

**dup(3)(q25.2)**

- tandem duplication on Chr3: 154541447(q25.2) - 155244824(q25.2)
- all genes near breakpoints: ['CHL1-AS2', 'CHL1', 'GPR149', 'LINC01487', 'LINC01986', 'STRIT1', 'MME']
- genes near breakpoints documented in DDG2P: None
- all genes with +1 CN: ['MME', 'LINC01487']
- genes with +1 CN documented in DDG2P: None

**dup(15)(q11.2)**

- tandem duplication on Chr15: 22279659(q11.2) - 23108140(q11.2)
- all genes near breakpoints: ['MIR4509-1', 'HERC2P9', 'OR4M2', 'OR4N3P', 'CYFIP1', 'GOLGA6L1', 'GOLGA6L6', 'CHEK2P2', 'LOC102723623', 'LOC102724760', 'HERC2P3', 'MIR1268A', 'OR4N4', 'MIR4509-2', 'IGHV1OR15-1', 'LOC101927079', 'LOC102723534', 'GOLGA8CP', 'TUBGCP5', 'GOLGA8DP', 'REREP3', 'GOLGA8EP', 'GOLGA6L22', 'IGHV1OR15-3', 'MIR4509-3', 'HERC2P7', 'LOC642131']
- genes near breakpoints documented in DDG2P: None
- all genes with +1 CN: ['REREP3', 'GOLGA8EP', 'HERC2P7', 'HERC2P2', 'HERC2', 'GOLGA8J', 'GOLGA8IP', 'WHAMMP3', 'LOC283683', 'GOLGA6L7', 'NIPA1', 'NIPA2', 'CYFIP1', 'TUBGCP5']
- genes with +1 CN documented in DDG2P:  
HERC2(605837): HERC2-related neurodevelopmental disorder(615516)