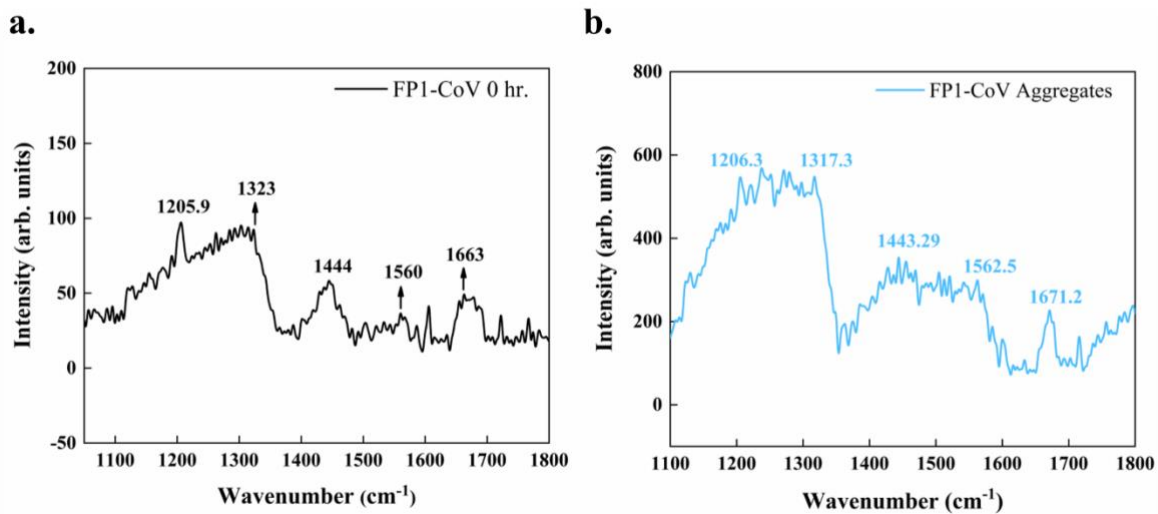
**Supplementary figure 2. TEM and AFM micrographs of SARS-CoV and SARS-CoV-2 peptides.** For TEM images, the scale bar represents 100 nm for SP-CoV2, FP1-CoV, and FP2-CoV2, 500 nm for FP2-CoV, and 200 nm for FP1-CoV2 peptide aggregates, respectively.



**Supplementary figure 3. TEM and AFM micrographs of SARS-CoV-2 peptides.** For TEM images, the scale bar represents 200 nm for ORF10 and NSP6-p peptide aggregates.



**Supplementary figure 4.** (a) AFM image of NSP11-CoV fibril. (b) Height profile of NSP11-CoV fibril shown with a green-colored line in panel a. (c) AFM image of NSP11-CoV2 fibrils. (d) HR-TEM micrograph of NSP11-CoV2; scale bar represents 200 nm. The source data are given in the Source Data file.



**Supplementary figure 5.** Raman spectra of monomer (a) and aggregates (b) of FP1-CoV. The spectral data was smoothed with 10 points using the FFT filter function. The source data are given in the Source Data file. Arb. units are arbitrary units.