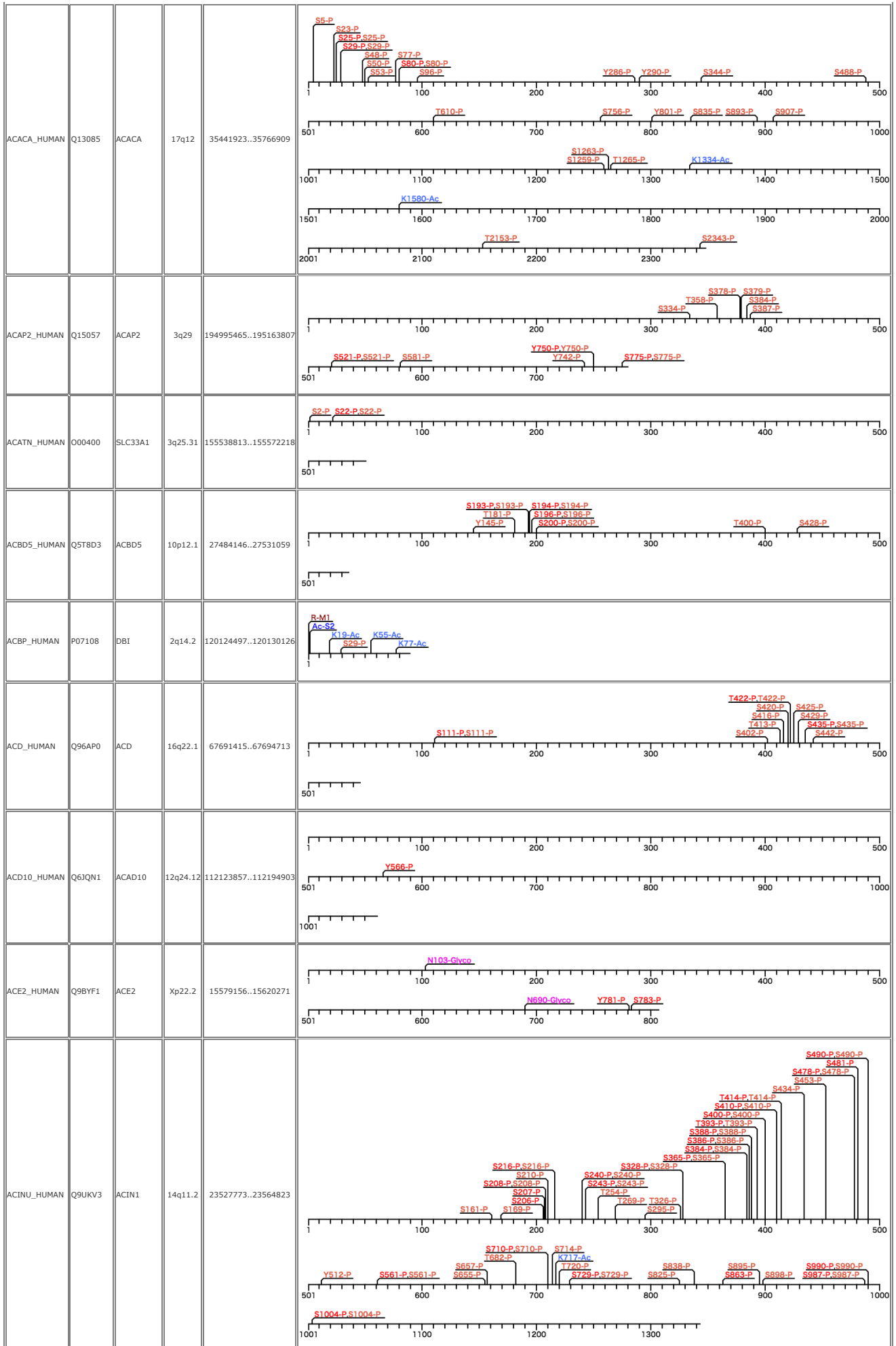


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| 1433E_HUMAN | P62258 | YWHAE | 17p13.3 | 1247566..1303672 | |
| 1433F_HUMAN | Q04917 | YWHAH | 22q12.3 | 32340447..32353590 | |
| 1433G_HUMAN | P61981 | YWHAQ | 7q11.23 | 75956116..75988348 | |
| 1433T_HUMAN | P27348 | YWHAQ | 2p25.1 | 9724101..9771143 | |
| 1433Z_HUMAN | P63104 | YWHAZ | 8q22.3 | 101928753..101965616 | |
| 1A03_HUMAN | P04439 | HLA-A | 6p22.1 | 29909037..29913661 | |
| 1A24_HUMAN | P05534 | HLA-A | 6p22.1 | 29898587..29903209 | |
| 1A32_HUMAN | P10314 | HLA-A | 6p22.1 | 29897513..29902154 | |
| 1A68_HUMAN | P01891 | HLA-A | 6p22.1 | 29899000..29903640 | |
| 1B35_HUMAN | P30685 | HLA-B | 6p21.33 | 31311768..31315097 | |
| 1C05_HUMAN | Q9TNN7 | HLA-C | 6p21.33 | 31229147..31232539 | |
| 1C07_HUMAN | P10321 | HLA-C | 6p21.33 | 31236526..31239907 | |
| 2A5D_HUMAN | Q14738 | PPP2R5D | 6p21.1 | 42952237..42980080 | |
| 2A5E_HUMAN | Q16537 | PPP2R5E | 14q23.2 | 63838075..64010092 | |

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| 3BP1_HUMAN | Q9Y3L3 | SH3BP1 | 22q13.1 | 38030661..38062939 | |
| 3BP5L_HUMAN | Q7L8J4 | SH3BP5L | 1q44 | 249104648..249120832 | |
| 41_HUMAN | P11171 | EPB41 | 1p35.3 | 29213603..29446553 | |
| 4EBP1_HUMAN | Q13541 | EIF4EBP1 | 8p11.23 | 37887859..37917883 | |
| 4ET_HUMAN | Q9NRA8 | EIF4ENIF1 | 22q12.2 | 31832963..31892094 | |
| 4F2_HUMAN | P08195 | SLC3A2 | 11q12.3 | 62623518..62656352 | |
| SNTD_HUMAN | P21589 | NT5E | 6q14.3 | 86159809..86205500 | |
| A16L1_HUMAN | Q676U5 | ATG16L1 | 2q37.1 | 234118697..234204320 | |
| A4_HUMAN | P05067 | APP | 21q21.3 | 27252861..27543446 | |
| AAAS_HUMAN | Q9NRG9 | AAAS | 12q13.13 | 53701240..53718648 | |
| AAAT_HUMAN | Q15758 | SLC1A5 | 19q13.32 | 47278140..47291851 | |
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| AAKB1_HUMAN | Q9Y478 | PRKAB1 | 12q24.23 | 120105558..120119435 | |
| AAKB2_HUMAN | O43741 | PRKAB2 | 1q21.1 | 146626685..146644129 | |
| AAKG2_HUMAN | Q9UGJ0 | PRKAG2 | 7q36.1 | 151253197..151574210 | |
| AAPK1_HUMAN | Q13131 | PRKAA1 | 5p13.1 | 40759481..40798476 | |
| AAPK2_HUMAN | P54646 | PRKAA2 | 1p32.2 | 57110995..57181008 | |
| AASD1_HUMAN | Q9BTE6 | AARSD1 | 17q21.31 | 41102543..41132545 | |
| AATF_HUMAN | Q9NY61 | AATF | 17q12 | 35306175..35414171 | |
| AB1IP_HUMAN | Q7Z5R6 | APBB1IP | 10p12.1 | 26727132..26856732 | |
| ABCC9_HUMAN | O60706 | ABCC9 | 12p12.1 | 21950335..22094336 | |
| ABCF1_HUMAN | Q8NE71 | ABCF1 | 6p21.33 | 30539153..30564956 | |

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| ABI2_HUMAN | Q9NYB9 | ABI2 | 2q33.2 | 204192942..204312446 | |
| ABL1_HUMAN | P00519 | ABL1 | 9q34.12 | 133589333..133763062 | |
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| ABLM1_HUMAN | O14639 | ABLM1 | 10q25.3 | 116190872..116444762 | |
| ABLM3_HUMAN | O94929 | ABLM3 | 5q32 | 148521046..148640105 | |
| ABR_HUMAN | Q12979 | ABR | 17p13.3 | 906758..1132315 | |
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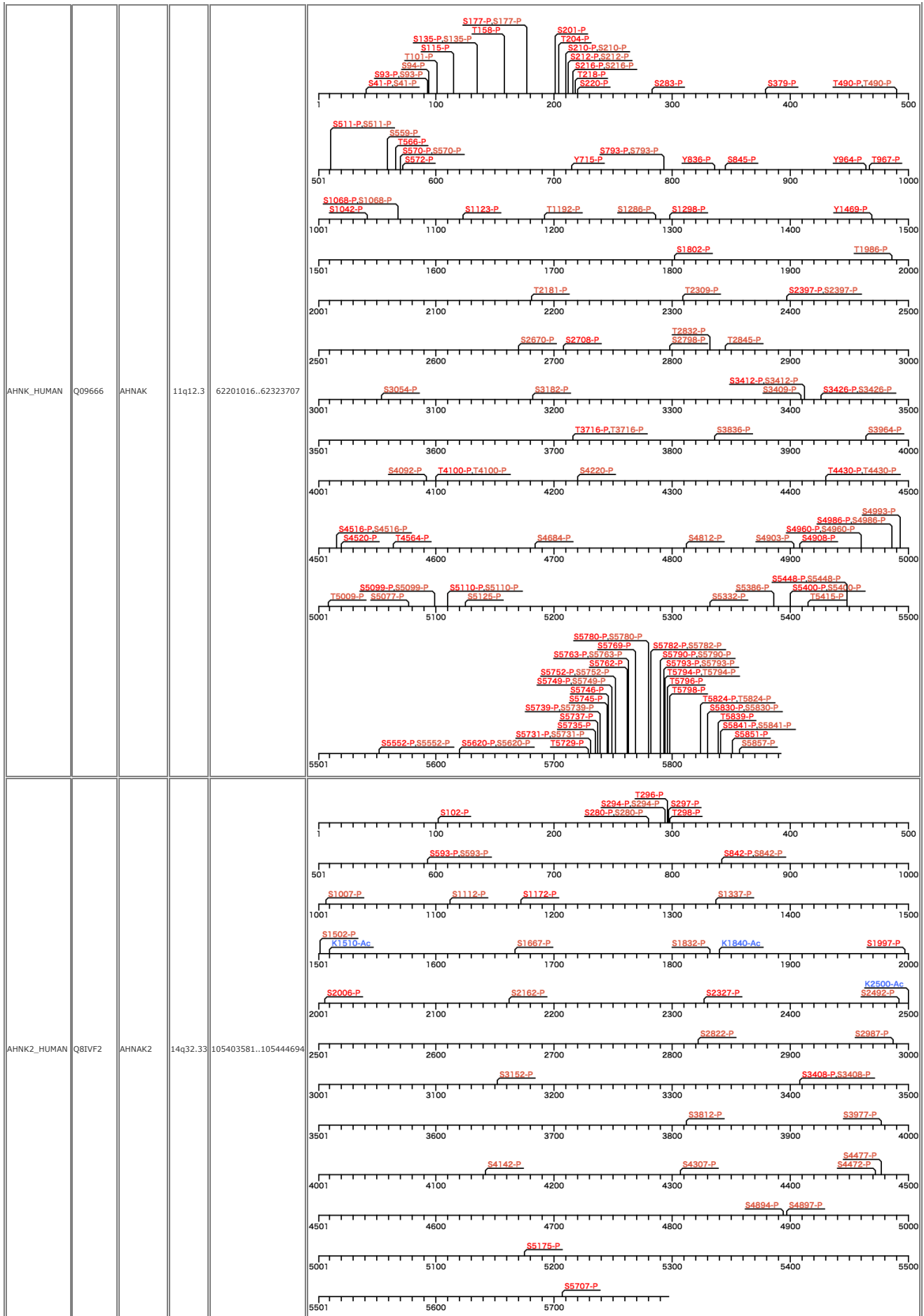


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| ADA10_HUMAN | O14672 | ADAM10 | 15q21.3 | 58887403...59042177 | |
| ADA17_HUMAN | P78536 | ADAM17 | 2p25.1 | 9628615...9695921 | |
| ADA19_HUMAN | Q9H013 | ADAM19 | 5q33.3 | 156822542...157002783 | |
| ADA1B_HUMAN | P35368 | ADRA1B | 5q33.3 | 159343790...159399551 | |
| ADA2A_HUMAN | P08913 | ADRA2A | 10q25.2 | 112836790...112840658 | |
| ADAM9_HUMAN | Q13443 | ADAM9 | 8p11.22 | 38854388...38962663 | |
| ADAS_HUMAN | O00116 | AGPS | 2q31.2 | 178257372...178408564 | |
| ADCY6_HUMAN | O43306 | ADCY6 | 12q13.12 | 49159975...49182820 | |
| ADCY9_HUMAN | O60503 | ADCY9 | 16p13.3 | 4003388...4166186 | |

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| ADDA_HUMAN | P35611 | ADD1 | 4p16.3 | 2845584..2931803 | |
| ADDB_HUMAN | P35612 | ADD2 | 2p13.3 | 70834750..70995357 | |
| ADDG_HUMAN | Q9UEY8 | ADD3 | 10q25.1 | 111756126..111895323 | |
| ADIP_HUMAN | Q9Y2D8 | SSX2IP | 1p22.3 | 85109390..85156486 | |
| ADNP_HUMAN | Q9H2P0 | ADNP | 20q13.13 | 49505585..49547958 | |
| ADRB2_HUMAN | P07550 | ADRB2 | 5q32 | 148206156..148208196 | |
| ADRM1_HUMAN | Q16186 | ADRM1 | 20q13.33 | 60877149..60883918 | |
| ADT1_HUMAN | P12235 | SLC25A4 | 4q35.1 | 186064395..186071536 | |

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| ADT2_HUMAN | P05141 | SLC25A5 | Xq24 | 118602363..118605282 | |
| ADT3_HUMAN | P12236 | SLC25A6 | Xp22.33 | 1505045..1511617 | |
| ADX_HUMAN | P10109 | FDX1 | 11q22.3 | 110300607..110335605 | |
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| AF10_HUMAN | P55197 | MLLT10 | 10p12.31 | 21823094..22032559 | |
| AF1L2_HUMAN | Q8N4X5 | AFAP1L2 | 10q25.3 | 116054583..116164515 | |
| AF9_HUMAN | P42568 | MLLT3 | 9p21.3 | 20341663..20622542 | |
| AFAD_HUMAN | P55196 | MLLT4 | 6q27 | 168227602..168372703 | |

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| AFAP1_HUMAN | Q8N556 | AFAP1 | 4p16.1 | 7760441..7941653 | |
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| AFF4_HUMAN | Q9UHB7 | AFF4 | 5q31.1 | 132211071..132299326 | |
| AGFG1_HUMAN | P52594 | AGFG1 | 2q36.3 | 228336868..228425930 | |
| AGM1_HUMAN | O95394 | PGM3 | 6q14.1 | 83870869..83903655 | |
| AGO2_HUMAN | Q9UKV8 | EIF2C2 | 8q24.3 | 141541264..141645718 | |
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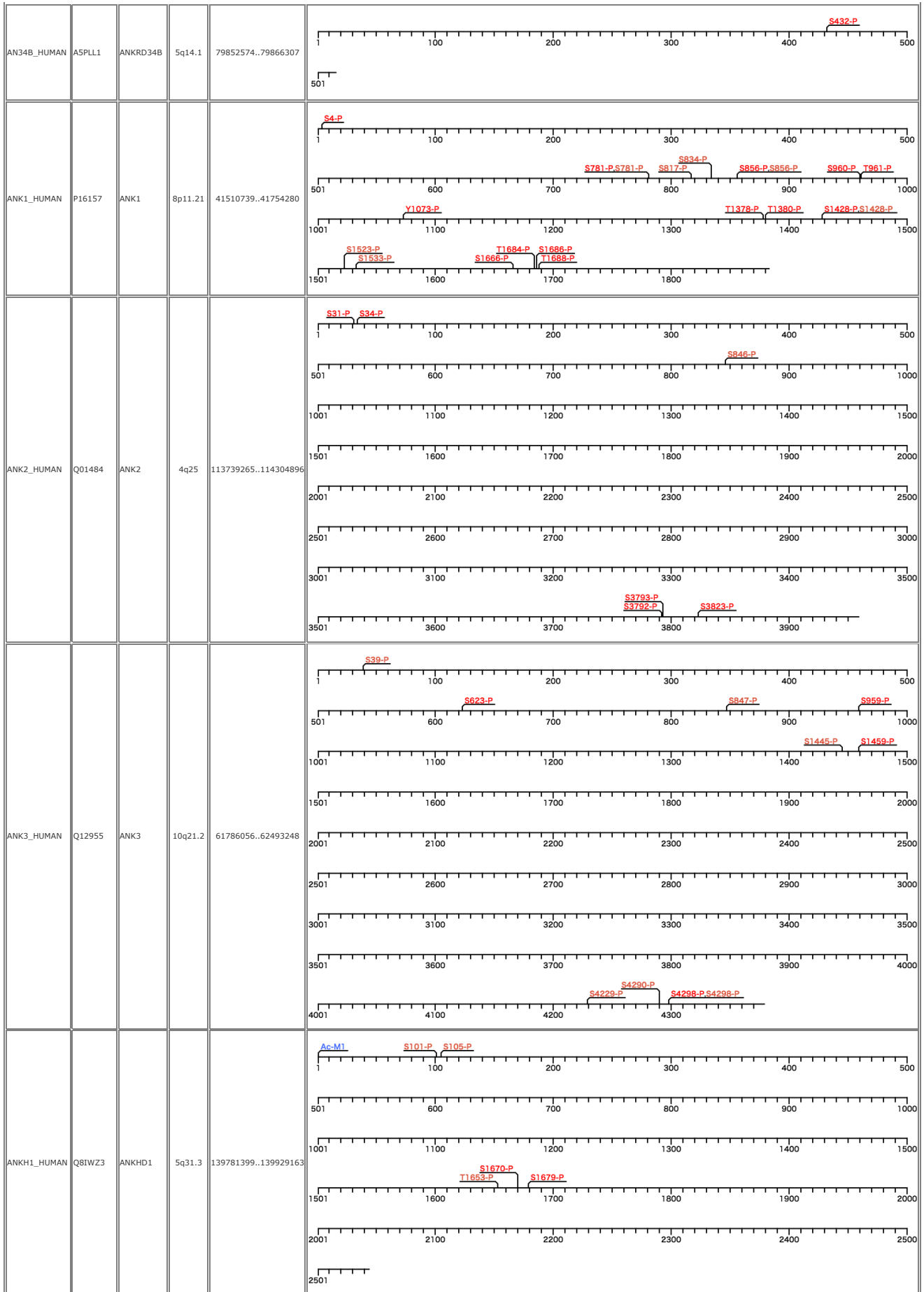


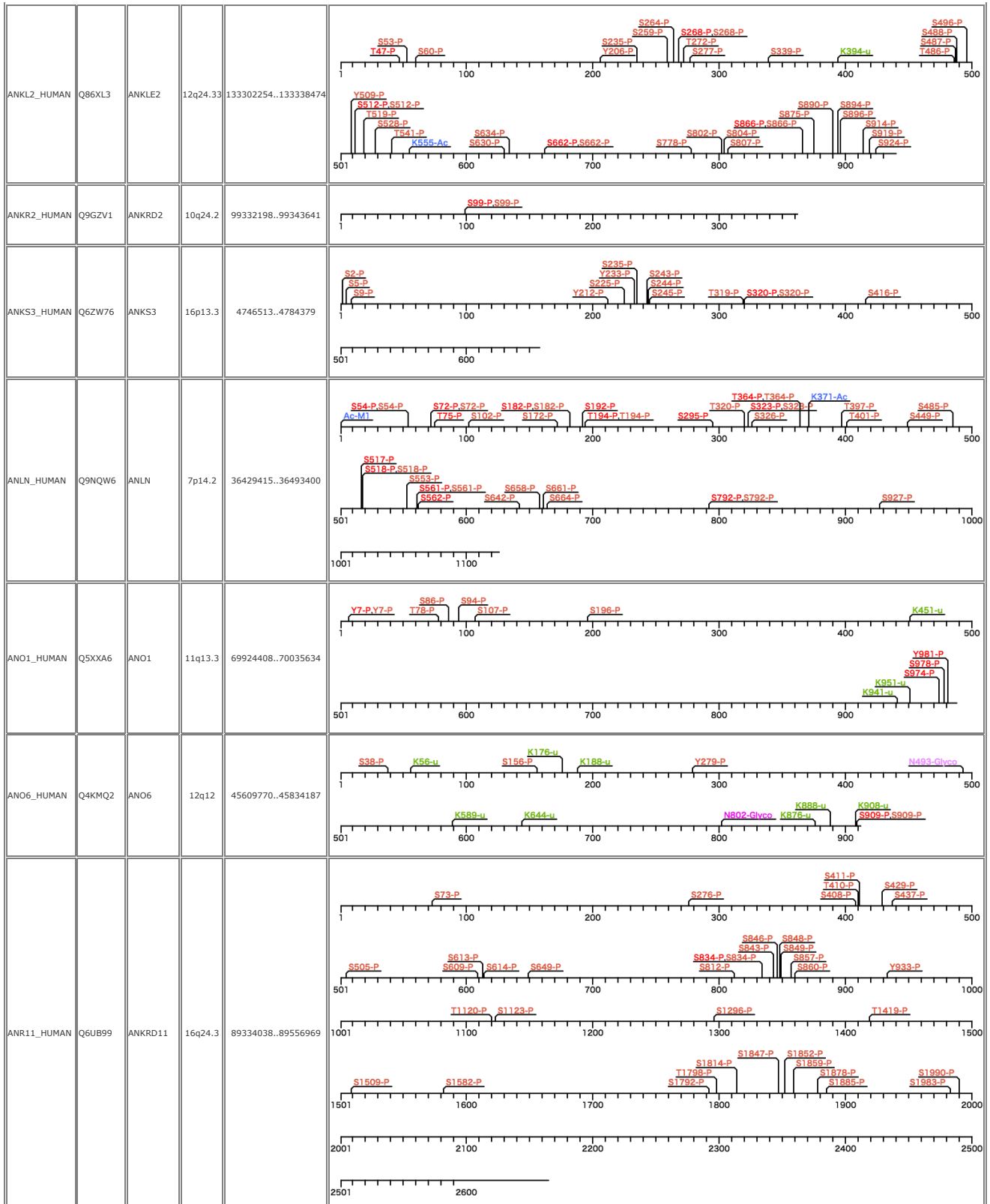
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| AIF1L_HUMAN | Q9BQ10 | AIF1L | 9q34.12 | 133971863..133998539 | |
| AIFM1_HUMAN | O95831 | AIFM1 | Xq26.1 | 129263337..129299861 | |
| AIM1_HUMAN | Q9Y4K1 | AIM1 | 6q21 | 106959730..107018326 | |
| AJUBA_HUMAN | Q961F1 | AJUBA | 14q11.2 | 23440383..23451851 | |
| AK1A1_HUMAN | P14550 | AKR1A1 | 1p34.1 | 46016215..46035721 | |
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| AKIR1_HUMAN | Q9H9L7 | AKIRIN1 | 1p34.3 | 39456895..39471731 | |
| AKIR2_HUMAN | Q53H80 | AKIRIN2 | 6q15 | 88384790..88411927 | |
| AKP13_HUMAN | Q12802 | AKAP13 | 15q25.3 | 85923802..86292586 | |
| AKT1_HUMAN | P31749 | AKT1 | 14q32.33 | 105235686..105262088 | |
| AKT2_HUMAN | P31751 | AKT2 | 19q13.2 | 40736224..40791443 | |
| AKT3_HUMAN | Q9Y243 | AKT3 | 1q43 | 243651535..244014381 | |
| AKTIP_HUMAN | Q9H8T0 | AKTIP | 16q12.2 | 53524952..53538323 | |
| AKTS1_HUMAN | Q96B36 | AKT1S1 | 19q13.33 | 50372295..50381716 | |
| AL1A1_HUMAN | P00352 | ALDH1A1 | 9q21.13 | 75515578..75695358 | |
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| ALDR_HUMAN | P15121 | AKR1B1 | 7q33 | 134127102..134144036 | |
| ALG3_HUMAN | Q92685 | ALG3 | 3q27.1 | 183960089..183967336 | |
| ALG5_HUMAN | Q9Y673 | ALG5 | 13q13.3 | 37523912..37574398 | |
| ALK_HUMAN | Q9UM73 | ALK | 2p23.1 | 29415640..30144432 | |
| ALKB5_HUMAN | Q6P6C2 | ALKBH5 | 17p11.2 | 18086392..18113268 | |
| ALS2_HUMAN | Q96Q42 | ALS2 | 2q33.1 | 202565277..202645912 | |
| AMER1_HUMAN | Q5JTC6 | FAM123B | Xq11.2 | 63404997..63425624 | |
| AMFR_HUMAN | Q9UKV5 | AMFR | 16q12.2 | 56395364..56459450 | |
| AMGO2_HUMAN | Q86S32 | AMIGO2 | 12q13.11 | 47469490..47473734 | |

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| AMOL1_HUMAN | Q81Y63 | AMOTL1 | 11q21 | 94439597..94609918 | |
| AMOL2_HUMAN | Q9Y2J4 | AMOTL2 | 3q22.2 | 134074716..134094321 | |
| AMOT_HUMAN | Q4VCS5 | AMOT | Xq23 | 112017731..112084043 | |
| AMPD2_HUMAN | Q01433 | AMPD2 | 1p13.3 | 110158726..110174673 | |
| AMPD3_HUMAN | Q01432 | AMPD3 | 11p15.4 | 10329860..10529126 | |
| AMPH_HUMAN | P49418 | AMPH | 7p14.1 | 38423305..38671167 | |
| AMPM2_HUMAN | P50579 | METAP2 | 12q22 | 95867296..95909615 | |
| AMRA1_HUMAN | Q9C0C7 | AMBRA1 | 11p11.2 | 46417964..46615675 | |
| AMRP_HUMAN | P30533 | LRPAP1 | 4p16.3 | 3508103..3534286 | |
| AN13D_HUMAN | Q62TN6 | ANKRD13D | 11q13.2 | 67056018..67069956 | |
| AN32B_HUMAN | Q92688 | ANP32B | 9q22.33 | 100745643..100778225 | |
| AN32C_HUMAN | O43423 | ANP32C | 4q32.3 | 165118159..165118863 | |





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| ANR17_HUMAN | O75179 | ANKRD17 | 4q13.3 | 73939093..74124515 | |
| ANR26_HUMAN | Q9UP58 | ANKRD26 | 10p12.1 | 27280843..27389421 | |
| ANR28_HUMAN | O15084 | ANKRD28 | 3p25.1 | 15708743..15901278 | |
| ANS1A_HUMAN | Q92625 | ANSK1A | 6p21.31 | 34857042..35059179 | |
| ANTR1_HUMAN | Q9H6X2 | ANTXR1 | 2p13.3 | 69240310..69476459 | |
| ANX11_HUMAN | P50995 | ANXA11 | 10q22.3 | 81910645..81965328 | |
| ANXA1_HUMAN | P04083 | ANXA1 | 9q21.13 | 75766673..75785309 | |

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| APC4_HUMAN | Q9UJX5 | ANAPC4 | 4p15.2 | 25378835..25420120 | |
| APC5_HUMAN | Q9UJX4 | ANAPC5 | 12q24.31 | 121746048..121837699 | |
| APLP2_HUMAN | Q06481 | APLP2 | 11q24.3 | 129939732..130014699 | |
| APMAP_HUMAN | Q9HDC9 | APMAP | 20p11.21 | 24943561..24973615 | |
| APOB_HUMAN | P04114 | APOB | 2p24.1 | 21224301..21266945 | |
| APOE_HUMAN | P02649 | APOE | 19q13.32 | 45409011..45412650 | |
| APT_HUMAN | P07741 | APT | 16q24.3 | 88875747..88878352 | |

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| AQP4_HUMAN | P55087 | AQP4 | 18q11.2 | 24432002...24445782 | |
| AR6P4_HUMAN | Q66PJ3 | ARL6IP4 | 12q24.31 | 123464607...123467456 | |
| AR6P6_HUMAN | Q8N655 | ARL6IP6 | 2q23.3 | 153574407...153617767 | |
| ARAF_HUMAN | P10398 | ARAF | Xp11.23 | 47420516...47431307 | |
| ARAP1_HUMAN | Q96P48 | ARAP1 | 11q13.4 | 72396114...72504644 | |
| ARAP2_HUMAN | Q8WZ64 | ARAP2 | 4p14 | 35949843...36246131 | |
| ARAP3_HUMAN | Q8WVN8 | ARAP3 | 5q31.3 | 141032968...141061788 | |
| ARBK1_HUMAN | P25098 | ADRBK1 | 11q13.2 | 67033881...67054027 | |