

## Gehirnfehlbildungen

**Lissenzephalie, Typ I [GP029] (~16kb)**

*ARX, DCX, PAFAH1B1, RELN, TUBA1A*

**umfassende Diagnostik siehe [GP032XL]**

**Mikrozephalie, primäre [GP031] (~24kb)**

*ASPM (MCPH5), CDK5RAP2 (MCPH3), MCPH1 (MCPH1), STIL (MCPH7), WDR62 (MCPH2)*

**umfassende Diagnostik siehe [GP032XL]**

**Warburg-Mikro-Syndrom [GP034] (~9 kb)**

*RAB3GAP1, RAB3GAP2, RAB18, TBC1D20*

**umfassende Diagnostik siehe [GP032XL]**

**Pontozerebelläre Hypoplasie [GP033] (20,2 kb)**

*CASK, RARS2, RELN, TSEN2, TSEN34, TSEN54, VRK1*

**Neuronale Migrationsstörungen (MCD) [GP032XL]**

*ACTB, ACTG1, AKT3, AP4M1, ARFGF2, ARX, ASPA, ASPM, , B3GNT1, CASK, CDK5RAP2, CENPJ, CEP135, CEP152, CEP63, COL18A1, COL4A1, CPT2, DCX, DHCR24, DNMT1, DYNC1H1, EFTUD2, EMX2, EOMES, EXOSC3, EZH2, FGFR3, FH, FKBP, FKTN, FLNA, GCDH, GFAP, GPC3, GPR56, HEPACAM, IER3IP1, ISPD, KIF11, LAMA2, LAMB2, LAMC3, LARGE, MCPH1, MED12, MEF2C, MLC1, MRE11A, MSMO1, NDE1, NFIX, NHEJ1, NR2E1, NSD1, OCLN, OPHN1, PAFAH1B1, PAX6, PEX7, PIGA, PIGN, PIK3CA, PIK3R2, PNKP, POMGNT1, POMT1, POMT2, PQBP1, PTEN, RAB18, RAB3GAP1, RAB3GAP2, RARS2, RELN, SEPSECS, SLC25A19, SNAP29, SRPX2, STIL, TSEN2, TSEN34, TSEN54, TUBA1A, TUBA8, TUBB2B, TUBB3, TUBGCP6, VLDLR, VRK1, WDR62, YWHAE*

**Makrozephalie [GP030XL]**

*ASPA, BRAF, BRWD3, DHCR24, EZH2, GCDH, GFAP, GPC3, HEPACAM, HRAS, KIF7, MED12, MLC1, NF1, NFIX, NSD1, PIK3CA, PIK3R2, PTEN, SPRED1*

**Adams-Oliver-Syndrom [GP024] (~16 kb)**

*ARHGAP31, DLL4, DOCK6, EOGT, NOTCH1, RBPJ*

**Aicardi-Goutières-Syndrom (AGS) [GP025] (~12 kb)**

*ADAR, IFIH1, RNASEH2A, RNASEH2B, RNASEH2C, SAMHD1, TREX1*

**Joubert-Syndrom [GP004] (~25 kb)**

*AHI1, CC2D2A, CEP290, NPHP RPGRIP1L, TMEM67*

**umfassende Diagnostik siehe [GP004XL]**

*AHI1, ARL13B, B9D1, C5orf42, CC2D2A, CEP290, CEP41, CSPP1, KIF7, MKS1, NPHP1, OFD1, RPGRIP1L, TCTN1, TCTN2, TCTN3, TMEM138, TMEM216, TMEM237, TMEM67, TTC21B*

**Zellweger-Syndrom [GP035] (~18 kb)**

*1. PEX1, 2. PEX6, 3. ABCD3, PEX10, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX26, PEX3, PEX5*