

| | | | | | | | | | | | |
|--------|---------------|-------|--|-------|-------|-------|-------|-------|--|---|--|
| KRT32 | rs2071561_T | S222Y | ADLEAQVEyLK ADLEAQVEyLKEELMCLCK ADLEAQVEyLKEELMCLCK | 0.728 | 0.421 | 0.885 | 0.920 | 0.769 | 1278.6576 2198.0719 2182.077 2326.1668 2310.1719 | 2 3 3 3 4 | -- M(+16), C(+57) C(+57) M(+16), C(+57) M(+16), C(+57) C(+57) |
| KRT32 | rs72830046_C | R280H | CQYEA M VEANRR CQYEA M VEANR | 0.934 | 0.997 | 0.984 | 0.881 | 0.957 | 1509.6573 1526.6839 1542.6788 1525.6522 1543.6628 1370.5827 1386.5777 | 2 3 3 2 2 3 2 3 2 | C(+57), C(-17) C(+57) C(+57), M(+16) C(+57), M(+16) C(+57), C(-17), M(+16) C(+57), Q(+1), M(+16) C(+57), Q(+1), M(+16) C(+57) C(+57) C(+57), M(+16) C(+57), C(-17), M(+16) |
| KRT32 | rs72830046_T | R280H | CQYEA M VEANhR | 0.479 | 0.083 | 0.212 | 0.530 | 0.349 | 1506.61 | 2 | C(+57), C(-17), M(+16) |
| KRT32 | rs16966929_A | T339M | DSLEn m LTESEAR | 0.000 | 0.039 | 0.000 | 0.000 | 0.000 | 1494.6741 | 2 | -- |
| KRT32 | rs2071563_G | T395M | LEGEIN T YR ARLEGEIN T YR | 0.827 | 0.814 | 0.891 | 0.935 | 0.824 | 1094.5477 1321.6859 | 2 3 2 | -- -- -- |
| KRT32 | rs2071563_A | T395M | LEGEIN m YR ARLEGEIN m YR | 0.676 | 0.666 | 0.563 | 0.423 | 0.628 | 1124.5404 1351.6787 | 2 3 | -- -- |
| KRT32 | rs2604955_C | N402S | SLLEs E DCK SLLEs E DCKLP SLLEs E DCKLPCNPC | 0.907 | 0.858 | 0.911 | 0.738 | 0.816 | 1080.4878 1290.6246 1821.7816 | 2 2 2 3 | C(+57) C(+57) All C = C(+57) All C = C(+57) |
| KRT32 | rs2604953_G | P427T | LPCNPCSTPSC T CVPSPCVPR | 0.107 | 0.433 | 0.401 | 0.270 | 0.389 | -- | -- | -- |
| KRT32 | rs2604953_T | P427T | LPCNPCSTPSC T CVPSPCV R LPCNPCSTPSC T CVPSPCV R TV R CVPR | 1.000 | 0.930 | 0.950 | 0.986 | 0.951 | 2551.0866 3263.456 | 3 3 | All C = C(+57) All C = C(+57) |
| KRT32 | rs2604956_C | D371E | Ae L ERQNEQYQLLDVR | 0.145 | 0.074 | 0.093 | 0.051 | 0.075 | 2103.0829 | 3 | -- |
| KRT32 | rs3744786_T | Q72R | TYLSSSCQ A ASGISGSMGPGSWYSEGFNGNEK | 0.918 | 0.974 | 0.893 | 0.744 | 0.839 | 3403.4478 3404.432 | 3 3 | C(+57), M(+16) C(+57), M(+16), N(+1) |
| KRT32 | rs3744786_C | Q72R | TYLSSSC r | 0.525 | 0.309 | 0.575 | 0.736 | 0.631 | -- | -- | -- |
| KRT32 | rs2071560_A | I171T | MV V NIDNAK | 1.000 | 0.997 | 0.996 | 0.998 | 0.994 | 1019.519 1020.503 | 2 2 | M(+16) M(+16), N(+1) |
| KRT32 | rs2071560_G | I171T | MV v NIDNAK | 0.002 | 0.113 | 0.188 | 0.022 | 0.098 | -- | -- | -- |
| KRT32 | rs146792525_C | A255T | LNIEVD A APPVDL T R CQLGDRLNIEVD A APPVDL T R | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1622.8748 2352.1976 2335.1711 2353.1816 | 2 3 3 3 3 | -- -- C(+57) C(+57), C(-17) C(+57), Q(+1) |
| KRT32 | rs146792525_T | A255T | LNIEVD t APPVDL T R | 0.000 | 0.039 | 0.000 | 0.000 | 0.003 | 1652.8853 | 2 3 | -- -- |
| KRT33A | rs12937519_A | A270V | QVVSSSEQLQSYQ v EIHEL R QVVSSSEQLQSYQ v EIHEL R R | 0.439 | 0.629 | 0.599 | 0.339 | 0.346 | 2335.2139 2318.187 2491.315 2474.288 | 3 3 3 3 | -- Q(-17) -- Q(-17) |
| KRT34 | rs2239710_G | I238T | SQYEALVEIN R SQYEALVEIN R R SQYEALVEINRRVEVQWFATQTEELNK | 0.887 | 1.000 | 0.833 | 0.939 | 0.876 | 1321.6747 1322.6587 1477.7758 1478.7598 3311.618 3312.602 | 2 2 3 3 3 3 | -- Q(+1) -- Q(+1) Q(+1) Q(+1), N(+1) |
| KRT34 | rs2071599_T | H348R | DSLENTL T ESEAH Y SSQLSQVSLITNVESQLAEIR DSLENTL T ESEAH Y SSQLSQVSLITNVESQ DSLENTL T ESEAH Y SSQLSQVSL DSLENTL T ESEAH Y SSQLSQVSL DSLENTL T ESEAH Y SSQLSQVSL DSLENTL T ESEAH Y SSQL DSLENTL T ESEAH Y SSQ DSLENTL T ESEAH Y S DSLENTL T ESEAH Y DSLENTL T ESEAH DSLENTL T ESEAH TLTESEAH Y SSQLSQVSLITNVESQLAEIR | 0.996 | 0.864 | 0.994 | 0.998 | 0.997 | 4019.968 3437.6191 2666.2428 2553.1587 2466.1267 2023.9091 1910.825 1695.7344 1608.7024 1445.639 3461.7394 | 3 4 3 4 3 3 2 2 2 2 2 3 4 | -- -- -- -- -- -- -- -- -- -- -- -- -- |
| KRT34 | rs61740668_G | R334W | CDLE r QNEQYQVLLDVR LAEIRCDLERQNEQYQVLLDVR DLERQNEQYQVLLDVR RQNEQYQVLLDVR RQNEQYQVLLDVR | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2178.0608 2161.0342 2162.018 2163.002 2760.41 2018.0301 1660.8765 1504.7754 1487.7489 1505.7594 | 3 2 3 2 4 4 3 3 2 2 2 2 2 | C(+57) C(+57) C(+57), C(-17) C(+57), C(-17) C(+57), C(-17), Q(+1) C(+57), C(-17), Q(+1), N(+1) C(+57) -- -- -- Q(-17) N(+1) Q(+1) |
| KRT34 | rs61740668_A | R334W | CDLE w QNEQYQVLLDVR | 0.014 | 0.002 | 0.012 | 0.006 | 0.017 | 2208.039 2191.012 | 3 3 | C(+57) C(+57), C(-17) |
| KRT35 | rs743686_A | S36P | VSAMYS S SSCK VSAMYS S SSCKLPSPVAR | 0.712 | 0.454 | 0.893 | 0.562 | 0.669 | 1222.5078 1206.5129 2143.0522 2127.0573 | 2 2 3 3 | M(+16), C(+57) C(+57) M(+16), C(+57) C(+57) |
| KRT35 | rs743686_G | S36P | VSAMYS s pCK VSAMYS s pCKLPSPVAR | 0.791 | 0.924 | 0.560 | 0.867 | 0.787 | 1216.5337 1232.5286 2137.0781 2153.073 | 2 2 3 3 | C(+57) M(+16), C(+57) C(+57) M(+16), C(+57) |
| KRT35 | rs138303882_A | R163W | YETEYSL w QLVESDINGLR | 0.000 | 0.009 | 0.000 | 0.000 | 0.003 | -- | -- | -- |
| KRT35 | rs138303882_G | R163W | TKYETEVS L R YETEYSL R RQLVESDINGLR RQLVESDINGLRR LVVEIDNAKLAADD R TKYETEVS L R | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1225.6423 996.4996 1243.6641 1226.6375 1399.7652 1382.7386 1383.7226 2995.5735 | 2 3 2 2 2 3 2 3 2 4 | -- -- -- Q(-17) -- -- Q(-17) Q(-17) Q(-17), N(+1) -- |
| KRT35 | rs12451652_C | C441Y | TN C SPRPICVPCGG R TN C SPRPICVPCGG R | 0.958 | 0.994 | 0.925 | 0.941 | 0.986 | 1974.9095 1975.8935 1827.8411 | 3 3 3 | All C = C(+57) N(+1), All C = C(+57) All C = C(+57) |

| | | | | | | | | | | | |
|-------|---------------|-------|-------------------------------------|-------|-------|-------|-------|-------|-----------|----|--------------------------------|
| KRT35 | rs12451652_T | C441Y | TN _y SPRIPCPCGGRF | 0.302 | 0.142 | 0.516 | 0.384 | 0.231 | -- | -- | -- |
| KRT35 | rs2071601_C | P413A | TNCSaRPICVPCGGRF | 0.789 | 0.867 | 0.579 | 0.867 | 0.767 | 1801.8254 | 3 | All C = C(+57) |
| | | | TNCSaRPICVPCGGRF | | | | | | 1948.8938 | 3 | All C = C(+57) |
| | | | | | | | | | 1949.8778 | 3 | N(+1), All C = C(+57) |
| KRT35 | rs2071601_G | P413A | TNCS _R PRIPCPCGGRF | 0.712 | 0.596 | 0.887 | 0.562 | 0.680 | 1974.9095 | 3 | All C = C(+57) |
| | | | | | | | | | 1975.8935 | 3 | N(+1), All C = C(+57) |
| | | | TNCS _R PRIPCPCGGRF | | | | | | 1827.8411 | 3 | All C = C(+57) |
| KRT36 | rs75790652_G | A202G | LNVEVDAAPPVDLNK | 1.000 | 1.000 | 0.996 | 0.998 | 0.997 | 1593.848 | 2 | -- |
| | | | CQLGDRLNVEVDAAPPVDLNKILEDMR | | | | | | 3080.5504 | 3 | -- |
| KRT36 | rs75790652_C | A202G | CQLGDRLNVEVDAAPPVDLNK | 0.002 | 0.002 | 0.153 | 0.008 | 0.084 | -- | -- | -- |
| KRT36 | rs11657323_T | N357T | YSSQLAQMQCLISNVEAQLSEIR | 0.954 | 0.976 | 1.000 | 0.965 | 0.974 | 2684.3018 | 3 | M(+16), C(+57) |
| | | | | | | | | | 2668.3069 | 3 | C(+57) |
| | | | QMQLISNVEAQLSEIR | | | | | | 2034.995 | 3 | M(+16), C(+57) |
| KRT36 | rs11657323_G | N357T | YSSQLAQMQCLISNVEAQLSEIR | 0.417 | 0.327 | 0.008 | 0.286 | 0.222 | 2655.312 | 3 | C(+57) |
| | | | | | | | | | 2656.296 | 3 | C(+57), Q(+1) |
| KRT36 | rs9904102_G | R277C | CQYEALVENNRR | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1395.6321 | 2 | C(+57) |
| | | | CQYEALVENNRR | | | | | | 1551.7332 | 3 | C(+57) |
| | | | | | | | | | 1534.7067 | 2 | C(+57), C(-17) |
| KRT36 | rs9904102_A | R277C | CQYEALVENNRR | 0.000 | 0.033 | 0.002 | 0.002 | 0.000 | -- | -- | -- |
| KRT37 | rs9910204_A | G13C | TSFYSTSSCPLCTMAPGAR | 0.493 | 0.284 | 0.167 | 0.630 | 0.375 | -- | -- | -- |
| KRT37 | rs9910204_C | G13C | TSFYSTSSCPLCTMAPGAR | 0.926 | 0.983 | 0.998 | 0.928 | 0.945 | 2208.9358 | 3 | T(+42), All C = C(+57), M(+16) |
| | | | | | | | | | 2166.925 | 3 | All C = C(+57), M(+16) |
| | | | | | | | | | 2192.9409 | 3 | T(+42), All C = C(+57) |
| KRT37 | rs9916724_T | N39S | NVFVSPIDVGCQPVAEANAASMCLLANVAHANR | 0.791 | 0.971 | 0.851 | 0.609 | 0.867 | 3495.693 | 3 | All C = C(+57) |
| | | | | | | | | | 3511.6879 | 4 | M(+16), All C = C(+57) |
| | | | | | | | | | | 3 | M(+16), All C = C(+57) |
| | | | NVFVSPIDVGCQPVAEANAASMCLLANVAHANRRV | | | | | | 3750.863 | 4 | All C = C(+57) |
| | | | | | | | | | 3766.8574 | 4 | M(+16), All C = C(+57) |
| KRT37 | rs9916724_C | N39S | NVFVSPIDVGCQPVAEANAASMCLLANVAHANR | 0.710 | 0.340 | 0.665 | 0.851 | 0.550 | -- | -- | -- |
| KRT37 | rs9916484_T | T72A | PSLCLPPTSHACPLPGTCHIPGNIGICGAYGK | 0.791 | 0.971 | 0.851 | 0.609 | 0.867 | 3503.6691 | 4 | All C = C(+57) |
| KRT37 | rs9916484_C | T72A | PSLCLPPTSHACPLPGTCHIPGNIGICGAYGK | 0.710 | 0.340 | 0.665 | 0.851 | 0.550 | -- | -- | -- |
| KRT37 | rs9916475_T | S73C | PSLCLPPTSHACPLPGTCHIPGNIGICGAYGK | 0.791 | 0.971 | 0.851 | 0.609 | 0.867 | 3503.6691 | 4 | All C = C(+57) |
| KRT37 | rs9916475_A | S73C | PSLCLPPTSHACPLPGTCHIPGNIGICGAYGK | 0.710 | 0.340 | 0.665 | 0.851 | 0.550 | -- | -- | -- |
| KRT38 | rs897416_A | S423P | LPCNPCTSPSCVTAPCAPR | 0.217 | 0.118 | 0.002 | 0.153 | 0.153 | 2231.9664 | 2 | All C = C(+57) |
| KRT38 | rs897416_G | S423P | LPCNPCTSPSCVTAPCAPR | 0.984 | 0.995 | 1.000 | 0.990 | 1.000 | 2241.9872 | 3 | All C = C(+57) |
| | | | | | | | | | | 2 | All C = C(+57) |
| KRT39 | rs17843021_G | T341M | DSQECLITETEAR | 0.984 | 0.980 | 0.972 | 0.988 | 0.997 | 1551.6955 | 2 | C(+57) |
| KRT39 | rs17843021_A | T341M | DSQECLITETEAR | 0.249 | 0.271 | 0.252 | 0.153 | 0.107 | 1581.6884 | 2 | C(+57) |
| KRT39 | rs142154718_C | S86N | FSLDDCSWYEGEINSNEK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2120.8866 | 2 | C(+57) |
| | | | FSLDDCSWYEGEINSNEKTMQLNLR | | | | | | 3235.4307 | 3 | C(+57) |
| KRT39 | rs142154718_T | S86N | FSLDDCSWYEGEINSNEK | 0.000 | 0.029 | 0.000 | 0.000 | 0.000 | -- | -- | -- |
| KRT39 | rs7213256_C | R456Q | EHCACGPLSR | 0.976 | 0.708 | 1.000 | 0.957 | 0.948 | 1273.5412 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | All C = C(+57) |
| KRT39 | rs7213256_T | R456Q | EHCACGPLSLVK | 0.298 | 0.790 | 0.065 | 0.378 | 0.329 | 1698.8303 | 3 | All C = C(+57) |
| KRT39 | rs17843023_G | L383M | QNQEYELLDVK | 1.000 | 0.992 | 0.982 | 1.000 | 1.000 | 1491.7689 | 2 | -- |
| | | | | | | | | | 1474.7424 | 2 | Q(-17) |
| KRT39 | rs17843023_T | L383M | QNQEYELLDVK | 0.024 | 0.169 | 0.151 | 0.020 | 0.020 | 1509.7252 | 2 | -- |
| KRT40 | rs150812789_A | C349R | QIQCLDNLNQLAEIR | 0.936 | 0.994 | 0.940 | 0.912 | 0.890 | 2053.038 | 4 | Q(-17) |
| KRT40 | rs150812789_G | C349R | LIDNLNQLAEIR | 0.421 | 0.120 | 0.442 | 0.489 | 0.524 | 1540.8329 | 2 | -- |
| KRT40 | rs2010027_C | R235H | NHEEEVNLRL | 0.936 | 0.531 | 0.962 | 0.904 | 0.948 | 1252.628 | 3 | -- |
| | | | | | | | | | 1253.612 | 3 | N(+1) |
| KRT40 | rs2010027_T | R235H | NHEEEVNLRLHQLGDR | 0.473 | 0.902 | 0.306 | 0.503 | 0.424 | 1931.9206 | 3 | -- |
| KRT40 | rs140634473_C | R108H | R _S LEETNAELES | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1377.6492 | 2 | -- |
| KRT40 | rs140634473_T | R108H | Vh _S LEETNAELES | 0.020 | 0.002 | 0.000 | 0.002 | 0.012 | -- | -- | -- |
| KRT40 | rs16968862_G | S406L | LSCSPCTTCTSSNTCEPC | 0.982 | 0.947 | 1.000 | 0.969 | 0.986 | 2208.797 | 2 | All C = C(+57) |
| KRT40 | rs16968862_A | S406L | LSCSPCTTCTSSNTCEPCSAVVICTVENCCL- | 0.241 | 0.437 | 0.063 | 0.348 | 0.193 | -- | -- | -- |
| KRT40 | rs721957_C | C265Y | CQ _Q ETVLANNRR | 0.696 | 0.177 | 0.657 | 0.509 | 0.545 | -- | -- | -- |
| KRT40 | rs721957_T | C265Y | CQ _Q ETVLANNRR | 0.767 | 0.986 | 0.825 | 0.906 | 0.893 | 1523.7382 | 3 | C(+57) |
| | | | CQ _Q ETVLANNRR | | | | | | 1367.6372 | 2 | C(+57) |
| KRT75 | rs2232393_A | E242G | YEDINRKTAAENFEVALKK | 1.000 | 0.998 | 1.000 | 1.000 | 1.000 | 2321.07 | 3 | T(+80), N(+1) |
| KRT75 | rs2232393_G | E242G | YEDINRKTAAENFEVALKK | 0.000 | 0.056 | 0.000 | 0.000 | 0.003 | -- | -- | -- |
| KRT81 | rs2071588_G | G52R | GLTGGFGSHSVCR | 0.543 | 0.126 | 0.669 | 0.558 | 0.530 | 1334.627 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| | | | GLTGGFGSHSVCRG | | | | | | 1391.6485 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| | | | GLTGGFGSHSVCRGF | | | | | | 1538.7169 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| KRT81 | rs6580873_A | R248L | RLYEEELIQLSHISDTSVVVK | 0.278 | 0.020 | 0.008 | 0.184 | 0.153 | 2571.4028 | 4 | -- |
| | | | | | | | | | | 3 | -- |
| | | | LYEEELIQLSHISDTSVVVK | | | | | | 2415.3017 | 3 | -- |
| | | | LYEEELIQLSH | | | | | | 1486.7788 | 2 | -- |
| KRT82 | rs2658658_A | T458M | GAFLYEPCGVSmPVLSTGVLR | 0.730 | 0.558 | 0.125 | 0.697 | 0.602 | 2253.1406 | 3 | C(+57) |
| | | | | | | | | | 2269.1355 | 2 | C(+57), M(+16) |
| | | | | | | | | | | 3 | C(+57), M(+16) |
| KRT82 | rs2658658_G | T458M | GAFLYEPCGVSTPVLSTGVLR | 0.789 | 0.884 | 0.996 | 0.773 | 0.853 | 2223.1478 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| KRT82 | rs1732263_C | E452D | GAFLYEPCGVSTPVLSTGVLR | 1.000 | 0.952 | 1.000 | 0.990 | 1.000 | 2223.1478 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| KRT82 | rs1732263_G | E452D | GAFLYDPCGVSTPVLSTGVLR | 0.078 | 0.378 | 0.000 | 0.145 | 0.084 | 2209.1321 | 2 | C(+57) |
| KRT82 | rs1791634_C | E219Q | KYEEELSLRPCVNEFVALK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2453.238 | 3 | C(+57) |
| | | | | | | | | | | 4 | C(+57) |
| | | | YEEELSLRPCVNEFVALK | | | | | | 2325.1431 | 3 | C(+57) |
| | | | | | | | | | | 4 | C(+57) |
| | | | KYEEELSLRPCVNEFVALKK | | | | | | 2581.333 | 3 | C(+57) |
| | | | | | | | | | | 4 | C(+57) |
| | | | YEEELSLRPCVNEFVALKK | | | | | | 2453.2381 | 3 | C(+57) |
| | | | | | | | | | | 4 | C(+57) |
| KRT82 | rs1791634_G | E219Q | KYEEELSLRPCVNEFVALK | 0.000 | 0.070 | 0.000 | 0.000 | 0.000 | -- | -- | -- |
| KRT83 | rs2852464_C | I279M | DLNMDcMVAEIK | 0.630 | 0.722 | 0.353 | 0.630 | 0.484 | 1454.6324 | 2 | M(+16), C(+57) |
| | | | | | | | | | 1438.6375 | 2 | C(+57) |
| | | | DLNMDcMVAEIKAQYDDIATR | | | | | | 1470.6273 | 2 | M(+16), C(+57), M(+16) |
| | | | | | | | | | 2504.1102 | 3 | M(+16), C(+57), M(+16) |
| | | | LDNSRDLNMDcMVAEIK | | | | | | 2505.094 | 3 | N(+1), M(+16), C(+57), M(+16) |
| | | | | | | | | | 2055.9144 | 2 | M(+16), C(+57), M(+16) |
| | | | LDNSRDLNMDcMVAEIKAQYDDIATR | | | | | | 3089.3973 | 4 | M(+16), C(+57), M(+16) |
| | | | | | | | | | 3090.381 | 3 | M(+16), C(+57), M(+16) |
| | | | ILQSHISDTSVVVKLDNSRDLNMDcMVAEIK | | | | | | 3563.739 | 4 | N(+1), M(+16), C(+57), M(+16) |
| KRT83 | rs2852464_G | I279M | DLNMDcMVAEIK | 0.855 | 0.779 | 0.976 | 0.836 | 0.885 | 1420.6811 | 2 | C(+57) |
| | | | | | | | | | 1436.676 | 2 | M(+16), C(+16) |
| | | | LDNSRDLNMDcMVAEIK | | | | | | 2005.9681 | 2 | C(+57) |
| | | | | | | | | | | 3 | C(+57) |
| | | | LDNSRDLNMDcMVAEIKAQYDDIATR | | | | | | 2006.9521 | 3 | N(+1), C(+57) |
| | | | | | | | | | 3039.451 | 4 | C(+57) |
| | | | DLNMDcMVAEIKAQYDDIATR | | | | | | 2454.1639 | 2 | C(+57) |

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|-----------|---------------|-------|--|-------|-------|-------|-------|-------|-----------|----------|----|-------------------------------|
| | | | | | | | | | | 3054.133 | 3 | Q(+1), All C = C(+57) |
| KRTAP4-4 | rs385055_T | Y25C | VNSCCGVSVDQGGLENCRRPSYQTTCCR | 1.000 | 0.778 | 1.000 | 1.000 | 0.994 | 3792.3933 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | | 4 | All C = C(+57) |
| | | | NSCCGSVCSVDQGGLENCRRPSYQTTCCR | | | | | | 3793.3773 | 3 | 3 | All C = C(+57), Q(+1) |
| | | | | | | | | | 3735.335 | 3 | 3 | N(+42), All C = C(+57) |
| | | | | | | | | | | 4 | 4 | N(+42), All C = C(+57) |
| | | | LENCRRPSYQTTCCR | | | | | | 2164.8449 | 3 | 3 | All C = C(+57) |
| | | | NCCRRPSYQTTCCR | | | | | | 1922.718 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | CCRRPSYQTTCCR | | | | | | 1791.6488 | 2 | 2 | C(-17), All C = C(+57) |
| | | | | | | | | | | 3 | 3 | C(-17), All C = C(+57) |
| | | | | | | | | | 1808.6754 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | CRPSYQTTCCR | | | | | | 1648.6447 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 1631.6182 | 2 | 2 | C(-17), All C = C(+57) |
| | | | PSYQTTCCR | | | | | | 1332.5129 | 2 | 2 | All C = C(+57) |
| | | | YQTTCCR | | | | | | 1148.4282 | 2 | 2 | All C = C(+57) |
| KRTAP4-4 | rs444509_A | C35S | TTCCRRPSCVSSCCRPQCCQTT | 1.000 | 0.852 | 1.000 | 1.000 | 0.994 | 2826.0431 | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCVSSCCRPQCCQTT | | | | | | 2986.0738 | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCVSSCCRPQCCQTT | | | | | | 3302.2056 | 4 | 4 | All C = C(+57) |
| KRTAP4-4 | rs75030409_T | Q109R | TTCCRRPSCCRPQ | 1.000 | 0.995 | 1.000 | 1.000 | 1.000 | 1582.6341 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCCRPQ | | | | | | 1742.6648 | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCCRPQCC | | | | | | 1902.6954 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 2 | 2 | All C = C(+57) |
| | | | TTCCRRPSCCRPQCCQ | | | | | | 2030.754 | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCCRPQCCQSV | | | | | | 2376.8851 | 3 | 3 | All C = C(+57) |
| | | | TTCCRRPSCCRPQCCQSVCCQPT | | | | | | 2863.0748 | 3 | 3 | All C = C(+57) |
| KRTAP4-4 | rs75030409_C | Q109R | TTCCRRPSCCRP | 0.000 | 0.097 | 0.000 | 0.000 | 0.009 | 1610.6767 | 3 | 3 | All C = C(+57) |
| KRTAP4-5 | rs1497383_A | R22C | VSSCCGVSVDQGGLENCRRPSCQTTCCR | 0.720 | 0.610 | 0.554 | 0.769 | 0.764 | 3738.291 | 3 | 3 | All C = C(+57), N(+1) |
| KRTAP4-6 | rs73983172_G | P63S | PSCCPSCCQTTCCR | 1.000 | 0.964 | 1.000 | 1.000 | 1.000 | 1833.6264 | 2 | 2 | All C = C(+57) |
| | | | RPSCCPSCCQTTCCR | | | | | | 1989.7275 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 2 | 2 | All C = C(+57) |
| | | | CRPSCCPSCCQTTCCR | | | | | | 2149.7581 | 3 | 3 | All C = C(+57) |
| | | | CCRPSCCPSCCQTTCCR | | | | | | 2309.7888 | 3 | 3 | All C = C(+57) |
| | | | CRPQCCQSVCCQPTCCR | | | | | | 4131.4725 | 4 | 4 | All C = C(+57) |
| | | | TTCCRRPSCVSSCCRPQCCQSVCCQPTCCR | | | | | | 4276.5464 | 4 | 4 | All C = C(+57) |
| | | | QSVCCQPTCCR | | | | | | 3430.1988 | 3 | 3 | All C = C(+57) |
| KRTAP4-7 | rs11655310_G | S16G | VSSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | 0.851 | 0.985 | 0.651 | 0.738 | 0.867 | 4280.529 | 4 | 4 | All C = C(+57) |
| KRTAP4-7 | rs383835_A | D18V | SSSCCGVSVDQGGCQVLCQETCCRRPSCQTTCCR | 0.644 | 0.601 | 0.643 | 0.736 | 0.631 | 4295.565 | 4 | 4 | All C = C(+57) |
| KRTAP4-8 | rs201814486_G | T183S | VSCHTTCYRPACVIST | 1.000 | 0.968 | 1.000 | 1.000 | 1.000 | 1911.851 | 3 | 3 | All C = C(+57) |
| | | | VSCHTTCYRPACVISTCPR | | | | | | 2325.0355 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| | | | VSCHTTCYRPACVISTCPRPVCC | | | | | | 2841.218 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| | | | VSCHTTCYRPACVISTCPRPVCCASS | | | | | | 3086.3192 | 4 | 4 | All C = C(+57) |
| | | | VSCHTTCYRPACVISTCPRPVCCASSC | | | | | | 3246.3498 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| | | | VSCHTTCYRPACVISTCPRPVCCASSCC | | | | | | 3406.3805 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| KRTAP4-8 | rs201814486_C | T183S | PACVIS-CPR | 0.002 | 0.324 | 0.020 | 0.004 | 0.046 | -- | -- | -- | -- |
| KRTAP4-8 | rs138296121_C | G7S | VNSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | 0.998 | 0.974 | 0.984 | 0.996 | 0.983 | 4311.4696 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| | | | | | | | | | 4312.454 | 4 | 4 | All C = C(+57), Q(+1) |
| KRTAP4-8 | rs138296121_T | G7S | VNSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | 0.030 | 0.253 | 0.286 | 0.041 | 0.210 | -- | -- | -- | -- |
| KRTAP4-9 | rs113059833_A | D18V | VSSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | 0.998 | 0.990 | 0.999 | 0.999 | 0.999 | 4281.5132 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 4 | 4 | All C = C(+57) |
| | | | SSSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | | | | | | 4225.439 | 4 | 4 | All C = C(+57), S(+42), Q(+1) |
| KRTAP4-9 | rs113059833_T | D18V | VSSCCGVSVDQGGCQDLQETCCRRPSCQTTCCR | 0.090 | 0.194 | 0.032 | 0.046 | 0.036 | -- | -- | -- | -- |
| KRTAP4-11 | rs9897031_C | R17Q | VNSCCGVSVDQGGCGR | 0.491 | 0.073 | 0.794 | 0.661 | 0.556 | 1824.6993 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | NSCCGSVCSHQGGCR | | | | | | 1825.6833 | 3 | 3 | N(+1), All C = C(+57) |
| | | | | | | | | | 1725.6308 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 1767.641 | 3 | 3 | N(+42), All C = C(+57) |
| | | | CGSVCSHQGGCR | | | | | | 1347.4987 | 2 | 2 | C(-17), All C = C(+57) |
| KRTAP4-11 | rs9897031_T | R17Q | VNSCCGVSVDQGGCGRDLQETCCRRPSCQTTCCR | 0.918 | 0.997 | 0.655 | 0.798 | 0.893 | -- | -- | -- | -- |
| KRTAP4-11 | rs113376601_C | R26H | CGRDLQETCCRRPSCQTTCCR | 0.998 | 0.952 | 0.984 | 0.996 | 0.980 | 2926.07 | 3 | 3 | All C = C(+57) |
| KRTAP9-2 | rs9902235_C | S56C | RPTSCQNTCCR | 0.913 | 0.855 | 0.861 | 0.959 | 0.965 | 1439.5937 | 3 | 3 | All C = C(+57) |
| | | | CRPTSCQNTCCR | | | | | | 1599.6243 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 1582.598 | 3 | 3 | C(-17), All C = C(+57) |
| | | | | | | | | | | 2 | 2 | C(-17), All C = C(+57) |
| | | | CQPCCRPTSCQNTCCR | | | | | | 2144.7969 | 3 | 3 | All C = C(+57) |
| | | | CVSSCCQPCCRPTSCQNTCCR | | | | | | 2737.9907 | 3 | 3 | All C = C(+57) |
| | | | TTCWKPTVTTCSTSPCCQACVSSCCQPCCRPTSCQNTCCR | | | | | | 5314.0017 | 4 | 4 | All C = C(+57) |
| | | | TTCWKPTVTTCSTSPCCQACVSSCCQPCCRPTSCQNTCCR | | | | | | 5515.113 | 4 | 4 | All C = C(+57) |
| KRTAP9-2 | rs9902235_G | S56C | CRPTSCQNTCCR | 0.421 | 0.646 | 0.597 | 0.350 | 0.300 | 1655.5964 | 2 | 2 | C(-17), All C = C(+57) |
| | | | | | | | | | | 3 | 3 | C(-17), All C = C(+57) |
| | | | | | | | | | 1672.6229 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | RPTSCQNTCCR | | | | | | 1512.5923 | 3 | 3 | All C = C(+57) |
| | | | CQPACVSSCCQPCCRPTSCQNTCCR | | | | | | 3427.1991 | 3 | 3 | All C = C(+57) |
| | | | CVSSCCQPCCRPTSCQNTCCR | | | | | | 2971.02 | 3 | 3 | All C = C(+57) |
| | | | CVSSCCQPCCRPTSCQNTCCR | | | | | | 2810.9893 | 3 | 3 | All C = C(+57) |
| | | | SCCQPCCRPTSCQNTCCR | | | | | | 2464.858 | 3 | 3 | All C = C(+57) |
| | | | CCQPCCRPTSCQNTCCR | | | | | | 2377.8262 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 2200.769 | 3 | 3 | C(-17), All C = C(+57) |
| | | | CQPCCRPTSCQNTCCR | | | | | | 2217.7956 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 2057.7649 | 3 | 3 | All C = C(+57) |
| | | | QPCCRPTSCQNTCCR | | | | | | 2040.7384 | 2 | 2 | Q(-17), All C = C(+57) |
| | | | | | | | | | | 3 | 3 | Q(-17), All C = C(+57) |
| | | | VSSCCQPCCRPTSCQNTCCR | | | | | | 2650.9587 | 3 | 3 | All C = C(+57) |
| | | | TTCWKPTVTTCSTSPCCQACVSSCCQPCCRPTSCQNTCCR | | | | | | 5598.132 | 4 | 4 | All C = C(+57) |
| | | | TTCWKPTVTTCSTSPCCQACVSSCCQPCCRPTSCQNTCCR | | | | | | 5396.0371 | 4 | 4 | All C = C(+57) |
| | | | TTCWKPTVTTCSTSPCCQACVSSCCQPCCRPTSCQNTCCR | | | | | | 5397.021 | 4 | 4 | Q(+1), All C = C(+57) |
| KRTAP9-2 | rs146532415_T | C149R | TCYPTTVCLPGLNQSNGSCGNCQPCRPACQTTCCR | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 4769.7742 | 4 | 4 | Q(+1), All C = C(+57) |
| | | | | | | | | | 4768.79 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 4768.7902 | 4 | 4 | All C = C(+57) |
| KRTAP9-2 | rs146532415_C | C149R | TCYPTTVCLPGLNQSNGSCGNCQPCRPACQTTCCR | 0.000 | 0.085 | 0.000 | 0.000 | 0.006 | -- | -- | -- | -- |
| KRTAP9-4 | rs2191379_A | S146V | CRPACCTTCFQPTCVSSCCQPFCC | 0.903 | 0.755 | 0.859 | 0.955 | 0.954 | 3309.1936 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 3292.167 | 3 | 3 | C(-17), All C = C(+57) |
| | | | PACCTTCFQPTCVSSCCQPFCC | | | | | | 2993.0618 | 2 | 2 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| | | | | | | | | | | 3 | 3 | All C = C(+57) |
| KRTAP9-4 | rs2191379_C | S146V | CVSSCCQPFCC | 0.435 | 0.744 | 0.597 | 0.346 | 0.352 | 1540.5146 | 2 | 2 | All C = C(+57) |
| | | | PACCTTCFQPTCVSSCCQPFCC | | | | | | 2917.031 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 3233.1623 | 3 | 3 | All C = C(+57) |
| | | | | | | | | | 3216.136 | 3 | 3 | C(-17), All C = C(+57) |

| | | | | | | | | | | | | |
|------------|---------------|-------|--|-------|-------|-------|-------|-------|-----------|------------------------|--------|--|
| | | | CFQPTCVSSCCQPFCC CVSSCCQPFCC | | | | | | | 2097.7414 1464.4833 | 2 2 | All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs12938692_A | Y86C | CCSTPCYQIPICGSSCCGQTSCGSSCGSSCAPVYCR | 0.787 | 0.977 | 0.915 | 0.528 | 0.486 | 0.486 | 4433.5758 | 4 | All C = C(+57) |
| KRTAP9-6 | rs12938692_G | Y86C | TTCCQPTCVSSCCQPFCC | 0.709 | 0.283 | 0.499 | 0.902 | 0.920 | -- | -- | -- | -- |
| KRTAP9-6 | rs576405629_A | Y145C | TCYHPTTVCLPGLNQCSSCCQPCYCPAC | 0.664 | 0.912 | 0.766 | 0.718 | 0.608 | 3755.4061 | 3 | 4 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs576405629_G | Y145C | TCYHPTTVCLPGLNQCSSCCQPCYCPAC | 0.477 | 0.191 | 0.345 | 0.526 | 0.576 | 4773.748 | 4 | 4 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs537301040_T | C146R | TCYHPTTVCLPGLNQCSSCCQPCYCPAC | 0.666 | 0.912 | 0.766 | 0.718 | 0.608 | 3755.4061 | 3 | 4 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs537301040_C | C146R | TCYHPTTVCLPGLNQCSSCCQPCYCPAC | 0.477 | 0.191 | 0.345 | 0.526 | 0.576 | 4773.748 | 4 | 4 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs12938374_G | C51Y | TTCCQPTCVSSCCQPFCC | 0.903 | 0.743 | 0.859 | 0.953 | 0.954 | 5404.99 | 4 | 4 | All C = C(+57) All C = C(+57) |
| KRTAP9-6 | rs12938374_A | C51Y | TTCCQPTCVSSCCQPFCC | 0.435 | 0.749 | 0.599 | 0.344 | 0.352 | 5408.0225 | 4 | 4 | All C = C(+57) All C = C(+57) |
| KRTAP9-9 | rs150962386_C | T25S | TTCCQPTCVSSCCQPFCC | 1.000 | 0.970 | 1.000 | 1.000 | 1.000 | 5383.0054 | 4 | 4 | All C = C(+57), Q(+1) All C = C(+57) |
| KRTAP9-9 | rs150962386_G | T25S | TTCCQPTCVSSCCQPFCC | 0.002 | 0.283 | 0.000 | 0.000 | 0.032 | -- | -- | -- | -- |
| KRTAP10-5 | rs464391_C | R268P | PASCYVLLCRPACSLRAC | 0.998 | 0.991 | 0.966 | 0.975 | 0.994 | 2077.976 | 3 | 3 | All C = C(+57) |
| KRTAP10-5 | rs464391_G | R268P | PASCYVLLCRPACSLRAC | 0.074 | 0.171 | 0.359 | 0.223 | 0.098 | -- | -- | -- | -- |
| KRTAP10-6 | rs465279_A | S300P | SSSSVLLCHPVCK | 0.928 | 0.425 | 0.702 | 0.845 | 0.873 | 1560.7509 | 3 | 3 | All C = C(+57) |
| KRTAP10-8 | rs411254_A | H26R | TVVIAASTMSVCSDDVGRVSR | 0.097 | 0.121 | 0.335 | 0.290 | 0.089 | -- | -- | -- | -- |
| KRTAP10-8 | rs411254_G | H26R | TVVIAASTMSVCSDDVGRVSR | 0.998 | 0.997 | 0.972 | 0.990 | 0.994 | 1919.8838 | 2 | 2 | M(+16), C(+57) |
| KRTAP10-9 | rs9980129_T | C257R | PACCVPVSSCCAPTSSr | 0.922 | 0.775 | 0.867 | 0.875 | 0.905 | -- | -- | -- | -- |
| KRTAP10-9 | rs9980129_C | C257R | PACCVPVSSCCAPTSSr | 0.509 | 0.759 | 0.569 | 0.579 | 0.556 | 2408.0396 | 3 | 3 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP10-10 | rs4818950_G | V158M | SVCYVPCVSGASTSC | 0.529 | 0.825 | 0.542 | 0.597 | 0.565 | 1633.6655 | 2 | 2 | All C = C(+57) |
| KRTAP10-10 | rs4818950_A | V158M | SVCYVPCVSGASTSC | 0.915 | 0.693 | 0.875 | 0.857 | 0.899 | -- | -- | -- | -- |
| KRTAP10-10 | rs7280841_A | V206I | STCCVPSPCGASASSCPSCCR | 0.000 | 0.144 | 0.000 | 0.006 | 0.017 | 2589.0078 | 3 | 3 | All C = C(+57) |
| KRTAP10-12 | rs61745911_G | C236Y | RVPVPSCCVPTSSCCQPSCLRASCGLLRCRPTCSRLAC | 1.000 | 0.894 | 1.000 | 0.949 | 0.991 | 4384.963 | 4 | 4 | All C = C(+57), Q(+1), S(+30) |
| KRTAP10-12 | rs61745911_A | C236Y | RVPVPSCCVPTSSCCQPSCLRASCGLLRCRPTCSRLAC | 0.082 | 0.572 | 0.056 | 0.360 | 0.124 | 4353.968 | 4 | 4 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP10-12 | rs34302939_G | G226S | VVPVPSCCVPTSSCCQPSCLRASCGLLRCRPTCSRLAC | 0.976 | 0.640 | 0.988 | 0.857 | 0.971 | 2134.9137 | 2 | 2 | All C = C(+57) All C = C(+57) All C = C(+57) |
| KRTAP10-12 | rs34302939_A | G226S | VVPVPSCCVPTSSCCQPSCLRASCGLLRCRPTCSRLAC | 0.254 | 0.887 | 0.218 | 0.601 | 0.248 | 3252.451 | 3 | 3 | All C = C(+57) All C = C(+57) |
| KRTAP11-1 | rs71321355_C | R72Q | CEPTACQPTCYR | 0.960 | 0.997 | 0.996 | 0.900 | 0.980 | 1542.613 | 2 | 2 | All C = C(+57) |
| KRTAP11-1 | rs71321355_T | R72Q | CEPTACQPTCYR | 0.356 | 0.095 | 0.101 | 0.524 | 0.271 | 1525.587 | 2 | 2 | C(-17), All C = C(+57) |
| KRTAP11-1 | rs9636845_A | C111S | PLTFVSSGCPQLGSISSVCQPVGGISTVCQPVGGVSTVCQACGVSR | 0.992 | 1.000 | 0.794 | 0.982 | 0.963 | 1698.7145 | 3 | 3 | All C = C(+57) |
| KRTAP13-2 | rs3804010_G | S74R | GCQIECWPTSCQTSYVESPCQTSYRPR | 0.988 | 0.924 | 0.996 | 0.984 | 0.991 | 1382.5827 | 2 | 2 | All C = C(+57) |
| KRTAP13-2 | rs3804010_C | S74R | GCQIECWPTSCQTSYVESPCQTSYRPR | 0.233 | 0.513 | 0.119 | 0.215 | 0.190 | 1364.5722 | 2 | 2 | E(-17), All C = C(+57) |
| KRTAP16-1 | rs2074285_C | P340R | RCPSVCEPVPSCPTSCR | 0.887 | 0.622 | 0.839 | 0.939 | 0.937 | 1156.4874 | 2 | 2 | All C = C(+57) |
| KRTAP16-1 | rs2074285_G | P340R | RCPSVCEPVPSCPTSCR | 0.485 | 0.849 | 0.633 | 0.384 | 0.424 | 1312.5885 | 3 | 3 | All C = C(+57) |
| LAMP1 | rs9577230_T | I309T | FFLQIQLNITLPDAR | 1.000 | 0.982 | 0.982 | 1.000 | 0.997 | 1055.4397 | 2 | 2 | All C = C(+57) |
| LAMP1 | rs9577230_C | I309T | FFLQIQLNITLPDAR | 0.002 | 0.197 | 0.256 | 0.006 | 0.110 | 984.4026 | 2 | 2 | All C = C(+57) |
| LRRC15 | rs13060627_C | V270L | LYLNNHISQLPPSIFMQLPQLNR | 0.946 | 0.967 | 0.998 | 0.986 | 0.986 | 1568.6614 | 2 | 2 | All C = C(+57) |
| LRRC15 | rs13060627_A | V270L | LYLNNHISQLPPSIFMQLPQLNR | 0.427 | 0.352 | 0.135 | 0.243 | 0.268 | 1811.7945 | 3 | 3 | All C = C(+57) |
| LRRC15 | rs13070515_A | P286L | ELSIGIFGPMNLR | 0.378 | 0.179 | 0.135 | 0.211 | 0.207 | 1812.7786 | 3 | 3 | All C = C(+57), Q(+1) |
| LRRC15 | rs13070515_G | P286L | ELSIGIFGPMNLR | 0.956 | 0.992 | 0.998 | 0.990 | 0.997 | -- | -- | -- | -- |
| LGALS3 | rs10148371_G | R183K | LDNNWGR | 1.000 | 0.982 | 1.000 | 1.000 | 1.000 | 874.4166 | 2 | 2 | -- |
| LGALS3 | rs10148371_A | R183K | LDNNWGR | 0.002 | 0.221 | 0.000 | 0.000 | 0.017 | 890.4115 | 2 | 2 | W(+16) |
| LGALS3 | rs11125_A | Q201H | IQVLVEPDHFK | 0.996 | 1.000 | 1.000 | 0.992 | 0.991 | 875.4006 | 2 | 2 | N(+1) |
| NEU2 | rs2233384_C | S11R | ESVFGQAAHAYR | 1.000 | 0.997 | 0.992 | 0.998 | 0.994 | 906.4064 | 2 | 2 | W(+32) |
| NEU2 | rs2233384_A | S11R | ASLVLQKEr | 0.002 | 0.076 | 0.214 | 0.108 | 0.049 | -- | -- | -- | -- |
| NEU2 | rs2233385_G | R41Q | IPALLYLPQQSLLAFAEQR | 1.000 | 1.000 | 0.994 | 1.000 | 1.000 | 1325.71 | 3 | 3 | Q(+1) |
| NEU2 | rs2233385_A | R41Q | IPALLYLPQQSLLAFAEQR | 0.006 | 0.000 | 0.161 | 0.012 | 0.061 | -- | -- | -- | -- |
| NEU2 | rs2233390_G | A145T | DLTDAIAGPAYR | 1.000 | 0.998 | 1.000 | 1.000 | 1.000 | 1262.6375 | 2 | 2 | -- |
| NEU2 | rs2233390_A | A145T | DLTDAIAGPAYR | 0.000 | 0.048 | 0.000 | 0.000 | 0.003 | -- | -- | -- | -- |
| NEU2 | rs2233391_A | H168N | EWSTFAVGPGHCLQLHNR | 0.757 | 0.292 | 0.058 | 0.358 | 0.499 | 2086.9764 | 3 | 3 | C(+57) |
| NEU2 | rs2233391_C | H168N | EWSTFAVGPGHCLQLHNR | 0.753 | 0.967 | 0.998 | 0.945 | 0.893 | 2084.961 | 3 | 3 | E(-18), W(+16), C(+57) |
| PGLYRP2 | rs34440547_C | R394Q | CRWGAAPYR | 0.952 | 0.970 | 0.915 | 0.951 | 0.919 | 2109.9923 | 3 | 3 | C(+57) |
| PGLYRP2 | rs34440547_T | R394Q | CRWGAAPYq | 0.398 | 0.286 | 0.508 | 0.413 | 0.401 | 2107.977 | 4 | 4 | E(-18), W(+16), C(+57) |
| PKP1 | rs61818256_C | R684W | RLLLSDMWSSK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1168.5316 | 2 | 2 | C(+57), W(+32) |
| | | | | | | | | | 1136.542 | 2 | 2 | C(+57), W(+32) |
| | | | | | | | | | -- | -- | -- | -- |
| | | | | | | | | | 1195.6027 | 2 | 2 | M(+16) |
| | | | | | | | | | -- | -- | -- | -- |
| | | | | | | | | | 1179.6078 | 2 | 2 | W(+16) |

| | | | | | | | | | | | | | |
|----------|---------------|--------|---------------------------------|-------|-------|-------|-------|-------|-----------|----|-----------|----|------------------------|
| | | | SSASPAAEAAR | | | | | | | | 1145.5909 | 3 | -- |
| PKP1 | rs61818256_T | R684W | AAEAawLLLSDMWSSK | 0.026 | 0.000 | 0.000 | 0.006 | 0.035 | -- | -- | -- | -- | -- |
| PKP1 | rs34626929_G | R116H | EPDNRRFSSYSQJMNWSR | 1.000 | 0.992 | 1.000 | 1.000 | 1.000 | 2305.005 | 3 | 2305.005 | 3 | M(+16) |
| | | | | | | | | | 2305.989 | 3 | -- | 3 | N(+1), M(+16) |
| PKP1 | rs34626929_A | R116H | hFSSYSQJMNWSR | 0.002 | 0.179 | 0.000 | 0.000 | 0.003 | -- | -- | -- | -- | -- |
| PKP1 | rs10920171_C | A442V | NYSGLDSLMAVYQNCVAAASR | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2348.101 | 2 | 2348.101 | 2 | M(+16), C(+57) |
| | | | | | | | | | 2364.096 | 3 | -- | 3 | M(+32), C(+57) |
| PKP1 | rs10920171_T | A442V | NYSGLDSLMAVYQNCVAAASR | 0.000 | 0.044 | 0.000 | 0.000 | 0.000 | -- | -- | -- | -- | -- |
| PLB1 | rs6753929_G | V167L | AFVNLVDLSEVAEVS | 0.942 | 0.989 | 0.944 | 0.965 | 0.902 | 1747.9225 | 2 | 1747.9225 | 2 | -- |
| | | | | | | | | | -- | 3 | -- | 3 | -- |
| PLB1 | rs6753929_C | V167L | AFINLVDLSEVAEVS | 0.427 | 0.174 | 0.391 | 0.368 | 0.510 | 1761.938 | 2 | 1761.938 | 2 | -- |
| PLCD1 | rs933135_C | R257H | EAAAGPALALSIE | 1.000 | 1.000 | 0.964 | 0.994 | 1.000 | 1539.8377 | 2 | 1539.8377 | 2 | -- |
| | | | | | | | | | -- | 3 | -- | 3 | -- |
| PLCD1 | rs933135_T | R257H | EAAAGPALALSIEhYEPSETAK | 0.030 | 0.000 | 0.329 | 0.190 | 0.061 | -- | -- | -- | -- | -- |
| PLEC | rs201070741_C | A1885T | RLEEQAQHK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1209.6335 | 3 | 1209.6335 | 3 | -- |
| PLEC | rs201070741_T | A1885T | LEEQAQHK | 0.004 | 0.000 | 0.071 | 0.010 | 0.003 | -- | -- | -- | -- | -- |
| PLEC | rs11136334_C | R1386Q | RQEQAALLEEIER | 0.823 | 0.980 | 0.982 | 0.855 | 0.893 | 1357.6958 | 2 | 1357.6958 | 2 | -- |
| PLEC | rs11136334_T | R1386Q | EQLQEQEALLEEIER | 0.678 | 0.051 | 0.268 | 0.550 | 0.484 | -- | -- | -- | -- | -- |
| PPL | rs2037912_C | Q1573E | QNLQLETR | 0.775 | 0.057 | 0.893 | 0.706 | 0.729 | 1001.5374 | 2 | 1001.5374 | 2 | -- |
| PPL | rs2037912_G | Q1573E | QNLQLETR | 0.712 | 0.997 | 0.589 | 0.769 | 0.787 | -- | -- | -- | -- | -- |
| PPL | rs143676756_C | R1457Q | VVLQDPPQAR | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1281.691 | 2 | 1281.691 | 2 | -- |
| PPL | rs143676756_T | R1457Q | VVLQDPPQARqEHALLR | 0.004 | 0.002 | 0.004 | 0.000 | 0.003 | -- | -- | -- | -- | -- |
| S100A3 | rs116208483_G | L62V | FMSVLDITNK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1054.5238 | 2 | 1054.5238 | 2 | -- |
| | | | FMSVLDITNKDCEVDFVEYVR | | | | | | 1070.5187 | 2 | 1070.5187 | 2 | M(+16) |
| | | | | | | | | | 2466.1316 | 3 | 2466.1316 | 3 | C(+16) |
| | | | | | | | | | 2482.1265 | 3 | 2482.1265 | 3 | M(+16), C(+57) |
| | | | | | | | | | 2483.111 | 3 | 2483.111 | 3 | M(+16), N(+1), C(+57) |
| S100A3 | rs36022742_C | R3K | ARPLEQAVAAIVCTFQEYAGR | 0.996 | 0.858 | 1.000 | 0.996 | 0.983 | 2350.1972 | 3 | 2350.1972 | 3 | C(+57) |
| | | | | | | | | | 2392.2078 | 3 | 2392.2078 | 3 | A(+42), C(+57) |
| | | | | | | | | | 2393.1918 | 3 | 2393.1918 | 3 | A(+42), Q(+1), C(+57) |
| | | | | | | | | | 2351.181 | 3 | 2351.181 | 3 | N(+1), C(+57) |
| S100A3 | rs36022742_T | R3K | AKPLEQAVAAIVCTFQEYAGR | 0.099 | 0.637 | 0.030 | 0.123 | 0.182 | 2322.191 | 3 | 2322.191 | 3 | C(+57) |
| | | | | | | | | | 2364.2017 | 2 | 2364.2017 | 2 | A(+42), C(+57) |
| | | | | | | | | | -- | 3 | -- | 3 | A(+42), C(+57) |
| S100A3 | rs41265164_G | H87Q | SLACLCLYCHEYFK | 0.996 | 0.834 | 1.000 | 0.996 | 0.983 | 1863.8227 | 2 | 1863.8227 | 2 | All C = C(+57) |
| | | | LCLYCHEYFK | | | | | | 1432.6388 | 3 | 1432.6388 | 3 | All C = C(+57) |
| | | | CLYCHEYFK | | | | | | 1302.5282 | 2 | 1302.5282 | 2 | All C = C(+57) |
| | | | LYCHEYFK | | | | | | 1159.5241 | 3 | 1159.5241 | 3 | C(+57), C(-17) |
| | | | CHEYFK | | | | | | 866.3501 | 2 | 866.3501 | 2 | C(+57) |
| | | | | | | | | | -- | -- | -- | -- | C(+57), C(-17) |
| SERPINB3 | rs61748838_C | R279P | ETRVDLHLPR | 1.000 | 0.956 | 1.000 | 1.000 | 1.000 | -- | -- | -- | -- | -- |
| SERPINB3 | rs61748838_G | R279P | ETpVDLHLPR | 0.008 | 0.366 | 0.000 | 0.002 | 0.029 | 1176.6372 | 3 | 1176.6372 | 3 | -- |
| SERPINB5 | rs1455555_A | I319V | GVALSNVHK | 0.781 | 0.958 | 0.776 | 0.892 | 0.818 | 1037.6102 | 2 | 1037.6102 | 2 | -- |
| SERPINB5 | rs1455555_G | I319V | GVALSNVHK | 0.714 | 0.334 | 0.750 | 0.575 | 0.637 | 1023.5946 | 2 | 1023.5946 | 2 | -- |
| SERPINB5 | rs2289519_T | S176P | FSESETK | 0.525 | 0.238 | 0.611 | 0.521 | 0.634 | 827.3781 | 2 | 827.3781 | 2 | -- |
| SYNGR2 | rs142608913_G | A28S | FLTQPOVVR | 1.000 | 0.973 | 1.000 | 1.000 | 1.000 | 1158.663 | 2 | 1158.663 | 2 | -- |
| SYNGR2 | rs142608913_T | A28S | FLTQPOVVR | 0.000 | 0.312 | 0.000 | 0.000 | 0.037 | 1174.6579 | 2 | 1174.6579 | 2 | -- |
| TACSTD2 | rs14008_G | D216E | AAGDVIDGDAAYFFER | 0.998 | 0.870 | 0.984 | 0.996 | 0.991 | 1732.7813 | 2 | 1732.7813 | 2 | -- |
| TACSTD2 | rs14008_T | D216E | AAGeVDIGDAAYFFER | 0.097 | 0.560 | 0.260 | 0.211 | 0.098 | 1746.7969 | 2 | 1746.7969 | 2 | -- |
| TCHH | rs2515663_A | L63R | TVDLLELLDLSNGR | 0.000 | 0.073 | 0.000 | 0.000 | 0.009 | -- | -- | -- | -- | -- |
| TCHH | rs2515663_C | L63R | TVDLLELLDf | 1.000 | 0.995 | 1.000 | 1.000 | 1.000 | 1299.7518 | 2 | 1299.7518 | 2 | -- |
| TGM3 | rs214803_A | T13K | AALGVOSINWQAFNFR | 0.986 | 0.646 | 0.996 | 0.969 | 0.968 | 1844.9766 | 3 | 1844.9766 | 3 | A(+42) |
| TGM3 | rs214803_C | T13K | AALGVOSINWQAFNFR | 0.310 | 0.826 | 0.147 | 0.284 | 0.303 | 1817.9293 | 2 | 1817.9293 | 2 | A(+42) |
| | | | | | | | | | -- | 3 | -- | 3 | A(+42) |
| TGM3 | rs214814_G | S249N | SWNGSVEILK | 0.986 | 0.947 | 0.998 | 1.000 | 0.994 | 1132.5997 | 2 | 1132.5997 | 2 | -- |
| | | | | | | | | | 1133.5837 | 2 | 1133.5837 | 2 | N(+1) |
| TGM3 | rs214814_A | S249N | nWNGSVEILK | 0.207 | 0.372 | 0.135 | 0.092 | 0.150 | 1159.6106 | 2 | 1159.6106 | 2 | -- |
| TRIM29 | rs1670195_G | S91C | NSNYFSMDSMEGK | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1541.5883 | 2 | 1541.5883 | 2 | All M = M(+16) |
| VSIG8 | rs62624468_C | V47I | LGCPYVLDPEYGPNGLDIEWMQVNSD | 1.000 | 0.992 | 1.000 | 1.000 | 1.000 | 3112.355 | 3 | 3112.355 | 3 | C(+57), M(+16) |
| | | | LGCPYVLDPEYGPNGLDIEWMQVNSDPAHHR | | | | | | 3710.6639 | 3 | 3710.6639 | 3 | C(+57), M(+16) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), M(+16) |
| | | | | | | | | | -- | 3 | -- | 3 | C(+57), W(+16) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), W(+16) |
| | | | | | | | | | 3694.6689 | 4 | 3694.6689 | 4 | C(+57) |
| | | | | | | | | | 3711.648 | 4 | 3711.648 | 4 | C(+57), W(+16), N(+1) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), M(+16), N(+1) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), M(+16), Q(+1) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), W(+16), Q(+1) |
| | | | | | | | | | 3726.6587 | 4 | 3726.6587 | 4 | C(+57), W(+16), M(+16) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), W(+32) |
| | | | | | | | | | -- | 4 | -- | 4 | C(+57), M(+32) |
| | | | VLDPEYGPNGLDIEWMQVNSDPAHHR | | | | | | 3120.4116 | 3 | 3120.4116 | 3 | M(+16) |
| | | | | | | | | | -- | 4 | -- | 4 | M(+16) |
| VSIG8 | rs62624468_T | V47I | LGCPYVLDPEYGPNGLDIEWMQVNSDPAHHR | 0.036 | 0.130 | 0.000 | 0.006 | 0.043 | -- | -- | -- | -- | -- |