

Supplementary Table III. Dual-encoding pMHC tetramer scheme

| Peptide number | Gene symbol | Peptide Sequence ^a | RS MHC-ELISA ^b | RS MHC-Bead ^c | Tetramer group | Dual-color encoding |
|----------------|-------------|-------------------------------|---------------------------|--------------------------|----------------|---------------------|
| 1 | NUP210 | M I H D L C L V F L | 71 | 38 | 1 | PE & Q565 |
| 2 | NUP210 | C L V F P A P A K A V | 56 | 51 | | PE & Q585 |
| 3 | PSD4 | V L L E S A F P G G L | 73 | 79 | | PE & Q605 |
| 4 | PLCB2 | R I L V G R L R A A | 84 | 79 | | PE & Q655 |
| 5 | HSPA6 | S L A S L L P H V | 88 | 101 | | PE & Q705 |
| 6 | CSF3R | T Q P G P L V P L | 70 | 63 | | PE & Q800 |
| 7 | HSPA6 | G I P P A P H G V | 73 | 98 | | APC & Q565 |
| 8 | ARHGAP15 | K L G D C I W T Y L | 78 | 39 | | APC & Q605 |
| 9 | GNA15 | R T I P T L Q P L | 74 | 56 | | APC & Q655 |
| 10 | CPVL | A L T E H S L M G M | 22 | 86 | | APC & Q800 |
| 11 | ICAM3 | A L C Q N G Y H G T I | 61 | 66 | | Q565 & Q605 |
| 12 | PSD4 | T L L N Q P D K M F L | 104 | 84 | | Q565 & Q655 |
| 13 | PSD4 | L L N Q P D K M F L | 82 | 21 | | Q565 & Q705 |
| 14 | SELL | G T M D C T H P L | 120 | 74 | | Q585 & Q605 |
| 15 | ZFP36L2 | W L L P L W A A L P L | 81 | 77 | | Q585 & Q655 |
| 16 | MPL | R L R A P E V F L | 66 | 31 | | Q585 & Q705 |
| 17 | HSPA6 | G L L Q V H H S C P L | 84 | 33 | | Q605 & Q705 |
| 18 | NCF4 | M M L P S Q P T L L | 86 | 95 | | Q605 & Q800 |
| 19 | NCF4 | M L P S Q P T L L | 50 | 56 | | Q655 & Q705 |
| 20 | MCM5 | Y L C D K V I P G | 96 | 90 | | Q655 & Q800 |
| 21 | HY | F I D S Y I C Q V | N.D. | N.D. | | Q705 & Q800 |
| 22 | CPVL | R Q V G D F H Q V | 79 | 76 | 2 | PE & APC |
| 23 | CD79b | L L L S A E V Q Q H L | 89 | 97 | | PE & Q565 |
| 24 | KCNAB2 | N L F D T A K V Y A | 95 | 85 | | PE & Q585 |
| 25 | HSPA6 | N L L G R F E L I G I | 65 | 70 | | PE & Q605 |
| 26 | HSPA6 | V L N S V A S L L | 107 | 58 | | PE & Q655 |
| 27 | NUP210 | D C L V F L A P A | 46 | 57 | | PE & Q705 |
| 28 | NUP210 | Q I L P L H G P E A | 63 | 51 | | PE & Q800 |
| 29 | ICAM3 | V L Q W L S D N R L | 59 | 43 | | APC & Q585 |
| 30 | ARHGAP 25 | S L Q R M V Q E L | 92 | 96 | | APC & Q605 |
| 31 | SP110 | E L H L L Q D E E V | 26 | 25 | | APC & Q655 |
| 32 | NUP210 | V L A S I E P E L P M | 70 | 55 | | APC & Q705 |
| 33 | SELPLG | F L P E T E P P E M | 94 | 93 | | APC & Q800 |
| 34 | ICAM3 | T M L G R R P P I | 69 | 88 | | Q565 & Q605 |
| 35 | SELL | S L F G K L Q L Q L | 42 | 60 | | Q565 & Q655 |
| 36 | FNBP1 | L A G S S L N P V | 67 | 99 | | Q565 & Q705 |
| 37 | DOCK2 | S I Q N Y H P F A | 60 | 51 | | Q585 & Q605 |
| 38 | ZFP36L2 | H L S Y H R L L P L | 77 | 44 | | Q585 & Q655 |
| 39 | DOCK2 | K L L Q I Q L R A K V | 49 | 78 | | Q585 & Q705 |
| 40 | DOCK2 | K L L Q I Q L C A | 103 | 72 | | Q605 & Q655 |
| 41 | HSPA6 | S L F E G V D F Y T | 77 | 77 | | Q605 & Q705 |
| 42 | FLT3 | S M P Q G T F P V | 63 | 87 | | Q605 & Q800 |
| 43 | SF1 | S L W S S S P M A | 101 | 102 | | Q655 & Q705 |
| 44 | CD48 | L L F E T V M C D T | 100 | 72 | | Q655 & Q800 |
| 45 | HSPA6 | F M T S S W W R A P L | N.D. | 73 | | Q705 & Q800 |
| 46 | HMHA1 | V L H D D L L E A | 83 | 91 | 3 | PE & APC |
| 47 | IQGAP2 | S V V K I Q S W F R M | 59 | 62 | | PE & Q565 |
| 48 | KCNAB2 | N L F D T A E V Y A A | 50 | 59 | | PE & Q585 |
| 49 | ITGAL | T A L R L T A F A S L | 64 | 34 | | PE & Q605 |
| 50 | LCP2 | M M K M M C I K D L | 36 | 69 | | PE & Q655 |
| 51 | HSPA6 | N L L G R F E L I | 65 | 76 | | PE & Q705 |
| 52 | CSF3R | T Q P G P L A P L | 76 | 79 | | PE & Q800 |
| 53 | ZFP36L2 | G L P A G A A A Q A | 35 | 54 | | APC & Q565 |
| 54 | DOCK2 | T L T T G E W A V | 68 | 73 | | APC & Q605 |
| 55 | SP110 | M L W S C T F C R M | 63 | 88 | | APC & Q655 |
| 56 | ITGAM | M M S E G G P P G A | 59 | 63 | | APC & Q705 |
| 57 | NUP210 | V L A S I E P E L | 79 | 96 | | APC & Q800 |
| 58 | ICAM3 | A L C Q N G Y H G T | 56 | 74 | | Q565 & Q605 |
| 59 | PSD4 | T L L N L P D K M F L | 93 | 93 | | Q565 & Q655 |
| 60 | PSD4 | L L N L P D K M F L | 88 | 26 | | Q565 & Q705 |
| 61 | HSPA6 | L L Q V H H S C P L | 33 | -14 | | Q585 & Q605 |
| 62 | BTK | Y I P S C T V V G M | 52 | 66 | | Q585 & Q655 |
| 63 | ZFP36L2 | R L L P L W A A L | 88 | 71 | | Q585 & Q705 |
| 64 | EVI2B | L P P P P L L D L | 69 | 19 | | Q605 & Q800 |
| 65 | EVI2B | D L P P P P P L L | 41 | 58 | | Q655 & Q705 |
| 66 | ARHGAP4 | S L C P W S W R A A | 90 | 78 | | Q655 & Q800 |
| 67 | ADIR-1F | S V A P A L A L F P A | N.D. | N.D. | | Q705 & Q800 |
| 68 | CPVL | R Q A G D F H Q V | 81 | 86 | 4 | PE & APC |
| 69 | CD79b | L L L P A E V Q Q H L | 84 | 99 | | PE & Q565 |
| 70 | KCNAB2 | N L F D T A E V Y A | 81 | 90 | | PE & Q585 |
| 71 | PLCB2 | F L A P P P P V R I L | 70 | 44 | | PE & Q605 |
| 72 | HSPA6 | V L N S L A S L L | 86 | 49 | | PE & Q655 |
| 73 | CSF3R | I T Q P G P L V P L | 82 | 75 | | PE & Q705 |
| 74 | NUP210 | I L P L H G P E A | 64 | 43 | | PE & Q800 |
| 75 | ICAM3 | V L Q W L P D N R L | 67 | 52 | | APC & Q585 |
| 76 | ITGAM | G T W E S N A N V | 52 | 74 | | APC & Q605 |
| 77 | GNA15 | T I P T P L Q P L | 67 | 66 | | APC & Q655 |
| 78 | NUP210 | V L A S I E A E L P M | 87 | 57 | | APC & Q705 |
| 79 | SELPLG | F L P E T E P P E I | 96 | 90 | | APC & Q800 |
| 80 | ICAM3 | T M L G R R A P I | 50 | 58 | | Q565 & Q605 |
| 81 | FNBP1 | R L A G S S L N P V | 91 | 104 | | Q565 & Q655 |
| 82 | FNBP1 | L A G S S L N L V | 71 | 79 | | Q565 & Q705 |
| 83 | ZFP36L2 | W L L P L W A A L | 97 | 96 | | Q585 & Q655 |
| 84 | DOCK2 | R L T S T N P T T | 67 | 75 | | Q585 & Q705 |
| 85 | NCF4 | M M L P S Q P T L L T | 52 | 70 | | Q605 & Q655 |
| 86 | BTK | C L C L L N P Q G T | 18 | 21 | | Q605 & Q705 |
| 87 | NCF4 | M M L P S R P T L | 79 | 61 | | Q605 & Q800 |
| 88 | N4BP2L1 | K L Y S E N L T L A | 122 | 86 | | Q655 & Q705 |
| 89 | ITGAM | R L Q V P V E A V | 58 | 81 | 5 | PE & APC |
| 90 | ARHGAP4 | S L L S P L H C W A V | 82 | 71 | | PE & Q565 |
| 91 | FLT3 | K V L H E L F G M D I | 84 | 79 | | PE & Q585 |
| 92 | LRMP | S L K L L E S L T P I | 90 | 93 | | PE & Q605 |
| 93 | HSPA6 | L L G R F E L I G I | 82 | 54 | | PE & Q655 |
| 94 | LRMP | N C L K L L E S L | 59 | 51 | | PE & Q705 |
| 95 | HSPA6 | F I Q V Y E V E R A | 77 | 80 | | PE & Q800 |
| 96 | NCF4 | R M M L P S Q P T L | 72 | 80 | | APC & Q565 |
| 97 | NUP210 | R A P P T T P A L | 65 | 80 | | APC & Q585 |
| 98 | ARHGAP 25 | S L Q S T V Q E L | 91 | 94 | | APC & Q605 |
| 99 | SP110 | M L W S C T F C R I | 100 | 81 | | APC & Q655 |
| 100 | NUP210 | V L A S I E A E L | 86 | 99 | | APC & Q800 |

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|-----|-----------|-------------|------|-----|-------------|
| 101 | FNBP1 | SRLAGSSLNPV | 90 | 90 | Q565 & Q655 |
| 102 | FNBP1 | RLAGSSLNL | 91 | 73 | Q565 & Q705 |
| 103 | SP110 | ILLEAPTGLV | 78 | 73 | Q585 & Q605 |
| 104 | ZFP36L2 | RLPLWAAALPL | 88 | 64 | Q585 & Q655 |
| 105 | ARHGAP 25 | MLLKLTSEFL | 92 | 101 | Q585 & Q705 |
| 106 | DOCK2 | QLCAKVPPL | 94 | 82 | Q605 & Q655 |
| 107 | IL2RG | YLFSEKETS | 88 | 76 | Q605 & Q705 |
| 108 | HSPA6 | LLHVHHCPL | 61 | 26 | Q605 & Q800 |
| 109 | FMNL1 | SLWQLGAAVML | 96 | 95 | Q655 & Q705 |
| 110 | SYNGR1 | FTWAGKAVL | 100 | 90 | Q655 & Q800 |
| 111 | CD48 | FVSGSGIAIA | N.D. | 99 | Q705 & Q800 |
| 112 | CD79b | TMASTVSRSA | 53 | 72 | PE & APC |
| 113 | IQGAP2 | FIDNTDSVV | 49 | 74 | PE & Q565 |
| 114 | PSD4 | VLLSEAFPGR | 72 | 55 | PE & Q585 |
| 115 | PSD4 | RLQTPMQVGL | 87 | 65 | PE & Q605 |
| 116 | HSPA6 | SVASLLPHV | 88 | 90 | PE & Q655 |
| 117 | CSF3R | ITQPPGLAPL | 73 | 83 | PE & Q705 |
| 118 | HSPA6 | GIPPARGV | 71 | 96 | PE & Q800 |
| 119 | DOCK2 | LLTLTGEWAV | 59 | 68 | APC & Q585 |
| 120 | ITGAM | GMWESNAV | 73 | 73 | APC & Q605 |
| 121 | CPVL | ALTERSLMGM | 72 | 23 | APC & Q705 |
| 122 | LTB | FLTSGTQFSDA | 61 | 68 | APC & Q800 |
| 123 | HSPA6 | LIFDLGGGT | 52 | 48 | Q565 & Q605 |
| 124 | FNBP1 | RLAGSSLNLV | 84 | 93 | Q565 & Q655 |
| 125 | SELL | GTMDCTHSL | 87 | 57 | Q585 & Q705 |
| 126 | NCF4 | ALMVRQARGL | 74 | 45 | Q585 & Q605 |
| 127 | CD69 | STLQGLTSV | 74 | 78 | Q585 & Q655 |
| 128 | DOCK2 | RLTSTNPTM | 43 | 50 | Q585 & Q705 |
| 129 | NCF4 | MMLPSRPTLLT | 45 | 58 | Q605 & Q655 |
| 130 | NCF4 | MMLPSRPTLL | 78 | 93 | Q605 & Q705 |
| 131 | NCF4 | MMLPSQPTL | 90 | 94 | Q605 & Q800 |
| 132 | SYNGR1 | FTWAGQAVL | 95 | 81 | Q655 & Q705 |
| 133 | N4BP2L1 | KIYSENLKLA | 104 | 82 | Q655 & Q800 |
| 134 | CSF3R | AMARDPHSLWV | N.D. | 104 | Q705 & Q800 |
| 135 | CPVL | RVTSIRLFEV | 54 | 66 | PE & APC |
| 136 | IQGAP2 | SIVKIQSWFRM | 55 | 77 | PE & Q565 |
| 137 | FLT3 | VLHELFGMDI | 76 | 90 | PE & Q585 |
| 138 | ITGAL | RALRLTAFASL | 92 | 29 | PE & Q605 |
| 139 | PSD4 | LLSEAFPGL | 57 | 68 | PE & Q655 |
| 140 | PLCB2 | ILVGLRAA | 104 | 86 | PE & Q705 |
| 141 | LRMP | SLLQSRYSYL | 74 | 13 | PE & Q800 |
| 142 | SELL | QLVIQCEPL | 67 | 65 | APC & Q565 |
| 143 | NUP210 | LLWVIAGVPV | 80 | 80 | APC & Q585 |
| 144 | ARHGAP 25 | SLSMVQEL | 93 | 96 | APC & Q605 |
| 145 | BTK | KLANIQCPCL | 87 | 77 | APC & Q655 |
| 146 | PSMB10 | ALRCASPWL | 65 | 26 | APC & Q705 |
| 147 | SELPLG | FLPETEPPEML | 69 | 60 | APC & Q800 |
| 148 | FNBP1 | SRLAGSSLNLV | 77 | 72 | Q565 & Q655 |
| 149 | PSD4 | LNLPDKMFL | 64 | 58 | Q565 & Q705 |
| 150 | SP110 | ILLEAPTGLA | 66 | 71 | Q585 & Q605 |
| 151 | ZFP36L2 | HLSYHWLLPL | 80 | 25 | Q585 & Q655 |
| 152 | DOCK2 | KLLQIQCAKV | 53 | 66 | Q585 & Q705 |
| 153 | DOCK2 | KLLQIQLRA | 83 | 20 | Q605 & Q655 |
| 154 | IL2RG | YLFSEKETS | 88 | 75 | Q605 & Q705 |
| 155 | HSPA6 | VLVEGSTRI | 74 | 55 | Q605 & Q800 |
| 156 | N4BP2L1 | KIYSENLKLA | 108 | 93 | Q655 & Q705 |
| 157 | CD48 | LLSETVMCDT | 100 | 81 | Q655 & Q800 |
| 158 | CD48 | FVSGSGIATA | 110 | 91 | PE & APC |
| 159 | KCNAB2 | MIMASTSSI | 91 | 92 | PE & Q565 |
| 160 | NUP210 | IMIHDCLLA | 104 | 86 | PE & Q585 |
| 161 | NCF4 | LLSDEDVAL | 92 | 97 | PE & Q605 |
| 162 | ARHGAP 25 | SLQRTVQEL | 87 | 84 | PE & Q655 |
| 163 | EVI2B | LLFLLQMMQV | 77 | 104 | PE & Q705 |
| 164 | NCF4 | RLSDEDVELM | 67 | 64 | APC & Q565 |
| 165 | EVI2B | LLQMMQVCL | 74 | 91 | APC & Q585 |
| 166 | FMNL1 | SLWQLGAAV | 76 | 61 | APC & Q605 |
| 167 | CORO1A | KLQAPVQEL | 79 | 53 | APC & Q655 |
| 168 | LYN | RLQREWHTL | 69 | 54 | APC & Q705 |
| 169 | RASGRP2 | VLDFRLPSPV | 51 | 43 | APC & Q800 |
| 170 | PTPN6 | STVASRLGPV | 72 | 74 | Q565 & Q605 |
| 171 | NCF4 | RCHELTVSL | 33 | 69 | Q565 & Q655 |
| 172 | NCF4 | SLLSLPVWVLM | 74 | 48 | Q565 & Q705 |
| 173 | N4BP2L1 | MALENNYEV | 59 | 83 | Q585 & Q605 |
| 174 | MAP4K1 | SLGIMAIEL | 71 | 70 | Q585 & Q655 |
| 175 | SEPT6 | RLSCPPSPRA | 53 | 64 | Q585 & Q705 |
| 176 | FCER1A | ISTQQQATFLL | 56 | 55 | Q605 & Q655 |
| 177 | DUSP22 | MLGDPVPPTPT | 41 | 88 | Q605 & Q705 |
| 178 | SP110 | ELHLLQDKEV | 23 | 47 | Q655 & Q800 |
| 179 | ATP2A3 | KMFVKGAPESV | N.D. | 98 | Q705 & Q800 |
| 180 | N4BP2L1 | KIYSENLTLA | 92 | 95 | PE & APC |
| 181 | N4BP2L1 | TMKIYSENLTL | 88 | 83 | PE & Q565 |
| 182 | FMNL1 | SLWQLGAAV | 88 | 91 | PE & Q655 |
| 183 | EVI2B | MMQVCLHHL | 84 | 65 | PE & Q705 |
| 184 | NUP210 | LLIGATMQV | 88 | 81 | PE & Q800 |
| 185 | HSPA6 | FMTSSWVRA | 82 | 78 | APC & Q565 |
| 186 | IQGAP2 | ILHSRTEFI | 80 | 81 | APC & Q605 |
| 187 | LRMP | FLPRNIGNA | 62 | 79 | APC & Q655 |
| 188 | FLT3 | ALARAGATVPL | 76 | 73 | APC & Q705 |
| 189 | NCF4 | PLPEAPLSL | 77 | 91 | APC & Q800 |
| 190 | NCF4 | AISANIADI | 47 | 56 | Q565 & Q605 |
| 191 | EVI2B | LLFLLQMMQI | 65 | 74 | Q565 & Q655 |
| 192 | DOK2 | TLPPRPDHI | 54 | 66 | Q565 & Q705 |
| 193 | NCF4 | LLSDEDVELM | 62 | 68 | Q585 & Q605 |
| 194 | DOK2 | LLASSMSSQL | 62 | 59 | Q585 & Q655 |
| 195 | NUP210 | IMIHDCLLV | 60 | 54 | Q605 & Q655 |
| 196 | DOK2 | QLGRISLLL | 63 | 37 | Q605 & Q705 |
| 197 | CSF3R | AQDPHSLWV | 60 | 64 | Q605 & Q800 |
| 198 | ARHGAP15 | FLRAENETGNM | 39 | 64 | Q655 & Q705 |
| 199 | FMNL1 | QLRAAVMLRL | 65 | 19 | Q655 & Q800 |
| 200 | CSF3R | AMAQDPHSLWV | N.D. | 103 | Q705 & Q800 |
| 201 | N4BP2L1 | KIYSENLTL | 94 | 92 | PE & APC |
| 202 | MPL | HLWVKNVFL | 109 | 93 | PE & Q565 |
| 203 | ATP2A3 | KMNVFDTNL | 89 | 89 | PE & Q585 |
| 204 | BTK | SLTAISTTL | 83 | 80 | PE & Q705 |
| 205 | EVI2B | FLLQMMQVCL | 86 | 82 | APC & Q565 |

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| 206 | SF1 | SLWSSSPVAT | 69 | 84 | APC & Q585 |
| 207 | IQGAP2 | ILHSRTEFV | 77 | 86 | APC & Q605 |
| 208 | NCF4 | SLLNLPVWV | 73 | 92 | APC & Q705 |
| 209 | PIK3CD | SVSHSSSPMTL | 76 | 52 | APC & Q800 |
| 210 | N4BP2L1 | TMKLYSENLTLL | 73 | 91 | Q565 & Q605 |
| 211 | ARHGAP4 | PLHCWVVL | 70 | 77 | Q565 & Q655 |
| 212 | DUSP22 | CLMGDPVPT | 57 | 86 | Q565 & Q705 |
| 213 | CD79b | PLDGGVAAA | 45 | 65 | Q585 & Q605 |
| 214 | BTK | HLASEKVYAI | 68 | 65 | Q585 & Q705 |
| 215 | CCL3 | FLTKRGRQV | 54 | 56 | Q605 & Q655 |
| 216 | PTPN6 | RLGPPVARTRV | 48 | 68 | Q605 & Q800 |
| 217 | BTK | SLLTISTTL | 92 | 84 | Q655 & Q705 |
| 218 | MAP4K1 | IMAIELAEL | 92 | 93 | Q655 & Q800 |
| 219 | ATP2A3 | KMFVKGAPDSV | N.D. | 106 | Q705 & Q800 |
| 220 | EVI2B | FLLQMMQICL | 91 | 90 | PE & APC |
| 221 | EVI2B | QMMQVCLHHL | 87 | 65 | PE & Q585 |
| 222 | CSF3R | AMARDPHSL | 83 | 62 | PE & Q605 |
| 223 | NUP210 | FLAPAKAVVYV | 88 | 85 | PE & Q705 |
| 224 | BTK | KLANIQCLCL | 89 | 51 | PE & Q800 |
| 225 | NUP210 | TIMIHDLCLA | 85 | 72 | APC & Q565 |
| 226 | IQGAP2 | KIQRNLWTL | 76 | 69 | APC & Q585 |
| 227 | ITGAM | VLRQEVAPL | 89 | 84 | APC & Q605 |
| 228 | NCF4 | LLSDEDVALM | 76 | 72 | APC & Q655 |
| 229 | EVI2B | JCLHLLPFWI | 80 | 79 | APC & Q705 |
| 230 | EVI2B | VCLHLLPFWI | 57 | 75 | APC & Q800 |
| 231 | ITGAM | RVLRQEVAPL | 74 | 79 | Q565 & Q605 |
| 232 | LRMP | LQSRGYSSL | 72 | 70 | Q565 & Q655 |
| 233 | N4BP2L1 | VMALENNYEV | 60 | 72 | Q565 & Q705 |
| 234 | NUP210 | TLLIGATIQVT | 69 | 48 | Q585 & Q605 |
| 235 | PRKCB1 | RIGQRQETV | 63 | 63 | Q585 & Q655 |
| 236 | ARHGAP4 | LLSPLHCWAV | 77 | 70 | Q585 & Q705 |
| 237 | ZFP36L2 | RLRPLCCTA | 56 | 58 | Q605 & Q655 |
| 238 | NUP210 | LLIGATIQV | 59 | 71 | Q605 & Q705 |
| 239 | NUP210 | TLLIGATIQV | 68 | 81 | Q605 & Q800 |
| 240 | MPL | HLWVKNMFL | 104 | 82 | PE & APC |
| 241 | DOK2 | TLLASSMSSQL | 74 | 80 | PE & Q585 |
| 242 | NCF4 | RLSDEDVALM | 77 | 68 | PE & Q655 |
| 243 | CD79b | TLRTGEVKWSV | 69 | 62 | PE & Q800 |
| 244 | ITGB2 | RLGGAAALPRV | 73 | 95 | APC & Q565 |
| 245 | BTK | LASEKVYTI | 62 | 67 | APC & Q585 |
| 246 | ATP2A3 | RLWTTTRPRV | 68 | 68 | APC & Q655 |
| 247 | MAP4K1 | GMAIELAEL | 81 | 81 | APC & Q705 |
| 248 | NUP210 | LLIGATIQVT | 71 | 46 | APC & Q800 |
| 249 | SEPT6 | RLSCSSPRA | 58 | 56 | Q565 & Q605 |
| 250 | IQGAP2 | ILHSRTEFISV | 66 | 70 | Q565 & Q655 |
| 251 | NUP210 | LAPAKAVVYV | 67 | 72 | Q565 & Q705 |
| 252 | LTB | DLSPLGPA | 62 | 61 | Q585 & Q655 |
| 253 | IQGAP2 | KIQRNLRTL | 66 | 39 | Q585 & Q705 |
| 254 | PIK3CD | KTGECCLYM | 84 | 86 | Q605 & Q655 |
| 255 | NUP210 | TLLIGATMQV | 87 | 83 | Q605 & Q705 |
| 256 | FMNL1 | SLWQLRAAV | 86 | 91 | Q605 & Q800 |
| 257 | N4BP2L1 | KLYSENKLL | 93 | 90 | Q655 & Q705 |
| 258 | NCF4 | SLLSLPVWV | 80 | 87 | Q655 & Q800 |
| 259 | CORO1A | KLQATVQEL | 89 | 81 | PE & APC |
| 260 | SF1 | SLWSSSPVA | 86 | 102 | PE & Q565 |
| 261 | SF1 | SLWSSSPMATT | 75 | 83 | PE & Q585 |
| 262 | EVI2B | MMQICLHHL | 97 | 74 | PE & Q605 |
| 263 | EVI2B | LLQMMQICL | 87 | 87 | PE & Q655 |
| 264 | N4BP2L1 | KIYSENKLL | 83 | 81 | PE & Q705 |
| 265 | NUP210 | CLFPPAPAKA | 20 | 23 | APC & Q565 |
| 266 | NCF4 | RLSDEDVEL | 85 | 93 | APC & Q585 |
| 267 | SYNGR1 | SIFTWAGKAVL | 81 | 46 | APC & Q655 |
| 268 | ITGAM | RVLRQEVAPL | 66 | 79 | APC & Q705 |
| 269 | CORO1A | GLWRHSPCA | 114 | 62 | Q565 & Q605 |
| 270 | LRMP | SLLQSRGYSSL | 69 | 72 | Q565 & Q655 |
| 271 | LTB | GLREREDLL | 65 | 48 | Q565 & Q705 |
| 272 | NCF4 | QLQGLQHNA | 53 | 51 | Q585 & Q605 |
| 273 | HSPA6 | FMTSSWVGA | 65 | 67 | Q585 & Q655 |
| 274 | N4BP2L1 | AVMALENNYEV | 64 | 85 | Q605 & Q655 |
| 275 | NUP210 | VTLLIGATIQV | 63 | 78 | Q605 & Q705 |
| 276 | CD79b | LLSAEVQQHL | 65 | 34 | Q655 & Q800 |
| 277 | CD48 | KQDNSTYIMRV | N.D. | 124 | Q705 & Q800 |
| 278 | DOK2 | SMSSQLGRISL | 86 | 76 | PE & APC |
| 279 | NCF4 | LLSDEDVEL | 85 | 92 | PE & Q585 |
| 280 | NUP210 | IMIHDLCVFL | 81 | 64 | PE & Q605 |
| 281 | NUP210 | LLIGATMQVT | 74 | 53 | PE & Q655 |
| 282 | SF1 | SLWSSSPVATT | 70 | 81 | PE & Q705 |
| 283 | LTB | GLCEREDLL | 75 | 72 | PE & Q800 |
| 284 | PSD4 | AQAEHSITRV | 78 | 61 | APC & Q605 |
| 285 | CCL3 | FLTKRGGQV | 64 | 75 | APC & Q705 |
| 286 | NUP210 | CLVFLAPAKA | 50 | 67 | Q565 & Q655 |
| 287 | SF1 | SLWSSSPMAT | 88 | 100 | Q585 & Q605 |
| 288 | N4BP2L1 | KIYSENLTLL | 91 | 94 | Q585 & Q655 |
| 289 | ARHGAP4 | SLLSPLHCWA | 86 | 81 | Q605 & Q655 |
| 290 | NCF4 | RLSDEDVAL | 85 | 71 | Q605 & Q705 |
| 291 | EVI2B | GLPPPPPLL | 80 | 85 | Q605 & Q800 |
| 292 | NUP210 | CLVFLAPAKA | 72 | 69 | Q655 & Q705 |
| 293 | NCF4 | SLLNLPVWVLM | 85 | 66 | Q655 & Q800 |
| 294 | MCM5 | YLCDKVVPG | 97 | 88 | PE & APC |
| 295 | NUP210 | VTLLIGATMQV | 88 | 84 | PE & Q565 |
| 296 | ARHGAP4 | SLLSPLHCWA | 50 | 65 | PE & Q585 |
| 297 | NCF4 | LLSDEDVELM | 83 | 69 | PE & Q605 |
| 298 | EVI2B | QMMQICLHHL | 82 | 59 | PE & Q655 |
| 299 | SYNGR1 | SIFTWAGQAVL | 84 | 58 | PE & Q705 |
| 300 | FMNL1 | SLWQLRAAVML | 58 | 48 | APC & Q565 |
| 301 | NUP210 | FLAPAKAVV | 85 | 83 | APC & Q585 |
| 302 | CD79b | RTGEVKWSV | 67 | 79 | APC & Q605 |
| 303 | BTK | LASEKVYAI | 72 | 69 | APC & Q655 |
| 304 | CSF3R | AMARDPHSL | 72 | 53 | APC & Q800 |
| 305 | NCF4 | LLNLPVWVL | 38 | 65 | Q565 & Q605 |
| 306 | FMNL1 | RMTRWAQTM | 79 | 38 | Q565 & Q655 |
| 307 | CCL3 | FLTKRSGQV | 69 | 77 | Q565 & Q705 |
| 308 | PRKCB1 | SMSKEAVAI | 68 | 65 | Q585 & Q605 |
| 309 | HSPA6 | SMCRFSPLTL | 61 | 69 | Q585 & Q655 |
| 310 | IQGAP2 | NLWTFLEQTGHV | 60 | 82 | Q585 & Q705 |

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|-----|----------|-----------------------|------|-----|-------------|
| 311 | HSPA6 | K C Q E V L A W L | 82 | 30 | Q605 & Q705 |
| 312 | NUP210 | T L L I G A T M Q V T | 45 | 41 | Q605 & Q800 |
| 313 | PTPN6 | T L S S R V C C R T | 72 | 34 | Q655 & Q705 |
| 314 | NUP210 | L V F L A P A K A V V | 53 | 67 | Q655 & Q800 |
| 315 | NCF4 | L L S D E D V A L M V | 70 | 82 | PE & APC |
| 316 | N4BP2L1 | A L E N N Y E V L | 71 | 63 | PE & Q565 |
| 317 | EVI2B | C L H H L P F W I | 41 | 33 | PE & Q585 |
| 318 | PTPN6 | S T V A S W L G P V | 75 | 64 | PE & Q605 |
| 319 | CCL3 | F L T K R S R Q V | 64 | 76 | PE & Q655 |
| 320 | ARHGAP4 | P L H C W A V L L | 69 | 77 | PE & Q800 |
| 321 | PTPN6 | T V A S R L G P V | 73 | 61 | APC & Q565 |
| 322 | CCL3 | F L T K R S G Q V C A | 61 | 59 | APC & Q605 |
| 323 | SP110 | L L E A P T G L V | 75 | 69 | APC & Q655 |
| 324 | NCF4 | V S L L S L P V W V | 56 | 60 | APC & Q800 |
| 325 | ARHGAP15 | K L G D C I W T Y P S | N.D. | 105 | Q565 & Q655 |
| 326 | NUP210 | M I H D L C L A F P A | N.D. | 128 | Q565 & Q705 |
| 327 | PSD4 | N L P D K M F L P G A | N.D. | 124 | Q585 & Q605 |
| 328 | ARHGAP15 | K L G D C I W T Y L S | N.D. | 91 | Q585 & Q655 |
| 329 | HSPA6 | G V F I Q V Y E V | N.D. | 103 | Q585 & Q705 |
| 330 | LYN | L M F W S P S H S C A | N.D. | 102 | Q605 & Q705 |
| 331 | MCM5 | T L T N I A M R P G L | N.D. | 74 | Q605 & Q800 |
| 332 | RASGRP2 | Q V L D L R L P S G V | N.D. | 107 | Q655 & Q705 |
| 333 | NUP210 | A T A T P C W T W L L | N.D. | 86 | Q655 & Q800 |

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^a Peptide sequences are provided with polymorphic residue in red

^b RS are normalized to the HLA-A2 high affinity CMV-pp65_{NLV} peptide