|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplemental Table 4a**: H3K4me3 peaks showing >2-fold increase in subsets of autism cases (A1-A16) | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **PEAK INFORMATION** |  |  |  |  | **Decipher database** |  | **Sfari database** |  |  | **HuGE database** |  |  | **Other information** |  |  |  |  |
| **Order on Author Supplemental Figure S5A heatmap** | **Peak** | **corrected for multiple testing p-value for the highest Autsim sample** | **Overlap gene/Intergenic** | **Nearest TSS** | **Distance to nearest TSS (bp)** | **Syndrome** | **Autism/Mental retardation** | **Support for Autism** | **Primay Reference** | **Most cited** | **Reference** | **Autism samples affected** | **Refseq Description** | **Neuronal Function** | **Autism/MR/Schizophrenia/Neurodegenerative Disease/Neurodevelopment** | **PMID** | **Association** | **CNV data** |
| **24** | **chr1:109101627-109102432** | **4.0E-15** | **intergenic** | **FAM102B** | **538** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC284611** |  |  |  |  |  |
| **459** | **chr1:110526434-110527339** | **8.7E-42** | **AHCYL1** | **AHCYL1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **S-adenosylhomocysteine hydrolase-like 1** |  |  |  |  |  |
| **428** | **chr1:113248992-113250592** | **3.8E-37** | **RHOC** | **RHOC** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **ras homolog gene family, member C precursor** |  |  |  |  |  |
| **154** | **chr1:113258748-113259512** | **3.3E-28** | **intergenic** | **PPM1J** | **798** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens PPM1J mRNA for protein phosphatase 1J, complete cds, clone: FLJ35951SAAN.** |  |  |  |  |  |
| **278** | **chr1:116710247-116711689** | **2.0E-41** | **intergenic** | **C1orf161** | **55872** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC126868** |  |  |  |  |  |
| **443** | **chr1:117113866-117114389** | **1.5E-12** | **intergenic** | **CD58** | **151** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Homo sapiens cDNA FLJ77504 complete cds, highly similar to Homo sapiens CD58 antigen, (lymphocyte function-associated antigen 3) (CD58), mRNA.** |  |  |  |  |  |
| **150** | **chr1:1286735-1287894** | **1.5E-26** | **intergenic** | **DVL1** | **2243** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **dishevelled 1** | **Y** |  | **9298901** | **essential for social interaction** |  |
| **232** | **chr1:14076877-14077348** | **6.9E-19** | **PRDM2** | **PRDM2** | **1002** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A6,A8,A13** | **retinoblastoma protein-binding zinc finger** |  |  |  |  |  |
| **149** | **chr1:1407933-1408694** | **4.6E-23** | **ATAD3B** | **ATAD3B** | **770** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **AAA-ATPase TOB3** |  |  |  |  |  |
| **354** | **chr1:143466924-143467596** | **6.1E-25** | **intergenic** | **LOC100130000** | **219533** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A11** |  |  |  |  |  |  |
| **226** | **chr1:149230543-149231582** | **2.4E-26** | **intergenic** | **LOC388692** | **47893** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A7** | **Homo sapiens cDNA FLJ13580 fis, clone PLACE1008851.** |  |  |  |  |  |
| **228** | **chr1:149398799-149399306** | **8.4E-08** | **HIST2H2BF** | **HIST2H2BF** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A7** | **histone cluster 2, H2bf isoform a** |  |  |  |  |  |
| **32** | **chr1:149821541-149821974** | **7.8E-05** | **HIST2H2BC** | **HIST2H2BC** | **366** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **205** | **chr1:154126624-154127642** | **1.3E-111** | **NUP210L** | **NUP210L** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A4,A5,A11,A14** | **nucleoporin 210kDa-like isoform 2** |  |  |  |  |  |
| **95** | **chr1:155109107-155110892** | **1.8E-59** | **SLC50A1** | **SLC50A1** | **820** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **168** | **chr1:156699215-156700182** | **3.8E-39** | **C1orf66** | **C1orf66** | **953** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC51093 isoform 2** |  |  |  |  |  |
| **52** | **chr1:159751276-159752157** | **2.5E-17** | **DUSP23** | **DUSP23** | **518** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **dual specificity phosphatase 23** |  |  |  |  |  |
| **468** | **chr1:160039344-160040058** | **2.1E-23** | **KCNJ10** | **KCNJ10** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **potassium inwardly-rectifying channel, subfamily** |  |  |  |  |  |
| **176** | **chr1:166945559-166946256** | **3.1E-23** | **intergenic** | **ILDR2** | **998** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **immunoglobulin-like domain containing receptor** |  |  |  |  |  |
| **277** | **chr1:181158502-181160807** | **5.3E-156** | **intergenic** | **IER5** | **100865** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **immediate early response 5** |  |  |  |  |  |
| **329** | **chr1:200841834-200843510** | **6.9E-183** | **GPR25** | **GPR25** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **G protein-coupled receptor 25** |  |  |  |  |  |
| **18** | **chr1:204796879-204797747** | **5.8E-35** | **intergenic** | **NFASC** | **34** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **neurofascin isoform 6 precursor** |  |  |  |  |  |
| **330** | **chr1:20668921-20670041** | **8.8E-99** | **VWA5B1** | **VWA5B1** | **51510** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **von Willebrand factor A domain containing 5B1** |  |  |  |  |  |
| **397** | **chr1:211499399-211500153** | **2.4E-17** | **TRAF5** | **TRAF5** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **TNF receptor-associated factor 5** |  |  |  |  |  |
| **300** | **chr1:212687351-212688991** | **6.0E-60** | **intergenic** | **ATF3** | **49705** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ43265 fis, clone HLUNG2018626, highly similar to Rattus norvegicus Activating transcription factor 3 (Atf3).** |  |  |  |  |  |
| **155** | **chr1:2157403-2158532** | **1.1E-23** | **intergenic** | **SKI** | **1601** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **v-ski sarcoma viral oncogene homolog** |  |  |  |  |  |
| **50** | **chr1:21978480-21979818** | **2.6E-15** | **RAP1GAP** | **RAP1GAP** | **132** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RAP1 GTPase activating protein isoform b** |  |  |  |  |  |
| **458** | **chr1:22262831-22263602** | **2.2E-15** | **HSPG2** | **HSPG2** | **148** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=Heparan sulfate proteoglycan 2; Flags: Fragment;** |  |  |  |  |  |
| **280** | **chr1:229566545-229571041** | **0.0E+00** | **ACTA1** | **ACTA1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **actin, alpha 1, skeletal muscle** |  |  |  |  |  |
| **66** | **chr1:231004480-231005334** | **1.3E-19** | **C1orf198** | **C1orf198** | **1** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC84886 isoform 3** |  |  |  |  |  |
| **377** | **chr1:237204558-237205387** | **1.7E-15** | **intergenic** | **RYR2** | **314** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ61140, highly similar to Ryanodine receptor 2;** |  |  |  |  |  |
| **11** | **chr1:244214033-244214949** | **2.8E-19** | **ZNF238** | **ZNF238** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Synthetic construct DNA, clone: pF1KB4680, Homo sapiens ZNF238 gene for zinc finger protein 238, complete cds, without stop codon, in Flexi system.** |  |  |  |  |  |
| **487** | **chr1:2583577-2586516** | **3.1E-99** | **intergenic** | **MMEL1** | **19096** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A15** | **Homo sapiens neprilysin-like metallopeptidase 2 mRNA, complete cds.** |  |  |  |  |  |
| **488** | **chr1:2615310-2616610** | **3.9E-53** | **intergenic** | **MMEL1** | **50829** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A15** | **Homo sapiens neprilysin-like metallopeptidase 2 mRNA, complete cds.** |  |  |  |  |  |
| **394** | **chr1:27675528-27677523** | **1.4E-31** | **SYTL1** | **SYTL1** | **7046** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **synaptotagmin-like 1** |  |  |  |  |  |
| **225** | **chr1:27995421-27999126** | **3.4E-188** | **IFI6** | **IFI6** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A6** | **interferon, alpha-inducible protein 6 isoform b** |  |  |  |  |  |
| **430** | **chr1:28994626-28995307** | **7.1E-17** | **GMEB1** | **GMEB1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **glucocorticoid modulatory element binding** |  |  |  |  |  |
| **362** | **chr1:31191462-31192941** | **2.8E-17** | **LOC100129196** | **LOC100129196** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** |  |  |  |  |  |  |
| **323** | **chr1:32705067-32707485** | **1.9E-209** | **MTMR9LP** | **MTMR9LP** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **325** | **chr1:32826519-32828489** | **1.0E-163** | **TSSK3** | **TSSK3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **testis-specific serine kinase 3** |  |  |  |  |  |
| **333** | **chr1:33771753-33773332** | **3.6E-120** | **intergenic** | **MIR3605** | **24761** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **429** | **chr1:33937616-33938012** | **4.6E-11** | **intergenic** | **ZSCAN20** | **219** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **zinc finger protein 31** |  |  |  |  |  |
| **371** | **chr1:3688349-3689093** | **1.4E-08** | **intergenic** | **LOC388588** | **258** | **1p36 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **hypothetical protein LOC388588** |  |  |  |  |  |
| **347** | **chr1:43250285-43251684** | **3.9E-67** | **intergenic** | **C1orf50** | **17370** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC79078** |  |  |  |  |  |
| **55** | **chr1:43995760-43996565** | **2.1E-18** | **PTPRF** | **PTPRF** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=Protein tyrosine phosphatase, receptor type, F;** | **Y** |  | **19816407** | **synapse formation** |  |
| **131** | **chr1:44870847-44872349** | **1.3E-31** | **RNF220** | **RNF220** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **ring finger protein 220** |  |  |  |  |  |
| **433** | **chr1:6305366-6306910** | **4.1E-30** | **HES3** | **HES3** | **1115** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **hairy and enhancer of split 3** |  |  |  |  |  |
| **442** | **chr1:6675343-6676086** | **3.2E-25** | **PHF13** | **PHF13** | **1588** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **PHD finger protein 13** |  |  |  |  |  |
| **449** | **chr1:68152808-68153310** | **2.4E-17** | **GADD45A** | **GADD45A** | **1949** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A13** | **Synthetic construct DNA, clone: pF1KB8372, Homo sapiens GADD45A gene for growth arrest and DNA-damage-inducible, alpha, without stop codon, in Flexi system.** |  |  |  |  |  |
| **359** | **chr1:7763422-7764606** | **3.6E-16** | **CAMTA1** | **VAMP3** | **66722** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **vesicle-associated membrane protein 3** |  |  |  |  |  |
| **233** | **chr1:78469724-78472860** | **4.2E-131** | **DNAJB4** | **DNAJB4** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A13** | **DnaJ (Hsp40) homolog, subfamily B, member 4** |  |  |  |  |  |
| **29** | **chr1:89456658-89457747** | **1.3E-19** | **CCBL2** | **CCBL2** | **896** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=RNA-binding motif protein X-linked-like 1 (Kynurenine aminotransferase III) (Protein RBM1).;** |  |  |  |  |  |
| **15** | **chr1:91317317-91318021** | **1.9E-13** | **intergenic** | **BARHL2** | **134523** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **BarH-like homeobox 2** |  |  |  |  |  |
| **157** | **chr10:103816327-103816556** | **3.2E-11** | **intergenic** | **C10orf76** | **395** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A2,A5** | **Homo sapiens cDNA FLJ13114 fis, clone NT2RP3002603.** |  |  |  |  |  |
| **398** | **chr10:104953095-104953857** | **2.0E-26** | **intergenic** | **NT5C2** | **39** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **5'-nucleotidase, cytosolic II** |  |  |  |  |  |
| **314** | **chr10:105344641-105345283** | **2.9E-48** | **NEURL** | **NEURL** | **90907** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **neuralized-like** |  |  |  |  |  |
| **368** | **chr10:106028917-106029679** | **3.2E-13** | **GSTO2** | **GSTO2** | **287** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ51997, highly similar to Glutathione transferase omega-2 (EC 2.5.1.18);** |  |  |  |  |  |
| **84** | **chr10:111985147-111985735** | **1.8E-22** | **MXI1** | **MXI1** | **26** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A13** | **MAX interactor 1 isoform c** |  |  |  |  |  |
| **180** | **chr10:121357187-121357601** | **2.9E-22** | **intergenic** | **TIAL1** | **646** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=T-cluster binding protein; SubName: Full=TIA1 cytotoxic granule-associated RNA binding protein-like 1, isoform CRA\_a;** |  |  |  |  |  |
| **454** | **chr10:121409464-121413914** | **4.9E-186** | **BAG3** | **BAG3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **BCL2-associated athanogene 3** |  |  |  |  |  |
| **389** | **chr10:12389806-12391057** | **4.6E-26** | **intergenic** | **CAMK1D** | **525** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **calcium/calmodulin-dependent protein kinase ID** |  |  |  |  |  |
| **352** | **chr10:12430855-12432242** | **7.1E-108** | **CAMK1D** | **CAMK1D** | **39273** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A10** | **calcium/calmodulin-dependent protein kinase ID** |  |  |  |  |  |
| **335** | **chr10:135131817-135132944** | **1.9E-64** | **intergenic** | **TUBGCP2** | **9173** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **tubulin, gamma complex associated protein 2** |  |  |  |  |  |
| **211** | **chr10:135206919-135207261** | **7.2E-26** | **intergenic** | **MTG1** | **359** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=cDNA FLJ60465, highly similar to Homo sapiens mitochondrial GTPase 1 homolog (MTG1), mRNA;** |  |  |  |  |  |
| **410** | **chr10:14646862-14647210** | **7.9E-10** | **FAM107B** | **MIR1265** | **168288** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** |  |  |  |  |  |  |
| **73** | **chr10:15413374-15414294** | **1.5E-19** | **intergenic** | **FAM171A1** | **316** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC221061 precursor** |  |  |  |  |  |
| **35** | **chr10:27531620-27532769** | **4.4E-43** | **intergenic** | **ACBD5** | **552** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=Acyl-CoA-binding domain-containing protein 5;** |  |  |  |  |  |
| **417** | **chr10:33245799-33246094** | **1.5E-08** | **ITGB1** | **ITGB1** | **728** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **integrin beta 1 isoform 1B precursor** |  |  |  |  |  |
| **286** | **chr10:43361209-43362550** | **2.0E-107** | **intergenic** | **BMS1** | **83256** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **BMS1-like, ribosome assembly protein** |  |  |  |  |  |
| **463** | **chr10:43762973-43763631** | **3.2E-32** | **intergenic** | **RASGEF1A** | **606** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RasGEF domain family, member 1A** |  |  |  |  |  |
| **285** | **chr10:46969754-46971998** | **3.3E-152** | **SYT15** | **SYT15** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **synaptotagmin XV isoform a** |  |  |  |  |  |
| **478** | **chr10:65027171-65028230** | **3.4E-20** | **JMJD1C** | **JMJD1C** | **752** | **N/A** | **N/A** | **Cytogenetic** | **17290275** | **14533015** | **N/A** | **A8,A13** | **Homo sapiens cDNA FLJ14374 fis, clone HEMBA1001635.** |  |  |  |  |  |
| **486** | **chr10:67329912-67330886** | **6.8E-48** | **intergenic** | **ANXA2P3** | **744628** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** |  |  |  |  |  |  |
| **381** | **chr10:736010-736831** | **4.0E-24** | **intergenic** | **DIP2C** | **402** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **DIP2 disco-interacting protein 2 homolog C** |  |  |  |  |  |
| **462** | **chr10:74057987-74058570** | **3.1E-25** | **intergenic** | **DDIT4** | **24311** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RTP801** |  |  |  |  |  |
| **392** | **chr10:95516183-95517503** | **3.4E-22** | **intergenic** | **LGI1** | **62** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Homo sapiens mRNA for leucine-rich, glioma inactivated 1 precursor variant protein.** |  |  |  |  |  |
| **289** | **chr10:98955336-98956796** | **2.4E-50** | **intergenic** | **SLIT1** | **9653** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **slit homolog 1 precursor** |  |  |  |  |  |
| **409** | **chr11:111779470-111785350** | **1.8E-177** | **HSPB2** | **CRYAB** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **crystallin, alpha B** |  |  |  |  |  |
| **483** | **chr11:113747065-113747282** | **2.4E-07** | **intergenic** | **USP28** | **809** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=cDNA FLJ61554, highly similar to Ubiquitin carboxyl-terminal hydrolase 28 (EC 3.1.2.15);** |  |  |  |  |  |
| **326** | **chr11:116147091-116147672** | **5.3E-49** | **intergenic** | **BUD13** | **496042** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **BUD13 homolog isoform 1** |  |  |  |  |  |
| **202** | **chr11:118961718-118962347** | **3.3E-35** | **HMBS** | **HMBS** | **3022** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hydroxymethylbilane synthase isoform 1** |  |  |  |  |  |
| **288** | **chr11:120038997-120041267** | **1.6E-69** | **intergenic** | **TRIM29** | **30134** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Synthetic construct DNA, clone: pF1KB7893, Homo sapiens TRIM29 gene for tripartite motif-containing protein 29, without stop codon, in Flexi system.** |  |  |  |  |  |
| **230** | **chr11:120255515-120259174** | **8.4E-119** | **ARHGEF12** | **ARHGEF12** | **47898** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8** | **Rho guanine nucleotide exchange factor (GEF) 12** |  |  |  |  |  |
| **97** | **chr11:120381003-120382206** | **6.2E-29** | **intergenic** | **GRIK4** | **148821** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **glutamate receptor KA1 precursor** |  |  |  |  |  |
| **60** | **chr11:125933309-125933690** | **2.2E-08** | **intergenic** | **CDON** | **122** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **surface glycoprotein, Ig superfamily member** |  |  |  |  |  |
| **355** | **chr11:128890102-128891643** | **7.8E-34** | **ARHGAP32** | **ARHGAP32** | **2445** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A11** |  |  |  |  |  |  |
| **156** | **chr11:17409539-17409989** | **7.6E-13** | **KCNJ11** | **KCNJ11** | **217** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **potassium inwardly-rectifying channel J11** | **Y** |  | **20595581** | **linked to locomotor hyperactivity** |  |
| **174** | **chr11:17411397-17412123** | **3.3E-59** | **intergenic** | **KCNJ11** | **519** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **potassium inwardly-rectifying channel J11** | **Y** |  | **20595581** | **linked to locomotor hyperactivity** |  |
| **380** | **chr11:19799325-19800058** | **9.7E-12** | **NAV2** | **LOC100126784** | **63179** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A11,A13** | **Homo sapiens hypothetical LOC100126784, mRNA (cDNA clone IMAGE:5195868).** |  |  |  |  |  |
| **241** | **chr11:33721132-33722050** | **1.8E-32** | **C11orf91** | **C11orf91** | **236** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** |  |  |  |  |  |  |
| **145** | **chr11:368049-369070** | **3.8E-48** | **intergenic** | **B4GALNT4** | **724** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **beta** |  |  |  |  |  |
| **437** | **chr11:43962920-43963663** | **2.2E-22** | **intergenic** | **C11orf96** | **442** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** |  |  |  |  |  |  |
| **148** | **chr11:45687429-45688864** | **4.6E-44** | **intergenic** | **CHST1** | **257** | **Potocki-Shaffer syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **carbohydrate (keratan sulfate Gal-6)** |  |  |  |  |  |
| **411** | **chr11:45919952-45921256** | **1.5E-20** | **MAPK8IP1** | **C11orf94** | **7577** | **Potocki-Shaffer syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **hypothetical protein LOC143678** |  |  |  |  |  |
| **345** | **chr11:47610619-47612560** | **4.8E-108** | **FAM180B** | **FAM180B** | **2390** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **RecName: Full=Protein FAM180B;** |  |  |  |  |  |
| **182** | **chr11:60674590-60674908** | **2.1E-18** | **intergenic** | **PRPF19** | **529** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **PRP19/PSO4 pre-mRNA processing factor 19** |  |  |  |  |  |
| **346** | **chr11:60774480-60777259** | **3.7E-227** | **CD6** | **CD6** | **35366** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **CD6 molecule precursor** |  |  |  |  |  |
| **213** | **chr11:62559634-62560312** | **6.3E-40** | **NXF1** | **TMEM223** | **148** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **transmembrane protein 223** |  |  |  |  |  |
| **197** | **chr11:64890320-64891015** | **1.1E-30** | **MRPL49** | **MRPL49** | **605** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **mitochondrial ribosomal protein L49** |  |  |  |  |  |
| **127** | **chr11:65585755-65586224** | **3.4E-23** | **intergenic** | **SNX32** | **15185** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ30934 fis, clone FEBRA2007017, moderately similar to Homo sapiens TRAF4-associated factor 2 mRNA.** |  |  |  |  |  |
| **444** | **chr11:65666455-65667892** | **2.7E-32** | **FOSL1** | **FOSL1** | **105** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ51531, highly similar to Fos-related antigen 1;** |  |  |  |  |  |
| **192** | **chr11:66510956-66511445** | **2.1E-17** | **intergenic** | **C11orf80** | **761** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA: FLJ22531 fis, clone HRC12890.** |  |  |  |  |  |
| **320** | **chr11:66884911-66886421** | **6.4E-99** | **intergenic** | **KDM2A** | **318** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **F-box and leucine-rich repeat protein 11** |  |  |  |  |  |
| **120** | **chr11:67169524-67169841** | **1.2E-10** | **intergenic** | **PPP1CA** | **148** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **protein phosphatase 1, catalytic subunit, alpha** |  |  |  |  |  |
| **33** | **chr11:72975192-72977043** | **3.4E-61** | **P2RY6** | **P2RY6** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **pyrimidinergic receptor P2Y6** |  |  |  |  |  |
| **28** | **chr11:74661122-74661895** | **9.7E-10** | **SPCS2** | **SPCS2** | **831** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **signal peptidase complex subunit 2 homolog** |  |  |  |  |  |
| **240** | **chr11:75272401-75277120** | **6.2E-238** | **SERPINH1** | **SERPINH1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **serine (or cysteine) proteinase inhibitor, clade** |  |  |  |  |  |
| **496** | **chr11:75918391-75922512** | **2.3E-173** | **intergenic** | **WNT11** | **817** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **wingless-type MMTV integration site family,** |  |  |  |  |  |
| **268** | **chr11:76837793-76839225** | **2.6E-62** | **intergenic** | **MYO7A** | **84** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens mRNA for myosin VIIA variant protein.** |  |  |  |  |  |
| **208** | **chr11:856876-857568** | **5.5E-38** | **TSPAN4** | **TSPAN4** | **12431** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **tetraspanin 4 isoform a** |  |  |  |  |  |
| **477** | **chr12:113795472-113795880** | **2.5E-13** | **intergenic** | **PLBD2** | **490** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **phospholipase B domain containing 2 isoform 2** |  |  |  |  |  |
| **461** | **chr12:125393680-125396492** | **1.7E-80** | **UBC** | **UBC** | **3095** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A13** | **ubiquitin C** |  |  |  |  |  |
| **479** | **chr12:133336713-133337162** | **3.5E-13** | **ANKLE2** | **ANKLE2** | **1289** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **ankyrin repeat and LEM domain containing 2** |  |  |  |  |  |
| **311** | **chr12:1904694-1906928** | **6.4E-86** | **CACNA2D4** | **LRTM2** | **22504** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **leucine-rich repeats and transmembrane domains 2** |  |  |  |  |  |
| **43** | **chr12:2160527-2161783** | **5.4E-31** | **intergenic** | **CACNA1C** | **632** | **N/A** | **N/A** | **Seconday autism in a subset of individuals with Timothy syndrome.** | **15454078** | **11441182, 8622942** | **N/A** | **A5** | **SubName: Full=Voltage-gated L-type calcium channel Cav1.2 alpha 1 subunit, splice variant 9\*; Flags: Fragment;** |  |  |  |  |  |
| **447** | **chr12:31741524-31741817** | **4.2E-08** | **DENND5B** | **DENND5B** | **2135** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **RecName: Full=DENN domain-containing protein 5B; AltName: Full=RAB6IP1-like protein;** |  |  |  |  |  |
| **294** | **chr12:49373747-49376090** | **2.7E-77** | **WNT1** | **WNT1** | **1512** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **wingless-type MMTV integration site family,** |  |  |  |  |  |
| **188** | **chr12:6309523-6310927** | **4.3E-38** | **CD9** | **CD9** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **CD9 antigen** |  |  |  |  |  |
| **390** | **chr12:64844881-64845337** | **4.9E-12** | **intergenic** | **TBK1** | **502** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **TANK-binding kinase 1** |  |  |  |  |  |
| **194** | **chr12:6928218-6930010** | **5.8E-132** | **CD4** | **GPR162** | **952** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **G protein-coupled receptor 162 isoform 2** |  |  |  |  |  |
| **76** | **chr12:74919-75052** | **6.8E-07** | **intergenic** | **LOC100288778** | **12931** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **121** | **chr12:80330514-80330844** | **2.0E-15** | **intergenic** | **PPP1R12A** | **1279** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8** | **Homo sapiens full length insert cDNA clone YW25G09.** |  |  |  |  |  |
| **356** | **chr12:89413245-89413789** | **8.3E-11** | **intergenic** | **DUSP6** | **332507** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A11** | **dual specificity phosphatase 6 isoform b** |  |  |  |  |  |
| **243** | **chr12:99138994-99140426** | **8.7E-62** | **ANKS1B** | **APAF1** | **99917** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **apoptotic peptidase activating factor 1 isoform** |  |  |  |  |  |
| **9** | **chr12:99546273-99546612** | **5.7E-04** | **ANKS1B** | **ANKS1B** | **1860** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A2** | **cajalin 2 isoform c** |  |  |  |  |  |
| **341** | **chr13:111464237-111466025** | **6.9E-96** | **intergenic** | **C13orf29** | **56630** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens mRNA for hypothetical protein (ORF1), clone Telethon(Italy\_B41)\_Strait13785\_FL302.** |  |  |  |  |  |
| **287** | **chr13:113597119-113599042** | **1.3E-251** | **intergenic** | **MCF2L** | **23714** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **MCF.2 cell line derived transforming** |  |  |  |  |  |
| **189** | **chr13:114240126-114240726** | **6.9E-31** | **TFDP1** | **TFDP1** | **1071** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ50802 complete cds, highly similar to Transcription factor Dp-1.** |  |  |  |  |  |
| **45** | **chr13:21278704-21279412** | **4.4E-13** | **IL17D** | **IL17D** | **1223** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **interleukin 17D precursor** |  |  |  |  |  |
| **141** | **chr13:37250632-37250818** | **1.9E-06** | **C13orf36** | **C13orf36** | **2584** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC400120** |  |  |  |  |  |
| **227** | **chr13:45057748-45058008** | **1.5E-05** | **TSC22D1** | **TSC22D1** | **46769** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A7** | **TSC22 domain family, member 1 isoform 1** |  |  |  |  |  |
| **344** | **chr13:49793792-49795712** | **6.0E-178** | **MLNR** | **MLNR** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **motilin receptor** |  |  |  |  |  |
| **313** | **chr13:53774457-53776710** | **1.6E-117** | **intergenic** | **OLFM4** | **171486** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **olfactomedin 4 precursor** |  |  |  |  |  |
| **34** | **chr13:80056395-80058108** | **4.5E-43** | **NDFIP2** | **NDFIP2** | **1137** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Nedd4 family interacting protein 2 isoform 1** |  |  |  |  |  |
| **304** | **chr14:100068102-100070533** | **1.2E-130** | **CCDC85C** | **CCDC85C** | **194** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **coiled-coil domain containing 85C** |  |  |  |  |  |
| **434** | **chr14:100707300-100708286** | **1.2E-19** | **YY1** | **YY1** | **2199** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **YY1 transcription factor** |  |  |  |  |  |
| **132** | **chr14:101053955-101055782** | **5.6E-63** | **intergenic** | **BEGAIN** | **17824** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **brain-enriched guanylate kinase-associated** |  |  |  |  |  |
| **185** | **chr14:101295281-101296174** | **1.2E-24** | **MEG3** | **MEG3** | **2837** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens MEG3 mRNA, partial sequence, imprinted gene.** |  |  |  |  |  |
| **494** | **chr14:104515946-104516746** | **5.0E-24** | **TDRD9** | **ASPG** | **35301** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A16** | **RecName: Full=60 kDa lysophospholipase; EC=3.1.1.5; Includes: RecName: Full=L-asparaginase; EC=3.5.1.1; AltName: Full=L-asparagine amidohydrolase; Includes: RecName: Full=Platelet-activating factor acetylhydrolase; Short=PAF acetylhydrolase; EC=3.1.1.47;** |  |  |  |  |  |
| **370** | **chr14:104601729-104602599** | **1.1E-15** | **intergenic** | **KIF26A** | **2460** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **kinesin family member 26A** |  |  |  |  |  |
| **190** | **chr14:105450893-105451729** | **1.6E-45** | **intergenic** | **C14orf79** | **886** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **hypothetical protein LOC122616** |  |  |  |  |  |
| **223** | **chr14:24630193-24631885** | **0.0E+00** | **IRF9** | **IRF9** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1,A6** | **interferon-stimulated transcription factor 3,** |  |  |  |  |  |
| **224** | **chr14:58797788-58800118** | **1.5E-122** | **ARID4A** | **ARID4A** | **32567** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A6** | **Homo sapiens cDNA, FLJ97468.** |  |  |  |  |  |
| **406** | **chr14:65005983-65009629** | **4.2E-55** | **HSPA2** | **HSPA2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **heat shock 70kDa protein 2** |  |  |  |  |  |
| **57** | **chr14:75390157-75390823** | **3.0E-12** | **intergenic** | **RPS6KL1** | **1012** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ35734 fis, clone TESTI2003475.** |  |  |  |  |  |
| **171** | **chr14:92571466-92571760** | **6.7E-15** | **ATXN3** | **ATXN3** | **1205** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=Ataxin-3; EC=3.4.22.-; AltName: Full=Machado-Joseph disease protein 1; AltName: Full=Spinocerebellar ataxia type 3 protein;** |  |  |  |  |  |
| **309** | **chr14:94405062-94406369** | **1.1E-121** | **ASB2** | **C14orf86** | **12344** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ43755 fis, clone TESTI2044833.** |  |  |  |  |  |
| **425** | **chr14:95786488-95787071** | **2.3E-15** | **intergenic** | **CLMN** | **243** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **calmin** |  |  |  |  |  |
| **69** | **chr15:102191187-102191776** | **2.1E-16** | **TM2D3** | **TM2D3** | **818** | **15q26 overgrowth syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **TM2 domain containing 3 isoform a** |  |  |  |  |  |
| **404** | **chr15:40571649-40572134** | **6.7E-08** | **intergenic** | **LOC100131244** | **2653** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** |  |  |  |  |  |  |
| **328** | **chr15:40573612-40576266** | **1.6E-104** | **LOC100131244** | **LOC100131244** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **283** | **chr15:41234290-41235119** | **1.3E-50** | **intergenic** | **CHAC1** | **10516** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **ChaC, cation transport regulator-like 1 isoform** |  |  |  |  |  |
| **5** | **chr15:45002660-45005210** | **0.0E+00** | **B2M** | **B2M** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1** | **beta-2-microglobulin precursor** |  |  |  |  |  |
| **306** | **chr15:52403698-52405202** | **8.8E-56** | **BCL2L10** | **BCL2L10** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **BCL2-like 10 (apoptosis facilitator)** |  |  |  |  |  |
| **337** | **chr15:58356985-58358859** | **1.2E-253** | **ALDH1A2** | **ALDH1A2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **aldehyde dehydrogenase 1A2 isoform 3** |  |  |  |  |  |
| **432** | **chr15:63413335-63413894** | **1.9E-13** | **intergenic** | **LACTB** | **104** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **lactamase, beta isoform b** |  |  |  |  |  |
| **122** | **chr15:64751949-64752884** | **2.8E-45** | **intergenic** | **ZNF609** | **38734** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=ZNF609 protein;** |  |  |  |  |  |
| **420** | **chr15:65322205-65322495** | **5.1E-06** | **intergenic** | **MTFMT** | **228** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **mitochondrial methionyl-tRNA formyltransferase** |  |  |  |  |  |
| **12** | **chr15:73925777-73926832** | **1.9E-19** | **intergenic** | **NPTN** | **24** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A13** | **neuroplastin isoform d precursor** |  |  |  |  |  |
| **426** | **chr15:74045638-74046852** | **8.9E-28** | **intergenic** | **C15orf59** | **1822** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **hypothetical protein LOC388135** |  |  |  |  |  |
| **249** | **chr15:74890755-74892562** | **1.2E-78** | **intergenic** | **CLK3** | **8150** | **15q24 recurrent microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ34373 fis, clone FEBRA2017333, highly similar to Dual specificity protein kinase CLK3 (EC 2.7.12.1).** |  |  |  |  |  |
| **384** | **chr15:78555643-78556953** | **3.3E-27** | **DNAJA4** | **DNAJA4** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **DnaJ (Hsp40) homolog, subfamily A, member 4** |  |  |  |  |  |
| **23** | **chr15:93424975-93425798** | **4.7E-15** | **intergenic** | **LOC100507217** | **274** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** |  |  |  |  |  |  |
| **473** | **chr16:1201830-1202620** | **2.6E-28** | **intergenic** | **CACNA1H** | **620** | **N/A** | **N/A** | **Missense mutations in ASD families** | **16754686** | **14729682** | **16754686** | **A13** | **calcium channel, voltage-dependent, T type,** |  |  |  |  |  |
| **184** | **chr16:21294321-21294609** | **5.9E-09** | **CRYM** | **NCRNA00169** | **17560** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ41766 fis, clone IMR322006222.** |  |  |  |  |  |
| **87** | **chr16:2246699-2248082** | **2.0E-20** | **intergenic** | **CASKIN1** | **234** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **CASK interacting protein 1** |  |  |  |  |  |
| **438** | **chr16:23607784-23608023** | **2.4E-07** | **intergenic** | **NDUFAB1** | **145** | **16p11.2-p12.2 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A13** | **NADH dehydrogenase (ubiquinone) 1, alpha/beta** |  |  |  |  |  |
| **163** | **chr16:2567966-2569378** | **2.6E-37** | **ATP6V0C** | **AMDHD2** | **984** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **amidohydrolase domain containing 2 isoform 1** |  |  |  |  |  |
| **101** | **chr16:27121370-27121960** | **1.4E-13** | **intergenic** | **C16orf82** | **43152** | **16p11.2-p12.2 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **hypothetical protein LOC162083** |  |  |  |  |  |
| **299** | **chr16:30102587-30104077** | **4.4E-47** | **YPEL3** | **TBX6** | **0** | **16p11.2 microduplication syndrome** | **N** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **T-box 6** |  |  |  |  |  |
| **448** | **chr16:3070350-3072338** | **1.1E-38** | **TNFRSF12A** | **TNFRSF12A** | **38** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **RecName: Full=Tumor necrosis factor receptor superfamily member 12A; AltName: Full=Fibroblast growth factor-inducible immediate-early response protein 14; Short=FGF-inducible 14; AltName: Full=Tweak-receptor; Short=TweakR; AltName: CD\_antigen=CD266; Flags: Precursor;** |  |  |  |  |  |
| **507** | **chr16:3201899-3203088** | **3.9E-20** | **intergenic** | **ZNF213** | **16766** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Synthetic construct DNA, clone: pF1KB7791, Homo sapiens ZNF213 gene for zinc finger protein 213, without stop codon, in Flexi system.** |  |  |  |  |  |
| **218** | **chr16:33509385-33509647** | **8.0E-17** | **intergenic** | **LOC390705** | **210683** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **215** | **chr16:33509761-33510647** | **3.3E-69** | **intergenic** | **LOC390705** | **211059** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **38** | **chr16:403121-405002** | **6.5E-25** | **intergenic** | **AXIN1** | **445** | **ATR-16 syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **axin 1 isoform b** |  |  |  |  |  |
| **103** | **chr16:417743-420324** | **8.8E-27** | **MRPL28** | **MRPL28** | **245** | **ATR-16 syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=Mitochondrial ribosomal protein L28;** |  |  |  |  |  |
| **100** | **chr16:66877672-66878182** | **4.8E-14** | **intergenic** | **CA7** | **99** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **carbonic anhydrase VII isoform 2** |  |  |  |  |  |
| **236** | **chr16:66956768-66960358** | **2.1E-284** | **RRAD** | **RRAD** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **Ras-related associated with diabetes** |  |  |  |  |  |
| **358** | **chr16:67193064-67194952** | **1.5E-20** | **TRADD** | **TRADD** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ54928, weakly similar to Tumor necrosis factor receptor type1-associated DEATH domain protein;** |  |  |  |  |  |
| **68** | **chr16:67684944-67686789** | **2.8E-38** | **RLTPR** | **RLTPR** | **5915** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RGD motif, leucine rich repeats, tropomodulin** |  |  |  |  |  |
| **386** | **chr16:69344348-69345038** | **2.1E-16** | **intergenic** | **VPS4A** | **248** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **vacuolar protein sorting factor 4A** |  |  |  |  |  |
| **83** | **chr16:717018-718109** | **8.1E-29** | **WDR90** | **RHOT2** | **23** | **ATR-16 syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=Ras homolog gene family, member T2; SubName: Full=Ras homolog gene family, member T2, isoform CRA\_a;** |  |  |  |  |  |
| **125** | **chr16:75285700-75286808** | **2.6E-31** | **BCAR1** | **BCAR1** | **174** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **breast cancer anti-estrogen resistance 1** |  |  |  |  |  |
| **402** | **chr16:81476796-81478106** | **1.7E-23** | **intergenic** | **CMIP** | **668** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **c-Maf-inducing protein isoform Tc-mip** |  |  |  |  |  |
| **39** | **chr16:8714959-8715523** | **6.5E-19** | **intergenic** | **C16orf68** | **3** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC79091** |  |  |  |  |  |
| **484** | **chr16:89238155-89238807** | **2.8E-14** | **CDH15** | **CDH15** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens cDNA, FLJ98637.** |  |  |  |  |  |
| **204** | **chr16:89576000-89576395** | **4.6E-14** | **SPG7** | **SPG7** | **1196** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **spastic paraplegia 7 isoform 1** |  |  |  |  |  |
| **452** | **chr17:15244358-15244964** | **3.8E-11** | **TEKT3** | **TEKT3** | **0** | **Hereditary Liability to Pressure Palsies (HNPP)** | **N** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **tektin 3** |  |  |  |  |  |
| **177** | **chr17:17496319-17496907** | **4.8E-19** | **intergenic** | **PEMT** | **1325** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RecName: Full=Phosphatidylethanolamine N-methyltransferase; Short=PEAMT; Short=PEMT; EC=2.1.1.17; AltName: Full=PEMT2;** |  |  |  |  |  |
| **136** | **chr17:17583594-17584684** | **4.6E-51** | **intergenic** | **RAI1** | **102** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **Increased expression of RAI1 in a male child with autism containg a duplication of approximately 3.3 Mb on chromosome 17p11.2** | **17334992** | **12652298** | **N/A** | **A5,A13** | **retinoic acid induced 1** |  |  |  |  |  |
| **382** | **chr17:17727086-17727915** | **3.3E-11** | **SREBF1** | **MIR33B** | **9841** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** |  |  |  |  |  |  |
| **455** | **chr17:17738681-17739612** | **1.2E-21** | **SREBF1** | **SREBF1** | **713** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **sterol regulatory element binding transcription** |  |  |  |  |  |
| **46** | **chr17:18056425-18057001** | **5.7E-09** | **MYO15A** | **ALKBH5** | **29865** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ20122 fis, clone COL05984.** |  |  |  |  |  |
| **108** | **chr17:18762618-18763038** | **3.1E-18** | **PRPSAP2** | **PRPSAP2** | **1127** | **Smith-Magenis/Potocki-Lupski Syndromes** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=cDNA FLJ44434 fis, clone UTERU2019491, moderately similar to Homo sapiens 41-kDa phosphoribosylpyrophosphate synthetase-associated protein;** |  |  |  |  |  |
| **107** | **chr17:2305532-2306508** | **9.3E-21** | **intergenic** | **MNT** | **1274** | **Miller-Dieker syndrome (MDS)** | **N** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **MAX binding protein** |  |  |  |  |  |
| **172** | **chr17:2678800-2679297** | **5.4E-27** | **intergenic** | **RAP1GAP2** | **20434** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RAP1 GTPase activating protein 2 isoform 2** |  |  |  |  |  |
| **492** | **chr17:27942034-27942602** | **4.7E-05** | **CORO6** | **CORO6** | **5839** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A16** | **RecName: Full=Coronin-6;** |  |  |  |  |  |
| **310** | **chr17:27942712-27945718** | **1.6E-86** | **CORO6** | **CORO6** | **2723** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **RecName: Full=Coronin-6;** |  |  |  |  |  |
| **86** | **chr17:33416439-33417246** | **3.8E-17** | **intergenic** | **RFFL** | **145** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **rififylin** |  |  |  |  |  |
| **408** | **chr17:36583737-36584664** | **5.7E-15** | **intergenic** | **ARHGAP23** | **55** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Rho GTPase activating protein 23** |  |  |  |  |  |
| **114** | **chr17:38332919-38333689** | **2.3E-32** | **intergenic** | **RAPGEFL1** | **552** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Rap guanine nucleotide exchange factor** |  |  |  |  |  |
| **129** | **chr17:39846793-39847068** | **2.8E-13** | **EIF1** | **EIF1** | **1667** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **eukaryotic translation initiation factor 1** |  |  |  |  |  |
| **40** | **chr17:39992581-39993413** | **1.4E-15** | **intergenic** | **NT5C3L** | **58** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **5'-nucleotidase, cytosolic III-like** |  |  |  |  |  |
| **348** | **chr17:40831402-40832799** | **8.1E-87** | **CCR10** | **CCR10** | **1046** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **CC chemokine receptor 10** |  |  |  |  |  |
| **201** | **chr17:43970819-43971227** | **9.6E-35** | **LOC100128977** | **MAPT** | **520** | **17q21.3 recurrent microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **19736351** | **A5,A8,A13** | **microtubule-associated protein tau isoform 4** |  |  |  |  |  |
| **138** | **chr17:4739260-4739554** | **5.9E-09** | **MINK1** | **MINK1** | **2626** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=Misshapen-like kinase 1; EC=2.7.11.1; AltName: Full=Mitogen-activated protein kinase kinase kinase kinase 6; AltName: Full=MAPK/ERK kinase kinase kinase 6; Short=MEK kinase kinase 6; Short=MEKKK 6; AltName: Full=GCK family kinase MiNK; AltName: Full=Misshapen/NIK-related kinase;** |  |  |  |  |  |
| **271** | **chr17:47645078-47646078** | **2.7E-48** | **intergenic** | **NXPH3** | **7219** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **neurexophilin 3 precursor** |  |  |  |  |  |
| **6** | **chr17:53344327-53344782** | **3.1E-19** | **HLF** | **HLF** | **2007** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1,A5** | **SubName: Full=cDNA FLJ61122, highly similar to Hepatic leukemia factor;** |  |  |  |  |  |
| **476** | **chr17:54909621-54910277** | **9.9E-33** | **intergenic** | **DGKE** | **1182** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **diacylglycerol kinase epsilon** |  |  |  |  |  |
| **128** | **chr17:62222404-62222793** | **2.1E-18** | **intergenic** | **SNORD104** | **644** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens small nucleolar RNA, C/D box 104 (SNORD104), non-coding RNA.** |  |  |  |  |  |
| **451** | **chr17:63050645-63051180** | **8.4E-12** | **GNA13** | **GNA13** | **1740** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **guanine nucleotide binding protein (G protein),** |  |  |  |  |  |
| **273** | **chr17:71947942-71949798** | **3.2E-66** | **intergenic** | **C17orf54** | **123266** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ40319 fis, clone TESTI2030754.** |  |  |  |  |  |
| **419** | **chr17:73179227-73179757** | **3.6E-11** | **intergenic** | **SUMO2** | **129** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SMT3 suppressor of mif two 3 homolog 2 isoform b** |  |  |  |  |  |
| **331** | **chr17:73750014-73750435** | **4.6E-29** | **ITGB4** | **GALK1** | **10845** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **SubName: Full=cDNA FLJ56765, highly similar to Galactokinase (EC 2.7.1.6); SubName: Full=cDNA, FLJ79080, highly similar to Galactokinase (EC 2.7.1.6);** |  |  |  |  |  |
| **446** | **chr17:73891600-73892309** | **2.3E-13** | **TRIM65** | **TRIM65** | **745** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **tripartite motif-containing 65** |  |  |  |  |  |
| **485** | **chr17:74135846-74137356** | **2.1E-65** | **FOXJ1** | **FOXJ1** | **24** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **forkhead box J1** |  |  |  |  |  |
| **474** | **chr17:74137368-74138226** | **2.3E-32** | **FOXJ1** | **FOXJ1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **forkhead box J1** |  |  |  |  |  |
| **440** | **chr17:76354104-76356040** | **1.1E-35** | **SOCS3** | **SOCS3** | **118** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **suppressor of cytokine signaling 3** |  |  |  |  |  |
| **279** | **chr17:77177530-77181153** | **0.0E+00** | **RBFOX3** | **ENGASE** | **106512** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **RecName: Full=Cytosolic endo-beta-N-acetylglucosaminidase; Short=ENGase; EC=3.2.1.96;** |  |  |  |  |  |
| **187** | **chr17:78390110-78390420** | **9.4E-21** | **FLJ35220** | **LOC100294362** | **1142** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **267** | **chr17:7982405-7984082** | **7.4E-73** | **ALOX12B** | **ALOX12B** | **6939** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **arachidonate 12-lipoxygenase, 12R type** |  |  |  |  |  |
| **431** | **chr17:80169390-80170260** | **8.3E-13** | **CCDC57** | **CCDC57** | **429** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **coiled-coil domain containing 57** |  |  |  |  |  |
| **256** | **chr17:881262-882347** | **3.6E-62** | **NXN** | **NXN** | **663** | **Miller-Dieker syndrome (MDS)** | **N** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **nucleoredoxin** |  |  |  |  |  |
| **246** | **chr17:9142522-9143400** | **8.3E-58** | **NTN1** | **NTN1** | **217664** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **netrin 1 precursor** |  |  |  |  |  |
| **501** | **chr18:45534075-45534625** | **4.3E-15** | **intergenic** | **SMAD2** | **76560** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Sma- and Mad-related protein 2 isoform 2** |  |  |  |  |  |
| **504** | **chr18:57363381-57365190** | **4.0E-54** | **CCBE1** | **CCBE1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A16** | **RecName: Full=Collagen and calcium-binding EGF domain-containing protein 1; AltName: Full=Full of fluid protein homolog; Flags: Precursor;** |  |  |  |  |  |
| **81** | **chr18:72922251-72922603** | **8.5E-10** | **intergenic** | **TSHZ1** | **127** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **teashirt family zinc finger 1** |  |  |  |  |  |
| **203** | **chr18:74728291-74729079** | **5.4E-25** | **MBP** | **MBP** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Homo sapiens cDNA FLJ25536 fis, clone CBR08909, highly similar to MYELIN BASIC PROTEIN.** |  |  |  |  |  |
| **165** | **chr19:10361408-10362174** | **2.6E-51** | **intergenic** | **MRPL4** | **465** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **mitochondrial ribosomal protein L4 isoform b** |  |  |  |  |  |
| **407** | **chr19:11450458-11451056** | **1.6E-14** | **intergenic** | **RAB3D** | **114** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **RAB3D, member RAS oncogene family** |  |  |  |  |  |
| **423** | **chr19:11465108-11466048** | **2.4E-23** | **CCDC159** | **LPPR2** | **13** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RecName: Full=Lipid phosphate phosphatase-related protein type 2; EC=3.1.3.4; AltName: Full=Plasticity-related gene 4 protein; Short=PRG-4;** |  |  |  |  |  |
| **436** | **chr19:11750095-11750503** | **1.5E-08** | **intergenic** | **ZNF833P** | **34309** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** |  |  |  |  |  |  |
| **82** | **chr19:12266089-12266606** | **1.3E-14** | **ZNF625** | **ZNF625** | **923** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 625** |  |  |  |  |  |
| **139** | **chr19:1237979-1239177** | **7.6E-24** | **C19orf26** | **C19orf26** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **downstream of Stk11** |  |  |  |  |  |
| **113** | **chr19:13974496-13975908** | **1.7E-42** | **intergenic** | **MIR181C** | **9604** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9** |  |  |  |  |  |  |
| **498** | **chr19:1444679-1445250** | **2.6E-24** | **intergenic** | **APC2** | **4897** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **adenomatosis polyposis coli 2** |  |  |  |  |  |
| **292** | **chr19:17958229-17959232** | **1.1E-49** | **JAK3** | **JAK3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **SubName: Full=cDNA FLJ50368, moderately similar to Tyrosine-protein kinase JAK3 (EC 2.7.10.2);** |  |  |  |  |  |
| **265** | **chr19:18498835-18500020** | **3.0E-38** | **GDF15** | **MIR3189** | **1464** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **497** | **chr19:18547074-18549547** | **3.3E-80** | **ISYNA1** | **ISYNA1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **RecName: Full=Inositol-3-phosphate synthase 1; EC=5.5.1.4; AltName: Full=Myo-inositol-1-phosphate synthase; Short=MI-1-P synthase; Short=MIP synthase; Short=hIPS; AltName: Full=Myo-inositol 1-phosphate synthase A1; Short=hINO1;** |  |  |  |  |  |
| **58** | **chr19:18654595-18655451** | **1.1E-29** | **intergenic** | **FKBP8** | **212** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **FK506-binding protein 8** |  |  |  |  |  |
| **30** | **chr19:2016028-2016852** | **4.9E-20** | **intergenic** | **BTBD2** | **326** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **BTB (POZ) domain containing 2** |  |  |  |  |  |
| **383** | **chr19:2270945-2274790** | **5.5E-92** | **OAZ1** | **OAZ1** | **1426** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Homo sapiens clone IMAGE 172979.** |  |  |  |  |  |
| **237** | **chr19:2305779-2308743** | **0.0E+00** | **LINGO3** | **LINGO3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **leucine rich repeat and Ig domain containing 3** |  |  |  |  |  |
| **464** | **chr19:2385219-2385546** | **2.8E-09** | **intergenic** | **TMPRSS9** | **4237** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **transmembrane protease, serine 9** |  |  |  |  |  |
| **500** | **chr19:291000-291429** | **3.7E-09** | **PPAP2C** | **PPAP2C** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **phosphatidic acid phosphatase type 2C isoform 2** |  |  |  |  |  |
| **195** | **chr19:2946086-2946457** | **4.4E-21** | **intergenic** | **ZNF77** | **1117** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **zinc finger protein 77** |  |  |  |  |  |
| **146** | **chr19:30206972-30208014** | **6.0E-32** | **intergenic** | **C19orf12** | **520** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC83636 isoform 2** |  |  |  |  |  |
| **298** | **chr19:33166243-33168303** | **5.8E-149** | **RGS9BP** | **RGS9BP** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **RGS9 anchor protein** |  |  |  |  |  |
| **445** | **chr19:3572964-3573927** | **1.1E-29** | **HMG20B** | **HMG20B** | **22** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **high-mobility group 20B** |  |  |  |  |  |
| **388** | **chr19:3575966-3577149** | **3.4E-22** | **HMG20B** | **HMG20B** | **3024** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **high-mobility group 20B** |  |  |  |  |  |
| **133** | **chr19:36358399-36359381** | **5.5E-50** | **intergenic** | **APLP1** | **19** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **amyloid precursor-like protein 1 isoform 2** |  |  |  |  |  |
| **482** | **chr19:3700576-3701149** | **3.7E-35** | **intergenic** | **PIP5K1C** | **99** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A13** | **phosphatidylinositol-4-phosphate 5-kinase, type** |  |  |  |  |  |
| **158** | **chr19:38746316-38746977** | **3.7E-13** | **PPP1R14A** | **PPP1R14A** | **195** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RecName: Full=Protein phosphatase 1 regulatory subunit 14A; AltName: Full=17 kDa PKC-potentiated inhibitory protein of PP1; AltName: Full=CPI-17;** |  |  |  |  |  |
| **322** | **chr19:39086872-39087570** | **2.7E-37** | **MAP4K1** | **MAP4K1** | **21073** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **SubName: Full=cDNA FLJ50326, highly similar to Mitogen-activated protein kinase kinase kinase kinase 1 (EC 2.7.11.1);** |  |  |  |  |  |
| **493** | **chr19:39226630-39227116** | **1.5E-04** | **CAPN12** | **CAPN12** | **7998** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A16** | **Homo sapiens cDNA FLJ43725 fis, clone TESOP2007978, moderately similar to Mus musculus Capn12 gene for calpain 12.** |  |  |  |  |  |
| **418** | **chr19:39440058-39440395** | **4.1E-14** | **FBXO17** | **FBXO17** | **2932** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **F-box protein FBG4 isoform 2** |  |  |  |  |  |
| **88** | **chr19:39811789-39812528** | **8.8E-18** | **intergenic** | **LRFN1** | **5813** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **leucine rich repeat and fibronectin type III** |  |  |  |  |  |
| **144** | **chr19:39882674-39883646** | **2.0E-37** | **MED29** | **MED29** | **712** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **mediator complex subunit 29** |  |  |  |  |  |
| **115** | **chr19:39897440-39899725** | **1.5E-80** | **ZFP36** | **ZFP36** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **zinc finger protein 36, C3H type, homolog** |  |  |  |  |  |
| **453** | **chr19:41104051-41104629** | **1.4E-11** | **LTBP4** | **LTBP4** | **911** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens latent transforming growth factor-beta binding protein 4S mRNA, complete cds.** |  |  |  |  |  |
| **181** | **chr19:4124695-4125068** | **1.9E-23** | **intergenic** | **MAP2K2** | **569** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=cDNA FLJ35806 fis, clone TESTI2005987, highly similar to Dual specificity mitogen-activated protein kinase kinase 2 (EC 2.7.12.2); SubName: Full=Mitogen-activated protein kinase kinase 2, isoform CRA\_d;** |  |  |  |  |  |
| **137** | **chr19:4183185-4183719** | **4.7E-16** | **ANKRD24** | **ANKRD24** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **ankyrin repeat domain 24** |  |  |  |  |  |
| **393** | **chr19:41856818-41859750** | **7.5E-40** | **TGFB1** | **TGFB1** | **81** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **17626784** | **A13** | **transforming growth factor, beta 1 precursor** |  |  |  |  |  |
| **349** | **chr19:45654778-45657765** | **2.0E-214** | **NKPD1** | **NKPD1** | **5643** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **NTPase, KAP family P-loop domain containing 1** |  |  |  |  |  |
| **316** | **chr19:46001509-46003029** | **5.7E-116** | **PPM1N** | **PPM1N** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** |  |  |  |  |  |  |
| **21** | **chr19:46477276-46479603** | **3.9E-40** | **intergenic** | **NOVA2** | **619** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **neuro-oncological ventral antigen 2** |  |  |  |  |  |
| **387** | **chr19:4670513-4670976** | **1.8E-09** | **intergenic** | **C19orf10** | **98** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **hypothetical protein LOC56005 precursor** |  |  |  |  |  |
| **374** | **chr19:47762691-47764919** | **6.3E-29** | **CCDC9** | **CCDC9** | **2961** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **coiled-coil domain containing 9** |  |  |  |  |  |
| **499** | **chr19:48900573-48902101** | **3.5E-45** | **GRIN2D** | **GRIN2D** | **2442** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **SubName: Full=N-methyl-D-aspartate receptor subunit 2D variant; Flags: Fragment;** |  |  |  |  |  |
| **206** | **chr19:49498150-49498500** | **1.2E-17** | **RUVBL2** | **RUVBL2** | **995** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=cDNA FLJ32936 fis, clone TESTI2007533, highly similar to RuvB-like 2 (EC 3.6.1.-); SubName: Full=RuvB-like 2 (E. coli), isoform CRA\_a;** |  |  |  |  |  |
| **193** | **chr19:49947615-49947864** | **3.2E-11** | **intergenic** | **SLC17A7** | **2807** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **solute carrier family 17, member 7** |  |  |  |  |  |
| **414** | **chr19:50179097-50179954** | **5.7E-11** | **intergenic** | **PRMT1** | **541** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **HMT1 hnRNP methyltransferase-like 2 isoform 2** |  |  |  |  |  |
| **178** | **chr19:51223159-51225231** | **1.3E-125** | **intergenic** | **CLEC11A** | **1373** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **stem cell growth factor precursor** |  |  |  |  |  |
| **191** | **chr19:53142312-53142648** | **2.8E-09** | **ZNF83** | **ZNF83** | **668** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 83 isoform a** |  |  |  |  |  |
| **207** | **chr19:54042584-54043203** | **9.0E-25** | **ZNF331** | **ZNF331** | **1252** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens KRAB zinc finger protein (ZNF331) mRNA, partial cds; alternatively spliced.** |  |  |  |  |  |
| **403** | **chr19:54483686-54485252** | **4.1E-30** | **CACNG8** | **MIR935** | **308** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** |  |  |  |  |  |  |
| **140** | **chr19:56185636-56186073** | **3.0E-07** | **U2AF2** | **EPN1** | **487** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **epsin 1 isoform b** |  |  |  |  |  |
| **117** | **chr19:58011889-58012628** | **1.2E-19** | **ZNF773** | **ZNF773** | **581** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 773** |  |  |  |  |  |
| **210** | **chr19:58963975-58964425** | **7.2E-26** | **ZNF324B** | **ZNF324B** | **1005** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 324B** |  |  |  |  |  |
| **179** | **chr19:58979489-58980363** | **6.7E-30** | **ZNF324** | **ZNF324** | **1078** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 324** |  |  |  |  |  |
| **74** | **chr19:6517114-6517607** | **1.2E-27** | **intergenic** | **TNFSF9** | **13402** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13,A16** | **tumor necrosis factor (ligand) superfamily,** |  |  |  |  |  |
| **475** | **chr19:676680-677073** | **1.9E-19** | **FSTL3** | **FSTL3** | **292** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A2,A5,A9,A11,A13** | **follistatin-like 3 glycoprotein precursor** |  |  |  |  |  |
| **336** | **chr19:7794571-7795846** | **8.9E-37** | **CLEC4G** | **CLEC4G** | **1211** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **C-type lectin domain family 4, member G** |  |  |  |  |  |
| **244** | **chr19:8397872-8401261** | **1.3E-159** | **KANK3** | **KANK3** | **6885** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **ankyrin repeat domain 47** |  |  |  |  |  |
| **321** | **chr19:8407615-8408137** | **3.7E-68** | **KANK3** | **KANK3** | **9** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **ankyrin repeat domain 47** |  |  |  |  |  |
| **413** | **chr19:916710-918902** | **3.9E-38** | **KISS1R** | **KISS1R** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **G protein-coupled receptor 54** |  |  |  |  |  |
| **503** | **chr2:110372842-110373263** | **5.0E-10** | **ANKRD57** | **ANKRD57** | **932** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **ankyrin repeat domain 57** |  |  |  |  |  |
| **339** | **chr2:118593453-118594551** | **1.1E-66** | **intergenic** | **DDX18** | **21199** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **DEAD (Asp-Glu-Ala-Asp) box polypeptide 18** |  |  |  |  |  |
| **338** | **chr2:127643159-127644430** | **3.3E-72** | **intergenic** | **BIN1** | **220434** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **bridging integrator 1 isoform 10** |  |  |  |  |  |
| **220** | **chr2:128458296-128458581** | **7.9E-10** | **intergenic** | **SFT2D3** | **15** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SFT2 domain containing 3** |  |  |  |  |  |
| **303** | **chr2:202898485-202901075** | **6.0E-84** | **FZD7** | **FZD7** | **0** | **2q33.1 deletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **frizzled 7 precursor** |  |  |  |  |  |
| **62** | **chr2:20649200-20651605** | **2.8E-61** | **RHOB** | **RHOB** | **2366** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **ras homolog gene family, member B precursor** |  |  |  |  |  |
| **317** | **chr2:208546078-208546943** | **1.8E-47** | **intergenic** | **CCNYL1** | **29320** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **cyclin Y-like 1 isoform 1** |  |  |  |  |  |
| **372** | **chr2:219188269-219189228** | **2.6E-13** | **PNKD** | **PNKD** | **368** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **myofibrillogenesis regulator 1 isoform 3** |  |  |  |  |  |
| **415** | **chr2:219762433-219763076** | **2.8E-14** | **intergenic** | **WNT10A** | **17179** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **wingless-type MMTV integration site family,** |  |  |  |  |  |
| **297** | **chr2:232545058-232546751** | **2.2E-35** | **intergenic** | **PTMA** | **26483** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens prothymosin a14 mRNA, complete cds.** |  |  |  |  |  |
| **367** | **chr2:239112444-239113000** | **2.9E-15** | **intergenic** | **ILKAP** | **120** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **integrin-linked kinase-associated protein** |  |  |  |  |  |
| **56** | **chr2:242212399-242213156** | **4.3E-14** | **HDLBP** | **HDLBP** | **98** | **2q37 monosomy** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **high density lipoprotein binding protein** |  |  |  |  |  |
| **159** | **chr2:242575030-242575533** | **1.6E-16** | **THAP4** | **THAP4** | **1192** | **2q37 monosomy** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=THAP domain-containing protein 4;** |  |  |  |  |  |
| **282** | **chr2:242893168-242893519** | **1.1E-26** | **intergenic** | **C2orf85** | **81283** | **2q37 monosomy** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **hypothetical protein LOC285093** |  |  |  |  |  |
| **16** | **chr2:243029818-243030378** | **3.3E-09** | **intergenic** | **LOC728323** | **465** | **2q37 monosomy** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **315** | **chr2:26784828-26786481** | **1.2E-88** | **C2orf70** | **C2orf70** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC339778** |  |  |  |  |  |
| **281** | **chr2:39186624-39188524** | **1.4E-75** | **LOC375196** | **LOC375196** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **502** | **chr2:47595955-47597382** | **1.2E-76** | **EPCAM** | **EPCAM** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1** | **epithelial cell adhesion molecule precursor** |  |  |  |  |  |
| **480** | **chr2:61403411-61403960** | **4.8E-19** | **intergenic** | **AHSA2** | **594** | **2p15-16.1 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **AHA1, activator of heat shock 90kDa protein** |  |  |  |  |  |
| **247** | **chr2:61404560-61405885** | **2.0E-86** | **AHSA2** | **AHSA2** | **6** | **2p15-16.1 microdeletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **AHA1, activator of heat shock 90kDa protein** |  |  |  |  |  |
| **276** | **chr2:62116355-62116893** | **1.2E-36** | **intergenic** | **CCT4** | **564** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **chaperonin containing TCP1, subunit 4 (delta)** |  |  |  |  |  |
| **324** | **chr2:636227-637131** | **4.5E-73** | **intergenic** | **TMEM18** | **40308** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **transmembrane protein 18** |  |  |  |  |  |
| **505** | **chr2:74642116-74642702** | **9.2E-06** | **C2orf81** | **C2orf81** | **2142** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A2** | **hypothetical protein LOC388963** |  |  |  |  |  |
| **295** | **chr2:85664170-85666164** | **1.2E-70** | **intergenic** | **SH2D6** | **2253** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens unknown mRNA.** |  |  |  |  |  |
| **219** | **chr2:87576528-87576879** | **1.3E-09** | **intergenic** | **NCRNA00152** | **178094** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA, FLJ92284.** |  |  |  |  |  |
| **104** | **chr2:8826048-8826483** | **2.5E-13** | **intergenic** | **ID2** | **3936** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **inhibitor of DNA binding 2** |  |  |  |  |  |
| **99** | **chr2:97759476-97760044** | **7.0E-16** | **FAHD2B** | **FAHD2B** | **538** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **fumarylacetoacetate hydrolase domain containing** |  |  |  |  |  |
| **161** | **chr20:10203463-10204468** | **7.1E-23** | **SNAP25** | **SNAP25** | **3987** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Synthetic construct DNA, clone: pF1KB5384, Homo sapiens SNAP25 gene for synaptosomal-associated protein, without stop codon, in Flexi system.** |  |  |  |  |  |
| **106** | **chr20:1166453-1167017** | **1.1E-14** | **intergenic** | **C20orf46** | **1336** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC55321** |  |  |  |  |  |
| **456** | **chr20:31044248-31045018** | **6.3E-30** | **C20orf112** | **C20orf112** | **26270** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **SubName: Full=Chromosome 20 open reading frame 112; SubName: Full=Chromosome 20 open reading frame 112, isoform CRA\_d;** |  |  |  |  |  |
| **373** | **chr20:31169136-31171081** | **1.1E-25** | **intergenic** | **LOC149950** | **4199** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **RecName: Full=Putative uncharacterized protein MGC163334;** |  |  |  |  |  |
| **167** | **chr20:31173272-31174584** | **1.0E-32** | **intergenic** | **LOC149950** | **696** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RecName: Full=Putative uncharacterized protein MGC163334;** |  |  |  |  |  |
| **217** | **chr20:3185766-3185960** | **0.0E+00** | **intergenic** | **DDRGK1** | **471** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **DDRGK domain containing 1 precursor** |  |  |  |  |  |
| **266** | **chr20:33296289-33299074** | **2.4E-141** | **TP53INP2** | **TP53INP2** | **4142** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **tumor protein p53 inducible nuclear protein 2** |  |  |  |  |  |
| **422** | **chr20:35088714-35089600** | **1.1E-38** | **DLGAP4** | **DLGAP4** | **241** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **disks large-associated protein 4 isoform c** |  |  |  |  |  |
| **334** | **chr20:43726066-43727672** | **1.1E-84** | **KCNS1** | **KCNS1** | **2081** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **potassium voltage-gated channel** |  |  |  |  |  |
| **263** | **chr20:43921444-43922812** | **4.2E-65** | **MATN4** | **RBPJL** | **12678** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **recombining binding protein L** |  |  |  |  |  |
| **79** | **chr20:44717001-44717595** | **6.7E-19** | **NCOA5** | **NCOA5** | **985** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **nuclear receptor coactivator 5** |  |  |  |  |  |
| **142** | **chr20:4804479-4805172** | **5.9E-20** | **intergenic** | **RASSF2** | **188** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Homo sapiens cDNA, FLJ97180.** |  |  |  |  |  |
| **222** | **chr20:5592364-5592588** | **6.3E-28** | **intergenic** | **GPCPD1** | **692** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** |  |  |  |  |  |  |
| **350** | **chr20:58661860-58663518** | **9.6E-163** | **intergenic** | **C20orf197** | **30881** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC284756** |  |  |  |  |  |
| **175** | **chr20:58713247-58714442** | **2.3E-37** | **intergenic** | **C20orf197** | **82268** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC284756** |  |  |  |  |  |
| **110** | **chr20:60695829-60696371** | **9.4E-21** | **intergenic** | **LSM14B** | **1145** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **LSM14 homolog B** |  |  |  |  |  |
| **91** | **chr20:60982302-60983535** | **5.2E-20** | **CABLES2** | **CABLES2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Cdk5 and Abl enzyme substrate 2** |  |  |  |  |  |
| **376** | **chr20:61424797-61425762** | **3.6E-09** | **intergenic** | **C20orf20** | **2042** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **MRG-binding protein** |  |  |  |  |  |
| **94** | **chr20:61434409-61436101** | **5.8E-34** | **intergenic** | **OGFR** | **75** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Synthetic construct Homo sapiens gateway clone IMAGE:100018397 3' read OGFR mRNA.** |  |  |  |  |  |
| **395** | **chr20:62031976-62033866** | **8.1E-28** | **intergenic** | **CHRNA4** | **39281** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **cholinergic receptor, nicotinic, alpha 4 subunit** |  |  |  |  |  |
| **375** | **chr20:62460099-62461728** | **6.3E-18** | **intergenic** | **ZBTB46** | **23243** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **zinc finger and BTB domain containing 46** |  |  |  |  |  |
| **471** | **chr20:709218-710045** | **9.2E-31** | **intergenic** | **C20orf54** | **39183** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **hypothetical protein LOC113278 precursor** |  |  |  |  |  |
| **489** | **chr21:11186520-11186866** | **2.0E-40** | **intergenic** | **BAGE** | **87583** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A15** | **B melanoma antigen precursor** |  |  |  |  |  |
| **216** | **chr21:33031273-33031541** | **2.8E-07** | **intergenic** | **SOD1** | **393** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Synthetic construct DNA, clone: pF1KB8213, Homo sapiens SOD1 gene for superoxide dismutase 1, soluble, without stop codon, in Flexi system.** |  |  |  |  |  |
| **173** | **chr21:37477096-37477939** | **1.7E-32** | **intergenic** | **CBR3** | **29323** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **carbonyl reductase 3** |  |  |  |  |  |
| **59** | **chr21:37757961-37758923** | **6.9E-22** | **CHAF1B** | **CHAF1B** | **273** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **chromatin assembly factor 1 subunit B** |  |  |  |  |  |
| **166** | **chr21:42219715-42220136** | **1.3E-09** | **intergenic** | **DSCAM** | **676** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens mRNA for Down syndrome cell adhesion molecule isoform CHD2-42 precursor variant protein.** |  |  |  |  |  |
| **441** | **chr21:43374242-43374982** | **4.8E-19** | **intergenic** | **C2CD2** | **243** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **C2 calcium-dependent domain containing 2 isoform** |  |  |  |  |  |
| **126** | **chr21:45286090-45287575** | **5.8E-35** | **AGPAT3** | **AGPAT3** | **975** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **1-acylglycerol-3-phosphate O-acyltransferase 3** |  |  |  |  |  |
| **245** | **chr21:46974375-46975041** | **1.7E-36** | **intergenic** | **SLC19A1** | **12024** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **SubName: Full=cDNA FLJ53257, highly similar to Folate transporter 1;** |  |  |  |  |  |
| **264** | **chr21:47717252-47718351** | **7.9E-50** | **YBEY** | **YBEY** | **10986** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **290** | **chr22:17565444-17567399** | **1.9E-122** | **IL17RA** | **IL17RA** | **0** | **Cat-Eye Syndrome (Type I)** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **interleukin 17A receptor precursor** |  |  |  |  |  |
| **319** | **chr22:20783689-20786644** | **5.6E-182** | **SCARF2** | **SCARF2** | **5502** | **22q11 duplication syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **scavenger receptor class F, member 2 isoform 2** |  |  |  |  |  |
| **63** | **chr22:23414649-23415121** | **1.0E-10** | **RTDR1** | **GNAZ** | **1981** | **22q11.2 distal deletion syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **guanine nucleotide binding protein, alpha z** |  |  |  |  |  |
| **470** | **chr22:29470121-29470696** | **4.0E-11** | **KREMEN1** | **KREMEN1** | **1056** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **kringle-containing transmembrane protein 1** |  |  |  |  |  |
| **13** | **chr22:34605048-34605910** | **6.9E-11** | **intergenic** | **LARGE** | **288632** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **like-glycosyltransferase** |  |  |  |  |  |
| **412** | **chr22:35776529-35777905** | **1.4E-20** | **HMOX1** | **HMOX1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **heme oxygenase (decyclizing) 1** |  |  |  |  |  |
| **318** | **chr22:38003238-38003624** | **2.4E-20** | **intergenic** | **GGA1** | **856** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **golgi associated, gamma adaptin ear containing,** |  |  |  |  |  |
| **495** | **chr22:38476463-38479136** | **4.9E-133** | **SLC16A8** | **SLC16A8** | **34** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **solute carrier family 16, member 8** |  |  |  |  |  |
| **61** | **chr22:39636776-39638198** | **3.5E-19** | **PDGFB** | **PDGFB** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **platelet-derived growth factor beta isoform 1** |  |  |  |  |  |
| **253** | **chr22:39958513-39960781** | **0.0E+00** | **intergenic** | **CACNA1I** | **5976** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **calcium channel, voltage-dependent, T type,** |  |  |  |  |  |
| **357** | **chr22:40927613-40930193** | **6.4E-57** | **MKL1** | **MKL1** | **102497** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A11** | **megakaryoblastic leukemia 1 protein** |  |  |  |  |  |
| **80** | **chr22:42978100-42978747** | **1.6E-12** | **intergenic** | **RRP7B** | **83** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ90011 fis, clone HEMBA1000443, highly similar to Gastric cancer antigen Zg14.** |  |  |  |  |  |
| **44** | **chr22:44727827-44729418** | **4.2E-31** | **intergenic** | **KIAA1644** | **19096** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC85352 precursor** |  |  |  |  |  |
| **98** | **chr22:45636989-45638263** | **4.5E-33** | **intergenic** | **C22orf9** | **339** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC23313 isoform b** |  |  |  |  |  |
| **221** | **chr22:50641166-50641348** | **2.3E-09** | **SELO** | **SELO** | **1759** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **selenoprotein O** |  |  |  |  |  |
| **212** | **chr22:50746307-50747237** | **4.5E-48** | **intergenic** | **PLXNB2** | **305** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **plexin B2 precursor** |  |  |  |  |  |
| **96** | **chr3:126374321-126374564** | **1.7E-04** | **intergenic** | **TXNRD3** | **354** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=Thioredoxin reductase 3; EC=1.8.1.9; AltName: Full=Thioredoxin reductase TR2; AltName: Full=Thioredoxin and glutathione reductase;** |  |  |  |  |  |
| **31** | **chr3:126700235-126701977** | **4.8E-30** | **intergenic** | **PLXNA1** | **5459** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9** | **SubName: Full=cDNA FLJ44113 fis, clone TESTI4046487, highly similar to Mus musculus plexin A1 (Plxna1);** |  |  |  |  |  |
| **302** | **chr3:131079148-131081524** | **1.5E-100** | **NUDT16P1** | **NUDT16P1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **26** | **chr3:14443072-14444029** | **9.4E-19** | **intergenic** | **SLC6A6** | **76** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **solute carrier family 6 (neurotransmitter** |  |  |  |  |  |
| **242** | **chr3:14852243-14853594** | **3.9E-56** | **intergenic** | **FGD5** | **6874** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **FYVE, RhoGEF and PH domain containing 5** |  |  |  |  |  |
| **379** | **chr3:170135880-170138721** | **4.4E-66** | **CLDN11** | **CLDN11** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **claudin 11** |  |  |  |  |  |
| **67** | **chr3:171756944-171757389** | **8.3E-12** | **intergenic** | **FNDC3B** | **28** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **fibronectin type III domain containing 3B** |  |  |  |  |  |
| **186** | **chr3:183355397-183355796** | **4.6E-14** | **KLHL24** | **KLHL24** | **1987** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **DRE1 protein** |  |  |  |  |  |
| **70** | **chr3:183993052-183993581** | **8.4E-12** | **ECE2** | **ECE2** | **217** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **endothelin converting enzyme 2 isoform D** |  |  |  |  |  |
| **284** | **chr3:196755077-196757067** | **1.9E-105** | **MFI2** | **MFI2** | **0** | **3q29 microduplication syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **SubName: Full=Antigen p97 (Melanoma associated) identified by monoclonal antibodies 133.2 and 96.5; SubName: Full=Melanoma-associated antigen p97, isoform 2,; SubName: Full=Antigen p97 (Melanoma associated) identified by monoclonal antibodies 133.2 and 96.5, isoform CRA\_b;** |  |  |  |  |  |
| **42** | **chr3:236894-237800** | **3.1E-19** | **intergenic** | **CHL1** | **849** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **cell adhesion molecule with homology to L1CAM** |  |  |  |  |  |
| **465** | **chr3:38070853-38071129** | **3.2E-11** | **PLCD1** | **PLCD1** | **25** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **phospholipase C, delta 1 isoform 2** |  | **Y** | **21572417** |  |  |
| **399** | **chr3:45267972-45268712** | **1.1E-16** | **intergenic** | **TMEM158** | **158** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Ras-induced senescence 1 precursor** |  |  |  |  |  |
| **238** | **chr3:46741882-46745255** | **1.4E-161** | **TMIE** | **TMIE** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens cDNA FLJ76643 complete cds, highly similar to Homo sapiens transmembrane inner ear (TMIE), mRNA.** |  |  |  |  |  |
| **343** | **chr3:50263450-50264182** | **2.7E-37** | **intergenic** | **GNAI2** | **9464** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **SubName: Full=Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2, isoform CRA\_c; SubName: Full=cDNA FLJ61561, highly similar to Guanine nucleotide-binding protein G(i), alpha-2 subunit;** |  |  |  |  |  |
| **308** | **chr3:51989094-51990825** | **2.4E-70** | **GPR62** | **GPR62** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **G protein-coupled receptor 62** |  |  |  |  |  |
| **396** | **chr3:53290130-53290937** | **9.1E-09** | **TKT** | **TKT** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **transketolase isoform 2** |  |  |  |  |  |
| **27** | **chr3:58222055-58223219** | **3.3E-19** | **intergenic** | **ABHD6** | **39** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **abhydrolase domain containing 6** |  |  |  |  |  |
| **272** | **chr3:72149166-72150600** | **3.3E-74** | **intergenic** | **PROK2** | **314809** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **prokineticin 2 isoform b precursor** |  |  |  |  |  |
| **92** | **chr3:87843154-87843660** | **2.5E-14** | **intergenic** | **HTR1F** | **188065** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **5-hydroxytryptamine (serotonin) receptor 1F** |  |  |  |  |  |
| **71** | **chr3:9291565-9292071** | **3.9E-17** | **intergenic** | **SRGAP3** | **254** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=SLIT-ROBO Rho GTPase-activating protein 3; Short=srGAP3; AltName: Full=srGAP2; AltName: Full=WAVE-associated Rac GTPase-activating protein; Short=WRP; AltName: Full=Mental disorder-associated GAP; AltName: Full=Rho GTPase-activating protein 14;** |  |  |  |  |  |
| **54** | **chr4:176987935-176988404** | **1.1E-10** | **WDR17** | **WDR17** | **951** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=cDNA FLJ25882 fis, clone CBR02655;** |  |  |  |  |  |
| **261** | **chr4:185747275-185748079** | **5.5E-41** | **intergenic** | **ACSL1** | **60** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ76467 complete cds, highly similar to Homo sapiens acyl-CoA synthetase long-chain family member 1 (ACSL1), mRNA.** |  |  |  |  |  |
| **307** | **chr4:187025289-187027501** | **2.5E-173** | **intergenic** | **TLR3** | **34981** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **toll-like receptor 3 precursor** |  |  |  |  |  |
| **351** | **chr4:3042595-3044357** | **3.0E-62** | **intergenic** | **HTT** | **32050** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **huntingtin** |  |  |  |  |  |
| **151** | **chr4:36246811-36247077** | **1.2E-05** | **intergenic** | **ARAP2** | **832** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **ArfGAP with RhoGAP domain, ankyrin repeat and PH** |  |  |  |  |  |
| **508** | **chr4:4108113-4108493** | **1.8E-11** | **intergenic** | **OTOP1** | **120128** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **otopetrin 1** |  |  |  |  |  |
| **160** | **chr4:53730448-53730907** | **1.5E-21** | **RASL11B** | **RASL11B** | **1954** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RAS-like family 11 member B** |  |  |  |  |  |
| **48** | **chr4:6270394-6271308** | **1.4E-13** | **intergenic** | **WFS1** | **268** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **19598235** | **A5** | **wolframin** |  |  |  |  |  |
| **363** | **chr4:6311155-6311816** | **5.7E-09** | **intergenic** | **WFS1** | **39579** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **wolframin** |  |  |  |  |  |
| **405** | **chr4:74088155-74088925** | **9.9E-15** | **ANKRD17** | **ANKRD17** | **35577** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A13** | **RecName: Full=Ankyrin repeat domain-containing protein 17; AltName: Full=Gene trap ankyrin repeat protein; AltName: Full=Serologically defined breast cancer antigen NY-BR-16;** |  |  |  |  |  |
| **467** | **chr5:131992380-131992957** | **1.5E-21** | **intergenic** | **IL13** | **907** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **interleukin 13 precursor** |  |  |  |  |  |
| **301** | **chr5:133449342-133450390** | **2.9E-67** | **intergenic** | **TCF7** | **11** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens cDNA FLJ33018 fis, clone THYMU1000459, highly similar to Homo sapiens transcription factor 7 (T-cell specific, HMG-box) (TCF7), transcript variant 5, mRNA.** |  |  |  |  |  |
| **36** | **chr5:171881631-171882851** | **1.3E-31** | **intergenic** | **SH3PXD2B** | **104** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SH3 and PX domains 2B** |  |  |  |  |  |
| **296** | **chr5:172110078-172111970** | **3.5E-197** | **NEURL1B** | **NEURL1B** | **41803** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **neuralized homolog 1B** |  |  |  |  |  |
| **342** | **chr5:176826685-176827952** | **1.2E-99** | **PFN3** | **PFN3** | **0** | **Sotos syndrome** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **profilin 3** |  |  |  |  |  |
| **209** | **chr5:179234845-179235512** | **6.9E-31** | **SQSTM1** | **SQSTM1** | **843** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ35790 fis, clone TESTI2005720.** |  |  |  |  |  |
| **51** | **chr5:180611922-180612419** | **8.4E-12** | **intergenic** | **TRIM7** | **15511** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **tripartite motif-containing 7 isoform 4** |  |  |  |  |  |
| **134** | **chr5:180689382-180689971** | **3.9E-45** | **intergenic** | **TRIM52** | **1263** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **tripartite motif-containing 52** |  |  |  |  |  |
| **506** | **chr5:31854173-31856131** | **2.0E-29** | **PDZD2** | **PDZD2** | **55143** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **PDZ domain containing 2** |  |  |  |  |  |
| **90** | **chr5:60239896-60240556** | **2.1E-22** | **ERCC8** | **ERCC8** | **349** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **excision repair cross-complementing rodent** |  |  |  |  |  |
| **262** | **chr5:79330496-79331955** | **6.6E-89** | **THBS4** | **THBS4** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **thrombospondin 4 precursor** |  |  |  |  |  |
| **8** | **chr5:88176422-88177229** | **6.8E-04** | **MEF2C** | **MEF2C** | **2054** | **N/A** | **N/A** | **Missence mutations and small deletions identified in ASD** | **20412115** | **9162005, 9069290** | **N/A** | **A2,A6** | **myocyte enhancer factor 2C isoform 1** |  |  |  |  |  |
| **472** | **chr5:9546367-9547098** | **9.8E-27** | **intergenic** | **SEMA5A** | **134** | **Cri du Chat Syndrome (5p deletion)** | **Y** | **Expression profiling** | **17028446** | **15743826** | **19812673** | **A5,A13** | **semaphorin 5A precursor** |  |  |  |  |  |
| **198** | **chr6:109704835-109705102** | **3.3E-10** | **intergenic** | **CD164** | **1073** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **CD164 molecule, sialomucin isoform 2** |  |  |  |  |  |
| **109** | **chr6:134492373-134493078** | **9.6E-19** | **SGK1** | **SGK1** | **2956** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **serum/glucocorticoid regulated kinase 1 isoform** |  |  |  |  |  |
| **53** | **chr6:134493111-134494980** | **2.2E-40** | **SGK1** | **SGK1** | **1054** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **serum/glucocorticoid regulated kinase 1 isoform** |  |  |  |  |  |
| **400** | **chr6:138187328-138188147** | **9.0E-16** | **intergenic** | **TNFAIP3** | **433** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **tumor necrosis factor, alpha-induced protein 3** |  |  |  |  |  |
| **291** | **chr6:161794811-161796471** | **0.0E+00** | **PARK2** | **AGPAT4** | **99704** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **SubName: Full=cDNA FLJ58844, highly similar to 1-acyl-sn-glycerol-3-phosphate acyltransferase delta (EC 2.3.1.51); SubName: Full=1-acylglycerol-3-phosphate O-acyltransferase 4 (Lysophosphatidic acid acyltransferase, delta), isoform CRA\_g;** |  | **Y** | **21360662** |  |  |
| **17** | **chr6:27791257-27791868** | **1.1E-08** | **intergenic** | **HIST1H4J** | **34** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **histone cluster 1, H4j** |  |  |  |  |  |
| **270** | **chr6:28226589-28227825** | **3.3E-91** | **NKAPL** | **NKAPL** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **NFKB activating protein-like** |  |  |  |  |  |
| **10** | **chr6:28848231-28849261** | **1.3E-22** | **intergenic** | **LOC401242** | **16777** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** |  |  |  |  |  |  |
| **41** | **chr6:28950237-28950928** | **4.7E-35** | **intergenic** | **ZNF311** | **22109** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=cDNA FLJ76000, highly similar to Homo sapiens zinc finger protein 311 (ZNF311), mRNA;** |  |  |  |  |  |
| **229** | **chr6:29687949-29688082** | **0.0E+00** | **intergenic** | **HLA-F** | **3034** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A2,A7** | **Homo sapiens cDNA FLJ39643 fis, clone SMINT2004023, highly similar to HLA class I histocompatibility antigen, alphachain F precursor.** |  |  |  |  |  |
| **1** | **chr6:29690664-29692626** | **9.3E-105** | **HLA-F** | **HLA-F** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1** | **Homo sapiens cDNA FLJ39643 fis, clone SMINT2004023, highly similar to HLA class I histocompatibility antigen, alphachain F precursor.** |  |  |  |  |  |
| **259** | **chr6:29893748-29895550** | **5.4E-84** | **intergenic** | **HCG4P6** | **320** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens cDNA FLJ32165 fis, clone PLACE6000424.** |  |  |  |  |  |
| **2** | **chr6:30457220-30458455** | **9.0E-49** | **HLA-E** | **HLA-E** | **38** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1,A13** | **SubName: Full=cDNA FLJ52681, highly similar to HLA class I histocompatibility antigen, alpha chain E;** |  |  |  |  |  |
| **3** | **chr6:31323401-31325532** | **1.3E-116** | **HLA-B** | **HLA-B** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1** | **SubName: Full=MHC class I antigen; Flags: Fragment;** |  |  |  |  |  |
| **124** | **chr6:3155285-3156242** | **1.1E-16** | **TUBB2A** | **TUBB2A** | **1541** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **tubulin, beta 2** |  |  |  |  |  |
| **401** | **chr6:31797321-31800362** | **4.3E-58** | **HSPA1B** | **HSPA1B** | **1810** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **heat shock 70kDa protein 1B** |  |  |  |  |  |
| **112** | **chr6:34724231-34724551** | **3.1E-12** | **intergenic** | **SNRPC** | **319** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **small nuclear ribonucleoprotein polypeptide C** |  |  |  |  |  |
| **251** | **chr6:3750219-3753111** | **9.8E-104** | **C6orf145** | **C6orf145** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC221749** |  |  |  |  |  |
| **135** | **chr6:41703378-41703977** | **3.1E-23** | **TFEB** | **TFEB** | **20** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **Homo sapiens mRNA for transcription factor EB (TFEB gene), splice variant A.** |  |  |  |  |  |
| **439** | **chr6:41748485-41749659** | **3.0E-36** | **PRICKLE4** | **PRICKLE4** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A9,A13** | **over-expressed breast tumor protein** |  |  |  |  |  |
| **257** | **chr6:42694424-42695742** | **1.4E-56** | **LOC442211** | **LOC442211** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** |  |  |  |  |  |  |
| **130** | **chr6:43042853-43043931** | **4.7E-26** | **intergenic** | **PTK7** | **97** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **PTK7 protein tyrosine kinase 7 isoform d** |  |  |  |  |  |
| **274** | **chr6:43969735-43971333** | **4.3E-52** | **C6orf223** | **C6orf223** | **1399** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **RecName: Full=Uncharacterized protein C6orf223;** |  |  |  |  |  |
| **269** | **chr6:4774790-4776386** | **4.8E-101** | **CDYL** | **CDYL** | **293** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **chromodomain protein, Y chromosome-like isoform** |  |  |  |  |  |
| **260** | **chr6:82460285-82464143** | **0.0E+00** | **FAM46A** | **FAM46A** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **hypothetical protein LOC55603** |  |  |  |  |  |
| **199** | **chr7:100064200-100065754** | **1.0E-87** | **TSC22D4** | **C7orf61** | **2306** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **hypothetical protein LOC402573** |  |  |  |  |  |
| **183** | **chr7:100805258-100806153** | **3.1E-24** | **VGF** | **VGF** | **2699** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **VGF nerve growth factor inducible precursor** | **Y** | **Y** | **20631166** | **altered expression in bipolar disorder** |  |
| **293** | **chr7:101929103-101930066** | **5.8E-39** | **SH2B2** | **SH2B2** | **699** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **SH2B adaptor protein 2** |  |  |  |  |  |
| **235** | **chr7:102311842-102312282** | **2.3E-38** | **POLR2J2** | **POLR2J2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A6,A8** | **Homo sapiens cDNA FLJ50019 complete cds, highly similar to Ras GTPase-activating protein 4.** |  |  |  |  |  |
| **152** | **chr7:108097620-108098318** | **3.6E-24** | **intergenic** | **NRCAM** | **779** | **N/A** | **N/A** | **A case-control study of 18 single nucleotide polymorphisms** | **18664314** | **8947556** | **19598235,19058789,18664314, 17106428,** | **A5** | **neuronal cell adhesion molecule isoform C** |  |  |  |  |  |
| **196** | **chr7:108164825-108165514** | **5.8E-25** | **PNPLA8** | **PNPLA8** | **1124** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **patatin-like phospholipase domain containing 8** |  |  |  |  |  |
| **89** | **chr7:112030798-112031474** | **1.9E-14** | **intergenic** | **IFRD1** | **31724** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **interferon-related developmental regulator 1** |  |  |  |  |  |
| **111** | **chr7:124406457-124406824** | **1.9E-10** | **intergenic** | **GPR37** | **776** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **G protein-coupled receptor 37 precursor** |  |  |  |  |  |
| **169** | **chr7:140098526-140099049** | **2.4E-17** | **intergenic** | **SLC37A3** | **215** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecName: Full=Sugar phosphate exchanger 3; AltName: Full=Solute carrier family 37 member 3;** |  |  |  |  |  |
| **460** | **chr7:150944371-150945817** | **1.8E-18** | **SMARCD3** | **SMARCD3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ52707, highly similar to SWI/SNF-related matrix-associatedactin-dependent regulator of chromatin subfamily D member 3;** |  | **Y** | **21082657** |  |  |
| **481** | **chr7:17337726-17338085** | **2.7E-07** | **intergenic** | **AHR** | **190** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **aryl hydrocarbon receptor precursor** |  |  |  |  |  |
| **25** | **chr7:33947274-33947720** | **8.5E-10** | **BMPER** | **BMPER** | **2163** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **BMP-binding endothelial regulator precursor** |  |  |  |  |  |
| **65** | **chr7:39454346-39454614** | **5.9E-09** | **POU6F2** | **C7orf36** | **151388** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **hypothetical protein LOC57002** |  |  |  |  |  |
| **153** | **chr7:44365478-44366907** | **6.3E-36** | **intergenic** | **CAMK2B** | **248** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **19058789** | **A5** | **Homo sapiens primary neuroblastoma cDNA, clone:Nbla00715, full insert sequence.** |  |  |  |  |  |
| **421** | **chr7:44787355-44787979** | **2.8E-14** | **intergenic** | **ZMIZ2** | **550** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **zinc finger, MIZ-type containing 2 isoform 2** |  |  |  |  |  |
| **239** | **chr7:45612742-45613966** | **1.4E-51** | **intergenic** | **ADCY1** | **158** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **19058789** | **A9** | **adenylate cyclase 1** |  |  |  |  |  |
| **360** | **chr7:4997171-4999389** | **1.8E-49** | **MMD2** | **MMD2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=Monocyte to macrophage differentiation-associated 2, isoform CRA\_c; SubName: Full=Putative uncharacterized protein MMD2;** |  |  |  |  |  |
| **49** | **chr7:51382263-51382915** | **4.1E-15** | **COBL** | **COBL** | **1600** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **19058789** | **A5** | **cordon-bleu homolog** |  |  |  |  |  |
| **416** | **chr7:5336527-5337011** | **2.0E-08** | **SLC29A4** | **SLC29A4** | **13967** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **Homo sapiens cDNA PSEC0113 fis, clone NT2RP2006435, weakly similar to 36 KD NUCLEOLAR PROTEIN HNP36.** |  |  |  |  |  |
| **147** | **chr7:55955895-55956765** | **9.5E-33** | **intergenic** | **ZNF713** | **23565** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **zinc finger protein 713** |  |  |  |  |  |
| **64** | **chr7:5635852-5637157** | **1.7E-41** | **FSCN1** | **FSCN1** | **3399** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **fascin 1** |  |  |  |  |  |
| **258** | **chr7:6703248-6704516** | **2.3E-57** | **intergenic** | **ZNF12** | **42050** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **zinc finger protein 12 isoform a** |  |  |  |  |  |
| **19** | **chr7:70158116-70158940** | **8.3E-12** | **AUTS2** | **WBSCR17** | **438848** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **UDP-GalNAc:polypeptide** |  |  |  |  |  |
| **93** | **chr7:75622395-75623288** | **6.2E-19** | **TMEM120A** | **TMEM120A** | **704** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **RecName: Full=Transmembrane protein 120A; AltName: Full=Transmembrane protein induced by tumor necrosis factor alpha;** |  |  |  |  |  |
| **255** | **chr7:75910926-75913394** | **3.3E-139** | **SRRM3** | **HSPB1** | **18480** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **heat shock protein beta-1** |  |  |  |  |  |
| **312** | **chr7:76026272-76027536** | **1.1E-45** | **ZP3** | **ZP3** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **zona pellucida glycoprotein 3 isoform 2** |  |  |  |  |  |
| **254** | **chr8:104383305-104384792** | **2.1E-77** | **CTHRC1** | **CTHRC1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **collagen triple helix repeat containing 1** |  |  |  |  |  |
| **231** | **chr8:104830977-104834818** | **3.2E-100** | **RIMS2** | **RIMS2** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8** | **regulating synaptic membrane exocytosis 2** |  |  |  |  |  |
| **14** | **chr8:120222742-120223098** | **4.0E-06** | **MAL2** | **MAL2** | **2133** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **MAL2 proteolipid protein** | **Y** |  | **20053882** | **preferentially associated with VGLUT-1-containing nerve terminals.** |  |
| **391** | **chr8:142424884-142425731** | **8.9E-16** | **intergenic** | **PTP4A3** | **6275** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **protein tyrosine phosphatase type IVA, member 3** |  |  |  |  |  |
| **37** | **chr8:144327642-144328311** | **5.0E-09** | **intergenic** | **ZFP41** | **797** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **zinc finger protein 41 homolog** |  |  |  |  |  |
| **75** | **chr8:145287767-145288047** | **1.5E-12** | **HEATR7A** | **SCXA** | **33469** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** |  |  |  |  |  |  |
| **200** | **chr8:145554683-145555451** | **2.7E-31** | **SCRT1** | **DGAT1** | **4116** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **diacylglycerol O-acyltransferase 1** |  |  |  |  |  |
| **162** | **chr8:145741040-145742838** | **4.4E-45** | **RECQL4** | **RECQL4** | **372** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **RecQ protein-like 4** |  |  |  |  |  |
| **332** | **chr8:145843509-145846816** | **0.0E+00** | **intergenic** | **ARHGAP39** | **4621** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** |  |  |  |  |  |  |
| **214** | **chr8:146023295-146023847** | **1.5E-22** | **intergenic** | **ZNF517** | **413** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **zinc finger protein 517** |  |  |  |  |  |
| **385** | **chr8:1772224-1773051** | **2.6E-13** | **ARHGEF10** | **ARHGEF10** | **76** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Rho guanine nucleotide exchange factor 10** |  |  |  |  |  |
| **327** | **chr8:22077119-22080079** | **0.0E+00** | **PHYHIP** | **PHYHIP** | **9772** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **phytanoyl-CoA 2-hydroxylase interacting protein** |  |  |  |  |  |
| **234** | **chr8:2590846-2592202** | **2.9E-36** | **intergenic** | **MYOM2** | **597689** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8** | **myomesin 2** |  |  |  |  |  |
| **20** | **chr8:89554581-89555983** | **9.5E-33** | **intergenic** | **MMP16** | **214864** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **matrix metalloproteinase 16 isoform 2** |  |  |  |  |  |
| **250** | **chr9:100880562-100882226** | **1.0E-65** | **TRIM14** | **TRIM14** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **tripartite motif protein TRIM14 isoform alpha** |  |  |  |  |  |
| **248** | **chr9:110249069-110251893** | **1.7E-129** | **KLF4** | **KLF4** | **154** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Kruppel-like factor 4 (gut)** |  |  |  |  |  |
| **378** | **chr9:115512055-115512908** | **4.1E-20** | **intergenic** | **SNX30** | **225** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **sorting nexin family member 30** |  |  |  |  |  |
| **366** | **chr9:119448626-119449483** | **2.0E-17** | **ASTN2** | **ASTN2** | **11** | **N/A** | **N/A** | **CNV from GWA study** | **19404257** | **3276720** | **N/A** | **A5,A13** | **astrotactin 2 isoform d** |  |  |  |  |  |
| **427** | **chr9:124029611-124030299** | **6.3E-13** | **intergenic** | **GSN** | **80** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9,A13** | **gelsolin isoform b** |  |  |  |  |  |
| **118** | **chr9:124460367-124461223** | **2.0E-31** | **DAB2IP** | **DAB2IP** | **43840** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **disabled homolog 2 interacting protein isoform** | **Y** |  | **12877983** | **downstream effector for Reelin and Ras signaling during brain development.** |  |
| **4** | **chr9:125168360-125169121** | **1.9E-68** | **intergenic** | **PTGS1** | **35132** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A1** | **prostaglandin-endoperoxide synthase 1 isoform 1** |  |  |  |  |  |
| **78** | **chr9:127019174-127020167** | **1.3E-44** | **NEK6** | **NEK6** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A8,A9,A13** | **NIMA-related kinase 6 isoform 2** |  |  |  |  |  |
| **275** | **chr9:128169888-128171236** | **4.2E-66** | **intergenic** | **GAPVD1** | **145778** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **GTPase activating protein and VPS9 domains 1** |  |  |  |  |  |
| **164** | **chr9:130679869-130680278** | **1.5E-21** | **intergenic** | **ST6GALNAC4** | **564** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **sialyltransferase 7D isoform b** |  |  |  |  |  |
| **340** | **chr9:132249955-132250896** | **1.8E-48** | **intergenic** | **C9orf50** | **132159** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **Homo sapiens cDNA FLJ35803 fis, clone TESTI2005979.** |  |  |  |  |  |
| **364** | **chr9:135996705-135997539** | **7.1E-13** | **RALGDS** | **RALGDS** | **144** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Homo sapiens Ral guanine nucleotide dissociation stimulator A mRNA, complete cds.** |  |  |  |  |  |
| **305** | **chr9:138582506-138587426** | **0.0E+00** | **SOHLH1** | **SOHLH1** | **3948** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A8,A9,A13** | **spermatogenesis and oogenesis specific basic** |  |  |  |  |  |
| **72** | **chr9:138796981-138797839** | **8.1E-18** | **CAMSAP1** | **CAMSAP1** | **1166** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=Calmodulin regulated spectrin-associated protein 1;** |  |  |  |  |  |
| **435** | **chr9:139024372-139024895** | **3.7E-09** | **intergenic** | **C9orf69** | **13641** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Homo sapiens cDNA FLJ13100 fis, clone NT2RP3002255.** |  |  |  |  |  |
| **143** | **chr9:139334364-139334891** | **4.3E-24** | **SEC16A** | **INPP5E** | **108** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **inositol polyphosphate-5-phosphatase E** |  |  |  |  |  |
| **361** | **chr9:139558990-139560145** | **3.5E-38** | **EGFL7** | **EGFL7** | **1609** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **EGF-like-domain, multiple 7** |  |  |  |  |  |
| **102** | **chr9:140007421-140008489** | **3.0E-17** | **DPP7** | **DPP7** | **706** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **dipeptidyl peptidase 7 preproprotein** |  |  |  |  |  |
| **85** | **chr9:140353842-140354689** | **3.3E-22** | **PNPLA7** | **NELF** | **56** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **nasal embryonic LHRH factor isoform d** |  |  |  |  |  |
| **119** | **chr9:33077190-33077643** | **5.3E-14** | **intergenic** | **SMU1** | **476** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **smu-1 suppressor of mec-8 and unc-52 homolog** |  |  |  |  |  |
| **450** | **chr9:34458717-34459363** | **8.0E-10** | **DNAI1** | **DNAI1** | **0** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=cDNA FLJ52805, moderately similar to Dynein intermediate chain 1, axonemal;** |  |  |  |  |  |
| **490** | **chr9:69382174-69382366** | **2.8E-07** | **ANKRD20A4** | **ANKRD20A4** | **194** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A15** | **ankyrin repeat domain 20 family, member A4** |  |  |  |  |  |
| **77** | **chr9:92113078-92114221** | **2.2E-23** | **intergenic** | **SEMA4D** | **18467** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens mRNA full length insert cDNA clone EUROIMAGE 1603443.** |  |  |  |  |  |
| **170** | **chr9:92222281-92223044** | **6.9E-31** | **intergenic** | **GADD45G** | **2355** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **SubName: Full=Growth arrest and DNA-damage-inducible, gamma;** |  |  |  |  |  |
| **466** | **chr9:98784758-98785072** | **1.4E-11** | **intergenic** | **NCRNA00092** | **721** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **Homo sapiens, clone IMAGE:5192035, mRNA.** |  |  |  |  |  |
| **47** | **chrX:101968617-101969212** | **3.8E-14** | **GPRASP2** | **GPRASP2** | **1514** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **G protein-coupled receptor associated sorting** |  |  |  |  |  |
| **469** | **chrX:109245169-109245445** | **3.1E-09** | **intergenic** | **TMEM164** | **417** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5,A13** | **transmembrane protein 164 isoform b** |  |  |  |  |  |
| **252** | **chrX:149715571-149716792** | **3.9E-68** | **intergenic** | **MTM1** | **20254** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A9** | **SubName: Full=cDNA FLJ50571, highly similar to Myotubularin (EC 3.1.3.48);** |  |  |  |  |  |
| **105** | **chrX:152782215-152782987** | **6.6E-13** | **intergenic** | **ATP2B3** | **18592** | **Xq28 (MECP2) duplication** | **Y** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **SubName: Full=PMCA3a; Flags: Fragment;** |  |  |  |  |  |
| **424** | **chrX:18373358-18373813** | **6.7E-08** | **intergenic** | **SCML2** | **514** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **SubName: Full=Sex comb on midleg-like 2 (Drosophila); SubName: Full=Sex comb on midleg-like 2 (Drosophila), isoform CRA\_a;** |  |  |  |  |  |
| **123** | **chrX:49056800-49057525** | **6.9E-25** | **intergenic** | **SYP** | **139** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **synaptophysin** |  |  |  |  |  |
| **353** | **chrX:65948641-65949218** | **3.4E-07** | **intergenic** | **EDA2R** | **89533** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A11** | **X-linked ectodysplasin receptor** |  |  |  |  |  |
| **369** | **chrX:77395261-77396149** | **4.3E-09** | **intergenic** | **TAF9B** | **82** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A13** | **transcription associated factor 9B** |  |  |  |  |  |
| **22** | **chrX:85302675-85303326** | **1.5E-09** | **intergenic** | **CHM** | **109** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **N/A** | **A5** | **Homo sapiens cDNA FLJ38564 fis, clone HCHON2004359.** |  |  |  |  |  |