

Supplemental Table 1: Spot Membrane Results

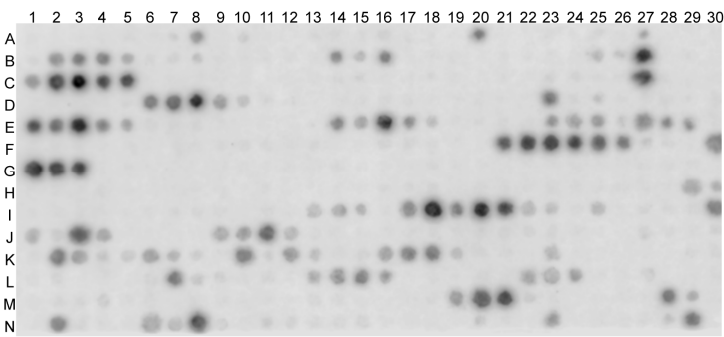
Bolded Regions Correspond to ≥3 contiguous spots detected

|                    |                     |                        |     |      |                     |                        |
|--------------------|---------------------|------------------------|-----|------|---------------------|------------------------|
| POT: Spike Protein | DETECT: IR800/rhRod | 88                     | C28 | 2381 | AAAYVGYLQPRFTLLKYNE |                        |
| 1 A 1              | 2224.8              | MFVFLVLLPLVSSQCVNLTT   | 89  | C29  | 2440                | YVGYLQPRFTLLKYNEGT     |
| 2 A 2              | 2232.7              | FLVLLPLVSSQCVNLTTTRTQ  | 90  | C30  | 2343.9              | GYLQPRFTLLKYNEGTITDAVD |
| 3 A 3              | 2180.6              | LLPLVSSQCVNLTTTRTQLPFP | 91  | D 1  | 2295.7              | QPRFTLLKYNEGTITDAVD    |
| 4 A 4              | 2192.5              | LVSSQCVNLTTTRTQLPPAYT  | 92  | D 2  | 2201.7              | TLLKYNEGTITDAVDCAL     |
| 5 A 5              | 2241.5              | SQCVNLTTTRTQLPPAYTNSF  | 93  | D 3  | 2165.6              | LKYNEGTITDAVDCALDPL    |
| 6 A 6              | 2237.6              | VNLTTTRTQLPPAYTNSFTRG  | 94  | D 4  | 2078.3              | NENGTITDAVDCALDPLSET   |
| 7 A 7              | 2336.7              | TTRTQLPPAYTNSFTRGVY    | 95  | D 5  | 2053.4              | GTITDAVDCALDPLSETKCT   |
| 8 A 8              | 2318.7              | TQLPPAYTNSFTRGVYYPDK   | 96  | D 6  | 2110.5              | TDVDCALDPLSETKCTKLKS   |
| 9 A 9              | 2378.8              | PPAYTNSFTRGVYYPDKVFR   | 97  | D 7  | 2170.6              | VDCALDPLSETKCTKLKSFTV  |
| 10 A10             | 2386.8              | YTNSTTRGVYYPDKVFRSSV   | 98  | D 8  | 2167.7              | ALDPLSETKCTKLKSFTVEKG  |
| 11 A11             | 2345.8              | SFTRGVYYPDKVFRSSVLHS   | 99  | D 9  | 2272.8              | PLSETKCTKLKSFTVEKGIYQ  |
| 12 A12             | 2354.7              | RGVYYPDKVFRSSVLHSTQD   | 100 | D10  | 2277.7              | ETKCTKLKSFTVEKGIYQTSN  |
| 13 A13             | 2415.9              | YYPDKVFRSSVLHSTQDLFL   | 101 | D11  | 2321.8              | CTLKSFTVEKGIYQTSNFRV   |
| 14 A14             | 2383.9              | DKVFRSSVLHSTQDLFLPFF   | 102 | D12  | 2330.7              | KSFTVEKGIYQTSNFRVQPT   |
| 15 A15             | 2341.8              | FRSSVLHSTQDLFLPFFSNV   | 103 | D13  | 2297.6              | TVEKGIYQTSNFRVQPTESI   |
| 16 A16             | 2385.8              | SVLHSTQDLFLPFFSNVTWF   | 104 | D14  | 2370.8              | KGIYQTSNFRVQPTESIVRF   |
| 17 A17             | 2407.8              | HSTQDLFLPFFSNVTWFHAI   | 105 | D15  | 2396.7              | YQTSNFRVQPTESIVRFPNI   |
| 18 A18             | 2405.8              | QDLFLPFFSNVTWFHAIHVS   | 106 | D16  | 2332.7              | SNFRVQPTESIVRFPNITNL   |
| 19 A19             | 2321.7              | FLPFFSNVTWFHAIHVSNGT   | 107 | D17  | 2331.7              | RVQPTESIVRFPNITNLCPF   |
| 20 A20             | 2250.6              | FFSNVTWFHAIHVSNGTNGTK  | 108 | D18  | 2233.6              | PTESIVRFPNITNLCPFGEV   |
| 21 A21             | 2287.6              | NVTWFHAIHVSNGTKRFDN    | 109 | D19  | 2238.7              | SIVRFPNITNLCPFGEVFNA   |
| 22 A22             | 2283.6              | WFHAIHVSNGTKRFDNPVL    | 110 | D20  | 2343.8              | RFPNITNLCPFGEVFNATRF   |
| 23 A23             | 2170.6              | AIHVSNGTNGTKRFDNPVLPF  | 111 | D21  | 2200.6              | NITNLCPFGEVFNATRFASV   |
| 24 A24             | 2135.5              | VSGTNGTKRFDNPVLPFNDG   | 112 | D22  | 2292.7              | NLCPFGEVFNATRFASVYAW   |
| 25 A25             | 2301.7              | TNGTKRFDNPVLPFNDGVYF   | 113 | D23  | 2360.8              | PFGEVFNATRFASVYAWNKR   |
| 26 A26             | 2288.7              | TKRFDNPVLPFNDGVYFAST   | 114 | D24  | 2415.9              | EVFNATRFASVYAWNKRKIS   |
| 27 A27             | 2247.6              | FNDNPVLPFNDGVYFASTEKS  | 115 | D25  | 2356.8              | NATRFASVYAWNKRKISNCV   |
| 28 A28             | 2211.7              | PVLPFNDGVYFASTEKSNI    | 116 | D26  | 2419.9              | RFASVYAWNKRKISNCVADY   |
| 29 A29             | 2301.8              | PFNDGVYFASTEKSNIIRGW   | 117 | D27  | 2344.8              | SVYAWNKRKISNCVADYSVL   |
| 30 A30             | 2260.9              | DGVYFASTEKSNIIRGWIFG   | 118 | D28  | 2359.8              | AWNKRKISNCVADYSVLYNS   |
| 31 B 1             | 2305                | YFASTEKSNIIRGWIFGTTL   | 119 | D29  | 2293.8              | RKRISNCVADYSVLYNSASF   |
| 32 B 2             | 2253.9              | STEKSNIIRGWIFGTTLDSK   | 120 | D30  | 2188.6              | ISNCVADYSVLYNSASFSTF   |
| 33 B 3             | 2252.9              | KSNIIRGWIFGTTLDSKTQS   | 121 | E 1  | 2268.7              | CVADYSVLYNSASFSTFKCY   |
| 34 B 4             | 2263.1              | IIRGWIFGTTLDSKTQSLLI   | 122 | E 2  | 2238.7              | DYSVLYNSASFSTFKCYGVS   |
| 35 B 5             | 2207.8              | GWIFGTTLDSKTQSLLIIVN   | 123 | E 3  | 2199.7              | VLYNSASFSTFKCYGVSPTK   |
| 36 B 6             | 2137.6              | FGTTLDSKTQSLLIIVNNATN  | 124 | E 4  | 2166.6              | NSASFSTFKCYGVSPTKLN    |
| 37 B 7             | 2143.6              | TLDSKTQSLLIIVNNATNVVI  | 125 | E 5  | 2257.8              | SFSTFKCYGVSPTKLNLCF    |
| 38 B 8             | 2144.6              | SKTQSLLIIVNNATNVVIKVC  | 126 | E 6  | 2250.7              | TFKCYGVSPTKLNLCFTNV    |
| 39 B 9             | 2232.6              | QSLLIIVNNATNVVIKVCEFC  | 127 | E 7  | 2223.6              | CYGVSPTKLNLCFTNVYAD    |
| 40 B10             | 2268.6              | LIVNNATNVVIKVCEFCFCN   | 128 | E 8  | 2233.6              | VSPTKLNLCFTNVYADSFV    |
| 41 B11             | 2302.5              | NNATNVVIKVCEFCFCNDPF   | 129 | E 9  | 2276.8              | TKLNLCFTNVYADSFVIRG    |
| 42 B12             | 2272.6              | TNVVIKVCEFCFCNDPFLGV   | 130 | E10  | 2277.6              | NLCFTNVYADSFVIRGDEV    |
| 43 B13             | 2421.8              | VIKVCEFCFCNDPFLGVYH    | 131 | E11  | 2332.7              | CFTNVYADSFVIRGDEVROI   |
| 44 B14             | 2437.7              | VCEFCFCNDPFLGVYHKNKN   | 132 | E12  | 2206.6              | NVYADSFVIRGDEVROIAPG   |
| 45 B15             | 2507.9              | FQFCNDPFLGVYHKNKNKW    | 133 | E13  | 2116.5              | ADSFVIRGDEVROIAPGQTG   |
| 46 B16             | 2432.8              | CNDPFLGVYHKNKNKSWMES   | 134 | E14  | 2155.7              | FVIRGDEVROIAPGQTGKIA   |
| 47 B17             | 2533                | PFLGVYHKNKNKSWMESFRV   | 135 | E15  | 2188.6              | RGDEVROIAPGQTGKIADYN   |
| 48 B18             | 2524.9              | GVYHKNKNKSWMESFRVYS    | 136 | E16  | 2264.8              | EVROIAPGQTGKIADYNKYL   |
| 49 B19             | 2477.8              | YHKNKNKSWMESFRVYSSAN   | 137 | E17  | 2207.7              | QIAPGQTGKIADYNKYLDD    |
| 50 B20             | 2367.6              | NNKSWMESFRVYSSANNCT    | 138 | E18  | 2200.7              | PGQTGKIADYNKYLDDFTG    |
| 51 B21             | 2450.7              | SWMESEFRVYSSANNCTFEY   | 139 | E19  | 2233.8              | TGKIADYNKYLDDFTGCVI    |
| 52 B22             | 2360.5              | ESEFRVYSSANNCTFEYVSQ   | 140 | E20  | 2318.8              | IADYNKYLDDFTGCVIAWN    |
| 53 B23             | 2372.7              | FRVYSSANNCTFEYVSQPFL   | 141 | E21  | 2334.7              | YNYKLDDFTGCVIAWNSNN    |
| 54 B24             | 2329.7              | YSSANNCTFEYVSQPFLMDL   | 142 | E22  | 2209.6              | KLPDDFTGCVIAWNSNNLDS   |
| 55 B25             | 2306.7              | ANNCTFEYVSQPFLMDLEGK   | 143 | E23  | 2155.5              | DDFTGCVIAWNSNNLDSKVG   |
| 56 B26             | 2306.7              | CTFEYVSQPFLMDLEGKQGN   | 144 | E24  | 2112.5              | TGCVIAWNSNNLDSKVGNGY   |
| 57 B27             | 2344.8              | EYVSQPFLMDLEGKQGNFKN   | 145 | E25  | 2241.7              | VIAWNSNNLDSKVGNGYNLY   |
| 58 B28             | 2351.9              | SQPFLMDLEGKQGNFNKLRE   | 146 | E26  | 2390.9              | WNSNNLDSKVGNGYNLYRL    |
| 59 B29             | 2433.1              | FLMDLEGKQGNFNKLREFV    | 147 | E27  | 2435.1              | NNLDSKVGNGYNLYRLFRK    |
| 60 B30             | 2397                | DLEGKQGNFNKLREFVFKNI   | 148 | E28  | 2408.1              | DSKVGNGYNLYRLFRKSNL    |
| 61 C 1             | 2375                | GKQGNFNKLREFVFKNIDGY   | 149 | E29  | 2450.2              | VGGNYNLYRLFRKSNLKPF    |
| 62 C 2             | 2450.2              | GNFNKLREFVFKNIDGYFKI   | 150 | E30  | 2637.3              | NYNYLYRLFRKSNLKPFERD   |
| 63 C 3             | 2510.3              | KNLREFVFKNIDGYFKIYSK   | 151 | F 1  | 2547.3              | YLYRLFRKSNLKPFERDIST   |
| 64 C 4             | 2490.1              | REFVFKNIDGYFKIYSKHTP   | 152 | F 2  | 2513.2              | RLFRKSNLKPFERDISTEYI   |
| 65 C 5             | 2398.1              | VFKNIDGYFKIYSKHTPINL   | 153 | F 3  | 2352.9              | RKSNLKPFERDISTEYIQAG   |
| 66 C 6             | 2394                | NIDGYFKIYSKHTPINLVRD   | 154 | F 4  | 2266.7              | NLKPFERDISTEYIQAGSTP   |
| 67 C 7             | 2390                | GYFKIYSKHTPINLVRDLQP   | 155 | F 5  | 2185.5              | PFERDISTEYIQAGSTPCNG   |
| 68 C 8             | 2313.9              | KIYSKHTPINLVRDLPQGFS   | 156 | F 6  | 2097.4              | RDISTEYIQAGSTPCNGVEG   |
| 69 C 9             | 2222.7              | SKHTPINLVRDLPQGFSALE   | 157 | F 7  | 2077.3              | STEYIQAGSTPCNGVEGFNC   |
| 70 C10             | 2179.7              | TPINLVRDLPQGFSALEPLV   | 158 | F 8  | 2167.5              | IYQAGSTPCNGVEGFNCYFP   |
| 71 C11             | 2193.7              | NLVRDLPQGFSALEPLVDLP   | 159 | F 9  | 2091.4              | AGSTPCNGVEGFNCYFPLQS   |
| 72 C12             | 2150.8              | RDLPLQGFSALEPLVDLPIGI  | 160 | F10  | 2243.6              | TPCNGVEGFNCYFPLQSYGF   |
| 73 C13             | 2094.7              | PQGFSALEPLVDLPIGINIT   | 161 | F11  | 2268.6              | NGVEGFNCYFPLQSYGFQPT   |
| 74 C14             | 2243.9              | FSALEPLVDLPIGINITRFQ   | 162 | F12  | 2268.6              | EGFNCFPLQSYGFQPTNGV    |
| 75 C15             | 2266                | LEPLVDLPIGINITRFQTL    | 163 | F13  | 2283.6              | NCYFPLQSYGFQPTNGVGQY   |
| 76 C16             | 2248                | LVDLPIGINITRFQTLALH    | 164 | F14  | 2319.7              | FPLQSYGFQPTNGVGQYPYR   |
| 77 C17             | 2327.1              | LPIGINITRFQTLALHRSY    | 165 | F15  | 2259.5              | QSYGFQPTNGVGQYPYRVV    |
| 78 C18             | 2315                | GINITRFQTLALHRSYLT     | 166 | F16  | 2228.6              | GFQPTNGVGQYPYRVVLSF    |
| 79 C19             | 2289.9              | ITRFQTLALHRSYLT        | 167 | F17  | 2251.7              | PTNGVGQYPYRVVLSFELL    |
| 80 C20             | 2150.7              | FQTLALHRSYLT           | 168 | F18  | 2244.7              | GVGYQPYRVVLSFELLHAP    |
| 81 C21             | 2132.7              | LLALHRSYLT             | 169 | F19  | 2302.7              | YQPYRVVLSFELLHAPATV    |
| 82 C22             | 2034.5              | LHRSYLT                | 170 | F20  | 2171.6              | YRVVLSFELLHAPATVCGP    |
| 83 C23             | 2025.5              | SYLT                   | 171 | F21  | 2096.6              | VVLSFELLHAPATVCGPKKS   |
| 84 C24             | 1981.4              | TPGDSSSGWTAGAAAYVGY    | 172 | F22  | 2113.6              | SFELLHAPATVCGPKKSTNL   |
| 85 C25             | 2064.5              | DSSSGWTAGAAAYVGYLQ     | 173 | F23  | 2091.6              | LLHAPATVCGPKKSTNLVKN   |
| 86 C26             | 2179.7              | SGWTAGAAAYVGYLQPRFT    | 174 | F24  | 2058.5              | APATVCGPKKSTNLVKNKCV   |
| 87 C27             | 2203.9              | TAGAAAYVGYLQPRFTLLK    | 175 | F25  | 2194.6              | TVCGPKKSTNLVKNKCVNFN   |

|     |     |        |                        |     |     |        |                       |
|-----|-----|--------|------------------------|-----|-----|--------|-----------------------|
| 176 | F26 | 2209.7 | GPKKSTNLVKNKCVNFNFNG   | 265 | I25 | 2204.8 | PIKDFGGFNFSQILPDPSPK  |
| 177 | F27 | 2198.7 | KSTNLVKNKCVNFNFNGLT    | 266 | I26 | 2237.8 | DFGGFNFSQILPDPSPKPSKR |
| 178 | F28 | 2139.6 | NLVKNKCVNFNFNGLTGTGV   | 267 | I27 | 2265.9 | GFNFQILPDPSPKPSKRSFI  |
| 179 | F29 | 2156.6 | KNKCVNFNFNGLTGTGVLTE   | 268 | I28 | 2304.9 | FSQILPDPSPKPSKRSFIEDL |
| 180 | F30 | 2115.5 | CVNFNFNGLTGTGVLTESNK   | 269 | I29 | 2317   | ILPDPSPKPSKRSFIEDLLFN |
| 181 | G 1 | 2187.8 | FNFNGLTGTGVLTESNKKFL   | 270 | I30 | 2321.9 | DPSKPSKRSFIEDLLFNKVT  |
| 182 | G 2 | 2151.7 | NGLTGTGVLTESNKKFLPFQ   | 271 | J 1 | 2322   | KPSKRSFIEDLLFNKVTIAD  |
| 183 | G 3 | 2199.7 | TGTGVLTESNKKFLPFQQFG   | 272 | J 2 | 2285   | KRSFIEDLLFNKVTIADAGF  |
| 184 | G 4 | 2324.9 | GVLTESNKKFLPFQQFGRDI   | 273 | J 3 | 2283   | FIEDLLFNKVTIADAGFIKQ  |
| 185 | G 5 | 2342.8 | TESNKKFLPFQQFGRDIADT   | 274 | J 4 | 2228.9 | DLLFNKVTIADAGFIKQYGD  |
| 186 | G 6 | 2312.8 | NKKFLPFQQFGRDIADTTDA   | 275 | J 5 | 2160.8 | FNKVTIADAGFIKQYGDCLG  |
| 187 | G 7 | 2312.7 | FLPFQQFGRDIADTTDAVRD   | 276 | J 6 | 2070.7 | VTIADAGFIKQYGDCLGDIA  |
| 188 | G 8 | 2281.5 | FQQFGRDIADTTDAVRDPQT   | 277 | J 7 | 2099.7 | ADAGFIKQYGDCLGDIAARD  |
| 189 | G 9 | 2233.6 | FGRDIADTTDAVRDPQTLEI   | 278 | J 8 | 2171.9 | GFIKQYGDCLGDIAARDLIC  |
| 190 | G10 | 2214.6 | DIADTTDAVRDPQTLEILDI   | 279 | J 9 | 2181.8 | KQYGDCLGDIAARDLICAQK  |
| 191 | G11 | 2216.5 | DTTDAVRDPQTLEILDITPC   | 280 | J10 | 2080.7 | GDCLGDIAARDLICAQKFNG  |
| 192 | G12 | 2190.6 | DAVRDPQTLEILDITPCSGF   | 281 | J11 | 2118.8 | LGDIAARDLICAQKFNGLTV  |
| 193 | G13 | 2148.6 | RDPQTLEILDITPCSGFGVS   | 282 | J12 | 2140.8 | IAARDLICAQKFNGLTVLPP  |
| 194 | G14 | 2093.6 | QTLLEILDITPCSGFGVSVIT  | 283 | J13 | 2212.9 | RDLICAQKFNGLTVLPPLLT  |
| 195 | G15 | 2006.5 | EILDITPCSGFGVSVITPGT   | 284 | J14 | 2203.8 | ICAQKFNGLTVLPPLLTDEM  |
| 196 | G16 | 1953.3 | DITPCSGFGVSVITPGTNTS   | 285 | J15 | 2228.8 | QKFNGLTVLPPLLTDEMIQ   |
| 197 | G17 | 1965.2 | PCSGFGVSVITPGTNTSNQV   | 286 | J16 | 2176.7 | NGLTVLPPLLTDEMIQYTS   |
| 198 | G18 | 1961.3 | FGGVSVITPGTNTSNQVAVL   | 287 | J17 | 2189.8 | TVLPPLLTDEMIQYTSALL   |
| 199 | G19 | 2106.3 | VSVITPGTNTSNQVAVLYQD   | 288 | J18 | 2105.7 | PPLLTDEMIQYTSALLAGT   |
| 200 | G20 | 2137.3 | ITPGTNTSNQVAVLYQDVNC   | 289 | J19 | 2099.7 | LTDEMIQYTSALLAGTITS   |
| 201 | G21 | 2155.2 | GTNTSNQVAVLYQDVNCTEV   | 290 | J20 | 2114.7 | EMIAQYTSALLAGTITSGWT  |
| 202 | G22 | 2150.2 | TSNQVAVLYQDVNCTEVPVA   | 291 | J21 | 2016.6 | AQYTSALLAGTITSGWTFGA  |
| 203 | G23 | 2169.3 | QVAVLYQDVNCTEVPVAIHA   | 292 | J22 | 1853.5 | TSALLAGTITSGWTFGAGAA  |
| 204 | G24 | 2227.4 | VLYQDVNCTEVPVAIHADQL   | 293 | J23 | 1948.7 | LAGTITSGWTFGAGAAIQI   |
| 205 | G25 | 2151.2 | QDVNCTEVPVAIHADQLTPT   | 294 | J24 | 1966.6 | GTITSGWTFGAGAAIQIPFA  |
| 206 | G26 | 2250.4 | NCTEVPVAIHADQLTPTWRV   | 295 | J25 | 2085.7 | TSGWTFGAGAAIQIPFAMQM  |
| 207 | G27 | 2283.5 | EVFPVAIHADQLTPTWRVYST  | 296 | J26 | 2230.9 | WTFGAGAAIQIPFAMQMAYR  |
| 208 | G28 | 2216.5 | VAIHADQLTPTWRVYSTGSN   | 297 | J27 | 2114.8 | GAGAAIQIPFAMQMAYRFNG  |
| 209 | G29 | 2307.5 | HADQLTPTWRVYSTGSNVFQ   | 298 | J28 | 2198.9 | AALQIPFAMQMAYRFNGIGV  |
| 210 | G30 | 2312.6 | QLTPTWRVYSTGSNVFQTRA   | 299 | J29 | 2286.8 | QIPFAMQMAYRFNGIGVTQN  |
| 211 | H 1 | 2243.6 | PTWRVYSTGSNVFQTRAGCL   | 300 | J30 | 2323.9 | FAMQMAYRFNGIGVTQNVLY  |
| 212 | H 2 | 2100.6 | RVYSTGSNVFQTRAGCLIGA   | 301 | K 1 | 2345.7 | QMAYRFNGIGVTQNVLYENQ  |
| 213 | H 3 | 2047.4 | STGSNVFQTRAGCLIGAEHV   | 302 | K 2 | 2369.9 | YRFNGIGVTQNVLYENQKLI  |
| 214 | H 4 | 2117.4 | SNVFQTRAGCLIGAEHVNNS   | 303 | K 3 | 2216.6 | NGIGVTQNVLYENQKLIANQ  |
| 215 | H 5 | 2212.5 | FQTRAGCLIGAEHVNNSYEC   | 304 | K 4 | 2280.6 | GVTONVLYENQKLIANQFNS  |
| 216 | H 6 | 2161.5 | RAGCLIGAEHVNNSYECDIP   | 305 | K 5 | 2264.7 | QNVLYENQKLIANQFNSAIG  |
| 217 | H 7 | 2118.5 | CLIGAEHVNNSYECDIPIGA   | 306 | K 6 | 2292.9 | LYENQKLIANQFNSAIGKIQ  |
| 218 | H 8 | 2062.4 | GAEHVNNSYECDIPIGAGIC   | 307 | K 7 | 2202.8 | NQKLIANQFNSAIGKIQDSL  |
| 219 | H 9 | 2126.5 | HVNNSYECDIPIGAGICASY   | 308 | K 8 | 2107.7 | LIANQFNSAIGKIQDSLST   |
| 220 | H10 | 2133.5 | NSYECDIPIGAGICASYQTQ   | 309 | K 9 | 2039.5 | NQFNSAIGKIQDSLSTASA   |
| 221 | H11 | 2071.4 | ECDIPIGAGICASYQTQTNS   | 310 | K10 | 1948.6 | NSAIGKIQDSLSTASALGK   |
| 222 | H12 | 2133.6 | IPIGAGICASYQTQTNSPRR   | 311 | K11 | 2032.7 | IGKIQDSLSTASALGKLQD   |
| 223 | H13 | 2124.5 | GAGICASYQTQTNSPRRARS   | 312 | K12 | 2046.5 | IQDSLSTASALGKLQDVVN   |
| 224 | H14 | 2196.5 | ICASYQTQTNSPRRARSVAS   | 313 | K13 | 2003.4 | SLSTASALGKLQDVVNQNA   |
| 225 | H15 | 2237.5 | SYQTQTNSPRRARSVASQSI   | 314 | K14 | 2028.4 | STASALGKLQDVVNQNAQAL  |
| 226 | H16 | 2206.6 | TQTNSPRRARSVASQSI IAY  | 315 | K15 | 2097.5 | SALGKLQDVVNQNAQALNTL  |
| 227 | H17 | 2195.7 | NSPRRARSVASQSI IAYTMS  | 316 | K16 | 2181.5 | GKLQDVVNQNAQALNTLVKQ  |
| 228 | H18 | 2138.8 | RRARSVASQSI IAYTMSLGA  | 317 | K17 | 2170.4 | QDVVNQNAQALNTLVKQLSS  |
| 229 | H19 | 2085.6 | RSVASQSI IAYTMSLGAENS  | 318 | K18 | 2146.5 | VNQNQALNTLVKQLSSNFG   |
| 230 | H20 | 2076.6 | ASQSI IAYTMSLGAENS VAY | 319 | K19 | 2076.6 | NAQALNTLVKQLSSNFGAIS  |
| 231 | H21 | 2105.6 | SI IAYTMSLGAENS VAYSNN | 320 | K20 | 2062.7 | ALNTLVKQLSSNFGAISSVL  |
| 232 | H22 | 2063.5 | AYTMSLGAENS VAYSNN SIA | 321 | K21 | 2106.7 | TLVKQLSSNFGAISSVLNDI  |
| 233 | H23 | 2039.5 | MSLGAENS VAYSNN SIAIPT | 322 | K22 | 2149.8 | KQLSSNFGAISSVLNDILSR  |
| 234 | H24 | 2070.4 | GAENS VAYSNN SIAIPTNFT | 323 | K23 | 2136.8 | SSNFGAISSVLNDILSRDL   |
| 235 | H25 | 2112.5 | NSVAYSNN SIAIPTNFTISV  | 324 | K24 | 2147.8 | FGAISSVLNDILSRDLKVEA  |
| 236 | H26 | 2143.5 | AYSNN SIAIPTNFTISVTTE  | 325 | K25 | 2228.7 | ISSVLNDILSRDLKVEAEVQ  |
| 237 | H27 | 2145.6 | NNSIAIPTNFTISVTTEILP   | 326 | K26 | 2325.8 | VLNDILSRDLKVEAEVQIDR  |
| 238 | H28 | 2147.7 | IAIPTNFTISVTTEILPVSM   | 327 | K27 | 2326.9 | DLRDLKVEAEVQIDRLIT    |
| 239 | H29 | 2180.6 | PTNFTISVTTEILPVSMTKT   | 328 | K28 | 2311.9 | SRDLKVEAEVQIDRLITGRL  |
| 240 | H30 | 2169.6 | FTISVTTEILPVSMTKTSVD   | 329 | K29 | 2283.8 | DKVEAEVQIDRLITGRLQSL  |
| 241 | I 1 | 2143.5 | SVTTEILPVSMTKTSVDCTM   | 330 | K30 | 2333.8 | EAEVQIDRLITGRLQSLQTY  |
| 242 | I 2 | 2235.7 | TEILPVSMTKTSVDCTMYIC   | 331 | L 1 | 2332.8 | VQIDRLITGRLQSLQTYVTQ  |
| 243 | I 3 | 2151.6 | LPVSMTKTSVDCTMYICGDS   | 332 | L 2 | 2346.9 | DRITGRLQSLQTYVTQQLI   |
| 244 | I 4 | 2175.5 | SMTKTSVDCTMYICGDSSTEC  | 333 | L 3 | 2260.8 | ITGRLQSLQTYVTQQLIRAA  |
| 245 | I 5 | 2170.5 | KTSVDCTMYICGDSSTECNL   | 334 | L 4 | 2387.9 | RLQSLQTYVTQQLIRAAEIR  |
| 246 | I 6 | 2208.6 | VDCTMYICGDSSTECNLLQ    | 335 | L 5 | 2219.7 | SLQTYVTQQLIRAAEIRASA  |
| 247 | I 7 | 2198.7 | TMVICGDSSTECNLLQYGS    | 336 | L 6 | 2189.7 | TYVTQQLIRAAEIRASANLA  |
| 248 | I 8 | 2154.6 | ICGDSSTECNLLQYGSFCT    | 337 | L 7 | 2126.7 | TQQLIRAAEIRASANLAATK  |
| 249 | I 9 | 2236.6 | DSTECNLLQYGSFCTQLN     | 338 | L 8 | 2116.8 | LIRAAEIRASANLAATKMSE  |
| 250 | I10 | 2273.8 | ECSNLLQYGSFCTQLNRAL    | 339 | L 9 | 2049.6 | AAEIRASANLAATKMSECVL  |
| 251 | I11 | 2225.9 | NLLQYGSFCTQLNRALTGI    | 340 | L10 | 2050.6 | IRASANLAATKMSECVLGQS  |
| 252 | I12 | 2184.7 | LQYGSFCTQLNRALTGIAVE   | 341 | L11 | 2093.6 | SANLAATKMSECVLGQSKRV  |
| 253 | I13 | 2151.6 | GSFCTQLNRALTGIAVEQDK   | 342 | L12 | 2186.7 | LAATKMSECVLGQSKRVDFC  |
| 254 | I14 | 2203.5 | CTQLNRALTGIAVEQDKNTQ   | 343 | L13 | 2173.7 | TKMSECVLGQSKRVDFCGKG  |
| 255 | I15 | 2246.6 | LNRLALTGIAVEQDKNTQEVF  | 344 | L14 | 2226.7 | SECVLGQSKRVDFCGKGHYL  |
| 256 | I16 | 2161.4 | ALTGIAVEQDKNTQEVFAQV   | 345 | L15 | 2272.9 | VLGQSKRVDFCGKGHYLMSF  |
| 257 | I17 | 2245.5 | GIAVEQDKNTQEVFAQVKQI   | 346 | L16 | 2315.8 | QSKRVDFCGKGHYLMSFFQS  |
| 258 | I18 | 2396.6 | VEQDKNTQEVFAQVKQIYKT   | 347 | L17 | 2277.7 | RVDFCGKGHYLMSFFQSAPH  |
| 259 | I19 | 2347.7 | DKNTQEVFAQVKQIYKTPPI   | 348 | L18 | 2162.6 | FCGKGHYLMSFFQSAPHGVV  |
| 260 | I20 | 2380.8 | TQEVFAQVKQIYKTPPIKDF   | 349 | L19 | 2252.7 | KGYHLSFFQSAPHGVVFLH   |
| 261 | I21 | 2283.9 | VFAQVKQIYKTPPIKDFGGF   | 350 | L20 | 2267.6 | HLMSFFQSAPHGVVFLHVTY  |
| 262 | I22 | 2314.9 | QVKQIYKTPPIKDFGGFNFS   | 351 | L21 | 2153.4 | SFPQSAPHGVVFLHVTYVPA  |
| 263 | I23 | 2314   | QYKTPPIKDFGGFNFSQILL   | 352 | L22 | 2207.4 | QSAPHGVVFLHVTYVPAQEK  |
| 264 | I24 | 2218.8 | KTPPIKDFGGFNFSQILPDP   | 353 | L23 | 2283.5 | PHGVVFLHVTYVPAQEKNEF  |

|     |     |        |                  |        |
|-----|-----|--------|------------------|--------|
| 354 | L24 | 2261.5 | VVFLHVTYVPAQEKNF | TTAP   |
| 355 | L25 | 2203.5 | LHVTYVPAQEKNF    | TTAPAI |
| 356 | L26 | 2163.4 | TVVPAQEKNF       | TTAPAI |
| 357 | L27 | 2136.4 | PAQEKNF          | TTAPAI |
| 358 | L28 | 2240.6 | EKNF             | TTAPAI |
| 359 | L29 | 2154.5 | FTTAPAI          | CHD    |
| 360 | L30 | 2138.5 | APAICH           | DGKAH  |
| 361 | M 1 | 2171.5 | ICH              | DGKAH  |
| 362 | M 2 | 2288.6 | DGKAH            | F      |
| 363 | M 3 | 2316.5 | AH               | F      |
| 364 | M 4 | 2378.6 | P                | REGV   |
| 365 | M 5 | 2385.6 | G                | V      |
| 366 | M 6 | 2436.7 | V                | S      |
| 367 | M 7 | 2453.7 | G                | T      |
| 368 | M 8 | 2520.8 | W                | F      |
| 369 | M 9 | 2331.6 | T                | Q      |
| 370 | M10 | 2278.5 | N                | F      |
| 371 | M11 | 2165.4 | E                | P      |
| 372 | M12 | 2080.5 | I                | I      |
| 373 | M13 | 2082.3 | T                | D      |
| 374 | M14 | 2129.4 | T                | F      |
| 375 | M15 | 2120.4 | S                | G      |
| 376 | M16 | 2201.5 | C                | D      |
| 377 | M17 | 2233.6 | V                | I      |
| 378 | M18 | 2350.6 | I                | V      |
| 379 | M19 | 2380.7 | N                | T      |
| 380 | M20 | 2505   | Y                | D      |
| 381 | M21 | 2481.9 | L                | Q      |
| 382 | M22 | 2442.8 | E                | L      |
| 383 | M23 | 2412.8 | S                | F      |
| 384 | M24 | 2335.7 | E                | E      |
| 385 | M25 | 2221.7 | D                | K      |
| 386 | M26 | 2087.5 | F                | K      |
| 387 | M27 | 2010.3 | H                | T      |
| 388 | M28 | 2054.5 | P                | D      |
| 389 | M29 | 2100.6 | D                | L      |
| 390 | M30 | 2198.7 | D                | I      |
| 391 | N 1 | 2182.6 | G                | I      |
| 392 | N 2 | 2253.7 | A                | S      |
| 393 | N 3 | 2326.7 | V                | N      |
| 394 | N 4 | 2341.8 | Q                | K      |
| 395 | N 5 | 2326.8 | I                | D      |
| 396 | N 6 | 2240.8 | L                | N      |
| 397 | N 7 | 2304.8 | V                | A      |
| 398 | N 8 | 2411   | N                | L      |
| 399 | N 9 | 2539.1 | E                | S      |
| 400 | N10 | 2672.3 | I                | D      |
| 401 | N11 | 2648.3 | Q                | E      |
| 402 | N12 | 2519.3 | G                | K      |
| 403 | N13 | 2468.3 | E                | Q      |
| 404 | N14 | 2391.4 | I                | K      |
| 405 | N15 | 2277.2 | P                | W      |
| 406 | N16 | 2178.2 | I                | W      |
| 407 | N17 | 2101   | G                | F      |
| 408 | N18 | 2076.8 | A                | G      |
| 409 | N19 | 2138.8 | I                | A      |
| 410 | N20 | 2129.7 | V                | M      |
| 411 | N21 | 2093.6 | T                | I      |
| 412 | N22 | 1995.4 | L                | C      |
| 413 | N23 | 2054.5 | M                | T      |
| 414 | N24 | 2094.4 | C                | C      |
| 415 | N25 | 2132.4 | C                | L      |
| 416 | N26 | 2097.3 | G                | C      |
| 417 | N27 | 2118.4 | S                | C      |
| 418 | N28 | 2249.6 | S                | C      |
| 419 | N29 | 2323.7 | C                | K      |
| 420 | N30 | 0      |                  |        |

(newline)



**SPOT: Vimentin DETECT: IR800/SLS2ECD**

|     |     |        |                       |
|-----|-----|--------|-----------------------|
| 421 | O 1 | 2151.7 | MSTRSVSSSSYRRMFGGPGT  |
| 422 | O 2 | 2146.7 | RSVSSSSYRRMFGGPGTASR  |
| 423 | O 3 | 2075.6 | SSSSYRRMFGGPGTASRPSS  |
| 424 | O 4 | 2144.7 | SYRRMFGGPGTASRPSSRS   |
| 425 | O 5 | 2101.6 | RMFGGPGTASRPSSRSYVT   |
| 426 | O 6 | 1956.3 | GGPGTASRPSSRSYVTTST   |
| 427 | O 7 | 2165.5 | GTASRPSSRSYVTTSTRTY   |
| 428 | O 8 | 2193.6 | SRPSSRSYVTTSTRTYSLG   |
| 429 | O 9 | 2124.6 | SSRSYVTTSTRTYSLGSAL   |
| 430 | O10 | 2203.7 | RSYVTTSTRTYSLGSALRPS  |
| 431 | O11 | 2141.6 | VTTSTRTYSLGSALRPSTSR  |
| 432 | O12 | 2203.8 | STRTYSLGSALRPSTSRSLY  |
| 433 | O13 | 2104.7 | TYSLSALRPSTSRSLYASS   |
| 434 | O14 | 1964.6 | LGSALRPSTSRSLYASSPGG  |
| 435 | O15 | 2040.6 | ALRPSTSRSLYASSPGGVYA  |
| 436 | O16 | 2044.5 | PSTSRSLYASSPGGVYATRS  |
| 437 | O17 | 2016.5 | SRSLYASSPGGVYATRSSAV  |
| 438 | O18 | 2111.7 | LYASSPGGVYATRSSAVRLR  |
| 439 | O19 | 2037.5 | SSPGGVYATRSSAVRLRSSV  |
| 440 | O20 | 2019.5 | GGVYATRSSAVRLRSSVPGV  |
| 441 | O21 | 2188.8 | YATRSSAVRLRSSVPGVRL   |
| 442 | O22 | 2183.7 | RSSAVRLRSSVPGVRLQDS   |
| 443 | O23 | 2214.7 | AVRLRSSVPGVRLQDSVDF   |
| 444 | O24 | 2159.7 | LRSSVPGVRLQDSVDFSLA   |
| 445 | O25 | 2102.6 | SVPGVRLQDSVDFSLADAI   |
| 446 | O26 | 2163.6 | GVRLQDSVDFSLADAINTE   |
| 447 | O27 | 2240.7 | LLQDSVDFSLADAINTEFKN  |
| 448 | O28 | 2244.6 | DSVDFSLADAINTEFKNTRT  |
| 449 | O29 | 2314.7 | DFSLADAINTEFKNTRTNEK  |
| 450 | O30 | 2306.7 | LADAINTEFKNTRTNEKVEL  |
| 451 | P 1 | 2377.7 | AINTEFKNTRTNEKVELQEL  |
| 452 | P 2 | 2464.7 | TEFKNTRTNEKVELQELNDR  |
| 453 | P 3 | 2419.7 | KNTRTNEKVELQELNDRFAN  |
| 454 | P 4 | 2467.8 | RTNEKVELQELNDRFANYID  |
| 455 | P 5 | 2479.9 | EKVELQELNDRFANYIDKVR  |
| 456 | P 6 | 2513   | ELQELNDRFANYIDKVRFL   |
| 457 | P 7 | 2512.9 | ELNDRFANYIDKVRFLQQN   |
| 458 | P 8 | 2511.1 | DRFANYIDKVRFLQQNKIL   |
| 459 | P 9 | 2406   | ANYIDKVRFLQQNKILLAE   |
| 460 | P10 | 2428   | IDKVRFLQQNKILLAELEQ   |
| 461 | P11 | 2370   | VRFLQQNKILLAELEQLKG   |
| 462 | P12 | 2280.9 | LEQQNKILLAELEQLKGQK   |
| 463 | P13 | 2267   | QNKILLAELEQLKGQKSR    |
| 464 | P14 | 2182   | ILLAELEQLKGQKSRGLD    |
| 465 | P15 | 2263.8 | AELEQLKGQKSRGLDLYEE   |
| 466 | P16 | 2366.9 | EQLKGQKSRGLDLYEEEMR   |
| 467 | P17 | 2395   | KQGKSRGLDLYEEEMREL    |
| 468 | P18 | 2465   | GKSRLGLDLYEEEMRELRRQ  |
| 469 | P19 | 2549   | RLGLDLYEEEMRELRRQVD   |
| 470 | P20 | 2552.8 | DLYEEEMRELRRQVDQLTND  |
| 471 | P21 | 2516.8 | EEEMRELRRQVDQLTNDKAR  |
| 472 | P22 | 2456.8 | MRELRRQVDQLTNDKARVE   |
| 473 | P23 | 2440.7 | LRRQVDQLTNDKARVEVERD  |
| 474 | P24 | 2313.5 | QVDQLTNDKARVEVERDNLA  |
| 475 | P25 | 2328.6 | QLTNDKARVEVERDNLAEDI  |
| 476 | P26 | 2386.8 | NDKARVEVERDNLAEDIMRL  |
| 477 | P27 | 2442.9 | ARVEVERDNLAEDIMRLREK  |
| 478 | P28 | 2486.9 | EVERDNLAEDIMRLREKLQE  |
| 479 | P29 | 2503.1 | RDNLAEDIMRLREKLQEEM   |
| 480 | P30 | 2531.1 | LAEDIMRLREKLQEEMLQRE  |
| 481 | Q 1 | 2547   | DIMRLREKLQEEMLQREAE   |
| 482 | Q 2 | 2515.9 | RLREKLQEEMLQREEAENTL  |
| 483 | Q 3 | 2452.7 | EKLQEEMLQREEAENTLQSF  |
| 484 | Q 4 | 2481.6 | QEEMLQREEAENTLQSFQD   |
| 485 | Q 5 | 2423.6 | MLQREEAENTLQSFQDQVDN  |
| 486 | Q 6 | 2322.5 | REEAENTLQSFQDQVDNASL  |
| 487 | Q 7 | 2248.6 | AENTLQSFQDQVDNASLARL  |
| 488 | Q 8 | 2291.7 | TLQSFQDQVDNASLARLDLE  |
| 489 | Q 9 | 2332.8 | SFRQDQVDNASLARLDLERKV |
| 490 | Q10 | 2271.7 | QVDNASLARLDLERKVESL   |
| 491 | Q11 | 2315.7 | DNASLARLDLERKVESLQEE  |
| 492 | Q12 | 2346.9 | SLARLDLERKVESLQEEIAF  |
| 493 | Q13 | 2445.1 | RDLERKVESLQEEIAFLKK   |
| 494 | Q14 | 2440   | LERKVESLQEEIAFLKKLHE  |
| 495 | Q15 | 2412.9 | KVESLQEEIAFLKKLHEEEI  |
| 496 | Q16 | 2426.9 | SLQEEIAFLKKLHEEEIQEL  |
| 497 | Q17 | 2425.8 | EEIAFLKKLHEEEIQELQAA  |
| 498 | Q18 | 2424.8 | AFLKKLHEEEIQELQAQIQE  |
| 499 | Q19 | 2457.6 | KKLHEEEIQELQAQIQEQHV  |
| 500 | Q20 | 2444.4 | HEEEIQELQAQIQEQHVQID  |
| 501 | Q21 | 2362.4 | EIQELQAQIQEQHVQIDVDV  |
| 502 | Q22 | 2304.4 | ELQAQIQEQHVQIDVDVSKP  |
| 503 | Q23 | 2263.4 | AQIQEQHVQIDVDVSKPDLT  |
| 504 | Q24 | 2206.4 | QEQQHVQIDVDVSKPDLTAAL |
| 505 | Q25 | 2191.5 | HVQIDVDVSKPDLTAALRDV  |
| 506 | Q26 | 2239.6 | IDVDVSKPDLTAALRDVRQQ  |
| 507 | Q27 | 2291.6 | DVSKPDLTAALRDVRQQYES  |
| 508 | Q28 | 2231.6 | KPDLTAALRDVRQQYESVAA  |
| 509 | Q29 | 2246.7 | LTAALRDVRQQYESVAAKNL  |

|     |     |        |                       |
|-----|-----|--------|-----------------------|
| 510 | Q30 | 2289.6 | ALRDVRQQYESVAAKNLQEA  |
| 511 | R 1 | 2393.5 | DVRQQYESVAAKNLQEAEEW  |
| 512 | R 2 | 2401.6 | QQYESVAAKNLQEAEEWYKS  |
| 513 | R 3 | 2328.7 | ESVAAKNLQEAEEWYKSFA   |
| 514 | R 4 | 2328.8 | AAKNLQEAEEWYKSFAADLS  |
| 515 | R 5 | 2329.7 | NLQEAEEWYKSFAADLSEAA  |
| 516 | R 6 | 2358.7 | EAEWYKSFAADLSEAAANRN  |
| 517 | R 7 | 2329.7 | EWYKSFAADLSEAAANRNDA  |
| 518 | R 8 | 2248.7 | KSKFADLSEAAANRNNDALRQ |
| 519 | R 9 | 2232.6 | FADLSEAAANRNNDALRQAKQ |
| 520 | R10 | 2216.5 | LSEAAANRNNDALRQAKQEST |
| 521 | R11 | 2335.6 | AANRNNDALRQAKQESTEYR  |
| 522 | R12 | 2462.7 | RNNDALRQAKQESTEYRRQV  |
| 523 | R13 | 2406.7 | DALRQAKQESTEYRRQVQSL  |
| 524 | R14 | 2440.6 | RQAKQESTEYRRQVQSLTCE  |
| 525 | R15 | 2370.5 | KQESTEYRRQVQSLTCEVDA  |
| 526 | R16 | 2283.6 | STEYRRQVQSLTCEVDALRG  |
| 527 | R17 | 2310.6 | YRRQVQSLTCEVDALRGKTNE |
| 528 | R18 | 2164.4 | QVQSLTCEVDALRGKTNESLE |
| 529 | R19 | 2224.6 | SLTCEVDALRGKTNESLERQM |
| 530 | R20 | 2339.7 | CEVDALRGKTNESLERQMR   |
| 531 | R21 | 2380.7 | DALRGKTNESLERQMR      |
| 532 | R22 | 2398.7 | KGTNESLERQMR          |
| 533 | R23 | 2383.6 | NESLERQMR             |
| 534 | R24 | 2458.7 | LERQMR                |
| 535 | R25 | 2389.6 | QMR                   |
| 536 | R26 | 2300.6 | EMEENFAVEAANYQDTIGRL  |
| 537 | R27 | 2283.5 | ENFAVEAANYQDTIGRLQDE  |
| 538 | R28 | 2248.5 | AVEAANYQDTIGRLQDEIQN  |
| 539 | R29 | 2337.7 | AANYQDTIGRLQDEIQNMKE  |
| 540 | R30 | 2412.8 | YQDTIGRLQDEIQNMKEEMA  |
| 541 | S 1 | 2412.9 | TIGRLQDEIQNMKEEMARHL  |
| 542 | S 2 | 2590   | RLQDEIQNMKEEMARHLREY  |
| 543 | S 3 | 2548.9 | DEIQNMKEEMARHLREYQDL  |
| 544 | S 4 | 2517.9 | QNMKEEMARHLREYQDLNV   |
| 545 | S 5 | 2475   | KEEMARHLREYQDLNVKMA   |
| 546 | S 6 | 2430.1 | MARHLREYQDLNVKMALDI   |
| 547 | S 7 | 2385   | HLREYQDLNVKMALDIEIA   |
| 548 | S 8 | 2399   | EYQDLNVKMALDIEIATYR   |
| 549 | S 9 | 2333.2 | DLNVKMALDIEIATYRKLL   |
| 550 | S10 | 2307   | NVKMALDIEIATYRKLLGE   |
| 551 | S11 | 2338   | MALDIEIATYRKLLGEESR   |
| 552 | S12 | 2336   | DIEIATYRKLLGEESRISL   |
| 553 | S13 | 2286   | IATYRKLLGEESRISLPLP   |
| 554 | S14 | 2349   | YRKLLGEESRISLPLPNFS   |
| 555 | S15 | 2215.8 | LLEGEESRISLPLPNFSSLN  |
| 556 | S16 | 2258.8 | GEESRISLPLPNFSSLNRL   |
| 557 | S17 | 2271.9 | SRLPLPNFSSLNRLRETNL   |
| 558 | S18 | 2230.8 | SLPLPNFSSLNRLRETNLDSL |
| 559 | S19 | 2242.8 | LPNFSSLNRLRETNLDSLPLV |
| 560 | S20 | 2271.7 | FSSLNRLRETNLDSLPLVDTH |
| 561 | S21 | 2321.8 | LNRLRETNLDSLPLVDTHSKR |
| 562 | S22 | 2308.8 | RETNLDSLPLVDTHSKRTLL  |
| 563 | S23 | 2264.9 | NLDSLPLVDTHSKRTLLIKT  |
| 564 | S24 | 2251.8 | SLPLVDTHSKRTLLIKTVET  |
| 565 | S25 | 2282.8 | LVDTHSKRTLLIKTVETRDG  |
| 566 | S26 | 2295.8 | THSKRTLLIKTVETRDGQVI  |
| 567 | S27 | 2314.8 | KRTLLIKTVETRDGQVINET  |
| 568 | S28 | 2281.6 | LLIKTVETRDGQVINETSQH  |
| 569 | S29 | 2309.3 | KTVETRDGQVINETSQHDD   |
| 570 | S30 | 2322.3 | VETRDGQVINETSQHDDLE   |

