

| CHROM | POS | REF | ALT | TYPE | AF_primary | AF_meta | VariantCategory |
|-------|-----------|-----|-----|-------|------------|---------|--------------------------------------|
| chr1 | 109745855 | T | G | SNV | 0.118 | 0.219 | downstream_gene_variant |
| chr1 | 114224782 | AT | A | INDEL | 0.256 | 0.169 | intron_variant |
| chr1 | 119962130 | G | A | SNV | 0.165 | 0.219 | missense_variant |
| chr1 | 148344615 | G | GC | INDEL | 0.132 | 0.101 | upstream_gene_variant |
| chr1 | 154461505 | G | A | SNV | 0.128 | 0.331 | upstream_gene_variant |
| chr1 | 155005648 | C | T | SNV | 0.116 | 0.167 | missense_variant |
| chr1 | 155280104 | C | CT | INDEL | 0.133 | 0.184 | splice_region_variant&intron_variant |
| chr1 | 157660172 | C | T | SNV | 0.087 | 0.305 | synonymous_variant |
| chr1 | 158582497 | GA | G | INDEL | 0.217 | 0.196 | upstream_gene_variant |
| chr1 | 158670040 | T | A | SNV | 0.054 | 0.319 | missense_variant |
| chr1 | 159684121 | CT | C | INDEL | 0.326 | 0.274 | upstream_gene_variant |
| chr1 | 16388875 | GCC | G | INDEL | 1.000 | 0.667 | intron_variant |
| chr1 | 169101273 | T | TG | INDEL | 0.710 | 0.716 | 3_prime_UTR_variant |
| chr1 | 170633186 | AT | A | INDEL | 1.000 | 0.688 | 5_prime_UTR_variant |
| chr1 | 171558447 | GT | G | INDEL | 0.400 | 0.301 | intron_variant |
| chr1 | 196397312 | C | T | SNV | 0.040 | 0.155 | missense_variant |
| chr1 | 200558286 | GA | G | INDEL | 0.467 | 1.000 | intron_variant |
| chr1 | 201981116 | G | GT | INDEL | 0.507 | 0.456 | frameshift_variant |
| chr1 | 207091138 | AT | A | INDEL | 0.245 | 0.227 | intron_variant |
| chr1 | 210001471 | G | T | SNV | 0.075 | 0.181 | missense_variant |
| chr1 | 212526422 | G | A | SNV | 0.128 | 0.372 | upstream_gene_variant |
| chr1 | 216246651 | T | C | SNV | 0.219 | 0.429 | intron_variant |
| chr1 | 242122274 | C | T | SNV | 0.041 | 0.187 | non_coding_transcript_exon_variant |
| chr1 | 247091604 | CA | C | INDEL | 0.214 | 0.250 | intron_variant |
| chr1 | 43805083 | A | T | SNV | 0.109 | 0.187 | missense_variant |
| chr1 | 93691855 | GT | G | INDEL | 0.300 | 0.256 | intron_variant |
| chr1 | 94312544 | G | GGC | INDEL | 0.085 | 0.067 | upstream_gene_variant |
| chr2 | 10188712 | C | G | SNV | 0.054 | 0.138 | synonymous_variant |
| chr2 | 10188713 | A | G | SNV | 0.055 | 0.127 | missense_variant |
| chr2 | 10269043 | AAG | A | INDEL | 0.078 | 0.184 | frameshift_variant |
| chr2 | 11273407 | GTC | G | INDEL | 0.254 | 0.234 | 5_prime_UTR_variant |

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|------|-----------|-------|----------|-------|-------|-------|--|
| chr2 | 120714401 | CT | C | INDEL | 0.229 | 0.290 | splice_region_variant&intron_variant |
| chr2 | 121746076 | G | A | SNV | 0.125 | 0.240 | synonymous_variant |
| chr2 | 166810161 | G | GCCCGCCC | INDEL | 0.208 | 0.320 | upstream_gene_variant |
| chr2 | 179415787 | G | A | SNV | 0.047 | 0.191 | missense_variant |
| chr2 | 185800489 | T | C | SNV | 0.160 | 0.231 | intron_variant |
| chr2 | 187529823 | ATT | A | INDEL | 0.246 | 0.293 | upstream_gene_variant |
| chr2 | 217142458 | G | A | SNV | 0.071 | 0.197 | missense_variant |
| chr2 | 219920551 | G | A | SNV | 0.164 | 0.198 | missense_variant |
| chr2 | 29445163 | T | C | SNV | 0.094 | 0.204 | intron_variant |
| chr2 | 32842836 | C | T | SNV | 0.104 | 0.229 | synonymous_variant |
| chr2 | 55186296 | A | G | SNV | 0.156 | 0.232 | missense_variant |
| chr2 | 96517957 | ATT | A | INDEL | 0.094 | 0.071 | downstream_gene_variant |
| chr2 | 96605652 | CAA | C | INDEL | 1.000 | 0.500 | intron_variant |
| chr3 | 124774779 | A | AGGGCAG | INDEL | 1.000 | 0.217 | 5_prime_UTR_variant |
| chr3 | 126268280 | T | C | SNV | 0.211 | 0.417 | downstream_gene_variant |
| chr3 | 160955882 | CTT | C | INDEL | 0.571 | 0.500 | splice_region_variant&intron_variant |
| chr3 | 183884669 | G | A | SNV | 0.081 | 0.159 | missense_variant |
| chr3 | 32568145 | C | CCA | INDEL | 0.092 | 0.158 | 3_prime_UTR_variant |
| chr3 | 38639339 | T | G | SNV | 0.053 | 0.199 | missense_variant |
| chr3 | 47018447 | CA | C | INDEL | 0.286 | 0.444 | 5_prime_UTR_variant |
| chr3 | 47449947 | G | A | SNV | 0.070 | 0.177 | missense_variant |
| chr3 | 48697209 | G | A | SNV | 0.085 | 0.250 | synonymous_variant |
| chr3 | 51422741 | CGGA | C | INDEL | 0.091 | 0.061 | start_lost&conservative_inframe_deletion |
| chr3 | 58817341 | G | T | SNV | 0.048 | 0.210 | intron_variant |
| chr3 | 75718167 | GC | G | INDEL | 0.118 | 0.078 | upstream_gene_variant |
| chr4 | 169086540 | CA | C | INDEL | 0.333 | 0.364 | intron_variant |
| chr5 | 10263451 | TGGAG | T | INDEL | 0.794 | 0.745 | downstream_gene_variant |
| chr5 | 140503037 | C | T | SNV | 0.066 | 0.313 | missense_variant |
| chr5 | 140764320 | G | A | SNV | 0.099 | 0.273 | synonymous_variant |
| chr5 | 140768679 | C | T | SNV | 0.051 | 0.271 | missense_variant |
| chr5 | 140810918 | C | T | SNV | 0.134 | 0.325 | missense_variant |
| chr5 | 151169791 | CA | C | INDEL | 0.250 | 0.333 | downstream_gene_variant |

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|------|-----------|---------|----------|-------|-------|-------|--------------------------------------|
| chr5 | 179233663 | A | AGGC | INDEL | 0.250 | 0.125 | 5_prime_UTR_variant |
| chr5 | 38427422 | C | A | SNV | 0.093 | 0.262 | downstream_gene_variant |
| chr5 | 68862363 | TGG | T | INDEL | 0.545 | 0.385 | downstream_gene_variant |
| chr5 | 74930800 | G | T | SNV | 0.111 | 0.263 | synonymous_variant |
| chr6 | 109659589 | TCA | T | INDEL | 0.833 | 0.625 | upstream_gene_variant |
| chr6 | 121433737 | C | A | SNV | 0.101 | 0.156 | missense_variant |
| chr6 | 131211616 | GA | G | INDEL | 0.500 | 0.221 | upstream_gene_variant |
| chr6 | 142409507 | C | T | SNV | 0.085 | 0.235 | missense_variant |
| chr6 | 143792157 | G | A | SNV | 0.044 | 0.202 | missense_variant |
| chr6 | 158294104 | CT | C | INDEL | 0.207 | 0.300 | downstream_gene_variant |
| chr6 | 22146818 | AT | A | INDEL | 0.933 | 0.615 | upstream_gene_variant |
| chr6 | 29694336 | A | ATG | INDEL | 1.000 | 1.000 | upstream_gene_variant |
| chr6 | 31976139 | GG | G | INDEL | 0.297 | 0.492 | upstream_gene_variant |
| chr6 | 32147291 | CT | C | INDEL | 0.203 | 0.145 | upstream_gene_variant |
| chr6 | 32551947 | CG | C | INDEL | 0.111 | 0.091 | frameshift_variant |
| chr6 | 32551954 | CG | C | INDEL | 0.122 | 0.105 | frameshift_variant |
| chr6 | 32557375 | T | TA | INDEL | 0.123 | 0.147 | intron_variant |
| chr6 | 32610140 | T | TTTCTTTC | INDEL | 0.135 | 0.064 | downstream_gene_variant |
| chr6 | 33101200 | T | TA | INDEL | 0.317 | 0.381 | downstream_gene_variant |
| chr6 | 401586 | A | C | SNV | 0.035 | 0.268 | missense_variant |
| chr6 | 41712723 | GTCTGTC | G | INDEL | 0.205 | 0.224 | intron_variant |
| chr7 | 105278904 | G | A | SNV | 0.039 | 0.145 | synonymous_variant |
| chr7 | 128298973 | G | GT | INDEL | 0.233 | 0.292 | upstream_gene_variant |
| chr7 | 129846823 | TA | T | INDEL | 0.375 | 0.278 | splice_region_variant&intron_variant |
| chr7 | 138356734 | G | GTTGGCT | INDEL | 0.088 | 0.082 | intron_variant |
| chr7 | 139746599 | AGT | A | INDEL | 0.229 | 0.213 | intron_variant |
| chr7 | 141536351 | CAG | C | INDEL | 0.089 | 0.088 | intron_variant |
| chr7 | 150754000 | G | A | SNV | 0.071 | 0.150 | synonymous_variant |
| chr7 | 151814026 | C | T | SNV | 0.061 | 0.159 | missense_variant |
| chr7 | 151882622 | TAG | T | INDEL | 0.061 | 0.143 | upstream_gene_variant |
| chr7 | 154002658 | CGT | C | INDEL | 0.074 | 0.061 | intron_variant |
| chr7 | 155465438 | CAAAA | C | INDEL | 0.250 | 0.438 | sequence_feature |

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|-------|-----------|---------|-------|-------|-------|-------|--|
| chr7 | 35851738 | CA | C | INDEL | 0.625 | 0.667 | intron_variant |
| chr7 | 38543104 | G | GC | INDEL | 0.588 | 0.430 | intron_variant |
| chr7 | 50450230 | C | T | SNV | 0.037 | 0.166 | splice_region_variant&intron_variant |
| chr7 | 73929947 | A | G | SNV | 0.161 | 0.134 | intron_variant |
| chr7 | 933611 | AAGCCGG | A | INDEL | 0.181 | 0.168 | splice_region_variant&intron_variant |
| chr7 | 99711096 | G | A | SNV | 0.148 | 0.376 | upstream_gene_variant |
| chr8 | 105509428 | C | CA | INDEL | 0.131 | 0.439 | frameshift_variant |
| chr8 | 132051740 | GGCGAAG | G | INDEL | 0.078 | 0.206 | frameshift_variant |
| chr8 | 144240312 | G | A | SNV | 0.137 | 0.345 | missense_variant |
| chr8 | 22009453 | C | G | SNV | 0.077 | 0.205 | synonymous_variant |
| chr8 | 25268493 | GCGCGCG | G | INDEL | 0.222 | 0.222 | intron_variant |
| chr8 | 52321783 | G | A | SNV | 0.080 | 0.115 | missense_variant |
| chr9 | 117129727 | T | C | SNV | 0.040 | 0.163 | intron_variant |
| chr9 | 123762336 | C | CA | INDEL | 0.200 | 0.267 | splice_region_variant&intron_variant |
| chr9 | 134379628 | C | T | SNV | 0.059 | 0.198 | missense_variant |
| chr9 | 135204150 | G | T | SNV | 0.058 | 0.188 | missense_variant |
| chr9 | 84267021 | TAC | T | INDEL | 0.167 | 0.189 | intron_variant |
| chr10 | 112697017 | CT | C | INDEL | 0.160 | 0.119 | upstream_gene_variant |
| chr10 | 134016407 | C | T | SNV | 0.055 | 0.168 | upstream_gene_variant |
| chr10 | 14569998 | C | CTT | INDEL | 0.667 | 0.583 | 3_prime_UTR_variant |
| chr10 | 17898179 | CA | C | INDEL | 0.400 | 0.327 | downstream_gene_variant |
| chr10 | 19678455 | C | T | SNV | 0.150 | 0.254 | stop_gained |
| chr10 | 24498289 | G | GA | INDEL | 0.345 | 0.337 | intron_variant |
| chr10 | 28274145 | C | CAA | INDEL | 0.400 | 0.462 | splice_region_variant&intron_variant |
| chr10 | 38260558 | AACACAC | A | INDEL | 0.500 | 0.625 | intron_variant |
| chr10 | 42941685 | T | TA | INDEL | 0.500 | 0.667 | intron_variant |
| chr10 | 52502792 | G | GTGCA | INDEL | 0.092 | 0.076 | intron_variant |
| chr10 | 54011325 | T | A | SNV | 0.047 | 0.239 | splice_region_variant&intron_variant |
| chr10 | 61574357 | AAC | A | INDEL | 0.076 | 0.122 | upstream_gene_variant |
| chr10 | 74098315 | C | CAA | INDEL | 0.286 | 0.344 | upstream_gene_variant |
| chr10 | 89720633 | C | CT | INDEL | 0.800 | 0.286 | splice_acceptor_variant&intron_variant |
| chr10 | 97725542 | TTG | T | INDEL | 0.182 | 0.500 | intron_variant |

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|-------|-----------|-----------|----------|-------|-------|-------|--------------------------------------|
| chr11 | 104872624 | TAC | T | INDEL | 0.060 | 0.078 | upstream_gene_variant |
| chr11 | 10711918 | TA | T | INDEL | 0.171 | 0.115 | splice_region_variant&intron_variant |
| chr11 | 120292373 | T | C | SNV | 0.112 | 0.045 | intron_variant |
| chr11 | 1213573 | T | TCCACAC | INDEL | 0.181 | 0.129 | non_coding_transcript_exon_variant |
| chr11 | 33770312 | G | A | SNV | 0.103 | 0.235 | intron_variant |
| chr11 | 43413157 | TTTGCG | T | INDEL | 0.125 | 0.179 | upstream_gene_variant |
| chr11 | 45924491 | G | T | SNV | 0.100 | 0.205 | synonymous_variant |
| chr11 | 47755552 | CA | C | INDEL | 0.235 | 0.286 | upstream_gene_variant |
| chr11 | 58379663 | CGT | C | INDEL | 0.062 | 0.068 | upstream_gene_variant |
| chr11 | 62751721 | C | CT | INDEL | 0.563 | 0.301 | upstream_gene_variant |
| chr11 | 65636047 | C | T | SNV | 0.042 | 0.222 | missense_variant |
| chr11 | 67795291 | C | T | SNV | 0.105 | 0.163 | missense_variant |
| chr11 | 73675860 | G | GCGCGCGC | INDEL | 0.087 | 0.228 | upstream_gene_variant |
| chr12 | 103352681 | ACCCGCTCA | A | INDEL | 0.063 | 0.279 | frameshift_variant |
| chr12 | 10586978 | A | AT | INDEL | 0.300 | 0.296 | upstream_gene_variant |
| chr12 | 12630578 | A | G | SNV | 0.064 | 0.220 | missense_variant |
| chr12 | 132313098 | G | GGCTGCC | INDEL | 0.714 | 0.813 | disruptive_inframe_insertion |
| chr12 | 132398254 | AAC | A | INDEL | 0.277 | 0.263 | upstream_gene_variant |
| chr12 | 14946973 | C | CA | INDEL | 1.000 | 0.286 | intron_variant |
| chr12 | 29596260 | TCAGTAGCT | T | INDEL | 0.083 | 0.087 | splice_region_variant&intron_variant |
| chr12 | 306372 | C | CATCATCC | INDEL | 0.316 | 0.382 | downstream_gene_variant |
| chr12 | 51857449 | C | G | SNV | 0.154 | 0.192 | missense_variant |
| chr12 | 56502908 | CA | C | INDEL | 0.286 | 0.467 | upstream_gene_variant |
| chr12 | 80889165 | T | TTTG | INDEL | 0.250 | 0.389 | intron_variant |
| chr12 | 9583167 | AG | A | INDEL | 0.163 | 0.137 | intron_variant |
| chr13 | 114312605 | G | GA | INDEL | 0.852 | 0.844 | upstream_gene_variant |
| chr13 | 25671272 | AG | A | INDEL | 0.070 | 0.080 | frameshift_variant |
| chr13 | 25671310 | TTATGA | T | INDEL | 0.150 | 0.129 | frameshift_variant |
| chr13 | 42042873 | ACT | A | INDEL | 0.063 | 0.131 | intron_variant |
| chr14 | 100742719 | G | T | SNV | 0.057 | 0.162 | downstream_gene_variant |
| chr14 | 106067207 | C | G | SNV | 0.067 | 0.159 | upstream_gene_variant |
| chr14 | 50649285 | C | A | SNV | 0.099 | 0.256 | stop_gained |

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|-------|----------|----------|----------|-------|-------|-------|--------------------------------------|
| chr14 | 57942425 | TA | T | INDEL | 0.357 | 0.421 | splice_region_variant&intron_variant |
| chr14 | 65392929 | CT | C | INDEL | 0.500 | 0.667 | downstream_gene_variant |
| chr14 | 68008899 | T | TA | INDEL | 0.471 | 0.463 | intron_variant |
| chr14 | 73959703 | C | CTT | INDEL | 0.188 | 0.242 | upstream_gene_variant |
| chr14 | 76446873 | A | G | SNV | 0.062 | 0.171 | downstream_gene_variant |
| chr14 | 91710562 | GACAC | G | INDEL | 0.156 | 0.400 | intron_variant |
| chr14 | 93107606 | G | A | SNV | 0.044 | 0.139 | missense_variant |
| chr14 | 94008977 | G | A | SNV | 0.064 | 0.202 | missense_variant |
| chr15 | 28326952 | G | A | SNV | 0.133 | 0.244 | synonymous_variant |
| chr15 | 28518114 | TC | T | INDEL | 0.095 | 0.069 | frameshift_variant |
| chr15 | 30437549 | A | AG | INDEL | 0.333 | 0.199 | downstream_gene_variant |
| chr15 | 38641776 | A | AAATTAG | INDEL | 0.833 | 1.000 | intron_variant |
| chr15 | 40235552 | CT | C | INDEL | 0.500 | 0.385 | intron_variant |
| chr15 | 40583923 | G | A | SNV | 0.046 | 0.232 | 3_prime_UTR_variant |
| chr15 | 40862191 | G | GGTTTTGT | INDEL | 0.163 | 0.213 | upstream_gene_variant |
| chr15 | 48826427 | GA | G | INDEL | 0.500 | 0.379 | sequence_feature |
| chr15 | 68500317 | G | GAC | INDEL | 0.682 | 0.727 | 3_prime_UTR_variant |
| chr15 | 90328748 | AAGATT | A | INDEL | 0.129 | 0.099 | intron_variant |
| chr15 | 90328754 | C | G | SNV | 0.135 | 0.111 | intron_variant |
| chr15 | 93007468 | C | G | SNV | 0.107 | 0.146 | synonymous_variant |
| chr15 | 93410345 | A | ATC | INDEL | 0.171 | 0.203 | intergenic_region |
| chr15 | 99514423 | TGCGGGGG | T | INDEL | 0.463 | 0.387 | intron_variant |
| chr16 | 1493826 | GGT | G | INDEL | 0.071 | 0.207 | frameshift_variant |
| chr16 | 15457634 | A | T | SNV | 0.356 | 0.052 | missense_variant |
| chr16 | 15457638 | A | G | SNV | 0.324 | 0.037 | missense_variant |
| chr16 | 15609245 | C | T | SNV | 0.033 | 0.235 | missense_variant |
| chr16 | 15865292 | CT | C | INDEL | 0.250 | 0.255 | downstream_gene_variant |
| chr16 | 16381738 | T | TA | INDEL | 0.255 | 0.157 | downstream_gene_variant |
| chr16 | 19278429 | T | TAA | INDEL | 0.400 | 0.302 | 3_prime_UTR_variant |
| chr16 | 21412275 | T | TA | INDEL | 1.000 | 0.800 | downstream_gene_variant |
| chr16 | 4546127 | CTT | C | INDEL | 0.769 | 0.500 | splice_region_variant&intron_variant |
| chr16 | 50186988 | G | A | SNV | 0.152 | 0.235 | upstream_gene_variant |

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|-------|----------|-----------|-------|-------|-------|-------|--|
| chr16 | 57059758 | A | T | SNV | 0.071 | 0.219 | missense_variant |
| chr16 | 89346098 | G | A | SNV | 0.095 | 0.283 | synonymous_variant |
| chr16 | 89784471 | CT | C | INDEL | 0.062 | 0.076 | upstream_gene_variant |
| chr16 | 89981345 | T | TTG | INDEL | 0.379 | 0.357 | 5_prime_UTR_variant |
| chr17 | 11659920 | G | A | SNV | 0.113 | 0.255 | synonymous_variant |
| chr17 | 17931884 | C | CA | INDEL | 0.200 | 0.267 | upstream_gene_variant |
| chr17 | 29647361 | TA | T | INDEL | 0.204 | 0.269 | upstream_gene_variant |
| chr17 | 40837178 | A | G | SNV | 0.110 | 0.335 | upstream_gene_variant |
| chr17 | 7578550 | G | A | SNV | 0.116 | 0.294 | structural_interaction_variant |
| chr17 | 7700419 | CAA | C | INDEL | 0.143 | 0.173 | intron_variant |
| chr17 | 80915236 | T | C | SNV | 0.096 | 0.295 | missense_variant&splice_region_variant |
| chr18 | 10718236 | C | T | SNV | 0.083 | 0.165 | missense_variant |
| chr18 | 13746320 | G | A | SNV | 0.079 | 0.169 | missense_variant |
| chr18 | 29672592 | AG | A | INDEL | 0.400 | 0.333 | 5_prime_UTR_variant |
| chr18 | 29693953 | C | G | SNV | 0.094 | 0.226 | downstream_gene_variant |
| chr18 | 3188664 | TAC | T | INDEL | 0.067 | 0.081 | upstream_gene_variant |
| chr18 | 40503735 | GA | G | INDEL | 0.324 | 0.244 | splice_region_variant&intron_variant |
| chr18 | 43487885 | TA | T | INDEL | 0.389 | 0.318 | intron_variant |
| chr19 | 1005265 | G | A | SNV | 0.113 | 0.273 | missense_variant |
| chr19 | 10229240 | CA | C | INDEL | 0.324 | 0.314 | splice_region_variant&intron_variant |
| chr19 | 13318300 | G | A | SNV | 0.073 | 0.303 | missense_variant |
| chr19 | 15932574 | CCACACA(C | | INDEL | 0.500 | 0.439 | downstream_gene_variant |
| chr19 | 1827020 | T | TGGA | INDEL | 0.231 | 0.149 | conservative_inframe_insertion |
| chr19 | 2979962 | CA | C | INDEL | 0.192 | 0.168 | upstream_gene_variant |
| chr19 | 36003877 | TCAA | T | INDEL | 0.171 | 0.105 | upstream_gene_variant |
| chr19 | 39071143 | C | T | SNV | 0.067 | 0.178 | missense_variant&splice_region_variant |
| chr19 | 39226648 | AGGTCTCC | A | INDEL | 0.800 | 0.826 | upstream_gene_variant |
| chr19 | 4885688 | T | TG | INDEL | 0.444 | 0.800 | downstream_gene_variant |
| chr19 | 50302897 | C | T | SNV | 0.083 | 0.225 | synonymous_variant |
| chr19 | 51331204 | T | TTG | INDEL | 0.800 | 0.811 | upstream_gene_variant |
| chr19 | 53875365 | G | A | SNV | 0.060 | 0.200 | intron_variant |
| chr19 | 55488178 | C | CTCTT | INDEL | 0.097 | 0.068 | downstream_gene_variant |

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| chr19 | 55598003 | G | GC | INDEL | 0.259 | 0.286 | upstream_gene_variant |
| chr19 | 5667204 | AC | A | INDEL | 0.250 | 0.157 | sequence_feature |
| chr19 | 7529500 | G | T | SNV | 0.055 | 0.184 | missense_variant |
| chr19 | 8601051 | G | GTC | INDEL | 0.227 | 0.478 | downstream_gene_variant |
| chr20 | 17462058 | A | AGAG | INDEL | 0.667 | 0.304 | upstream_gene_variant |
| chr20 | 18414185 | CA | C | INDEL | 0.313 | 0.259 | upstream_gene_variant |
| chr20 | 25756020 | CA | C | INDEL | 0.238 | 0.143 | upstream_gene_variant |
| chr20 | 26061746 | CT | C | INDEL | 0.394 | 0.324 | downstream_gene_variant |
| chr20 | 2673644 | GGGCGCT | G | INDEL | 1.000 | 0.800 | 5_prime_UTR_variant |
| chr20 | 29623257 | TTG | T | INDEL | 0.070 | 0.065 | splice_region_variant&intron_variant |
| chr20 | 29624020 | G | GT | INDEL | 0.326 | 0.230 | splice_region_variant&intron_variant |
| chr20 | 33500343 | T | C | SNV | 0.070 | 0.046 | upstream_gene_variant |
| chr20 | 36628853 | A | ACGGCCA | INDEL | 0.188 | 0.173 | intron_variant |
| chr21 | 10969894 | A | G | SNV | 0.186 | 0.102 | intron_variant |
| chr21 | 15746137 | C | T | SNV | 0.084 | 0.154 | missense_variant |
| chr21 | 19628809 | CT | C | INDEL | 0.304 | 0.139 | splice_region_variant&intron_variant |
| chr21 | 30438952 | AT | A | INDEL | 0.429 | 0.333 | upstream_gene_variant |
| chr21 | 40636354 | TAAA | T | INDEL | 0.375 | 0.250 | intron_variant |
| chr21 | 48064255 | G | A | SNV | 0.101 | 0.207 | missense_variant |
| chr22 | 17600985 | C | T | SNV | 0.087 | 0.234 | missense_variant |
| chr22 | 20656732 | AG | A | INDEL | 0.083 | 0.172 | intron_variant |
| chr22 | 24141236 | CA | C | INDEL | 0.222 | 0.214 | intron_variant |
| chr22 | 30051705 | CT | C | INDEL | 0.439 | 0.311 | sequence_feature |
| chr22 | 39882149 | AT | A | INDEL | 0.368 | 0.519 | splice_region_variant&intron_variant |
| chr22 | 40364462 | AAC | A | INDEL | 0.833 | 0.526 | upstream_gene_variant |
| chr22 | 42951978 | GC | G | INDEL | 0.700 | 0.667 | upstream_gene_variant |
| chr22 | 47882347 | C | T | SNV | 0.109 | 0.218 | intron_variant |
| chr22 | 50547296 | A | T | SNV | 0.088 | 0.222 | downstream_gene_variant |
| chr22 | 51043245 | C | T | SNV | 0.192 | 0.244 | synonymous_variant |
| chr22 | 51135989 | GTT | G | INDEL | 1.000 | 1.000 | frameshift_variant |
| chrX | 114141233 | A | C | SNV | 0.182 | 0.416 | missense_variant |
| chrX | 123184949 | CT | C | INDEL | 0.333 | 0.333 | splice_region_variant&intron_variant |

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|------|-----------|-----|-----|-------|-------|-------|--------------------------------------|
| chrX | 135961586 | TG | T | INDEL | 0.207 | 0.270 | frameshift_variant |
| chrX | 148851540 | TG | T | INDEL | 0.698 | 0.656 | upstream_gene_variant |
| chrX | 15262814 | T | TA | INDEL | 0.737 | 0.765 | intron_variant |
| chrX | 153151280 | G | GCC | INDEL | 1.000 | 1.000 | frameshift_variant |
| chrX | 153151284 | GT | G | INDEL | 1.000 | 1.000 | frameshift_variant |
| chrX | 19380975 | TA | T | INDEL | 0.375 | 0.308 | splice_region_variant&intron_variant |
| chrX | 44758425 | T | G | SNV | 0.185 | 0.467 | intron_variant |
| chrX | 44772989 | GTA | G | INDEL | 0.316 | 0.132 | intron_variant |
| chrX | 52654061 | A | G | SNV | 0.228 | 0.461 | non_coding_transcript_exon_variant |
| chrX | 71933512 | TCA | T | INDEL | 0.143 | 0.306 | downstream_gene_variant |
| chrX | 76965132 | TA | T | INDEL | 0.500 | 0.500 | intron_variant |
| chrY | 13310690 | TTC | T | INDEL | 0.159 | 0.128 | intergenic_region |
| chrY | 24052494 | AG | A | INDEL | 0.375 | 1.000 | intron_variant |

| CHROM | POS | PutativeImpact | GeneSymbol | EnsemblID | NucleotideChange | AAChange |
|-------|-----------|----------------|--------------|-----------------|------------------------|-------------|
| chr1 | 109745855 | MODIFIER | KIAA1324 | ENSG00000116299 | c.*221T>G | |
| chr1 | 114224782 | MODIFIER | MAGI3 | ENSG00000081026 | c.3329-721delT | |
| chr1 | 119962130 | MODERATE | HSD3B2 | ENSG00000203859 | c.232G>A | p.Val78Ile |
| chr1 | 148344615 | MODIFIER | PFN1P3 | ENSG00000234367 | n.-4641_-4640insC | |
| chr1 | 154461505 | MODIFIER | SHE | ENSG00000169291 | c.-2986C>T | |
| chr1 | 155005648 | MODERATE | DCST2 | ENSG00000163354 | c.361G>A | p.Glu121Lys |
| chr1 | 155280104 | LOW | FDPS | ENSG00000160752 | n.255-8dupT | |
| chr1 | 157660172 | LOW | FCRL3 | ENSG00000160856 | c.1563G>A | p.Ser521Ser |
| chr1 | 158582497 | MODIFIER | SPTA1 | ENSG00000163554 | n.-683delT | |
| chr1 | 158670040 | MODERATE | OR6K2 | ENSG00000196171 | c.403A>T | p.Met135Leu |
| chr1 | 159684121 | MODIFIER | CRP | ENSG00000132693 | n.-565delA | |
| chr1 | 16388875 | MODIFIER | FAM131C | ENSG00000185519 | c.174+117_174+118delGG | |
| chr1 | 169101273 | MODIFIER | ATP1B1 | ENSG00000143153 | c.*480_*481insG | |
| chr1 | 170633186 | MODIFIER | PRRX1 | ENSG00000116132 | c.-162delT | |
| chr1 | 171558447 | MODIFIER | PRRC2C | ENSG00000117523 | c.8200-39delT | |
| chr1 | 196397312 | MODERATE | KCNT2 | ENSG00000162687 | c.907G>A | p.Val303Ile |
| chr1 | 200558286 | MODIFIER | KIF14 | ENSG00000118193 | c.3114+58delT | |
| chr1 | 201981116 | HIGH | ELF3 | ENSG00000163435 | c.197dupT | p.Trp67fs |
| chr1 | 207091138 | MODIFIER | FAIM3 | ENSG00000162894 | c.38-3700delA | |
| chr1 | 210001471 | MODERATE | DIEXF | ENSG00000117597 | c.63G>T | p.Lys21Asn |
| chr1 | 212526422 | MODIFIER | RP11-384C4.2 | ENSG00000229832 | n.-4338G>A | |
| chr1 | 216246651 | MODIFIER | USH2A | ENSG00000042781 | c.5573-9A>G | |
| chr1 | 242122274 | MODIFIER | BECN1P1 | ENSG00000196289 | n.1233C>T | |
| chr1 | 247091604 | MODIFIER | AHCTF1 | ENSG00000153207 | c.98+2826delT | |
| chr1 | 43805083 | MODERATE | MPL | ENSG00000117400 | c.533A>T | p.Asn178Ile |
| chr1 | 93691855 | MODIFIER | CCDC18 | ENSG00000122483 | c.2332-19delT | |
| chr1 | 94312544 | MODIFIER | RP4-561L24.3 | ENSG00000260464 | n.-186_-185insGC | |
| chr2 | 10188712 | LOW | KLF11 | ENSG00000172059 | c.1248C>G | p.Arg416Arg |
| chr2 | 10188713 | MODERATE | KLF11 | ENSG00000172059 | c.1249A>G | p.Thr417Ala |
| chr2 | 10269043 | HIGH | RRM2 | ENSG00000171848 | c.1051_1052delGA | p.Glu351fs |
| chr2 | 11273407 | MODIFIER | C2orf50 | ENSG00000150873 | c.-36_-35delCT | |

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|------|-----------|----------|-------------|------------------|------------------------------|---------------|
| chr2 | 120714401 | LOW | PTPN4 | ENSG000000088179 | c.1981-3delT | |
| chr2 | 121746076 | LOW | GLI2 | ENSG000000074047 | c.2586G>A | p.Ala862Ala |
| chr2 | 166810161 | MODIFIER | AC010127.3 | ENSG000000236107 | n.-3748_-3747insCCCGCCCGCTCA | |
| chr2 | 179415787 | MODERATE | TTN | ENSG000000155657 | c.91471C>T | p.Arg30491Cys |
| chr2 | 185800489 | MODIFIER | ZNF804A | ENSG000000170396 | c.387-21T>C | |
| chr2 | 187529823 | MODIFIER | ITGAV | ENSG000000138448 | n.-29_-28delTT | |
| chr2 | 217142458 | MODERATE | MARCH4 | ENSG000000144583 | c.802C>T | p.Arg268Cys |
| chr2 | 219920551 | MODERATE | IHH | ENSG000000163501 | c.614C>T | p.Pro205Leu |
| chr2 | 29445163 | MODIFIER | ALK | ENSG000000171094 | c.3515+47A>G | |
| chr2 | 32842836 | LOW | BIRC6 | ENSG000000115760 | c.14439C>T | p.Cys4813Cys |
| chr2 | 55186296 | MODERATE | EML6 | ENSG000000214595 | c.4751A>G | p.His1584Arg |
| chr2 | 96517957 | MODIFIER | ANKRD36C | ENSG000000174501 | n.*79_*80delAA | |
| chr2 | 96605652 | MODIFIER | ANKRD36C | ENSG000000174501 | c.1532-891_1532-890delTT | |
| chr3 | 124774779 | MODIFIER | HEG1 | ENSG000000173706 | c.-52_-46dupGCTGCCC | |
| chr3 | 126268280 | MODIFIER | C3orf22 | ENSG000000180697 | c.*431A>G | |
| chr3 | 160955882 | LOW | NMD3 | ENSG000000169251 | c.578-5_578-4delTT | |
| chr3 | 183884669 | MODERATE | DVL3 | ENSG000000161202 | c.1104G>A | p.Met368Ile |
| chr3 | 32568145 | MODIFIER | DYNC1LI1 | ENSG000000144635 | c.*144_*145dupTG | |
| chr3 | 38639339 | MODERATE | SCN5A | ENSG000000183873 | c.2143A>C | p.Met715Leu |
| chr3 | 47018447 | MODIFIER | CCDC12 | ENSG000000160799 | c.-93delT | |
| chr3 | 47449947 | MODERATE | PTPN23 | ENSG000000076201 | c.1297G>A | p.Asp433Asn |
| chr3 | 48697209 | LOW | CELSR3 | ENSG000000008300 | c.2859C>T | p.Asp953Asp |
| chr3 | 51422741 | HIGH | MANF | ENSG000000145050 | c.-2_1delGGA | p.Met1del |
| chr3 | 58817341 | MODIFIER | C3orf67 | ENSG000000163689 | c.1800+71C>A | |
| chr3 | 75718167 | MODIFIER | LINC00960 | ENSG000000242516 | n.-3374delC | |
| chr4 | 169086540 | MODIFIER | ANXA10 | ENSG000000109511 | c.480+80delA | |
| chr5 | 10263451 | MODIFIER | CTD-2256P15 | ENSG000000271980 | n.*1254_*1257delCTCC | |
| chr5 | 140503037 | MODERATE | PCDHB4 | ENSG000000081818 | c.1457C>T | p.Thr486Ile |
| chr5 | 140764320 | LOW | PCDHGA7 | ENSG000000253537 | c.1854G>A | p.Ala618Ala |
| chr5 | 140768679 | MODERATE | PCDHGB4 | ENSG000000253953 | c.1228C>T | p.Arg410Cys |
| chr5 | 140810918 | MODERATE | PCDHGA12 | ENSG000000253159 | c.592C>T | p.Arg198Cys |
| chr5 | 151169791 | MODIFIER | G3BP1 | ENSG000000145907 | n.*2845delA | |

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|------|-----------|----------|-------------|-----------------|------------------------------|--------------|
| chr5 | 179233663 | MODIFIER | MGAT4B | ENSG00000161013 | c.-83_-81dupGCC | |
| chr5 | 38427422 | MODIFIER | CTD-2108O9. | ENSG00000248234 | n.*2572G>T | |
| chr5 | 68862363 | MODIFIER | GTF2H2C | ENSG00000183474 | n.*1404_*1405delGG | |
| chr5 | 74930800 | LOW | ANKDD1B | ENSG00000189045 | c.678G>T | p.Leu226Leu |
| chr6 | 109659589 | MODIFIER | CCDC162P | ENSG00000203799 | n.-88_-87delCA | |
| chr6 | 121433737 | MODERATE | TBC1D32 | ENSG00000146350 | c.3361G>T | p.Asp1121Tyr |
| chr6 | 131211616 | MODIFIER | EPB41L2 | ENSG00000079819 | c.-54delT | |
| chr6 | 142409507 | MODERATE | NMBR | ENSG00000135577 | c.289G>A | p.Val97Ile |
| chr6 | 143792157 | MODERATE | PEX3 | ENSG00000034693 | c.391G>A | p.Val131Ile |
| chr6 | 158294104 | MODIFIER | RP11-52J3.2 | ENSG00000229502 | n.*1037delA | |
| chr6 | 22146818 | MODIFIER | CASC15 | ENSG00000272168 | n.-618delT | |
| chr6 | 29694336 | MODIFIER | HCG4P11 | ENSG00000225864 | n.-2590_-2589dupCA | |
| chr6 | 31976139 | MODIFIER | C4A-AS1 | ENSG00000233627 | n.-4842delC | |
| chr6 | 32147291 | MODIFIER | AGPAT1 | ENSG00000204310 | c.-8019delA | |
| chr6 | 32551947 | HIGH | HLA-DRB1 | ENSG00000196126 | c.308delC | p.Ala103fs |
| chr6 | 32551954 | HIGH | HLA-DRB1 | ENSG00000196126 | c.301delC | p.Arg101fs |
| chr6 | 32557375 | MODIFIER | HLA-DRB1 | ENSG00000196126 | c.100+44_100+45insT | |
| chr6 | 32610140 | MODIFIER | HLA-DQA1 | ENSG00000196735 | c.*4832_*4833insTTCTTTC | |
| chr6 | 33101200 | MODIFIER | HLA-DPB2 | ENSG00000224557 | n.*4339_*4340insA | |
| chr6 | 401586 | MODERATE | IRF4 | ENSG00000137265 | c.908A>C | p.Asn303Thr |
| chr6 | 41712723 | MODIFIER | PGC | ENSG00000096088 | c.60-183_60-178delGACAGA | |
| chr7 | 105278904 | LOW | ATXN7L1 | ENSG00000146776 | c.1098C>T | p.Ser366Ser |
| chr7 | 128298973 | MODIFIER | AC018638.1 | ENSG00000229413 | n.-4985_-4984insA | |
| chr7 | 129846823 | LOW | TMEM209 | ENSG00000146842 | c.31-6delT | |
| chr7 | 138356734 | MODIFIER | SVOPL | ENSG00000157703 | c.273+29_273+30insAGCCAA | |
| chr7 | 139746599 | MODIFIER | PARP12 | ENSG00000059378 | c.986+83_986+84delAC | |
| chr7 | 141536351 | MODIFIER | PRSS37 | ENSG00000165076 | c.568-18_568-17delCT | |
| chr7 | 150754000 | LOW | CDK5 | ENSG00000164885 | c.189C>T | p.Ile63Ile |
| chr7 | 151814026 | MODERATE | GALNT11 | ENSG00000178234 | c.191C>T | p.Pro64Leu |
| chr7 | 151882622 | MODIFIER | KMT2C | ENSG00000055609 | c.-3320_-3319delCT | |
| chr7 | 154002658 | MODIFIER | DPP6 | ENSG00000130226 | c.244-140627_244-140626delTG | |
| chr7 | 155465438 | MODERATE | RBM33 | ENSG00000184863 | c.123-122_123-119delAAAA | |

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|-------|-----------|----------|----------|-----------------|--|-------------|
| chr7 | 35851738 | MODIFIER | SEPT7 | ENSG00000122545 | c.69+74delA | |
| chr7 | 38543104 | MODIFIER | AMPH | ENSG00000078053 | c.205+145_205+146insG | |
| chr7 | 50450230 | LOW | IKZF1 | ENSG00000185811 | c.422-8C>T | |
| chr7 | 73929947 | MODIFIER | GTF2IRD1 | ENSG00000006704 | c.517+21A>G | |
| chr7 | 933611 | LOW | GET4 | ENSG00000239857 | c.895+8_895+36delGGGGCGCCCTT GTCACACCCACTCCAGCC | |
| chr7 | 99711096 | MODIFIER | TAF6 | ENSG00000106290 | n.-2149C>T | |
| chr8 | 105509428 | HIGH | LRP12 | ENSG00000147650 | c.1351dupT | p.Cys451fs |
| chr8 | 132051740 | HIGH | ADCY8 | ENSG00000155897 | c.824_839delTCTTCACGCTCTTCGC | p.Leu275fs |
| chr8 | 144240312 | MODERATE | LY6H | ENSG00000176956 | c.158C>T | p.Thr53Ile |
| chr8 | 22009453 | LOW | LG13 | ENSG00000168481 | c.555G>C | p.Leu185Leu |
| chr8 | 25268493 | MODIFIER | DOCK5 | ENSG00000147459 | c.5509-213_5509-206delGCGCACGC | |
| chr8 | 52321783 | MODERATE | PXDNL | ENSG00000147485 | c.2401C>T | p.Arg801Cys |
| chr9 | 117129727 | MODIFIER | AKNA | ENSG00000106948 | c.1728+96A>G | |
| chr9 | 123762336 | LOW | C5 | ENSG00000106804 | n.166-8dupT | |
| chr9 | 134379628 | MODERATE | POMT1 | ENSG00000130714 | c.23C>T | p.Pro8Leu |
| chr9 | 135204150 | MODERATE | SETX | ENSG00000107290 | c.2835C>A | p.Asp945Glu |
| chr9 | 84267021 | MODIFIER | TLE1 | ENSG00000196781 | c.372+106_372+107delGT | |
| chr10 | 112697017 | MODIFIER | RPL13AP6 | ENSG00000234118 | n.-27delA | |
| chr10 | 134016407 | MODIFIER | DPYSL4 | ENSG00000151640 | n.-650C>T | |
| chr10 | 14569998 | MODIFIER | FAM107B | ENSG00000065809 | c.*11_*12dupAA | |
| chr10 | 17898179 | MODIFIER | MRC1L1 | ENSG00000183748 | c.*1348delA | |
| chr10 | 19678455 | HIGH | MALRD1 | ENSG00000204740 | c.2869C>T | p.Arg957* |
| chr10 | 24498289 | MODIFIER | KIAA1217 | ENSG00000120549 | c.70+111dupA | |
| chr10 | 28274145 | LOW | ARMC4 | ENSG00000169126 | c.383-7_383-6dupTT | |
| chr10 | 38260558 | MODIFIER | ZNF25 | ENSG00000175395 | c.15+70_15+77delGTGTGTGT | |
| chr10 | 42941685 | MODIFIER | CCNYL2 | ENSG00000182632 | n.698+5371dupT | |
| chr10 | 52502792 | MODIFIER | ASAH2B | ENSG00000204147 | c.86+25_86+26insATGC | |
| chr10 | 54011325 | LOW | PRKG1 | ENSG00000185532 | c.1077-5T>A | |
| chr10 | 61574357 | MODIFIER | CCDC6 | ENSG00000108091 | n.-1873_-1872delGT | |
| chr10 | 74098315 | MODIFIER | DNAJB12 | ENSG00000148719 | n.-1694_-1693dupTT | |
| chr10 | 89720633 | HIGH | PTEN | ENSG00000171862 | c.802-3dupT | |

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|-------|-----------|----------|--------------|-----------------|---|------------------|
| chr10 | 97725542 | MODIFIER | ENTPD1-AS1 | ENSG00000226688 | n.276-89127_276-89126delCA | |
| chr11 | 104872624 | MODIFIER | CASP5 | ENSG00000137757 | c.-2873_-2872delGT | |
| chr11 | 10711918 | LOW | MRV11 | ENSG00000072952 | c.-882-3delT | |
| chr11 | 120292373 | MODIFIER | ARHGEF12 | ENSG00000196914 | c.299-139T>C | |
| chr11 | 1213573 | MODIFIER | MUC5AC | ENSG00000215182 | n.815_816insCACACC | |
| chr11 | 33770312 | MODIFIER | FBXO3 | ENSG00000110429 | c.1048+11C>T | |
| chr11 | 43413157 | MODIFIER | TTC17 | ENSG00000052841 | n.-4528_-4524delTTGCG | |
| chr11 | 45924491 | LOW | MAPK8IP1 | ENSG00000121653 | c.1173G>T | p.Leu391Leu |
| chr11 | 47755552 | MODIFIER | FNBP4 | ENSG00000109920 | n.-1743delT | |
| chr11 | 58379663 | MODIFIER | AP001350.1 | ENSG00000269570 | c.-906_-905delAC | |
| chr11 | 62751721 | MODIFIER | SLC22A6 | ENSG00000197901 | n.-358dupA | |
| chr11 | 65636047 | MODERATE | EFEMP2 | ENSG00000172638 | c.781G>A | p.Glu261Lys |
| chr11 | 67795291 | MODERATE | ALDH3B1 | ENSG00000006534 | c.1285C>T | p.Arg429Cys |
| chr11 | 73675860 | MODIFIER | DNAJB13 | ENSG00000187726 | c.-3449_-3448insCGCGCGCGCGCGCC | |
| chr12 | 103352681 | HIGH | ASCL1 | ENSG00000139352 | c.664_673delCTCAGCCCCG | p.Leu222fs |
| chr12 | 10586978 | MODIFIER | KLRC2 | ENSG00000205809 | c.-476dupA | |
| chr12 | 12630578 | MODERATE | DUSP16 | ENSG00000111266 | c.1187T>C | p.Leu396Pro |
| chr12 | 132313098 | MODERATE | MMP17 | ENSG00000198598 | c.62_70dupTGCCGCTGC | p.Leu21_Leu23dup |
| chr12 | 132398254 | MODIFIER | ULK1 | ENSG00000177169 | c.-2766_-2765delAC | |
| chr12 | 14946973 | MODIFIER | WBP11 | ENSG00000084463 | c.722-118dupT | |
| chr12 | 29596260 | LOW | OVCH1 | ENSG00000187950 | c.3157+6_3157+33delTGATTTCCCAT GAATCTCTATGCTACTG | |
| chr12 | 306372 | MODIFIER | RP11-283I3.1 | ENSG00000255671 | n.*3076_*3077insATCATCCTCCCCC TCCTCTTTCTCATGGTA | |
| chr12 | 51857449 | MODERATE | SLC4A8 | ENSG00000050438 | c.1300C>G | p.Gln434Glu |
| chr12 | 56502908 | MODIFIER | PA2G4 | ENSG00000170515 | n.-744delA | |
| chr12 | 80889165 | MODIFIER | PTPRQ | ENSG00000139304 | c.1870+33_1870+35dupGTT | |
| chr12 | 9583167 | MODIFIER | DDX12P | ENSG00000214826 | n.1493+16delC | |
| chr13 | 114312605 | MODIFIER | ATP4B | ENSG00000186009 | c.-147_-146insT | |
| chr13 | 25671272 | HIGH | PABPC3 | ENSG00000151846 | c.937delG | p.Ala313fs |
| chr13 | 25671310 | HIGH | PABPC3 | ENSG00000151846 | c.976_980delATGAT | p.Met326fs |
| chr13 | 42042873 | MODIFIER | RGCC | ENSG00000102760 | c.344-19_344-18delTC | |

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|-------|-----------|----------|-------------|-------------------------------------|--|-------------|
| chr14 | 100742719 | MODIFIER | AL157871.2 | ENSG00000259052 | n.*3577C>A | |
| chr14 | 106067207 | MODIFIER | AL928742.12 | ENSG00000227468 | n.-831G>C | |
| chr14 | 50649285 | HIGH | SOS2 | ENSG00000100485 | c.754G>T | p.Glu252* |
| chr14 | 57942425 | LOW | C14orf105 | ENSG00000100557 | c.653-4delT | |
| chr14 | 65392929 | MODIFIER | CHURC1 | ENSG00000258289 | n.*1728delT | |
| chr14 | 68008899 | MODIFIER | PLEKHH1 | ENSG00000054690 | c.126+189_126+190insA | |
| chr14 | 73959703 | MODIFIER | HEATR4 | ENSG00000187105 | n.-1221_-1220dupAA | |
| chr14 | 76446873 | MODIFIER | TGFB3 | ENSG00000119699 | n.*46T>C | |
| chr14 | 91710562 | MODIFIER | GPR68 | ENSG00000119714 | c.-99-9043_-99-9040delGTGT | |
| chr14 | 93107606 | MODERATE | RIN3 | ENSG00000100599 | c.464G>A | p.Arg155Gln |
| chr14 | 94008977 | MODERATE | UNC79 | ENSG00000133958 | c.1690G>A | p.Val564Ile |
| chr15 | 28326952 | LOW | OCA2 | ENSG00000104044 | c.69C>T | p.Ser23Ser |
| chr15 | 28518114 | HIGH | HERC2 | ENSG00000128731 | c.836delG | p.Gly279fs |
| chr15 | 30437549 | MODIFIER | RN7SL469P | ENSG00000241167 | n.*1346_*1347insG | |
| chr15 | 38641776 | MODIFIER | SPRED1 | ENSG00000166068 | c.684+52_684+53insAATTAGT | |
| chr15 | 40235552 | MODIFIER | EIF2AK4 | ENSG00000128829 | c.258-12delT | |
| chr15 | 40583923 | MODIFIER | PLCB2 | ENSG00000137841 | c.*44C>T | |
| chr15 | 40862191 | MODIFIER | C15orf57 | ENSG00000128891 | c.-6997_-6978dupAAAACAAAACAAAA CAAAAC | |
| chr15 | 48826427 | LOW | FBN1 | ENSG00000166147 | c.737-26delT | |
| chr15 | 68500317 | MODIFIER | CLN6 | ENSG00000128973 | c.*159_*160dupGT | |
| chr15 | 90328748 | MODIFIER | ANPEP | ENSG00000166825 | c.2752-21_2752-17delAATCT | |
| chr15 | 90328754 | MODIFIER | ANPEP | ENSG00000166825 | c.2752-22G>C | |
| chr15 | 93007468 | LOW | ST8SIA2 | ENSG00000140557 | c.981C>G | p.Val327Val |
| chr15 | 93410345 | MODIFIER | RN7SL599P-A | ENSG00000264123- ENSG00000272888 | n.93410345_93410346insTC | |
| chr15 | 99514423 | MODIFIER | RP11-654A16 | ENSG00000259475 | n.267-5131_267-5125delCCCCCCC | |
| chr16 | 1493826 | HIGH | CCDC154 | ENSG00000197599 | c.193_194delAC | p.Thr65fs |
| chr16 | 15457634 | MODERATE | NPIPA5 | ENSG00000183793 | c.935T>A | p.Leu312Gln |
| chr16 | 15457638 | MODERATE | NPIPA5 | ENSG00000183793 | c.931T>C | p.Cys311Arg |
| chr16 | 15609245 | MODERATE | C16orf45 | ENSG00000166780 | c.190C>T | p.Arg64Trp |

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|-------|----------|----------|--------------|-----------------|------------------------|--------------|
| chr16 | 15865292 | MODIFIER | MYH11 | ENSG00000133392 | n.*4406delA | |
| chr16 | 16381738 | MODIFIER | RP11-517A5.5 | ENSG00000262848 | n.*2253dupT | |
| chr16 | 19278429 | MODIFIER | SYT17 | ENSG00000103528 | c.*46_*47dupAA | |
| chr16 | 21412275 | MODIFIER | NPIPB3 | ENSG00000169246 | c.*1329_*1330insT | |
| chr16 | 4546127 | LOW | HMOX2 | ENSG00000103415 | n.293-4_293-3delTT | |
| chr16 | 50186988 | MODIFIER | RPL10P14 | ENSG00000260031 | n.-1500C>T | |
| chr16 | 57059758 | MODERATE | NLRC5 | ENSG00000140853 | c.903A>T | p.Gln301His |
| chr16 | 89346098 | LOW | ANKRD11 | ENSG00000167522 | c.6852C>T | p.Ala2284Ala |
| chr16 | 89784471 | MODIFIER | ZNF276 | ENSG00000158805 | c.-3577delT | |
| chr16 | 89981345 | MODIFIER | MC1R | ENSG00000258839 | c.-771_-770dupTG | |
| chr17 | 11659920 | LOW | DNAH9 | ENSG00000007174 | c.6774G>A | p.Leu2258Leu |
| chr17 | 17931884 | MODIFIER | ATPAF2 | ENSG00000171953 | n.-2940dupT | |
| chr17 | 29647361 | MODIFIER | CTD-2370N5. | ENSG00000265118 | c.-1514delT | |
| chr17 | 40837178 | MODIFIER | CCR10 | ENSG00000184451 | c.-3337T>C | |
| chr17 | 7578550 | HIGH | TP53 | ENSG00000141510 | c.380C>T | |
| chr17 | 7700419 | MODIFIER | DNAH2 | ENSG00000183914 | c.7864-56_7864-55delAA | |
| chr17 | 80915236 | MODERATE | B3GNTL1 | ENSG00000175711 | c.860A>G | p.Lys287Arg |
| chr18 | 10718236 | MODERATE | PIEZO2 | ENSG00000154864 | c.4952G>A | p.Arg1651Gln |
| chr18 | 13746320 | MODERATE | RNMT | ENSG00000101654 | c.1241G>A | p.Arg414Gln |
| chr18 | 29672592 | MODIFIER | RNF138 | ENSG00000134758 | c.-145delG | |
| chr18 | 29693953 | MODIFIER | RP11-53I6.2 | ENSG00000263917 | n.*2211C>G | |
| chr18 | 3188664 | MODIFIER | RP13-270P17. | ENSG00000265399 | n.-1730_-1729delAC | |
| chr18 | 40503735 | LOW | RIT2 | ENSG00000152214 | c.235-8delT | |
| chr18 | 43487885 | MODIFIER | EPG5 | ENSG00000152223 | c.4329+37delT | |
| chr19 | 1005265 | MODERATE | GRIN3B | ENSG00000116032 | c.1765G>A | p.Ala589Thr |
| chr19 | 10229240 | LOW | EIF3G | ENSG00000130811 | c.301-8delT | |
| chr19 | 13318300 | MODERATE | CACNA1A | ENSG00000141837 | c.7348C>T | p.Arg2450Cys |
| chr19 | 15932574 | MODIFIER | ZNF861P | ENSG00000267235 | n.*24_*31delTGTGTGTG | |
| chr19 | 1827020 | MODERATE | REXO1 | ENSG00000079313 | c.1765_1767dupTCC | p.Ser589dup |
| chr19 | 2979962 | MODIFIER | TLE6 | ENSG00000104953 | n.-3941delA | |
| chr19 | 36003877 | MODIFIER | DMKN | ENSG00000161249 | c.-2768_-2766delTTG | |
| chr19 | 39071143 | MODERATE | RYR1 | ENSG00000196218 | c.14645C>T | p.Thr4882Met |

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|-------|----------|----------|--------------|-----------------|--|-------------|
| chr19 | 39226648 | MODIFIER | CTD-2540F13 | ENSG00000267892 | n.-2275_-2258delGGTCTCGGGGGTCT CGGG | |
| chr19 | 4885688 | MODIFIER | AC027319.1 | ENSG00000221535 | n.*3526_*3527insC | |
| chr19 | 50302897 | LOW | AP2A1 | ENSG00000196961 | c.1146C>T | p.Asp382Asp |
| chr19 | 51331204 | MODIFIER | KLK1 | ENSG00000167748 | c.-4201_-4200insCA | |
| chr19 | 53875365 | MODIFIER | ZNF525 | ENSG00000203326 | c.-67-103G>A | |
| chr19 | 55488178 | MODIFIER | CTC-550B14.1 | ENSG00000243494 | n.*2393_*2394insTCTT | |
| chr19 | 55598003 | MODIFIER | EPS8L1 | ENSG00000131037 | n.-142_-141insC | |
| chr19 | 5667204 | MODERATE | SAFB | ENSG00000160633 | c.2453+30delC | |
| chr19 | 7529500 | MODERATE | CTD-2207O23 | ENSG00000268861 | c.2135G>T | p.Arg712Leu |
| chr19 | 8601051 | MODIFIER | MYO1F | ENSG00000142347 | c.*5733_*5734dupGA | |
| chr20 | 17462058 | MODIFIER | DYNLT3P1 | ENSG00000232241 | n.-1983_-1982insCTC | |
| chr20 | 18414185 | MODIFIER | RNA5SP476 | ENSG00000252422 | n.-300delA | |
| chr20 | 25756020 | MODIFIER | FAM182B | ENSG00000175170 | n.-113delT | |
| chr20 | 26061746 | MODIFIER | FAM182A | ENSG00000125804 | n.*4671delT | |
| chr20 | 2673644 | MODIFIER | EBF4 | ENSG00000088881 | c.-137_-132delCTGGCG | |
| chr20 | 29623257 | LOW | FRG1B | ENSG00000149531 | c.66+7_66+8delGT | |
| chr20 | 29624020 | LOW | FRG1B | ENSG00000149531 | c.71-6dupT | |
| chr20 | 33500343 | MODIFIER | ACSS2 | ENSG00000131069 | n.-553T>C | |
| chr20 | 36628853 | MODIFIER | TTI1 | ENSG00000101407 | c.2653-1153_2653-1124dupCCCACGCG GGAGGGAAGCCTGCGCTGGCCG | |
| chr21 | 10969894 | MODIFIER | TPTE | ENSG00000166157 | c.119+115T>C | |
| chr21 | 15746137 | MODERATE | HSPA13 | ENSG00000155304 | c.1217G>A | p.Gly406Glu |
| chr21 | 19628809 | LOW | CHODL | ENSG00000154645 | c.80-4delT | |
| chr21 | 30438952 | MODIFIER | CCT8 | ENSG00000156261 | n.-3765delA | |
| chr21 | 40636354 | MODIFIER | BRWD1 | ENSG00000185658 | c.1885+29_1885+31delTTT | |
| chr21 | 48064255 | MODERATE | PRMT2 | ENSG00000160310 | c.182G>A | p.Arg61Lys |
| chr22 | 17600985 | MODERATE | CECR6 | ENSG00000183307 | c.1033G>A | p.Ala345Thr |
| chr22 | 20656732 | MODIFIER | AC011718.2 | ENSG00000223579 | n.347-2393delC | |
| chr22 | 24141236 | MODIFIER | SMARCB1 | ENSG00000099956 | c.336-1876delA | |

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|-------|-----------|----------|--------------|-------------------------------------|----------------------------|-------------|
| chr22 | 30051705 | LOW | NF2 | ENSG00000186575 | c.599+41delT | |
| chr22 | 39882149 | LOW | MGAT3 | ENSG00000128268 | c.1-3delT | |
| chr22 | 40364462 | MODIFIER | GRAP2 | ENSG00000100351 | n.-916_-915delAC | |
| chr22 | 42951978 | MODIFIER | Z93241.1 | ENSG00000265106 | n.-3700delG | |
| chr22 | 47882347 | MODIFIER | LL22NC03-75 | ENSG00000218357 | c.50+132G>A | |
| chr22 | 50547296 | MODIFIER | MOV10L1 | ENSG00000073146 | c.*18608A>T | |
| chr22 | 51043245 | LOW | MAPK8IP2 | ENSG00000008735 | c.1515C>T | p.Tyr505Tyr |
| chr22 | 51135989 | HIGH | SHANK3 | ENSG00000251322 | c.1393_1394delTT | p.Phe465fs |
| chrX | 114141233 | MODERATE | HTR2C | ENSG00000147246 | c.632A>C | p.Asp211Ala |
| chrX | 123184949 | LOW | STAG2 | ENSG00000101972 | c.1018-3delT | |
| chrX | 135961586 | HIGH | RBMX | ENSG00000147274 | c.3delC | p.Asn1fs |
| chrX | 148851540 | MODIFIER | HSFX1 | ENSG00000171116 | c.-4799delG | |
| chrX | 15262814 | MODIFIER | ASB9 | ENSG00000102048 | c.761-63dupT | |
| chrX | 153151280 | HIGH | LCA10 | ENSG00000196987 | c.650_651insCC | p.Gly218fs |
| chrX | 153151284 | HIGH | LCA10 | ENSG00000196987 | c.655delT | p.Tyr219fs |
| chrX | 19380975 | LOW | MAP3K15 | ENSG00000180815 | c.3567-8delT | |
| chrX | 44758425 | MODIFIER | KDM6A | ENSG00000147050 | c.225+25192T>G | |
| chrX | 44772989 | MODIFIER | KDM6A | ENSG00000147050 | c.225+39770_225+39771delAT | |
| chrX | 52654061 | MODIFIER | SSX8 | ENSG00000157965 | n.297A>G | |
| chrX | 71933512 | MODIFIER | PHKA1-AS1 | ENSG00000231944 | n.*1323_*1324delCA | |
| chrX | 76965132 | MODIFIER | ATRX | ENSG00000085224 | c.133+7475delT | |
| chrY | 13310690 | MODIFIER | RP1-85D24.1- | ENSG00000270570- ENSG00000263502 | n.13310691_13310692delTC | |
| chrY | 24052494 | MODIFIER | RBMX1E | ENSG00000242389 | c.881+10delC | |