



Seznam genů zahrnutých ve virtuálním panelu – Opožděný psychomotorický vývoj (FocusedExome)

Virtuální panel zahrnuje analýzu 1105 genů:

AAAS, AARS1, AASS, ABAT, ABCA2, ABCC9, ABCD1, ABCD4, ABHD5, ACAD9, ACADM, ACADS, ACADSB, ACADVL, ACAT1, ACO2, ACOX1, ACP5, ACSL4, ACTA2, ACTB, ACTG1, ACVR1, ACY1, ADA, ADAMTS10, ADAR, ADARB1, ADK, ADNP, ADSL, AFF2, AFF3, AFG3L2, AGA, AGMO, AGO1, AGO2, AGPS, AGXT, AHCY, AHI1, AIFM1, AIMP1, AIPL1, AIRE, AK2, AKR1D1, AKT1, AKT3, ALAD, ALDH18A1, ALDH3A2, ALDH4A1, ALDH5A1, ALDH7A1, ALDOA, ALG1, ALG11, ALG12, ALG13, ALG14, ALG3, ALG6, ALG8, ALG9, ALMS1, ALPL, ALX3, ALX4, AMER1, AMT, ANK2, ANKH, ANKRD11, ANO5, ANTXR1, AP1S1, AP1S2, AP3B1, AP3B2, AP4B1, AP4E1, AP4M1, AP4S1, ARFGF2, ARG1, ARHGEF9, ARID1A, ARID1B, ARID2, ARL13B, ARL14EP, ARL6, ARSA, ARSB, ARSL, ARX, ASAH1, ASCC3, ASH1L, ASL, ASNS, ASPA, ASPM, ASS1, ASXL1, ASXL3, ATIC, AT1L1, ATM, ATN1, ATP13A2, ATP1A2, ATP1A3, ATP6AP2, ATP6VOA1, ATP6VOA2, ATP7A, ATP8A2, ATR, ATRX, AUH, AUTS2, B3GALNT2, B3GALT6, B4GALNT1, B4GALT1, B4GALT7, B9D1, B9D2, BBS1, BBS10, BBS12, BBS2, BBS4, BBS5, BBS7, BBS9, BCAP31, BCKDHA, BCKDHB, BCKDK, BCL11A, BCL11B, BCOR, BCORL1, BCS1L, BLM, BMP4, BOLA3, BRAF, BRAT1, BRSK2, BRWD3, BSCL2, BSND, BTB, BUB1B, C12orf57, CA2, CA8, CACNA1A, CACNA1C, CACNA1D, CACNA1E, CACNA1G, CACNB4, CAMK2G, CAMK4, CAMTA1, CARS2, CASK, CASR, CBL, CBS, CC2D1A, CC2D2A, CCBE1, CCDC22, CCDC88C, CD96, CDC42BPB, CDC6, CDH15, CDK16, CDK19, CDK5RAP2, CDKL5, CDKN1C, CDON, CENPJ, CEP120, CEP135, CEP152, CEP290, CEP41, CEP57, CEP63, CEP85L, CERT1, CFAP418, CIC, CLCN2, CLCN4, CLN3, CLN5, CLN6, CLN8, CNKSR2, CNNM2, CNOT3, CNPY3, CNTNAP2, COASY, COG1, COG4, COG5, COG6, COG7, COG8, COL4A1, COL4A2, COLEC11, COQ4, COQ9, COX10, COX15, COX6B1, COX7B, CPE, CPLANE1, CPS1, CRADD, CRBN, CREBBP, CRPPA, CSDE1, CSPP1, CSTB, CTC1, CTCF, CTDP1, CTNNA1, CTNND1, CTSA, CTSD, CUL3, CUL4B, CUX2, CYB5R3, CYC1, CYP27A1, CYP2U1, D2HGDH, DAG1, DARS1, DARS2, DBT, DCAF17, DCX, DDB1, DDC, DDHD2, DDOST, DDX53, DDX59, DEAF1, DHCR24, DHCR7, DHDDS, DHFR, DHTKD1, DHX37, DCHS1, DIAPH1, DIP2B, DIS3L2, DKC1, DLAT, DLD, DLG1, DLG3, DLG4, DLL1, DMD, DMPK, DNAJC19, DNM1, DNM1L, DNMT3A, DNMT3B, DOCK3, DOCK6, DOCK8, DOLK, DPAGT1, DPM1, DPM2, DPM3, DPP6, DPYD, DPYS, DYM, DYNC1H1, DYRK1A, EARS2, EBP, EEF1A2, EEF1B2, EFTUD2, EHMT1, EIF2AK3, EIF2S3, ELAC2, ELOVL4, ELP2, EMC1, EMG1, EMX2, ENTPD1, EP300, EPB41L1, EPG5, EPHA7, ERBB4, ERCC1, ERCC2, ERCC3, ERCC5, ERCC6, ERCC8, ERLIN2, ESCO2, ETFA, ETFB, ETFDH, ETHE1, EXOSC3, EXT2, EXTL3, EZH2, FA2H, FAAH2, FAM111A, FAM126A, FAM20C, FANCA, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FARS2, FAT4, FBXL4, FBXO11, FBXW11, FDFT1, FGD1, FGF14, FGFR2, FH, FIG4, FKR1, FKTN, FLNA, FLVCR1, FLVCR2, FMN2, FMR1, FOLR1, FOXG1, FOXP1, FOXP2, FOXRED1, FRAS1, FREM2, FRMPD4, FRY, FTCD, FTO, FTSJ1, FUCA1, FUT8, GABRA1, GABRA2, GABRA5, GABRB2, GABRB3, GABRD, GABRG2, GAD1, GALC, GALE, GALNT2, GALT, GAMT, GATA6, GATAD2B, GATM, GBA, GBA2, GCDH, GDI1, GEMIN4, GFAP, GFER, GFM1, GCH1, GJB1, GJB2, GJB3, GJC2, GK, GLB1, GLDC, GLI2, GLI3, GLIS3, GLS, GLUL, GLYCTK, GM2A, GMPPA, GMPPB, GNAI2, GNAO1, GNAS, GNB5, GNE, GNPAT, GNPTAB, GNPTG, GNS, GPC3, GPC4, GPSM2, GRIA1, GRIA3, GRID2, GRIK2, GRIN1, GRIN2A, GRIN2B, GRM1, GSS, GTF2H5, GUSB, HACE1, HADH, HADHA, HADHB, HARS1, HAX1, HCCS, HCFC1, HCN1, HDAC4, HDAC8, HEPACAM, HERC2, HESX1, HEXA, HEXB, HGSNAT, HIBCH, HINT1, HIRA, HIVEP2, HK1, HLCS, HMGCL, HNF1B, HNMT, HNRNPD, HNRNPH1, HNRNPH2, HNRNPU, HOXA1, HPD, HPRT1, HRAS, HSD17B10, HSD17B4, HSPD1, HSPG2, HTRA2, HTT, HUWE1, HYL1, CHD2, CHD3, CHD7, CHD8, CHKB, CHL1, CHMP1A, CHRM1, CHST14, IBA57, IDH2, IDS, IDUA, IER3IP1, IFIH1, IFT172, IFT43, IGF1, IGF1R, IKBKG, IL1RAPL1, IMPDH2, INPP4A, INPP5E, IQSEC2, IRX5, ITGA7, ITPA, ITPR1, IVD, JAM3, JMJD1C, KANSL1, KARS1, KAT5, KAT6B, KCNC3, KCNJ10, KCNJ11, KCNJ6, KCNJ9, KCNMA1, KCNN3, KCNQ2, KCNQ3, KCNT1, KCTD7, KDM5C, KDM6A, KDM6B, KIF11, KIF1A, KIF2A, KIF5A, KIF5C, KIF7, KLF7, KLHL7, KMT2A, KMT2C, KMT2D, KMT2E, KPTN, KRAS, L1CAM, L2HGDH, LAMA1, LAMA2, LAMB1, LAMB2, LAMC3, LAMP2, LARP7, LARS1, LARS2, LIAS, LIG4, LIPT1, LMBRD1, LMNB1, LMNB2, LRP2, LRP5, LRPPRC, LSS, LZTFL1, MADD, MAF, MAGEL2, MAN1B1, MAN2B1, MANBA, MAOA, MAP2K1, MAP2K2, MAPK1, MAPK10, MASP1, MAT1A, MBD5, MBTPS2, MCCC1, MCCC2, MCM3AP, MCOLN1, MCPH1, MECP2, MED12, MED13, MED13L, MED17, MED23, MED25, MEF2C, MEIS2, MFF, MFS2A, MFS2B, MFS2C, MGAT2, MGP, MID1, MINPP1, MIR17HG, MKKS, MKS1, MLC1, MLYCD, MMAA, MMAB, MMADHC, MMACHC, MMUT, MN1, MOCS1, MOCS2, MOGS, MPDU1, MPI, MPLKIP, MPV17, MRPS22, MRPS34, MSMO1, MTFMT, MTHFR, MTHFS, MTO1, MTOR, MTR, MTRFR, MTRR, MVK, MYCN, MYO5A, MYT1L, NAA10, NAGA, NAGLU, NAGS, NALCN, NARS1, NBAS, NBEA, NBN, NCAPD2, NCKAP1, NDE1, NDP, NDST1, NDUFA1, NDUFA2, NDUFAF1, NDUFAF2, NDUFAF5, NDUFS1, NDUFS4, NDUFS7, NDUFS8, NDUFV1, NEDD4L, NEU1, NF1, NFIA, NFIX, NFU1, NHP2, NHS, NIPBL, NKX2-1, NLGN3, NPC1, NPC2, NPHP1, NPHP3,



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NR2F1, NR4A2, NRAS, NRXN1, NSD1, NSDHL, NSUN2, NT5C3A, NTNG2, NTRK1, NTRK2, NUBPL, NUP214, NUP62, NYX, OCLN, OCRL, ODAD2, ODC1, OFD1, OPA3, OPHN1, OTC, OTX2, PACS1, PAFAH1B1, PAH, PAK3, PAX1, PAX6, PAX8, PBX1, PC, PCCA, PCCB, PCDH19, PCNT, PDCD6IP, PDE10A, PDE4D, PDGFRB, PDHA1, PDHB, PDHX, PDP1, PDSS1, PDSS2, PEPD, PET100, PEX1, PEX10, PEX11B, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX26, PEX3, PEX5, PEX6, PEX7, PGAP2, PGAP3, PGK1, PHACTR1, PHF6, PHF8, PHGDH, PHIP, PIBF1, PIGA, PIGB, PIGL, PIGN, PIGO, PIGV, PIGW, PIK3CA, PIK3R2, PLA2G6, PLCB1, PLP1, PMM2, PMPCA, PNKP, PNPLA6, PNPO, PNPT1, POGZ, POLA1, POLG, POLR1C, POLR3A, POLR3B, POMGNT1, POMGNT2, POMK, POMT1, POMT2, PORCN, POU1F1, PPM1D, PPP2R1A, PPP2R5D, PPT1, PQBP1, PRICKLE2, PRKAR1B, PRMT7, PRODH, PRPS1, PRRT2, PRSS12, PSAP, PSMB8, PSPH, PTDSS1, PTEN, PTF1A, PTH1R, PTHLH, PTCH1, PTCHD1, PTPN11, PTRH2, PTS, PUS1, PYCR1, QDPR, RAB18, RAB23, RAB39B, RAB3GAP1, RAB3GAP2, RAC1, RAD21, RAD51, RAF1, RAI1, RALGAPA1, RARB, RARS1, RARS2, RAX, RBBP8, RBM10, RBPJ, RELN, RFT1, RHOBTB2, RIT1, RLIM, RMND1, RMRP, RNASEH2A, RNASEH2B, RNASEH2C, RNASET2, RNF113A, RNU4ATAC, ROGDI, ROR2, RORA, RPGRIP1L, RPIA, RPL10, RPS6KA3, RRM2B, RSRC1, RTEL1, RTTN, RXYLT1, SACS, SALL1, SAMD9, SAMHD1, SARS1, SARS2, SATB2, SBF1, SC5D, SCAPER, SCN1A, SCN1B, SCN2A, SCN3A, SCN8A, SCO1, SCO2, SDCCAG8, SDHA, SDHAF1, SEPSECS, SERAC1, SETBP1, SETD2, SETD5, SFXN4, SGSH, SHANK2, SHANK3, SHH, SHOC2, SHROOM4, SIL1, SIX3, SKI, SLC12A5, SLC12A6, SLC16A2, SLC17A5, SLC19A3, SLC1A1, SLC1A2, SLC25A1, SLC25A12, SLC25A15, SLC25A22, SLC25A26, SLC25A38, SLC26A2, SLC27A4, SLC2A1, SLC2A2, SLC33A1, SLC35A1, SLC35A2, SLC35C1, SLC35D1, SLC39A13, SLC46A1, SLC4A1, SLC4A11, SLC4A4, SLC5A5, SLC5A6, SLC5A7, SLC6A1, SLC6A17, SLC6A19, SLC6A3, SLC9A6, SLX4, SMAD3, SMAD4, SMARCA2, SMARCA4, SMARCB1, SMARCE1, SMC1A, SMC3, SMOC1, SMPD1, SMS, SNAP29, SNIP1, SNX14, SOS1, SOX10, SOX2, SOX3, SOX5, SOX6, SOX9, SPECC1L, SPG11, SPR, SPRED1, SPTAN1, SPTBN2, SRCAP, SRD5A3, SRGAP3, ST3GAL3, ST3GAL5, STAG1, STAMBP, STIL, STRA6, STRADA, STXBP1, SUCLA2, SUCLG1, SUFU, SUMF1, SUOX, SUPT16H, SURF1, SYN1, SYNCRIP, SYNGAP1, SYNJ1, SYP, SZT2, TAF1, TAF1C, TAFAZZIN, TANC2, TAT, TBC1D20, TBC1D23, TBC1D24, TBCE, TBCK, TBL1XR1, TBX1, TCF4, TCF7L2, TCN2, TCTN2, TCTN3, TECPR2, TENM3, TERT, TFE3, TGFB1, TGIF1, TH, THOC2, THRA, THRB, TKT, TMCO1, TMEM165, TMEM216, TMEM231, TMEM237, TMEM67, TMEM70, TNPO2, TNR, TOE1, TOR1A, TP73, TPP1, TRAPPC11, TRAPPC9, TREX1, TRIM32, TRIO, TRIP12, TRMT1, TRNT1, TRPM3, TRRAP, TSC1, TSC2, TSEN2, TSEN34, TSEN54, TSFM, TSHB, TSPAN7, TTC19, TTC37, TTC8, TTI2, TUBA1A, TUBB2B, TUBB3, TUBB4A, TUBG1, TUBGCP4, TUBGCP6, TUSC3, TWIST1, TWIST2, UBE2A, UBE3A, UBR1, UBR7, UMPS, UNC80, UPB1, UPF3B, UROC1, USP7, USP9X, VAMP1, VARS2, VIPAS39, VLDLR, VPS13B, VPS33B, VRK1, WAC, WARS2, WDFY3, WDPCP, WDR11, WDR4, WDR45, WDR45B, WDR62, WDR81, WWOX, XPA, XRCC4, XYLT1, YARS1, YY1, ZBTB11, ZBTB18, ZBTB24, ZC3H14, ZC4H2, ZDHHC9, ZEB2, ZFHX4, ZFP57, ZFYVE26, ZIC1, ZIC2, ZMYND11, ZNF335, ZNF526, ZNF711