**Supplementary Table S6. Significant pathways for genes with deleterious variants and those genes mutated in the pathway in ASD subjects.**

|  |  |
| --- | --- |
| **Term** | **Genes** |
| Olfactory Transduction | OR7A17, OR51D1, OR8S1, OR4L1, CNGB1, OR52D1, OR4C3, OR4D2, OR52L1, OR8K5,  OR6C1, OR7C2, OR51L1, OR14C36, OR5R1, OR5M1, OR4M2, OR4D9, OR5M9, OR1D2,  OR4D6, OR1D5, OR6M1, OR8J3, OR13F1, OR2D3, OR8B4, OR51B2, OR2T1, OR2T3,  OR52N2, OR56B4, OR52N4, OR56B1, OR51B5, OR2T6, OR51B6, OR2C3, OR2C1, OR1I1,  OR13H1, OR4B1, OR11H1, OR6B1, OR6B2, OR51S1, OR51I2, OR11H6, OR52W1, OR8D1,  OR51A4, OR6K6, OR8D4, OR4C46, OR10A5, OR10A4, OR52H1, OR1A2, OR10A2, OR4K17,  OR1N2, OR5AU1, OR4C15, OR5AN1, OR5I1, OR2W3, OR51G1, OR10J1, OR4K15, OR4K14,  OR10X1, OR4N4, OR14I1, OR6V1, OR5H6, OR52J3, OR1L6, OR8H3, OR51F1, OR51F2,  OR5D18, OR5A1, OR5A2, OR10G4, OR9Q2, OR2G3, OR13C5, OR2G2, OR13C2, OR10R2,  OR51V1, OR52I1, OR2B11, OR52I2, OR10H1, OR9G1, OR9G4, OR10H5, OR10H3, OR10H2,  OR10Z1, OR4X1, OR4F5, OR2F2, OR3A1, OR6X1 |
| ABC Transporters | ABCA8, ABCA9, ABCB8, ABCD1, ABCC11, ABCC10, CFTR, ABCA4, ABCB5, ABCA6, ABCC3,  ABCC1, ABCA13, ABCC6 |