| Supplementary Table 5: Top upregulated and downregulated genes of autistic cases across young and older ages (2-56 years) |                              |                        |                  |                        |                              |  |  |
|---|------------------------------|------------------------|------------------|------------------------|------------------------------|--|--|
| #   | Unique id                    | P-value                | Symbol           | Cytoband               | Fold Change                  |  |  |
| 184   | ILMN 2208903                 | 0.0024303              | CD52             | 1p36.11b               | -2.410674105                 |  |  |
| 152   | ILMN 2052079                 | 0.0020735              | ZNF544           | 19q13.43c              | -2.143945694                 |  |  |
| 1773  | ILMN 1730256                 | 0.0413185              | GNG13            | 16p13.3f               | -2.082915908                 |  |  |
| 641   | ILMN 2381020                 | 0.0103796              | SLCO1A2          | 12p12.1e               | -2.048057703                 |  |  |
| 1727<br>492   | ILMN 1767393<br>ILMN 2393149 | 0.0395188<br>0.0078457 | GRIA3<br>ALOX15B | Xq25b<br>17p13.1d      | -2.023978355<br>-2.015891746 |  |  |
| 343   | ILMN 2379823                 | 0.0078437              | TNFRSF19         | 13q12.12a              | -2.013891740                 |  |  |
| 422   | ILMN 2176625                 | 0.0064175              | LOC285735        | 6q23.2c                | -1.992223017                 |  |  |
| 443   | ILMN 1757639                 | 0.0067223              | C3orf57          | 3q26.1b                | -1.955654811                 |  |  |
| 117   | ILMN 1731958                 | 0.0015902              | SYT10            | 12p11.1b               | -1.915423598                 |  |  |
| 136   | ILMN_1743187                 | 0.0019092              | C6orf120         | 6q27f                  | -1.912032862                 |  |  |
| 119   | ILMN_1663062                 | 0.001667               | CCDC67           | 11q21a                 | -1.868389293                 |  |  |
| 255   | ILMN_2415447                 | 0.0035365              | KCNQ4            | 1p34.2c                | -1.815448225                 |  |  |
| 1687<br>1455  | ILMN_1746646<br>ILMN 1781356 | 0.0381878<br>0.0302485 | CHRM5<br>TSC22D3 | 15q14a<br>Xq22.3b      | -1.766627349<br>-1.763821158 |  |  |
| 1135  | ILMN 1753005                 | 0.0302483              | RELN             | 7q22.1g                | -1.753085136                 |  |  |
| 1034  | ILMN 2118773                 | 0.0193053              | ASAH2B           | 10q11.23b              | -1.741433805                 |  |  |
| 114   | ILMN 2123557                 | 0.0015271              | FAM73A           | 1p31.1e                | -1.721109387                 |  |  |
| 958   | ILMN_2043569                 | 0.0168192              | MOSPD2           | Xp22.2                 | -1.7130517                   |  |  |
| 191   | ILMN 1765257                 | 0.0025085              | CINP             | 14q32.31c              | -1.703683781                 |  |  |
| 337   | ILMN_1651617                 | 0.0048523              | CTNNB1           | 3p22.1b                | -1.691706334                 |  |  |
| 1649  | ILMN_1786239                 | 0.0369945              | TACR1            | 2p13.1a                | -1.689192389                 |  |  |
| 710   | ILMN_1732189                 | 0.0120642              | SYCE1            | 10q26.3f               | -1.685862436                 |  |  |
| 330<br>654  | ILMN_2162603<br>ILMN 1747129 | 0.0047823<br>0.010571  | SMPX<br>CASP8AP2 | Xp22.12a<br>6q15d      | -1.684780938<br>-1.677791686 |  |  |
| 618   | ILMN 2054652                 | 0.010371               | TYRP1            | 9p23b                  | -1.675826976                 |  |  |
| 24  | ILMN 1730917                 | 0.0004379              | KMO              | 1q43e                  | -1.667494409                 |  |  |
| 105   | ILMN 1733564                 | 0.0014416              | GPLD1            | 6p22.2b                | -1.651537764                 |  |  |
| 761   | ILMN_1719309                 | 0.0129776              | LRRC39           | 1p21.2a                | -1.648665058                 |  |  |
| 110   | ILMN_1787408                 | 0.0014958              | NUDT17           | 1q21.1b                | -1.647011505                 |  |  |
| 1485  | ILMN_2049184                 | 0.0315735              | DNASE1L3         | 3p14.3a                | -1.641646708                 |  |  |
| 120   | ILMN 2296011                 | 0.0016837              | BRWD1            | 21q22.2a-q22.2b        | -1.641608276                 |  |  |
| 341   | ILMN 1738672                 | 0.0049123              | TRIM33           | 1p13.2Bp13.2a          | -1.639341873                 |  |  |
| 1618<br>62  | ILMN 2342835<br>ILMN 1678435 | 0.0360879<br>0.0009251 | P2RY14<br>SRD5A3 | 3q25.1Bq25.1c<br>4q12d | -1.636370025<br>-1.632757655 |  |  |
| 118   | ILMN 1653728                 | 0.0016093              | ERBB4            | 2q34c-q34e             | -1.630507485                 |  |  |
| 590   | ILMN 2189815                 | 0.0010073              | SLC22A10         | 11q12.3b               | -1.628676424                 |  |  |
| 737   | ILMN 1713161                 | 0.0124575              | USP16            | 21q21.3c               | -1.628597753                 |  |  |
| 1072  | ILMN 1752457                 | 0.0200432              | DDX4             | 5q11.2e                | -1.626834268                 |  |  |
| 87  | ILMN 2262543                 | 0.0012252              | C20orf7          | 20p12.1d               | -1.624474811                 |  |  |
| 104   | ILMN 2388716                 | 0.0014371              | KCNC4            | 1p13.3a                | -1.621522673                 |  |  |
| 1036  | ILMN 2405756                 | 0.0193171              | VAMP1            | 12p13.31d              | -1.621206674                 |  |  |
| 1574  | ILMN 2258409                 | 0.0344905              | P2RY14           | 3q25.1Bq25.1c          | -1.617849604                 |  |  |
| 553<br>1140   | ILMN 2082109<br>ILMN 1773485 | 0.0089075<br>0.0216142 | ZNF214<br>OKI    | 11p15.4b<br>6q26c      | -1.61759371<br>-1.617285558  |  |  |
| 434   | ILMN 1675053                 | 0.0065985              | DMN              | 15q26.3b               | -1.616979002                 |  |  |
| 1862  | ILMN 1665714                 | 0.0444812              | C4orf22          | 4q21.21c               | -1.609701068                 |  |  |
| 1546  | ILMN 1783131                 | 0.0335151              | SAMD13           | 1p31.1a                | -1.607617581                 |  |  |
| 1223  | ILMN 1679837                 | 0.0236763              | SGPP1            | 14q23.2b               | -1.59889703                  |  |  |
| 1577  | ILMN 1670193                 | 0.0345835              | ACY3             | 11q13.2a               | -1.598672992                 |  |  |
| 66  | ILMN 2293012                 | 0.0009626              | ADAM32           | 8p11.23Bp11.23a        | -1.590280446                 |  |  |
| 1081  | ILMN 2225104                 | 0.020231               | ZNF569           | 19q13.12c              | -1.586342253                 |  |  |
| 1651  | ILMN 2092232                 | 0.0370329              | TSR1             | 17p13.3c               | -1.584913022                 |  |  |
| 584<br>1988   | ILMN_2382974<br>ILMN 1659753 | 0.0093547<br>0.0490985 | CCDC7<br>LAMP2   | 10p11.22b<br>Xq24d     | -1.583323003<br>-1.583147012 |  |  |
| 333   | ILMN 2147133                 | 0.0048134              | NBPF15           | 1q21.1d                | -1.580338152                 |  |  |
| 79  | ILMN 2282366                 | 0.0048134              | IQSEC3           | 12p13.33d              | -1.579910353                 |  |  |
| 1809  | ILMN 2071737                 | 0.0427711              | EIF5A2           | 3q26.2c                | -1.579101323                 |  |  |
| 1644  | ILMN_2237474                 | 0.0368357              | TBC1D8B          | Xq22.3b                | -1.578991182                 |  |  |
| 1715  | ILMN_2366205                 | 0.0391057              | CACNB1           | 17q12c                 | -1.574539839                 |  |  |
| 149   | ILMN_1753567                 | 0.0020553              | ZNF451           | 6p12.1a                | -1.572884474                 |  |  |
| 1972  | ILMN_2166582                 | 0.0485356              | CAMK4            | 5q22.1b                | -1.572301997                 |  |  |
| 1147  | ILMN_2305599                 | 0.0217509              | LDB3             | 10q23.2a               | -1.569753875                 |  |  |
| 1623  | ILMN_1658805                 | 0.0362422              | BRE              | 2p23.2b                | -1.569300373                 |  |  |
| 1000  | ILMN_1790230                 | 0.0180802              | ZNF181           | 19q13.11c              | -1.568361777                 |  |  |

| 25   |  |   |   |  |   |
|--|--|---|---|--|---|
|  | ILMN 1692271   | 0.0004431   | CCM2  | 7p13c  | -1.563241268  |
| 1453   | ILMN 2265082   | 0.0301822   | FUSIP1  | 1p36.11d   | -1.562064858  |
| 4  | ILMN 2341711   | 0.0000862   | ISCA1L  | 5q12.1d  | -1.559656876  |
| 1265   | ILMN_1753663   | 0.0246874   | ARL4A   | 7p21.3a  | -1.559389506  |
| 1525   | ILMN_1785010   | 0.0326705   | TPTE2   | 13q12.11a  | -1.553372491  |
| 662  | ILMN 1806366   | 0.0108019   | ENOX2   | Xq25h-q26.1a   | -1.550674744  |
| 535  | ILMN 1697168   | 0.0087047   | PRPF4B  | 6p25.2a  | -1.55051529   |
| 1021   | ILMN 1708959   | 0.0189585   | MFN1  | 3q26.32c   | -1.548304332  |
| 670  | ILMN 2253272   | 0.010993  | Clorf9  | 1q24.3d  | -1.548027528  |
| 16   | ILMN 1723398   | 0.000354  | CSNK1G1   | 15q22.31a  | -1.547782686  |
| 1003   | ILMN 2205896   | 0.0181499   | MEIS3P1   | - 1  | -1.545899885  |
| 1905   | ILMN 1724915   | 0.0458729   | C6orf191  | 6q22.33e   | -1.544661349  |
| 90   | ILMN 1699798   | 0.001259  | HRAS  | 11p15.5d   | -1.54465518   |
| 1184   | ILMN 1784099   | 0.0227746   | VPS13A  | 9q21.13c   | -1.54437913   |
| 37   | ILMN 2328952   | 0.0005605   | CLCC1   | 1p13.3c-p13.3b   | -1.542775885  |
| 70   | ILMN 1717541   | 0.0010297   | CNTNAP3   | 9p13.1Bp13.1a  | -1.540142854  |
| 1284   | ILMN 2397294   | 0.0252059   | PLCB4   | 20p12.2b   | -1.539821305  |
| 985  | ILMN 1738572   | 0.0175794   | USP48   | 1p36.12b   | -1.539648149  |
| 1837   | ILMN 1770857   | 0.0173794   | SYT2  | 1q32.1d  | -1.538811603  |
|  |  |   |   |  |   |
| 815  | ILMN_2061641   | 0.0138677   | SGOL2   | 2q33.1e  | -1.538810974  |
| 1010   | ILMN_1664560   | 0.0183222   | DYRK1A<br>CCDC24  | 21q22.13b  | -1.538056832<br>-1.53722867   |
| 1293   | ILMN_1803490   | 0.0256417   | CCDC34  | 11p14.1d   |   |
| 1368   | ILMN_1813341   | 0.0274475   | PTGFR   | 1p31.1e  | -1.536839634  |
| 1241   | ILMN_1787988   | 0.024201  | UBE2D1  | 10q21.1e   | -1.536341237  |
| 1920   | ILMN 2193761   | 0.0464745   | LOC442245   |  | -1.53565212   |
| 929  | ILMN 2225151   | 0.0160995   | DLX6  | 7q21.3c  | -1.535440803  |
| 68   | ILMN 1657818   | 0.0009699   | IQCB1   | 3q13.33c   | -1.535400975  |
| 975  | ILMN 2386040   | 0.0173869   | MYO19   | 17q12b   | -1.533441485  |
| 837  | ILMN 1741143   | 0.0142681   | TXK   | 4p12a  | -1.530777572  |
| 157  | ILMN 1731729   | 0.0021466   | OCLN  | 5q13.2a  | -1.530025071  |
| 461  | ILMN 1803217   | 0.0073125   | KIAA0514  | 10q11.22a  | -1.529675424  |
| 781  | ILMN 1747577   | 0.0133895   | ALAD  | 9q32c  | -1.529076318  |
| 103  | ILMN 1798952   | 0.001412  | KDELR3  | 22q13.1b   | -1.528886658  |
| 31   | ILMN 1769245   | 0.0004912   | GLIPR1  | 12q21.2a   | -1.528265649  |
| 1423   | ILMN 1783840   | 0.0294419   | FLJ42986  | 2q11.2e  | -1.527526322  |
| #  | Unique id  | P-value   | Symbol  | Cytoband   | Fold Change   |
| 760  | ILMN 1753166   | 0.0129621   | PREI3   | 2q33.1b  | 3.163095105   |
| 253  | ILMN 1715169   | 0.0034973   | HLA-DRB1  | 6p21.32b   | 3.072859818   |
|  | ILIVIIN 1/13109  |   |   | op=1.5=0   | 3.072037010   |
| 403  | ILMN 1788874   | 0.0060707   | SERPINA3  | 14q32.13b  | 2.941806537   |
| 403<br>487   |  |   |   |  |   |
|  | ILMN 1788874   | 0.0060707   | SERPINA3  | 14q32.13b  | 2.941806537   |
| 487  | ILMN 1788874<br>ILMN 2206126   | 0.0060707<br>0.0077479  | SERPINA3<br>RAET1L  | 14q32.13b<br>6q25.1b   | 2.941806537<br>2.633618398  |
| 487<br>972   | ILMN 1788874<br>ILMN 2206126<br>ILMN 2074477   | 0.0060707<br>0.0077479<br>0.0173429   | SERPINA3<br>RAET1L<br>GPR4<br>SFN   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a  | 2.941806537<br>2.633618398<br>2.553466997   |
| 487<br>972<br>36   | ILMN 1788874<br>ILMN 2206126<br>ILMN 2074477<br>ILMN 1806607   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355   | SERPINA3<br>RAET1L<br>GPR4  | 14q32.13b<br>6q25.1b<br>19q13.32a  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988   |
| 487<br>972<br>36<br>260<br>175   | ILMN 1788874<br>ILMN 2206126<br>ILMN 2074477<br>ILMN 1806607<br>ILMN 2215418<br>ILMN 1689734   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116  |
| 487<br>972<br>36<br>260<br>175<br>53   | ILMN 1788874<br>ILMN 2206126<br>ILMN 2074477<br>ILMN 1806607<br>ILMN 2215418<br>ILMN 1689734<br>ILMN 1737096   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787  | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554   | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682  |
| 487<br>972<br>36<br>260<br>175<br>53   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787  | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126   | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0003509   | SERPINA3 RAETIL GPR4 SFN SERPINA6 ILIRN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 ILIRL1 MC3R   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0003509<br>0.0210929  | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895<br>2.171008349   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1768120   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017854<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0003509<br>0.0210929<br>0.0010429   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895<br>2.171008349<br>2.162513314  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1768120 ILMN 1693976  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.00210929<br>0.0010429<br>0.0189992   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a  | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895<br>2.171008349<br>2.162513314<br>2.160325955   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2086143 ILMN 1667754 ILMN 1667754 ILMN 1791759 ILMN 1768120 ILMN 1693976 ILMN 1781745   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0003509<br>0.0210929<br>0.0189992<br>0.0189992<br>0.0253758   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895<br>2.171008349<br>2.162513314<br>2.160325955<br>2.153004856  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1768120 ILMN 1693976 ILMN 1781745 ILMN 1781745 ILMN 1722850   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0003509<br>0.0210929<br>0.0189992<br>0.0253758<br>0.0018112   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1768120 ILMN 1768120 ILMN 1781745 ILMN 1781745 ILMN 1781745 ILMN 1782850 ILMN 1722850 ILMN 2071028   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0010429<br>0.0010429<br>0.0189992<br>0.0253758<br>0.0018112<br>0.0028571  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24  | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a<br>3p25.3c-p25.3b  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.139502961   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1755674 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1791759 ILMN 1791759 ILMN 178120 ILMN 1693976 ILMN 1781745 ILMN 1722850 ILMN 2071028 ILMN 2071028 ILMN 2071028  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.0010429<br>0.0010429<br>0.0189992<br>0.0253758<br>0.0018112<br>0.0028571<br>0.0131291   | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a<br>3p25.3c-p25.3b<br>6p24.3a                                   | 2.941806537<br>2.633618398<br>2.553466997<br>2.437586931<br>2.435505988<br>2.362526116<br>2.361541173<br>2.324730682<br>2.311026679<br>2.219710147<br>2.210575573<br>2.208332245<br>2.188175227<br>2.186412895<br>2.171008349<br>2.162513314<br>2.160325955<br>2.153004856<br>2.146396291<br>2.139502961<br>2.133200071                       |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1755674 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1781759 ILMN 1781750 ILMN 1781745 ILMN 1781745 ILMN 1781745 ILMN 1722850 ILMN 2071028 ILMN 2071028 ILMN 2070375   | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.001929<br>0.010929<br>0.0189992<br>0.0253758<br>0.0018112<br>0.0028571<br>0.0131291<br>0.0226226  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82   | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a<br>3p25.3c-p25.3b<br>6p24.3a<br>Xp11.4a                        | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.139502961 2.133200071 2.12887513  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376  | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1755674 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 1791759 ILMN 1781745 ILMN 1791759 ILMN 1781745 ILMN 1791759 ILMN 1781745 ILMN 1791759 ILMN 1781745 ILMN 1781745 ILMN 1722850 ILMN 2071028 ILMN 2071028 ILMN 20710375 ILMN 2070375 ILMN 1697069  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.003509<br>0.0210929<br>0.0189992<br>0.0253758<br>0.0018112<br>0.0028571<br>0.00286226<br>0.0278279  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3  | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.16253314 2.160325955 2.153004856 2.146396291 2.139502961 2.133200071 2.12887513 2.119800211   |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459                                   | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.003509<br>0.0210929<br>0.018992<br>0.0253758<br>0.0018112<br>0.0028571<br>0.0131291<br>0.0226226<br>0.0278279<br>0.00772459   | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2                                    | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a<br>3p25.3c-p25.3b<br>6p24.3a<br>Xp11.4a                        | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.139502961 2.133200071 2.12887513 2.119800211 2.116896693  |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881                            | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2309615 ILMN 1771840 ILMN 1771841 ILMN 286143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 2070375 ILMN 2070375 ILMN 1697069 ILMN 2194619 ILMN 1716512  | 0.0060707<br>0.0077479<br>0.0173429<br>0.0005519<br>0.0036355<br>0.0023758<br>0.000787<br>0.0017554<br>0.0028003<br>0.0001947<br>0.0007337<br>0.0031126<br>0.0048925<br>0.003509<br>0.0210929<br>0.0189992<br>0.0253758<br>0.00189992<br>0.0253758<br>0.00189992<br>0.0252526<br>0.0028571<br>0.0131291<br>0.0226226<br>0.0278279<br>0.0072459<br>0.0173429 | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870                           | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a 8p23.1b  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.139502961 2.133200071 2.12887513 2.119800211 2.116896693 2.106414899                                    |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881<br>35                      | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 178120 ILMN 1781745 ILMN 1791759 ILMN 1791759 ILMN 1693976 ILMN 1781745 ILMN 1791759 ILMN 1693976 ILMN 1781745 ILMN 1791759   | 0.0060707 0.0077479 0.0173429 0.0075519 0.0036355 0.0023758 0.000787 0.0017554 0.0028003 0.0001947 0.0007337 0.0031126 0.0048925 0.0003509 0.0210929 0.0010429 0.0189992 0.0253758 0.0018112 0.0028571 0.0131291 0.0028571 0.0131291 0.0226226 0.0278279 0.0072459 0.0152096 0.0005274  | SERPINA3 RAET1L GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870 STC1                      | 14q32.13b<br>6q25.1b<br>19q13.32a<br>1p36.11a<br>14q32.13a<br>2q13d<br>13q32.1b<br>4q31.3a<br>14q11.2b<br>19q13.31a<br>11q13.1d<br>3p22.3c<br>2q12.1a<br>20q13.2d<br>4q21.1a<br>3p24.3c<br>17q21.2a<br>9q31.3a<br>6q22.2a<br>3p25.3c-p25.3b<br>6p24.3a<br>Xp11.4a<br>17q21.1a<br>8p23.1b | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.139502961 2.133200071 2.12887513 2.119800211 2.116896693 2.106414899 2.10637289                         |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881<br>35<br>904               | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 23096143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1768120 ILMN 1781745 ILMN 1791759 ILMN 1791759 ILMN 1693976 ILMN 172850 ILMN 172850 ILMN 1791759  | 0.0060707 0.0077479 0.0173429 0.0075519 0.0036355 0.0023758 0.000787 0.0017554 0.0028030 0.0001947 0.0007337 0.0031126 0.0048925 0.0003509 0.0210929 0.0010429 0.0189992 0.0253758 0.0018112 0.0028571 0.0131291 0.0026526 0.0278279 0.0072459 0.00152096 0.0005274 0.0156016   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870 STC1 SLC11A1              | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a 8p23.1b  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.133200071 2.12887513 2.119800211 2.116896693 2.106414899 2.10637289 2.101896093                         |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881<br>35<br>904<br>404        | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2309615 ILMN 1771841 ILMN 21313672 ILMN 1667754 ILMN 1791759 ILMN 1768120 ILMN 1791759 ILMN 1708120 ILMN 1791759 ILMN 1693976 ILMN 1781745 ILMN 1791759 ILMN 1791759 ILMN 1781745 ILMN 1791759 ILMN 2070375 ILMN 2070375 ILMN 1697069 ILMN 2194619 ILMN 1716512 ILMN 1758164 ILMN 1735737 ILMN 1653073   | 0.0060707 0.0077479 0.0173429 0.0075519 0.0036355 0.0023758 0.000787 0.0017554 0.002803 0.0001947 0.0007337 0.0031126 0.0048925 0.003509 0.0210929 0.0010429 0.0189992 0.0253758 0.0018112 0.0028571 0.0131291 0.0226226 0.0278279 0.0072459 0.0072459 0.00152096 0.0005274 0.0156016 0.0060769   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870 STC1 SLC11A1 OR10Q1       | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a 8p23.1b  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.13920071 2.12887513 2.119800211 2.116896693 2.106414899 2.10637289 2.101896093 2.095635241              |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881<br>35<br>904<br>404<br>496 | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1737096 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2086143 ILMN 2313672 ILMN 1667754 ILMN 1791759 ILMN 1791759 ILMN 178120 ILMN 178145 ILMN 1791759 | 0.0060707 0.0077479 0.0173429 0.0005519 0.0036355 0.0023758 0.00028003 0.00017554 0.0028003 0.0001947 0.0007337 0.0031126 0.0048925 0.0003509 0.0210929 0.0010429 0.0189992 0.0253758 0.0018112 0.0028571 0.0131291 0.0226226 0.0278279 0.0072459 0.0152096 0.0005274 0.0156016 0.0060769 0.0079355   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870 STC1 SLC11A1 OR10Q1 OR1M1 | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a 8p23.1b  8p21.2d 2q35e 11q12.1b 19p13.2d                                     | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.133200071 2.12887513 2.119800211 2.116896693 2.106414899 2.10637289 2.101896093 2.095635241 2.095066016 |
| 487<br>972<br>36<br>260<br>175<br>53<br>126<br>209<br>10<br>49<br>225<br>339<br>15<br>1116<br>72<br>1024<br>1289<br>131<br>214<br>767<br>1175<br>1376<br>459<br>881<br>35<br>904<br>404        | ILMN 1788874 ILMN 2206126 ILMN 2074477 ILMN 1806607 ILMN 2215418 ILMN 1689734 ILMN 1737096 ILMN 1789162 ILMN 1755674 ILMN 2309615 ILMN 1771841 ILMN 2309615 ILMN 1771841 ILMN 21313672 ILMN 1667754 ILMN 1791759 ILMN 1768120 ILMN 1791759 ILMN 1708120 ILMN 1791759 ILMN 1693976 ILMN 1781745 ILMN 1791759 ILMN 1791759 ILMN 1781745 ILMN 1791759 ILMN 2070375 ILMN 2070375 ILMN 1697069 ILMN 2194619 ILMN 1716512 ILMN 1758164 ILMN 1735737 ILMN 1653073   | 0.0060707 0.0077479 0.0173429 0.0075519 0.0036355 0.0023758 0.000787 0.0017554 0.002803 0.0001947 0.0007337 0.0031126 0.0048925 0.003509 0.0210929 0.0010429 0.0189992 0.0253758 0.0018112 0.0028571 0.0131291 0.0226226 0.0278279 0.0072459 0.0072459 0.00152096 0.0005274 0.0156016 0.0060769   | SERPINA3 RAETIL GPR4 SFN SERPINA6 IL1RN CLDN10 MAB21L2 FAM12A PSG6 FOSL1 CCR4 IL1RL1 MC3R CXCL10 C3orf48 KRTAP9-3 C9orf152 VGLL2 C3orf24 TFAP2A GPR82 CSF3 AMAC1L2 MGC70870 STC1 SLC11A1 OR10Q1       | 14q32.13b 6q25.1b 19q13.32a 1p36.11a 14q32.13a 2q13d 13q32.1b 4q31.3a 14q11.2b 19q13.31a 11q13.1d 3p22.3c 2q12.1a 20q13.2d 4q21.1a 3p24.3c 17q21.2a 9q31.3a 6q22.2a 3p25.3c-p25.3b 6p24.3a Xp11.4a 17q21.1a 8p23.1b  | 2.941806537 2.633618398 2.553466997 2.437586931 2.435505988 2.362526116 2.361541173 2.324730682 2.311026679 2.219710147 2.210575573 2.208332245 2.188175227 2.186412895 2.171008349 2.162513314 2.160325955 2.153004856 2.146396291 2.13920071 2.12887513 2.119800211 2.116896693 2.106414899 2.10637289 2.101896093 2.095635241              |

| 359  | ILMN 1784884  | 0.0052713 | LILRB3    | 19q13.42a             | 2.076099817 |
|------|---------------|-----------|-----------|-----------------------|-------------|
| 182  | ILMN 1772179  | 0.0024228 | OR2G2     | 1q44e                 | 2.073002692 |
| 124  | ILMN 1813776  | 0.001746  | OR4D6     | 11q12.1d              | 2.067387091 |
| 6    | ILMN_1693487  | 0.0001593 | OR2W1     | 6p22.1a               | 2.066688293 |
| 107  | ILMN_1695658  | 0.0014547 | KIF20A    | 5q31.2c               | 2.062731605 |
| 366  | ILMN_1731529  | 0.0053882 | MS4A12    | 11q12.2a              | 2.050919002 |
| 593  | ILMN 1787509  | 0.0095384 | PRIC285   | 20q13.33e             | 2.048410321 |
| 424  | ILMN 2361810  | 0.0064279 | DRD3      | 3q13.31a              | 2.044891521 |
| 73   | ILMN 1751028  | 0.0010487 | SERPINH1  | 11q13.5a              | 2.044843707 |
| 116  | ILMN 1774219  | 0.0015884 | C2orf51   | 2p11.2c               | 2.035096123 |
| 248  | ILMN 1764402  | 0.0033944 | FAM12B    | 14q11.2b              | 2.033908337 |
| 647  | ILMN 1669119  | 0.0104821 | LOC728946 |                       | 2.025835019 |
| 938  | ILMN 1691264  | 0.0163231 | NAT8B     | 2p13.2a               | 2.025108439 |
| 338  | ILMN 1721916  | 0.0048807 | LOC389151 | 3q22.3c               | 2.023243277 |
| 69   | ILMN 2145490  | 0.0010248 | LOC283677 | 15q24.1a              | 2.022440581 |
| 347  | ILMN 1777917  | 0.00501   | DSCR10    | 21q22.13b             | 2.016119774 |
| 1545 | ILMN 1681576  | 0.0334144 | IQCF2     | 3p21.1e               | 2.005690025 |
| 517  | ILMN 1741165  | 0.008413  | SLC11A1   | 2q35e                 | 1.996124475 |
| 291  | ILMN 1813206  | 0.0041172 | CP        | 3q24f-q25.1a          | 1.99041984  |
| 471  | ILMN 1815480  | 0.0074524 | NAT8      | 2p13.2a               | 1.989906773 |
| 159  | ILMN 1714841  | 0.0021933 | OR4D9     | 11q12.1d              | 1.982635097 |
| 58   | ILMN 1694166  | 0.0008844 | HIST1H2A  | 6p22.2a               | 1.977219677 |
| 267  | ILMN 1655565  | 0.0037057 | UGT3A2    | 5p13.2c               | 1.975246829 |
| 860  | ILMN 2092118  | 0.0147335 | FPR1      | 19q13.33e             | 1.975030425 |
| 17   | ILMN 1714446  | 0.0003614 | PLG       | 6q26a                 | 1.973673776 |
| 410  | ILMN 1780368  | 0.0062054 | GPR18     | 13q32.3a              | 1.968653067 |
| 208  | ILMN 2123719  | 0.0027892 | LOC651503 | 6p22.1a               | 1.967328655 |
| 247  | ILMN 1774685  | 0.0033591 | IL24      | 1q32.1h               | 1.964159629 |
| 165  | ILMN 1710993  | 0.0022502 | Clorf111  | 1q23.3b               | 1.952692909 |
| 3    | ILMN 1682592  | 0.0000638 | IL19      | 1q23.36<br>1q32.1h    | 1.949276851 |
| 215  | ILMN 1713927  | 0.002866  | AMTN      | 4q13.3a               | 1.948099745 |
| 543  | ILMN 2415393  | 0.002800  | FSHB      | 11p14.1a              | 1.945617075 |
| 401  | ILMN 1787212  | 0.0060387 | CDKN1A    | 6p21.31a              | 1.940516202 |
| 421  | ILMN 1808674  | 0.0064025 | CPN1      | 10q24.2c              | 1.935519723 |
| 326  | ILMN 1696284  | 0.0046968 | CLDN18    | 3q22.3b               | 1.933319723 |
| 19   | ILMN 1741430  | 0.000385  | MAGEA10   | Xq28e                 | 1.927681042 |
| 12   | ILMN 1694400  | 0.000383  | MSR1      | 8p22c                 | 1.926152655 |
| 1397 | ILMN 2322768  | 0.0002441 | CSF3      | 17q21.1a              | 1.923600388 |
| 274  | ILMN 1727459  | 0.0037901 | ORC1L     | 1p32.3d               | 1.919166103 |
| 254  | ILMN 1798000  | 0.0037901 | PSG1      | 19q13.31a             | 1.919100103 |
| 143  | ILMN 1749368  | 0.0033331 | HIST1H3H  | 6p22.1c               | 1.916871375 |
| 500  | ILMN 1783969  | 0.0019802 | FAM24A    | 10q26.13b             | 1.916612987 |
| 51   | ILMN 1775879  | 0.00076   | KRTAP19-2 | 21g22.11a             | 1.913584764 |
| 672  | ILMN 1672076  | 0.0110124 | WFDC10B   | 20q13.12b             | 1.906941589 |
| 192  | ILMN 1801584  | 0.0025158 | CXCR4     | 2q21.3b               | 1.902028509 |
| 396  | ILMN 1773848  | 0.0023138 | C15orf32  | 15q26.1d              | 1.90004053  |
| 50   | ILMN 2256050  | 0.0039303 | SERPINA1  | 14q32.13a             | 1.899160712 |
| 173  | ILMN 1697466  | 0.002367  | OR5AY1    | 1q44e                 | 1.898447824 |
| 529  | ILMN 1686245  | 0.0085856 | OR6Q1     | 11q12.1b              | 1.895309148 |
| 1275 | ILMN 1711111  | 0.0083830 | SLC9A10   | 3q13.2a               | 1.893507324 |
| 71   | ILMN 1701376  | 0.0010374 | MGC34821  | 11q12.3b              | 1.893307324 |
| 1288 | ILMN 1813561  | 0.025332  | SCIN      | 7p21.3a               | 1.8816685   |
| 342  | ILMN 1705551  | 0.0049136 | OR56A4    | 11p15.4c              | 1.876572144 |
| 170  | ILMN 2168421  | 0.0023309 | SPATA8    | 15q26.2c              | 1.875293706 |
| 453  | ILMN 1749341  | 0.0023303 | LOC554226 | 13420.20              | 1.872041954 |
| 67   | ILMN 1793182  | 0.0009923 | SLC36A2   | 5q33.1d               | 1.869309791 |
| 1986 | ILMN 2138801  | 0.0490656 | TP73L     | 3q28b                 | 1.866656901 |
| 280  | ILMN 2357419  | 0.0039279 | LILRA5    | 19q13.42a             | 1.865735075 |
| 1317 | ILMN 2205012  | 0.0039279 | SFTPA2    | 19q13.42a<br>10q22.3f | 1.864205816 |
| 93   | ILMN 1738691  | 0.0013038 | POU4F1    | 13q31.1a              | 1.863802677 |
| 648  | ILMN 1811289  | 0.013038  | COL4A6    | Xq22.3c               | 1.863073275 |
| 64   | ILMN 1775257  | 0.0009608 | PROK2     | 3p13d                 | 1.862821045 |
| 384  | ILMN 1731928  | 0.0057217 | LY9       | 1q23.3a               | 1.861813297 |
| 320  | ILMN 1708248  | 0.0037217 | LILRB1    | 19q13.42a             | 1.85726951  |
| 1615 | ILMN 1663793  | 0.0360043 | MIST      | 4p16.1a               | 1.856856476 |
| 649  | ILMN 1652137  | 0.0105149 | PPYR1     | 10g11.22a             | 1.854606176 |
| 491  | ILMN 1656802  | 0.0078408 | LOXL2     | 8p21.3a               | 1.853159173 |
| 17.1 | 12111_1000002 | 0.00/0400 |           | υρ <b>21.</b> σα      | 1.00010/1/0 |