

**inv(2)(p25.3p21)**

- inversion on Chr2: 0(p25.3) - 41697819(p21)
- all genes near breakpoints: ['CHL1-AS2', 'ULK4', 'LINC01986', 'CHL1']
- genes near breakpoints documented in DDG2P: None

**dup(9)(p11.2)**

- tandem duplication on Chr9: 40602586(p11.2) - 41201918(p11.2)
- all genes near breakpoints: ['LOC105379443', 'MIR4477A', 'PGM5P2', 'LOC102724238', 'FGF7P3', 'MIR4477B', 'LOC440896', 'LOC554249', 'LOC101929583', 'GLIDR', 'CBWD6', 'FRG1HP', 'LOC107984035', 'FOXD4L6', 'LOC102724580', 'CBWD3', 'AQP7P3', 'CBWD5']
- genes near breakpoints documented in DDG2P: None
- all genes with +1 CN: ['MIR1299', 'FRG1HP', 'PGM5P2', 'LOC440896', 'FOXD4L6', 'CBWD3', 'CBWD6', 'CBWD5']
- genes with +1 CN documented in DDG2P: None

**dup(9)(q21.11)**

- tandem duplication on Chr9: 66738214(q21.11) - 67475278(q21.11)
- all genes near breakpoints: ['LOC103908605', 'CNTNAP3P2', 'LOC101927827', 'ZNF658']
- genes near breakpoints documented in DDG2P: None
- all genes with +1 CN: ['ZNF658', 'FAM74A3', 'SPATA31A3', 'LOC105379450', 'CNTNAP3P2']
- genes with +1 CN documented in DDG2P: None

**del(3)(q29p22.1)**

- deletion on Chr3: 198230597(q29) - 41697819(p22.1)
- all genes near breakpoints: ['FAM157A', 'ULK4', 'LMLN-AS1', 'LINC01986', 'CHL1-AS2', 'LMLN', 'ANKRD18DP', 'CHL1']
- genes near breakpoints documented in DDG2P: None
- all genes with -1 CN: []
- genes with -1 CN documented in DDG2P: None