| HCAECs | I 3R4F 0.06 | I 3R4F 0.225 | I THS2.2 0.06 | I THS2.2 0.225 | I THS2.2 1.125 | D 3R4F 0.06 | D 3R4F 0.225 | D THS2.2 0.06 | D THS2.2 0.225 | D THS2.2 1.125 | FD 3R4F 0.06 | FD 3R4F 0.225 | FD THS2.2 0.06 | FD THS2.2 0.225 | FD THS2.2 2.25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASPHD1 | 0.07 | 0.02 | 0 | 0 | **0.01** | 0.23 | 0.09 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KCNC4 | -1.29 | -0.99 | -0.05 | -0.16 | **-1.45** | -0.34 | -0.87 | -0.14 | -0.3 | -1.09 | -0.68 | 0 | -0.22 | -0.56 | -0.34 |
| NDST1 | 0.32 | 0.51 | 0.65 | 0.63 | **0.42** | 0.01 | -0.21 | -0.63 | -0.43 | 0.38 | -0.11 | -0.4 | -0.41 | -0.08 | 0 |
| VEZF1 | 0.24 | 0.13 | 0.05 | 0.17 | 0.26 | -0.21 | -0.2 | -0.07 | -0.11 | 0.04 | -0.05 | 0 | -0.07 | 0.01 | **-0.26** |
| C16orf46 | 1.47 | 0.98 | 0.2 | 0.35 | **0.84** | -0.07 | 0.47 | -0.11 | -0.09 | 0.43 | 0.14 | 0.01 | 0.77 | 0.59 | -0.58 |
| TLE3 | 0.14 | -0.16 | -0.11 | 0.01 | 0.22 | -0.22 | 0.21 | 0.07 | 0 | 0.37 | 0.37 | 0.01 | 0.02 | -0.13 | **0.51** |
| BRE-AS1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.08 | 0 | 0 | 0 | 0.22 | 0.05 | 0 | 0 | **2.42** |
| KLHL17 | -0.11 | -0.03 | -0.19 | -0.19 | 0.16 | 0.47 | -0.15 | 0.22 | 0.24 | 0.15 | 0.13 | 0.01 | 0 | 0.03 | **-0.46** |
| EFNA5 | -0.07 | -0.31 | 0.06 | 0.01 | **-0.62** | -0.48 | -0.19 | -0.37 | -0.39 | -0.36 | -0.46 | -0.45 | -0.24 | -0.62 | 0.01 |
| UBE2N | 0.13 | -0.04 | -0.04 | -0.06 | 0.11 | 0.29 | 0.46 | 0.34 | 0.41 | 0.19 | -0.03 | -0.01 | -0.1 | -0.06 | **0.45** |
| ZNF280D | -0.35 | -0.41 | -0.12 | 0.09 | **-1.15** | -0.33 | -0.52 | 0.27 | -0.09 | 0.01 | -0.82 | -0.03 | -0.1 | 0.03 | -1.07 |
| MYO1D | 0.2 | 0.53 | **0.45** | -0.08 | 0.2 | 0.29 | 0.37 | 0.14 | 0.22 | 0.22 | 0.22 | -0.01 | -0.02 | 0.21 | -0.3 |
| RNF103 | 0.18 | 0.27 | 0.08 | 0.01 | 0.29 | 0.09 | 0.23 | 0.15 | -0.01 | 0.26 | 0.47 | 0.01 | 0.15 | 0.28 | **0.29** |
| GIMAP6 | -0.12 | -0.59 | 0.08 | -0.05 | -1.01 | -0.18 | -0.73 | -0.25 | -0.31 | **-0.64** | -0.83 | 0.28 | -0.14 | -0.3 | 0.01 |
| LGR4 | -0.47 | -0.28 | 0.11 | 0.15 | **-0.81** | 0.21 | -0.16 | 0.14 | 0.02 | -0.47 | -0.38 | 0.01 | -0.04 | 0.02 | -0.25 |
| FAM214B | -0.1 | 0.01 | -0.03 | -0.07 | **0.11** | 0.22 | 0.37 | 0.21 | 0.22 | 0.28 | 0.45 | 0.01 | 0.01 | -0.01 | 0.24 |
| CXCL3 | 3.29 | 0.61 | 0.07 | -0.2 | **1.85** | -0.84 | -1.1 | 0.19 | -0.14 | -1.21 | -1.83 | -0.02 | -0.73 | -0.95 | 0.43 |
| ZBTB20 | -0.04 | -0.1 | -0.15 | -0.04 | 0.72 | 1.37 | -0.04 | 0.19 | 2.19 | 0.03 | -0.04 | -0.08 | 0.09 | -0.12 | **-1.63** |
| CMBL | -0.45 | -0.45 | -0.1 | 0.05 | **-0.81** | -0.35 | -1.01 | -0.35 | -0.49 | -0.54 | -0.94 | 0.01 | -0.3 | -0.53 | 0.2 |
| UCP3 | -0.02 | 0.03 | -0.02 | -0.02 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0.02 | 0 | 0 | **0.36** |
| NFATC3 | -0.61 | -0.64 | -0.21 | -0.35 | **-0.99** | -0.05 | -0.32 | -0.14 | -0.1 | -0.2 | -0.8 | -0.02 | 0.11 | -0.37 | 0.33 |
| RPGRIP1L | -0.19 | -0.65 | 0.53 | 0.27 | **-1.23** | 0.06 | -0.13 | 0.17 | -0.09 | -0.92 | -0.86 | 0.03 | 0.06 | -0.06 | 0.45 |
| C10orf10 | -0.05 | -0.05 | 0.08 | -0.12 | -0.39 | 0.09 | -0.06 | 0.1 | 0.02 | -0.21 | -0.14 | -0.12 | -0.16 | -0.09 | **-1.7** |
| C4orf52 | 0.2 | 0.3 | 0.08 | 0.4 | **0.52** | 0.53 | 0.36 | 0.3 | 0.29 | 0.73 | 0.46 | 0.42 | 0.46 | 0.66 | -0.03 |
| ID1 | -0.76 | -0.43 | -0.08 | 0.08 | -0.87 | 0.77 | 0.4 | 0.3 | 0.4 | 1.2 | 0.74 | -0.12 | 0.22 | 0.72 | **-1.6** |
| CD274 | 0.23 | 0.25 | 0.04 | 0.13 | **0.37** | 0.05 | 0.29 | 0.01 | 0.1 | 0.3 | 0.15 | 0.02 | 0.15 | 0.13 | 0.25 |
| CSMD2 | -0.43 | -0.18 | -0.36 | -0.46 | 0.75 | 0.18 | 0.59 | 0.17 | -0.01 | 0.54 | -0.94 | -0.25 | -0.92 | -0.79 | **2.93** |
| GPRASP2 | -0.97 | -0.78 | -0.43 | -0.38 | **-0.84** | -0.13 | -0.21 | -0.08 | -0.2 | 0.08 | 0.31 | 0.23 | 0.26 | 0.31 | -0.02 |
| PGBD3 | -0.32 | -0.19 | 0.16 | 0.2 | **-0.52** | 0.3 | 0.14 | 0.17 | 0.13 | -0.18 | -0.19 | 0.11 | 0.04 | 0.12 | -0.01 |
| NEIL2 | 0.32 | -0.18 | 0.08 | 0.04 | -0.06 | 0.11 | -0.04 | 0.12 | 0.08 | -0.12 | -0.4 | 0.05 | -0.14 | -0.34 | **0.52** |
| NUFIP2 | 0.15 | 0.33 | 0.27 | 0.15 | 0.39 | 0.19 | 0.52 | 0.17 | 0.14 | 0.26 | 0.68 | 0.08 | -0.11 | 0.12 | **0.79** |
| C7orf60 | 0.15 | 0.22 | 0.36 | 0.16 | 0.07 | 0.1 | 0.23 | 0.06 | -0.03 | -0.01 | 0.33 | 0.1 | 0.18 | 0.13 | **0.95** |
| ZNF311 | -0.88 | -1.02 | -0.88 | -0.83 | -0.28 | -0.5 | -0.8 | -0.15 | -0.1 | 1.46 | -0.36 | 0.85 | -0.04 | **-0.13** | 0.09 |
| KLF6 | 0.14 | 0.18 | 0.04 | 0.01 | 0.31 | 0.03 | 0.18 | 0 | 0.1 | 0.18 | 0.25 | 0.04 | 0.05 | 0.17 | **0.37** |
| LARP4 | 0.19 | 0.25 | 0.24 | 0.24 | -0.07 | -0.15 | 0.23 | -0.23 | -0.15 | 0.16 | 0.77 | 0.05 | 0.36 | 0.42 | **0.44** |
| TNFSF18 | 2.42 | 3.01 | 0.04 | 0.89 | **2.81** | 1.46 | 2.14 | 0.69 | 0.6 | 1.82 | 0.45 | -0.18 | 0.59 | 1.06 | -1.5 |
| ZNF883 | -0.52 | -0.43 | -0.5 | -0.14 | **-1.5** | -0.42 | -0.15 | 0.42 | 0.16 | -0.38 | -1.01 | 0.72 | 1.08 | -0.25 | -0.09 |
| PPP1R10 | -0.24 | -0.22 | 0.34 | 0.04 | -0.25 | 0.05 | -0.24 | 0.06 | 0.22 | 0.41 | 0.04 | 0.19 | -0.22 | 0.13 | **1.51** |
| FGF14-AS2 | -0.03 | -0.03 | 0.03 | -0.01 | **-0.02** | -0.24 | -0.23 | -0.22 | -0.09 | -0.04 | -0.02 | 0.36 | -0.01 | 0.22 | 0.05 |
| EID1 | -0.09 | 0.06 | 0.15 | 0.1 | **-0.21** | 0.02 | -0.11 | 0.03 | -0.01 | -0.19 | -0.14 | -0.03 | 0.05 | 0.05 | -0.21 |
| ERCC4 | -0.17 | -0.51 | 0.2 | 0.11 | -0.61 | -0.07 | -0.1 | -0.27 | -0.15 | -0.3 | -0.25 | -0.14 | 0.43 | 0.19 | **-0.95** |
| GLI3 | -0.03 | -0.24 | -0.28 | -0.18 | **-0.17** | -0.05 | 0.14 | 0.15 | 0.09 | -0.03 | -0.19 | -0.47 | -0.14 | -0.11 | 0.07 |
| ZNF17 | -0.1 | -0.3 | -0.05 | -0.13 | 0.04 | 0.43 | -0.31 | -0.25 | 0.9 | -0.65 | 0.26 | -0.16 | 0.79 | -0.04 | **-0.99** |
| ESAM | -0.18 | -0.09 | 0.06 | -0.04 | -0.11 | 0.1 | 0.01 | 0.1 | 0.13 | 0.16 | 0.02 | 0.3 | 0.03 | 0.09 | **-0.05** |
| LOC730202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.06 | 0 | 0 | **0.01** |
| MPP5 | -0.18 | 0.24 | 0.08 | -0.11 | 0.89 | -0.09 | 0.2 | 0.15 | 0.26 | 0.02 | 0.95 | 0.2 | 0.28 | 0.35 | **1.2** |
| SPRY2 | 0.37 | 0.38 | 0.28 | 0.27 | 0.46 | 0.25 | 0.22 | 0.24 | 0.28 | 0.11 | 0.07 | 0.07 | 0.12 | -0.01 | **0.42** |
| CACNG6 | -0.03 | -0.01 | 0 | -0.02 | 0.02 | -0.04 | -0.18 | -0.23 | 0.01 | -0.02 | -0.78 | 0.11 | -0.57 | -0.47 | **0.64** |

| I 3R4F 0.06 | I 3R4F 0.225 | I THS2.2 0.06 | I THS2.2 0.225 | I THS2.2 1.125 | D 3R4F 0.06 | D 3R4F 0.225 | D THS2.2 0.06 | D THS2.2 0.225 | D THS2.2 1.125 | FD 3R4F 0.06 | FD 3R4F 0.225 | FD THS2.2 0.06 | FD THS2.2 0.225 | FD THS2.2 2.25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 0.886 | 1.000 | 1.000 | 0.034 | 0.834 | 0.813 | 1.000 | 1.000 | 0.940 | 1.000 | 0.632 | 1.000 | 0.909 | 0.744 |
| 0.102 | 0.069 | 1.000 | 1.000 | 0.039 | 0.632 | 0.078 | 1.000 | 0.969 | 0.116 | 0.062 | 1.000 | 0.512 | 0.281 | 0.589 |
| 0.662 | 0.244 | 0.828 | 1.000 | 0.029 | 1.000 | 0.901 | 1.000 | 1.000 | 0.719 | 1.000 | 0.683 | 1.000 | 1.000 | 1.000 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.525 | 0.209 | 0.135 | 1.000 | 1.000 | 1.000 | 0.838 | 1.000 | 1.000 | 1.000 | 0.030 |
| 0.119 | 0.256 | 1.000 | 1.000 | 0.039 | 1.000 | 0.495 | 1.000 | 1.000 | 0.723 | 0.973 | 1.000 | 0.976 | 0.835 | 0.389 |
| 1.000 | 0.839 | 1.000 | 1.000 | 0.603 | 0.546 | 0.542 | 1.000 | 1.000 | 0.125 | 0.174 | 1.000 | 1.000 | 1.000 | 0.023 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.788 | 1.000 | 1.000 | 1.000 | 0.702 | 0.404 | 1.000 | 1.000 | 0.034 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.896 | 0.880 | 1.000 | 1.000 | 1.000 | 0.693 | 1.000 | 1.000 | 1.000 | 0.049 |
| 1.000 | 0.862 | 1.000 | 1.000 | 0.050 | 0.803 | 0.830 | 0.903 | 1.000 | 0.188 | 0.421 | 0.153 | 0.883 | 0.503 | 1.000 |
| 0.358 | 0.999 | 1.000 | 1.000 | 0.889 | 0.538 | 0.367 | 0.781 | 0.604 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.047 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.031 | 0.896 | 0.220 | 1.000 | 1.000 | 1.000 | 0.154 | 1.000 | 1.000 | 1.000 | 0.506 |
| 0.220 | 0.114 | 0.024 | 1.000 | 0.718 | 0.373 | 0.286 | 1.000 | 0.519 | 0.504 | 0.751 | 1.000 | 1.000 | 0.904 | 0.233 |
| 0.555 | 0.132 | 1.000 | 1.000 | 0.270 | 1.000 | 0.406 | 1.000 | 1.000 | 0.337 | 0.143 | 1.000 | 1.000 | 0.473 | 0.039 |
| 1.000 | 0.069 | 1.000 | 1.000 | 0.099 | 0.918 | 0.097 | 1.000 | 0.967 | 0.039 | 0.067 | 0.090 | 0.747 | 0.194 | 1.000 |
| 0.528 | 0.463 | 1.000 | 1.000 | 0.041 | 0.896 | 0.580 | 1.000 | 1.000 | 0.082 | 0.189 | 1.000 | 1.000 | 1.000 | 0.595 |
| 0.253 | 0.905 | 1.000 | 1.000 | 0.023 | 0.701 | 0.177 | 1.000 | 0.952 | 0.533 | 0.077 | 1.000 | 1.000 | 1.000 | 0.578 |
| 0.077 | 0.820 | 1.000 | 1.000 | 0.041 | 0.884 | 0.414 | 1.000 | 1.000 | 0.733 | 0.226 | 1.000 | 1.000 | 0.273 | 0.588 |
| 1.000 | 0.910 | 1.000 | 1.000 | 0.951 | 0.896 | 0.818 | 1.000 | 0.496 | 0.884 | 0.786 | 0.683 | 1.000 | 0.824 | 0.045 |
| 0.478 | 0.387 | 1.000 | 1.000 | 0.034 | 0.818 | 0.157 | 1.000 | 0.962 | 0.143 | 0.083 | 1.000 | 1.000 | 0.620 | 0.312 |
| 1.000 | 0.959 | 1.000 | 1.000 | 1.000 | 1.000 | 0.827 | 1.000 | 1.000 | 0.909 | 1.000 | 0.580 | 1.000 | 0.900 | 0.043 |
| 0.491 | 0.353 | 1.000 | 1.000 | 0.048 | 1.000 | 0.417 | 1.000 | 1.000 | 0.700 | 0.053 | 1.000 | 1.000 | 0.301 | 0.226 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.042 | 1.000 | 1.000 | 1.000 | 1.000 | 0.492 | 0.336 | 1.000 | 1.000 | 1.000 | 0.779 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.464 | 0.367 | 1.000 | 1.000 | 1.000 | 0.784 | 0.751 | 0.718 | 0.675 | 1.000 | 0.021 |
| 1.000 | 0.422 | 1.000 | 0.960 | 0.039 | 0.220 | 0.207 | 0.862 | 0.953 | 0.120 | 0.148 | 0.319 | 0.336 | 0.145 | 1.000 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.075 | 0.234 | 0.350 | 1.000 | 1.000 | 0.432 | 0.452 | 1.000 | 1.000 | 0.461 | 0.043 |
| 0.273 | 0.258 | 1.000 | 1.000 | 0.041 | 0.896 | 0.110 | 1.000 | 1.000 | 0.229 | 0.347 | 1.000 | 0.448 | 0.742 | 0.252 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.672 | 0.324 | 1.000 | 1.000 | 0.424 | 0.799 | 1.000 | 1.000 | 1.000 | 0.009 |
| 0.953 | 0.801 | 1.000 | 1.000 | 0.049 | 1.000 | 0.579 | 1.000 | 1.000 | 1.000 | 0.541 | 0.283 | 0.856 | 0.404 | 1.000 |
| 0.995 | 0.905 | 1.000 | 1.000 | 0.047 | 0.814 | 0.344 | 0.971 | 1.000 | 0.741 | 0.065 | 0.371 | 1.000 | 0.930 | 1.000 |
| 1.000 | 0.400 | 1.000 | 1.000 | 1.000 | 0.611 | 0.845 | 1.000 | 0.977 | 0.737 | 0.094 | 1.000 | 0.996 | 0.371 | 0.029 |
| 0.867 | 0.150 | 1.000 | 1.000 | 0.275 | 0.734 | 0.399 | 1.000 | 1.000 | 0.353 | 0.113 | 0.491 | 0.966 | 0.900 | 0.048 |
| 0.787 | 0.496 | 1.000 | 0.799 | 1.000 | 0.896 | 0.454 | 1.000 | 1.000 | 1.000 | 0.451 | 0.551 | 0.391 | 0.504 | 0.023 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.821 | 0.896 | 0.519 | 1.000 | 1.000 | 0.918 | 0.167 | 0.651 | 1.000 | 0.004 | 1.000 |
| 1.000 | 0.102 | 1.000 | 1.000 | 0.068 | 1.000 | 0.161 | 1.000 | 0.859 | 0.150 | 0.237 | 0.934 | 0.801 | 0.213 | 0.010 |
| 0.768 | 0.261 | 0.731 | 0.799 | 1.000 | 0.937 | 0.599 | 1.000 | 1.000 | 0.884 | 0.092 | 0.935 | 0.465 | 0.316 | 0.035 |
| 0.275 | 0.131 | 1.000 | 1.000 | 0.045 | 0.624 | 0.115 | 1.000 | 1.000 | 0.380 | 0.310 | 0.846 | 0.612 | 0.297 | 0.389 |
| 0.510 | 0.260 | 1.000 | 1.000 | 0.041 | 1.000 | 1.000 | 1.000 | 1.000 | 0.530 | 0.379 | 0.873 | 1.000 | 1.000 | 1.000 |
| 0.219 | 0.905 | 1.000 | 1.000 | 0.852 | 1.000 | 0.813 | 1.000 | 1.000 | 0.086 | 1.000 | 0.329 | 0.928 | 0.918 | 0.014 |
| 0.746 | 0.586 | 1.000 | 1.000 | 0.019 | 0.896 | 0.813 | 1.000 | 1.000 | 0.884 | 0.751 | 0.683 | 1.000 | 0.900 | 0.690 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.035 | 1.000 | 0.231 | 1.000 | 1.000 | 0.412 | 0.458 | 0.683 | 0.462 | 0.900 | 0.218 |
| 1.000 | 0.173 | 1.000 | 1.000 | 0.314 | 1.000 | 1.000 | 0.998 | 1.000 | 0.574 | 0.356 | 0.448 | 0.588 | 0.606 | 0.037 |
| 1.000 | 0.538 | 0.841 | 0.973 | 0.034 | 1.000 | 0.297 | 0.778 | 1.000 | 1.000 | 0.633 | 0.219 | 1.000 | 1.000 | 1.000 |
| 1.000 | 0.369 | 1.000 | 1.000 | 1.000 | 1.000 | 0.372 | 1.000 | 1.000 | 0.265 | 0.934 | 0.684 | 0.832 | 1.000 | 0.037 |
| 0.606 | 1.000 | 1.000 | 1.000 | 1.000 | 0.868 | 1.000 | 1.000 | 1.000 | 0.798 | 1.000 | 0.085 | 1.000 | 0.750 | 0.038 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.537 | 1.000 | 1.000 | 0.034 |
| 0.844 | 1.000 | 1.000 | 1.000 | 0.566 | 1.000 | 0.826 | 1.000 | 1.000 | 1.000 | 0.127 | 0.743 | 1.000 | 0.786 | 0.042 |
| 0.613 | 0.232 | 0.994 | 1.000 | 0.152 | 0.546 | 0.370 | 1.000 | 0.805 | 0.511 | 0.146 | 0.396 | 0.984 | 1.000 | 0.031 |
| 1.000 | 0.969 | 1.000 | 1.000 | 1.000 | 1.000 | 0.813 | 1.000 | 1.000 | 1.000 | 0.374 | 1.000 | 0.978 | 0.900 | 0.047 |

UP
DOWN
FDR≤0.05

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CDC7 | 0.37 | -1.35 | 0.61 | -0.12 | **-1.35** | -0.49 | -1.25 | -0.22 | -0.02 | -0.95 | -1.78 | 0.1 | -0.5 | -1.05 | 0.56 |
| WDR25 | -0.01 | -0.12 | -0.09 | -0.09 | -0.16 | 0.48 | -0.01 | 0.2 | 0.13 | -0.18 | -0.07 | 0.15 | -0.01 | -0.02 | **0.83** |
| HSPA9 | -0.05 | 0.18 | 0.17 | 0.11 | 0.11 | 0 | 0.12 | -0.04 | 0.03 | 0.12 | 0.39 | 0.06 | 0.1 | 0.13 | **0.33** |
| KIAA1598 | 0.02 | -0.11 | -0.15 | -0.09 | 0.02 | -0.4 | -0.34 | -0.1 | -0.09 | -0.07 | -0.11 | -0.12 | 0.15 | -0.06 | **-0.66** |
| DDA1 | 0.25 | 0.16 | -0.15 | -0.11 | 0.46 | 0.11 | 0.21 | 0.05 | 0.03 | 0.5 | 0.22 | 0.11 | -0.07 | 0.11 | **0.6** |
| SDE2 | 0.13 | 0.27 | 0.24 | 0.07 | 0.2 | 0.08 | 0.38 | 0.06 | 0.11 | 0.42 | 0.5 | 0.18 | 0.05 | 0.16 | **0.98** |
| SAP30BP | 0.28 | 0.45 | -0.2 | 0.05 | 0.57 | 0.77 | 0.51 | 0.44 | 0.42 | 0.67 | 0.84 | 0.22 | -0.09 | 0.47 | **1.18** |
| CDS2 | 0.15 | 0.04 | -0.05 | -0.18 | **0.45** | 0.12 | 0.38 | 0.02 | 0.13 | 0.39 | 0.39 | -0.16 | 0.13 | 0.09 | 0.03 |
| HNRNPH3 | 0.09 | 0.06 | 0.06 | 0.08 | 0 | 0.05 | 0.22 | 0.08 | 0.07 | 0.17 | 0.1 | 0.13 | -0.03 | 0.01 | **0.68** |
| NASP | -0.26 | -0.16 | 0.15 | 0.26 | -0.48 | -0.21 | -0.61 | -0.26 | -0.37 | 0.22 | 0.08 | 0.23 | 0.1 | -0.04 | **1.18** |
| PPFIBP2 | -0.02 | -0.02 | 0.01 | 0 | **-0.02** | -0.27 | -0.28 | -0.13 | -0.02 | 0.16 | -0.04 | 0.99 | 0.01 | 0.04 | 0.2 |
| POLR1C | -0.29 | 0.07 | 0.06 | -0.01 | 0.1 | 0.09 | 0.18 | 0.04 | 0.24 | 0.21 | 0.16 | -0.07 | 0.09 | 0.13 | **-0.34** |
| GJA4 | -1.36 | -1.14 | 0.14 | -0.24 | **-1.33** | -0.35 | -0.85 | -0.17 | -0.22 | -0.62 | -1.71 | 0.14 | -0.33 | -0.75 | -0.67 |
| FBXL14 | -0.25 | 0.01 | -0.07 | -0.05 | -0.1 | -0.08 | -0.08 | 0 | -0.16 | 0.06 | -0.3 | 0.13 | -0.09 | -0.19 | **0.62** |
| MTHFS | -0.11 | -0.16 | -0.06 | -0.19 | -0.29 | 0.08 | 0.02 | 0.09 | 0.05 | 0.09 | -0.41 | 0.13 | -0.26 | -0.04 | **0.6** |
| TDG | -0.01 | 0.12 | -0.02 | 0.1 | -0.06 | -0.05 | 0.13 | -0.04 | 0.02 | 0.1 | 0.2 | -0.05 | 0.04 | 0.16 | **0.23** |
| HNRNPA1L2 | 0.02 | -0.33 | 0.25 | 0.27 | **-1.18** | -0.47 | -0.23 | -0.12 | -0.34 | -0.72 | -0.79 | 0.14 | 0.24 | -0.51 | -0.64 |
| SEC24A | 0.32 | 0.51 | -0.2 | 0.08 | 0.93 | 0.28 | 0.63 | -0.16 | 0.2 | 0.46 | 0.24 | 0.09 | -0.05 | 0.09 | **0.41** |
| CPEB4 | 0.05 | 0.08 | -0.19 | -0.16 | 0.18 | -0.35 | 0.06 | -0.36 | -0.4 | 0.04 | 0.94 | 0.36 | 0.31 | 0.6 | **1.63** |
| TOR3A | -0.46 | -0.54 | 0.15 | -0.07 | -0.54 | -0.1 | -0.21 | -0.07 | -0.13 | -0.24 | -0.47 | 0.11 | 0 | -0.34 | **0.49** |
| PTDSS2 | 0.02 | -0.03 | -0.24 | -0.21 | **0.46** | 0.17 | 0.13 | 0.31 | 0.1 | 0.56 | 0.09 | 0.53 | -0.16 | -0.01 | 0.12 |
| CDO1 | -0.58 | -0.54 | -0.14 | -0.17 | -0.68 | -0.27 | -0.63 | -0.17 | -0.18 | -0.36 | -0.85 | 0.41 | 0.31 | -0.26 | **1.79** |
| NUDT9 | 0.23 | 0.11 | 0.06 | 0.05 | 0.29 | 0.04 | 0.12 | 0.12 | 0.22 | 0.34 | 0.08 | 0.17 | -0.13 | 0.08 | **0.74** |
| ZCCHC10 | 0.34 | 0.09 | 0.52 | -0.01 | 0.08 | -0.01 | 0.11 | 0.23 | 0.04 | 0.09 | 0.38 | 0.15 | 0.01 | 0.29 | **0.65** |
| B4GALT4 | 0.54 | 0.08 | -0.12 | -0.22 | -0.38 | -0.24 | 0.16 | -0.16 | -0.06 | -0.2 | 0.14 | -0.07 | 0.15 | 0.07 | **-0.3** |
| PLA2G15 | -0.22 | 0.17 | 0.07 | -0.04 | 0.06 | 0.32 | 0.03 | 0.18 | -0.03 | 0.43 | 0.7 | 0.6 | **0.51** | 0.67 | -0.14 |
| TMEM37 | -0.03 | -0.85 | 0.97 | 0.4 | **-2.02** | 0.79 | -0.1 | 0.96 | 0.63 | -0.77 | -1.01 | -0.77 | -0.02 | -0.24 | -0.18 |
| WDR4 | 0.15 | 0 | 0.05 | -0.02 | 0.17 | -0.1 | 0.01 | -0.07 | -0.12 | 0.15 | -0.26 | -0.34 | -0.23 | -0.26 | **-0.08** |
| FRAT1 | -0.2 | -0.1 | 0.1 | 0.31 | -0.17 | 0.12 | -0.09 | 0.03 | -0.05 | -0.31 | -0.29 | -0.23 | -0.07 | 0.05 | **-0.97** |
| AMZ1 | -0.19 | 0.03 | -0.11 | -0.02 | 0.54 | -0.2 | -0.18 | -0.29 | -0.24 | -0.11 | 0.22 | 0.14 | 0.08 | 0.36 | **0.59** |
| SC5DL | 0.11 | 0.26 | 0.12 | 0.09 | -0.09 | 0.28 | 0.24 | -0.09 | -0.02 | 0.18 | 0.42 | 0.16 | 0.1 | 0.28 | **0.66** |
| CCDC137 | -0.19 | -0.25 | -0.2 | -0.26 | 0.06 | 0.41 | 0.36 | 0.37 | 0.18 | 0.11 | -0.23 | 0.17 | 0.01 | 0.12 | **0.7** |
| PCDHGB4 | -0.13 | 0.01 | -0.11 | 0 | 0.02 | -0.24 | -0.24 | 0.02 | -0.15 | -0.09 | -0.35 | -0.12 | -0.2 | -0.33 | **-0.49** |
| ZBTB40 | 0.12 | 0.4 | 0.17 | 0.18 | 0.14 | -0.17 | 0.27 | -0.13 | -0.1 | 0.29 | 0.48 | -0.13 | 0.05 | 0.25 | **-0.51** |
| MCL1 | 0.34 | 0.26 | 0 | 0.1 | 0.15 | 0.08 | 0.07 | 0.01 | -0.06 | -0.04 | 0.35 | 0.16 | 0.2 | 0.23 | **0.62** |
| CCDC42B | 0.23 | 0.14 | 0.11 | 0.13 | -0.19 | 0.19 | -0.12 | 0.11 | -0.17 | -0.11 | 0.17 | 0.73 | 0.18 | 0.14 | **0.19** |
| THAP6 | -0.4 | -0.25 | -0.16 | -0.21 | **-0.64** | 0.09 | 0.1 | 0.14 | -0.09 | -0.02 | -0.11 | -0.69 | 0.05 | -0.04 | 0.18 |
| CTCF | -0.22 | -0.27 | -0.07 | -0.12 | -0.15 | -0.06 | -0.18 | -0.04 | -0.04 | -0.1 | -0.47 | 0.11 | -0.12 | -0.16 | **0.42** |
| INTS4 | -0.05 | -0.11 | 0 | 0 | 0.05 | -0.2 | 0.01 | -0.05 | -0.03 | 0.06 | -0.36 | -0.83 | -0.68 | -0.76 | **-0.22** |
| MESP1 | 0 | 0 | 0 | 0 | 0 | 0.01 | -0.01 | 0.02 | 0 | -0.01 | -0.02 | 0.33 | -0.01 | -0.01 | **0.09** |
| BRD4 | 0.42 | 0.3 | -0.08 | -0.01 | 0.62 | 0.38 | 0.49 | 0.09 | -0.06 | 0.81 | 0.99 | 0.24 | 0.09 | 0.19 | **0.87** |
| B3GALTL | -0.01 | 0.15 | 0.26 | 0.33 | -0.28 | -0.21 | -0.18 | -0.33 | -0.24 | -0.14 | -0.2 | -0.18 | 0.16 | -0.03 | **-0.65** |
| PLA2R1 | 0.05 | 0.01 | 0.16 | 0.03 | 0 | 0.09 | -0.02 | -0.02 | -0.02 | 0.03 | -0.08 | -0.12 | 0.13 | 0.13 | **-0.43** |
| PTPLAD2 | -0.19 | -0.47 | 0.31 | -0.43 | -0.65 | 0.36 | 0.07 | 0.46 | 0.31 | 0.08 | -0.87 | 0.24 | -0.53 | -0.85 | **0.86** |
| GEMIN2 | 0.02 | -0.03 | 0.28 | 0.12 | **-0.63** | -0.13 | 0 | 0.06 | 0.05 | 0.15 | 0.36 | -0.13 | 0.25 | 0.14 | -0.46 |
| C16orf72 | 0.12 | 0.36 | 0.07 | -0.04 | 0.44 | 0.34 | 0.37 | 0.29 | 0 | 0.49 | 0.58 | 0.22 | -0.05 | 0.25 | **0.77** |
| RAB5B | 0.21 | 0.13 | 0.07 | 0.06 | 0.03 | 0.13 | 0.23 | 0.05 | 0.06 | 0.07 | 0.2 | -0.1 | 0.15 | 0.15 | **-0.35** |
| COX18 | -0.12 | -0.46 | 0.05 | 0.09 | **-0.57** | -0.15 | -0.27 | 0.04 | -0.11 | -0.62 | -0.51 | 0.07 | -0.31 | -0.55 | 0.02 |
| EGFL7 | -0.17 | -0.03 | 0.07 | -0.06 | 0.08 | 0.23 | 0.31 | 0.28 | 0.42 | 0.41 | -0.03 | -0.39 | -0.1 | 0.04 | **-1.36** |
| ZNF596 | 0.08 | 0.04 | 0.06 | 0.08 | 0 | 0 | 0.03 | 0.01 | 0.22 | 0.12 | 0.08 | 0.14 | 0 | 0.03 | **0.48** |
| PRKRIP1 | -0.02 | -0.17 | -0.15 | -0.04 | 0.02 | -0.35 | -0.2 | -0.07 | -0.15 | 0.04 | -0.51 | 0.26 | -0.28 | -0.31 | **0.89** |
| ATP6V1H | -0.06 | 0.07 | -0.11 | -0.08 | 0.02 | 0.31 | 0.32 | 0.15 | 0.17 | 0.25 | 0.2 | 0.1 | 0.09 | 0.16 | **0.34** |
| KBTBD6 | -0.43 | -0.42 | 0.07 | 0.12 | -0.58 | -0.05 | 0.04 | -0.11 | -0.13 | 0.25 | -0.26 | -0.1 | 0.27 | -0.11 | **-0.34** |
| NEMF | -0.07 | 0.05 | 0.11 | 0.09 | **0.18** | 0.1 | 0.14 | 0.15 | 0.26 | 0.07 | 0.02 | 0.05 | 0.03 | 0.18 | -0.17 |
| RRP1 | -0.08 | 0.43 | 0.1 | 0.09 | 0.34 | 0.24 | 0.28 | 0.06 | 0.25 | 0.54 | 0.01 | 0.1 | -0.1 | 0 | **0.34** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 0.079 | 1.000 | 1.000 | 0.039 | 0.668 | 0.079 | 0.998 | 1.000 | 0.815 | 0.117 | 1.000 | 1.000 | 0.589 | 0.322 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.797 | 0.441 | 1.000 | 1.000 | 1.000 | 0.884 | 1.000 | 0.710 | 1.000 | 1.000 | 0.033 |
| 1.000 | 0.062 | 0.627 | 0.641 | 0.610 | 1.000 | 0.286 | 1.000 | 1.000 | 0.346 | 0.061 | 0.649 | 0.866 | 0.739 | 0.045 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.482 | 0.242 | 1.000 | 1.000 | 0.884 | 0.625 | 0.529 | 0.809 | 0.984 | 0.043 |
| 1.000 | 0.985 | 1.000 | 1.000 | 0.113 | 1.000 | 0.424 | 1.000 | 1.000 | 0.441 | 0.771 | 0.923 | 1.000 | 1.000 | 0.021 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.446 | 1.000 | 0.420 | 1.000 | 1.000 | 0.418 | 0.200 | 0.417 | 1.000 | 0.740 | 0.030 |
| 1.000 | 0.406 | 1.000 | 1.000 | 0.276 | 0.554 | 0.303 | 0.974 | 0.939 | 0.235 | 0.175 | 0.683 | 1.000 | 0.825 | 0.012 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.029 | 1.000 | 0.283 | 1.000 | 1.000 | 0.263 | 0.138 | 0.303 | 0.886 | 0.304 | 1.000 |
| 1.000 | 0.920 | 1.000 | 1.000 | 1.000 | 1.000 | 0.294 | 1.000 | 1.000 | 0.567 | 0.731 | 0.636 | 1.000 | 1.000 | 0.023 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.262 | 0.927 | 0.147 | 1.000 | 1.000 | 0.884 | 1.000 | 0.682 | 1.000 | 1.000 | 0.049 |
| 0.752 | 0.578 | 1.000 | 1.000 | 0.000 | 0.344 | 0.172 | 1.000 | 1.000 | 1.000 | 0.751 | 0.246 | 1.000 | 0.964 | 0.928 |
| 0.469 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.427 | 1.000 | 1.000 | 0.947 | 0.908 | 0.377 | 1.000 | 0.907 | 0.049 |
| 0.124 | 0.212 | 1.000 | 1.000 | 0.045 | 0.626 | 0.081 | 1.000 | 1.000 | 0.125 | 0.097 | 0.488 | 0.171 | 0.136 | 0.087 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 1.000 | 0.862 | 1.000 | 1.000 | 1.000 | 0.351 | 0.683 | 1.000 | 0.843 | 0.042 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.661 | 0.950 | 1.000 | 1.000 | 1.000 | 1.000 | 0.118 | 0.899 | 0.723 | 1.000 | 0.049 |
| 1.000 | 0.784 | 1.000 | 1.000 | 0.887 | 0.896 | 0.137 | 1.000 | 1.000 | 0.736 | 0.116 | 0.719 | 1.000 | 0.684 | 0.044 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.028 | 0.622 | 0.951 | 1.000 | 0.999 | 0.349 | 0.082 | 0.886 | 0.655 | 0.323 | 0.137 |
| 0.152 | 0.063 | 1.000 | 1.000 | 0.052 | 0.328 | 0.070 | 0.970 | 0.690 | 0.302 | 0.504 | 0.904 | 1.000 | 1.000 | 0.041 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.589 | 0.746 | 1.000 | 1.000 | 0.800 | 1.000 | 0.074 | 0.440 | 0.876 | 0.374 | 0.016 |
| 0.329 | 0.124 | 1.000 | 1.000 | 0.280 | 0.896 | 0.415 | 1.000 | 1.000 | 0.945 | 0.072 | 0.922 | 1.000 | 0.620 | 0.037 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.043 | 0.772 | 0.433 | 0.747 | 1.000 | 0.443 | 1.000 | 0.195 | 0.994 | 1.000 | 0.723 |
| 0.697 | 0.473 | 1.000 | 1.000 | 0.392 | 0.627 | 0.275 | 1.000 | 1.000 | 0.726 | 0.359 | 0.768 | 1.000 | 1.000 | 0.026 |
| 0.222 | 0.905 | 1.000 | 1.000 | 0.417 | 1.000 | 0.644 | 1.000 | 1.000 | 0.193 | 0.740 | 0.619 | 0.823 | 0.900 | 0.045 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.630 | 0.866 | 1.000 | 1.000 | 0.089 | 0.448 | 1.000 | 0.374 | 0.016 |
| 0.176 | 1.000 | 1.000 | 1.000 | 0.189 | 1.000 | 0.974 | 1.000 | 1.000 | 0.884 | 0.836 | 1.000 | 1.000 | 1.000 | 0.039 |
| 1.000 | 0.584 | 1.000 | 1.000 | 0.983 | 0.988 | 1.000 | 1.000 | 1.000 | 0.396 | 0.072 | 0.086 | 0.016 | 0.347 | 1.000 |
| 1.000 | 0.388 | 0.727 | 1.000 | 0.039 | 0.142 | 0.920 | 0.401 | 0.859 | 0.543 | 0.055 | 0.076 | 1.000 | 0.668 | 0.869 |
| 0.891 | 1.000 | 1.000 | 1.000 | 1.000 | 0.900 | 1.000 | 1.000 | 1.000 | 0.884 | 0.608 | 0.381 | 1.000 | 0.848 | 0.001 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.962 | 1.000 | 0.836 | 1.000 | 1.000 | 0.884 | 0.379 | 0.440 | 1.000 | 1.000 | 0.046 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.174 | 1.000 | 1.000 | 1.000 | 1.000 | 0.904 | 0.751 | 0.683 | 1.000 | 0.900 | 0.018 |
| 1.000 | 0.354 | 1.000 | 1.000 | 0.823 | 0.468 | 0.123 | 1.000 | 1.000 | 0.680 | 0.226 | 0.683 | 1.000 | 0.709 | 0.030 |
| 1.000 | 0.374 | 1.000 | 0.960 | 1.000 | 0.549 | 0.666 | 0.918 | 1.000 | 1.000 | 0.799 | 0.843 | 1.000 | 1.000 | 0.049 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.580 | 0.311 | 1.000 | 0.405 | 1.000 | 0.509 | 0.683 | 0.967 | 0.752 | 0.014 |
| 1.000 | 0.328 | 1.000 | 1.000 | 0.861 | 0.928 | 0.346 | 1.000 | 1.000 | 0.180 | 0.140 | 0.696 | 1.000 | 0.853 | 0.041 |
| 0.426 | 0.451 | 1.000 | 1.000 | 0.428 | 0.969 | 0.867 | 1.000 | 1.000 | 1.000 | 0.122 | 0.647 | 0.983 | 0.735 | 0.030 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.859 | 0.896 | 0.858 | 1.000 | 1.000 | 0.884 | 1.000 | 0.325 | 1.000 | 1.000 | 0.011 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.030 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.278 | 1.000 | 1.000 | 1.000 |
| 1.000 | 0.709 | 1.000 | 1.000 | 0.468 | 1.000 | 0.541 | 1.000 | 1.000 | 0.881 | 0.117 | 0.784 | 1.000 | 0.880 | 0.047 |
| 1.000 | 0.644 | 1.000 | 1.000 | 1.000 | 0.653 | 1.000 | 1.000 | 1.000 | 1.000 | 0.957 | 0.432 | 1.000 | 0.805 | 0.048 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.821 | 0.852 | 0.813 | 1.000 | 1.000 | 0.884 | 0.463 | 0.350 | 1.000 | 0.900 | 0.044 |
| 1.000 | 0.787 | 1.000 | 1.000 | 0.355 | 0.896 | 0.470 | 1.000 | 1.000 | 0.280 | 0.098 | 0.547 | 1.000 | 1.000 | 0.040 |
| 1.000 | 0.119 | 0.302 | 1.000 | 0.512 | 0.896 | 0.960 | 1.000 | 1.000 | 0.651 | 0.111 | 0.073 | 0.987 | 1.000 | 0.038 |
| 0.995 | 0.966 | 1.000 | 1.000 | 1.000 | 0.854 | 0.813 | 1.000 | 1.000 | 0.987 | 1.000 | 0.820 | 0.856 | 0.629 | 0.009 |
| 1.000 | 0.226 | 1.000 | 1.000 | 0.259 | 0.785 | 1.000 | 1.000 | 1.000 | 1.000 | 0.550 | 1.000 | 1.000 | 0.750 | 0.021 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.019 | 1.000 | 1.000 | 1.000 | 1.000 | 0.883 | 0.841 | 0.578 | 0.927 | 0.622 | 0.117 |
| 1.000 | 0.316 | 1.000 | 1.000 | 0.458 | 0.588 | 0.385 | 1.000 | 1.000 | 0.084 | 0.097 | 0.647 | 1.000 | 0.559 | 0.006 |
| 0.153 | 0.524 | 1.000 | 1.000 | 1.000 | 0.667 | 0.317 | 1.000 | 1.000 | 0.867 | 0.412 | 0.629 | 0.620 | 0.698 | 0.019 |
| 1.000 | 0.100 | 1.000 | 1.000 | 0.025 | 0.976 | 0.616 | 1.000 | 1.000 | 0.213 | 0.338 | 1.000 | 0.846 | 0.159 | 1.000 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.687 | 1.000 | 0.928 | 0.535 | 1.000 | 0.123 | 1.000 | 1.000 | 0.038 |
| 0.996 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.813 | 1.000 | 0.977 | 0.863 | 0.751 | 0.683 | 1.000 | 0.905 | 0.041 |
| 1.000 | 0.756 | 1.000 | 1.000 | 1.000 | 0.849 | 0.827 | 1.000 | 1.000 | 1.000 | 0.335 | 0.455 | 0.617 | 0.354 | 0.021 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.665 | 0.153 | 1.000 | 0.990 | 0.459 | 0.512 | 0.775 | 1.000 | 0.900 | 0.017 |
| 0.269 | 0.240 | 1.000 | 1.000 | 0.266 | 1.000 | 1.000 | 1.000 | 1.000 | 0.842 | 0.801 | 0.964 | 1.000 | 1.000 | 0.036 |
| 1.000 | 0.969 | 1.000 | 1.000 | 0.031 | 0.984 | 0.299 | 0.866 | 0.536 | 1.000 | 1.000 | 0.932 | 1.000 | 0.861 | 0.769 |
| 1.000 | 0.666 | 1.000 | 1.000 | 0.491 | 0.853 | 0.608 | 1.000 | 1.000 | 0.744 | 1.000 | 0.741 | 1.000 | 1.000 | 0.043 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ISG20 | 2.6 | 1.17 | 0.08 | -0.02 | **1.98** | 0.47 | 0.24 | 0.25 | 0.94 | 0.66 | 0.64 | 0.54 | 0.18 | 0.26 | 0.16 | 0.537 | 0.165 | 1.000 | 1.000 | 0.023 | 0.588 | 0.813 | 1.000 | 0.958 | 0.379 | 0.419 | 0.365 | 1.000 | 0.900 | 0.579 |
| NAA16 | -0.21 | -0.02 | 0.08 | 0.38 | 0.23 | -0.93 | -0.69 | -0.54 | -0.59 | 0.3 | 0.24 | 0.25 | 0.11 | 0.13 | **0.84** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.297 | 0.187 | 0.921 | 0.752 | 0.884 | 0.169 | 0.587 | 0.971 | 0.836 | 0.043 |
| RNPC3 | -0.32 | -0.23 | -0.5 | -0.27 | **-0.5** | -0.45 | -0.88 | -0.32 | -0.45 | -0.29 | -0.7 | -0.06 | -0.25 | -0.31 | -0.2 | 0.948 | 0.372 | 0.599 | 1.000 | 0.042 | 0.601 | 0.268 | 1.000 | 0.841 | 0.312 | 0.167 | 1.000 | 1.000 | 0.752 | 0.936 |
| SYPL1 | 0.27 | 0.05 | 0 | 0.04 | -0.05 | 0.12 | -0.1 | 0 | -0.08 | -0.21 | -0.05 | 0.06 | 0.1 | 0.06 | **-0.2** | 0.293 | 1.000 | 1.000 | 1.000 | 0.821 | 0.548 | 0.395 | 1.000 | 1.000 | 0.479 | 0.935 | 0.755 | 1.000 | 0.951 | 0.034 |
| NUDCD2 | -0.2 | -0.14 | 0.03 | -0.03 | **-0.38** | 0.25 | -0.23 | 0.12 | 0.09 | 0.19 | -0.23 | 0.33 | 0 | 0.07 | 0.1 | 1.000 | 0.939 | 1.000 | 1.000 | 0.049 | 0.514 | 0.196 | 1.000 | 1.000 | 1.000 | 0.094 | 0.055 | 1.000 | 0.989 | 0.242 |
| SLC19A2 | 0.57 | 0.22 | 0.21 | 0.21 | 0.14 | 0.29 | 0.21 | -0.13 | -0.2 | 0.64 | 0.44 | 0.29 | -0.07 | 0.12 | **0.95** | 0.588 | 0.651 | 1.000 | 1.000 | 0.687 | 0.969 | 0.752 | 1.000 | 1.000 | 0.682 | 0.075 | 0.168 | 1.000 | 0.900 | 0.021 |
| DCBLD2 | 0.13 | 0.27 | 0.1 | 0.11 | **0.41** | 0.11 | 0.31 | -0.02 | 0.02 | 0.15 | 0.26 | -0.16 | 0.08 | 0.1 | -0.05 | 0.798 | 0.145 | 1.000 | 1.000 | 0.031 | 0.867 | 0.087 | 1.000 | 1.000 | 0.312 | 0.158 | 0.183 | 1.000 | 0.831 | 1.000 |
| RBFOX2 | -0.1 | -0.11 | 0.02 | 0.02 | -0.11 | -0.06 | -0.29 | -0.1 | -0.11 | **-0.27** | -0.4 | -0.16 | 0.02 | -0.19 | -0.05 | 1.000 | 0.514 | 1.000 | 1.000 | 0.656 | 0.946 | 0.115 | 1.000 | 1.000 | 0.012 | 0.056 | 0.457 | 1.000 | 0.620 | 1.000 |
| RCL1 | -0.3 | -0.28 | 0.2 | 0.04 | -0.16 | -0.11 | 0.14 | 0.26 | 0.17 | -0.08 | -0.01 | 1.46 | 0.12 | -0.05 | **0.46** | 0.997 | 0.964 | 1.000 | 1.000 | 0.929 | 1.000 | 0.318 | 1.000 | 1.000 | 0.956 | 1.000 | 0.208 | 1.000 | 1.000 | 0.040 |
| GEM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.66 | 0 | 0 | **5.24** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.125 | 1.000 | 1.000 | 0.014 |
| PIGX | 0.16 | 0.2 | 0.27 | 0.22 | **-0.49** | 0.07 | 0.01 | -0.06 | 0.07 | -0.25 | 0.11 | 0.11 | 0.08 | 0.1 | -0.34 | 0.995 | 0.447 | 0.860 | 1.000 | 0.033 | 1.000 | 1.000 | 1.000 | 1.000 | 0.793 | 1.000 | 1.000 | 1.000 | 0.900 | 0.574 |
| NRARP | -0.55 | -0.34 | -0.02 | -0.04 | **-0.5** | 0.06 | 0.05 | 0.17 | 0.05 | -0.04 | -0.36 | -0.34 | 0 | 0.03 | **-1.05** | 0.235 | 0.171 | 1.000 | 1.000 | 0.044 | 0.851 | 0.467 | 0.747 | 1.000 | 1.000 | 0.054 | 0.110 | 1.000 | 1.000 | 0.014 |
| CHST15 | -0.51 | -0.42 | -0.01 | -0.13 | -0.57 | -0.05 | 0.15 | -0.01 | -0.01 | 0.02 | -0.16 | -0.24 | -0.04 | -0.12 | **-0.74** | 0.356 | 0.171 | 1.000 | 1.000 | 0.169 | 1.000 | 0.679 | 1.000 | 1.000 | 1.000 | 0.501 | 0.683 | 1.000 | 0.780 | 0.012 |
| FLJ37798 | 0.42 | -0.17 | 0.23 | -0.09 | **-0.59** | -0.09 | -0.28 | -0.3 | -0.21 | 0.23 | -0.28 | 0.24 | -0.23 | -0.04 | 0.74 | 0.918 | 1.000 | 1.000 | 1.000 | 0.042 | 1.000 | 0.749 | 0.996 | 1.000 | 0.585 | 0.353 | 0.255 | 1.000 | 1.000 | 0.116 |
| TXNDC11 | 0.06 | 0.17 | -0.02 | -0.04 | 0.24 | 0.24 | 0.29 | 0.13 | 0.18 | 0.42 | 0.33 | 0.37 | -0.02 | 0.13 | **0.12** | 1.000 | 0.613 | 1.000 | 1.000 | 0.358 | 0.599 | 0.241 | 1.000 | 1.000 | 0.494 | 0.293 | 0.258 | 1.000 | 0.791 | 0.011 |
| EEA1 | 0.12 | 0 | 0.16 | 0.04 | -0.09 | -0.1 | 0.03 | 0.09 | -0.11 | -0.1 | -0.26 | -0.58 | -0.09 | -0.04 | **-0.19** | 1.000 | 1.000 | 1.000 | 1.000 | 0.823 | 0.896 | 1.000 | 1.000 | 1.000 | 0.883 | 0.658 | 0.164 | 1.000 | 1.000 | 0.021 |
| MOGS | 0.05 | 0.18 | 0.03 | -0.07 | 0.06 | 0.05 | -0.04 | 0.04 | 0.07 | -0.07 | -0.13 | -0.19 | -0.12 | -0.07 | **-0.58** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.605 | 0.394 | 1.000 | 1.000 | 0.007 |
| LINC00667 | -0.11 | -0.11 | -0.05 | -0.13 | -0.08 | -0.42 | -0.12 | -0.44 | -0.2 | -0.19 | -0.13 | -0.18 | -0.07 | -0.14 | **-0.06** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.826 | 1.000 | 1.000 | 1.000 | 0.872 | 0.133 | 0.056 | 1.000 | 0.316 | 0.001 |
| MED20 | -0.12 | 0.06 | 0 | 0.05 | -0.26 | 0.25 | 0.12 | 0.21 | 0.12 | **-0.22** | -0.03 | -0.15 | 0.03 | 0.09 | -0.05 | 1.000 | 0.905 | 1.000 | 1.000 | 0.296 | 0.638 | 0.467 | 0.770 | 1.000 | 0.038 | 1.000 | 0.494 | 1.000 | 1.000 | 0.958 |
| TMEM185A | 0.82 | -0.43 | -0.19 | -0.35 | -0.24 | -0.19 | -0.24 | -0.22 | -0.2 | -0.49 | -0.49 | 0.02 | 0.13 | **-0.45** | 0.06 | 0.866 | 0.800 | 1.000 | 1.000 | 1.000 | 0.896 | 0.495 | 1.000 | 1.000 | 0.569 | 0.070 | 0.683 | 1.000 | 0.017 | 1.000 |
| HRH1 | -0.15 | -0.13 | 0.02 | 0 | -0.08 | 0.19 | 0.05 | 0.04 | -0.06 | -0.37 | 0.48 | 0.48 | -0.04 | -0.04 | **1.42** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 0.802 | 1.000 | 1.000 | 1.000 | 0.923 | 0.279 | 0.067 | 1.000 | 1.000 | 0.009 |
| LOC253039 | -0.18 | -0.31 | 0.3 | 0.06 | -0.19 | -0.38 | 0.1 | -0.23 | -0.16 | -0.57 | -0.51 | -0.39 | -0.07 | 0.02 | **-1.15** | 0.306 | 0.072 | 0.912 | 1.000 | 0.825 | 0.691 | 1.000 | 1.000 | 1.000 | 0.482 | 0.355 | 0.476 | 1.000 | 1.000 | 0.021 |
| SLBP | -0.01 | 0.23 | 0.03 | 0.09 | 0.12 | 0.19 | 0.45 | 0.16 | 0.23 | 0.67 | 0.62 | 0.19 | 0.24 | 0.39 | **0.56** | 1.000 | 0.365 | 1.000 | 1.000 | 0.857 | 0.896 | 0.083 | 1.000 | 1.000 | 0.441 | 0.075 | 0.580 | 0.967 | 0.446 | 0.036 |
| NFKBIB | 0.96 | 0.69 | -0.05 | -0.06 | 1.03 | 0.26 | 0.74 | 0.19 | 0.77 | 0.89 | 0.87 | 0.43 | -0.07 | 0.22 | **1.26** | 0.444 | 0.299 | 1.000 | 1.000 | 0.133 | 0.904 | 0.243 | 1.000 | 1.000 | 0.271 | 0.097 | 0.159 | 1.000 | 0.864 | 0.028 |
| CLCN6 | -0.03 | 0.36 | 0.1 | 0.1 | -0.17 | 0.28 | 0.41 | 0.21 | 0.41 | 0.48 | 0.31 | 0.12 | 0.14 | 0.22 | **-0.35** | 1.000 | 0.503 | 1.000 | 1.000 | 0.887 | 0.326 | 0.355 | 0.857 | 0.804 | 0.320 | 0.377 | 0.742 | 1.000 | 0.743 | 0.028 |
| PCDH10 | -0.61 | -0.46 | -0.01 | -0.19 | -0.61 | -0.11 | -0.25 | -0.11 | -0.13 | -0.22 | -0.27 | -0.21 | -0.05 | -0.14 | **-0.6** | 0.065 | 0.378 | 1.000 | 1.000 | 0.147 | 0.609 | 0.209 | 0.998 | 1.000 | 0.733 | 0.213 | 0.373 | 1.000 | 0.900 | 0.019 |
| CLIP4 | 0.35 | 0.49 | 0.12 | 0.23 | 0.5 | 0.33 | 0.65 | 0.15 | 0.37 | **0.71** | 0.39 | -0.12 | 0.36 | 0.52 | -0.34 | 0.305 | 0.115 | 1.000 | 1.000 | 0.088 | 0.451 | 0.054 | 1.000 | 0.670 | 0.038 | 0.061 | 0.507 | 0.304 | 0.085 | 0.278 |
| TSPAN12 | -0.73 | -0.7 | 0.27 | -0.11 | **-1.08** | -0.61 | -0.96 | -0.34 | -0.68 | -0.81 | -0.8 | 0.17 | -0.04 | -0.19 | 0.06 | 0.200 | 0.084 | 0.981 | 1.000 | 0.044 | 0.192 | 0.068 | 0.877 | 0.472 | 0.127 | 0.053 | 0.412 | 1.000 | 0.774 | 1.000 |
| NXT2 | 0.28 | 0.01 | 0.23 | 0.13 | 0.09 | 0.09 | -0.07 | 0.11 | -0.23 | -0.76 | -0.01 | 0.6 | -0.04 | 0.01 | **1.69** | 0.670 | 1.000 | 1.000 | 1.000 | 0.815 | 1.000 | 0.827 | 1.000 | 0.976 | 0.258 | 1.000 | 0.157 | 1.000 | 1.000 | 0.014 |
| COL4A6 | 0.22 | 0.21 | 0.6 | 0.29 | -0.04 | 0.11 | -0.27 | 0.06 | -0.08 | 0.04 | 0.52 | 0.2 | 0.05 | -0.13 | **-0.56** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.813 | 1.000 | 1.000 | 1.000 | 0.530 | 0.816 | 1.000 | 1.000 | 0.027 |
| SNAPC1 | -0.07 | -0.19 | -0.3 | -0.32 | -0.19 | -0.39 | -0.29 | -0.45 | -0.43 | -0.06 | 0.11 | 0.45 | -0.13 | -0.15 | **1.26** | 1.000 | 0.546 | 0.760 | 0.838 | 0.821 | 0.879 | 0.813 | 1.000 | 1.000 | 1.000 | 1.000 | 0.326 | 1.000 | 1.000 | 0.016 |
| CCT6A | 0.04 | 0.14 | -0.06 | 0.04 | 0.15 | 0.19 | 0.19 | 0.05 | 0.13 | 0.28 | 0.34 | 0.13 | 0.05 | 0.26 | **0.36** | 1.000 | 0.473 | 1.000 | 1.000 | 0.670 | 0.160 | 0.217 | 1.000 | 0.821 | 0.222 | 0.230 | 0.644 | 1.000 | 0.542 | 0.033 |
| RSPRY1 | 0.06 | -0.03 | -0.13 | 0.08 | 0.45 | 0.13 | 0.13 | 0.08 | 0.17 | 0.27 | 0.02 | 0.13 | -0.13 | -0.05 | **0.36** | 1.000 | 1.000 | 1.000 | 1.000 | 0.192 | 0.591 | 0.705 | 1.000 | 0.413 | 0.124 | 1.000 | 0.199 | 1.000 | 1.000 | 0.043 |
| SHANK3 | -0.27 | -0.22 | -0.01 | -0.07 | -0.04 | -0.31 | -0.14 | 0.14 | 0.14 | 0.17 | 0.16 | -0.3 | -0.01 | 0.2 | **-0.83** | 0.691 | 0.308 | 1.000 | 1.000 | 1.000 | 0.719 | 0.549 | 1.000 | 1.000 | 0.884 | 0.658 | 0.351 | 1.000 | 0.900 | 0.019 |
| HIATL1 | -0.04 | 0.06 | 0.01 | -0.02 | **-0.1** | 0.03 | 0.04 | -0.04 | -0.04 | 0.05 | 0.03 | -0.11 | 0.03 | 0.04 | -0.04 | 1.000 | 0.803 | 1.000 | 1.000 | 0.042 | 0.896 | 0.442 | 1.000 | 0.830 | 0.884 | 1.000 | 0.325 | 1.000 | 0.909 | 0.828 |
| TSC22D1 | -0.17 | -0.04 | 0.26 | 0.12 | -0.71 | -0.11 | -0.1 | 0.23 | 0.18 | -0.17 | 0.1 | 0.59 | -0.01 | 0.13 | **1.62** | 1.000 | 1.000 | 1.000 | 1.000 | 0.341 | 1.000 | 0.736 | 1.000 | 1.000 | 0.998 | 1.000 | 0.341 | 1.000 | 1.000 | 0.012 |
| ERRFI1 | 0.67 | 0.3 | 0.17 | 0.18 | **0.46** | 0 | 0.12 | -0.1 | -0.13 | 0.15 | 0.45 | 0.39 | 0.06 | -0.01 | **1.06** | 0.072 | 0.162 | 1.000 | 1.000 | 0.049 | 1.000 | 0.738 | 1.000 | 1.000 | 0.743 | 0.051 | 0.079 | 1.000 | 1.000 | 0.021 |
| DGCR14 | -0.18 | 0.08 | 1.02 | 0.12 | 0.39 | 0.55 | 0.7 | 0.47 | 0.49 | 0.69 | 1.21 | 0.74 | 0.6 | 0.82 | **2.01** | 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.730 | 0.414 | 1.000 | 1.000 | 0.587 | 0.436 | 0.664 | 1.000 | 0.900 | 0.047 |
| AZIN1 | 0.15 | 0.2 | 0.12 | 0.15 | 0.38 | 0.1 | 0.36 | -0.02 | 0.07 | 0.18 | 0.38 | 0.35 | 0.2 | 0.4 | **0.95** | 1.000 | 0.694 | 1.000 | 1.000 | 0.204 | 1.000 | 0.388 | 1.000 | 1.000 | 0.795 | 0.171 | 0.094 | 0.911 | 0.362 | 0.049 |
| PROX1 | -0.38 | -0.16 | 0.46 | 0.15 | -0.76 | -0.06 | 0.39 | -0.18 | 0.23 | 0.26 | 0.77 | 0.43 | 0.18 | 0.35 | **1.16** | 0.474 | 0.905 | 1.000 | 0.912 | 0.189 | 1.000 | 0.477 | 1.000 | 1.000 | 0.996 | 0.102 | 0.319 | 0.490 | 0.657 | 0.043 |
| HPS5 | -0.29 | -0.09 | -0.25 | -0.01 | -0.26 | -0.82 | -0.89 | -0.79 | -0.92 | -0.32 | 0.17 | 0.38 | -0.03 | 0.06 | **1.02** | 1.000 | 1.000 | 1.000 | 1.000 | 0.661 | 0.800 | 0.553 | 1.000 | 1.000 | 0.200 | 0.348 | 0.238 | 1.000 | 1.000 | 0.020 |
| SYNE1 | -0.49 | 0.03 | -0.03 | -0.13 | -0.27 | -0.1 | -0.26 | -0.07 | 0.05 | -0.1 | -0.37 | -0.19 | 0.14 | 0.07 | **-0.49** | 0.546 | 1.000 | 1.000 | 1.000 | 0.821 | 1.000 | 0.565 | 1.000 | 1.000 | 1.000 | 0.064 | 0.674 | 0.905 | 0.901 | 0.016 |
| PES1 | 0.25 | 0.24 | 0.07 | 0.01 | 0.15 | 0.22 | 0.21 | 0.12 | 0.28 | 0.16 | -0.17 | 0.29 | -0.22 | 0.03 | **0.74** | 0.757 | 0.754 | 1.000 | 1.000 | 0.449 | 0.494 | 0.353 | 1.000 | 1.000 | 0.884 | 0.811 | 0.425 | 1.000 | 1.000 | 0.017 |
| LYAR | 0 | -0.03 | 0 | -0.16 | 0.14 | -0.06 | 0.05 | -0.13 | -0.14 | 0.22 | -0.21 | 0.32 | -0.08 | 0.05 | **0.81** | 1.000 | 1.000 | 1.000 | 1.000 | 0.629 | 1.000 | 1.000 | 1.000 | 1.000 | 0.550 | 0.243 | 0.306 | 1.000 | 1.000 | 0.008 |
| CXCR4 | 0.16 | 0.45 | -0.12 | -0.12 | -0.07 | 0.43 | 0.46 | 0.18 | 0.08 | -0.15 | 0.34 | -0.42 | -0.2 | -0.26 | **-1.05** | 0.980 | 0.217 | 1.000 | 1.000 | 1.000 | 0.380 | 0.196 | 0.404 | 1.000 | 0.884 | 0.620 | 0.431 | 0.934 | 0.796 | 0.014 |
| TUFM | -0.04 | 0 | 0.1 | 0.03 | -0.01 | 0.12 | 0.02 | 0.05 | 0.12 | 0.15 | 0.03 | 0.45 | -0.04 | 0.14 | **0.18** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 0.942 | 1.000 | 0.130 | 1.000 | 0.548 | 0.024 |
| SPRY1 | -0.5 | -0.5 | -0.02 | -0.12 | **-0.48** | -0.16 | -0.04 | -0.11 | -0.16 | -0.24 | -0.3 | -0.12 | -0.08 | -0.56 | -0.3 | 0.242 | 0.328 | 1.000 | 1.000 | 0.027 | 0.897 | 1.000 | 1.000 | 1.000 | 0.822 | 0.119 | 0.637 | 1.000 | 0.382 | 0.079 |
| TMEM42 | -0.47 | -0.61 | -0.24 | -0.14 | **-1.05** | -0.12 | -0.34 | 0.25 | -0.06 | -0.36 | -0.39 | 0.3 | 0 | -0.18 | -0.12 | 0.975 | 0.227 | 1.000 | 1.000 | 0.030 | 0.959 | 0.420 | 1.000 | 1.000 | 0.378 | 0.287 | 0.398 | 1.000 | 0.964 | 0.787 |
| PIK3CB | 0.09 | 0.04 | 0.12 | 0.17 | -0.06 | -0.07 | 0.04 | -0.17 | 0 | 0.04 | 0.04 | -0.14 | 0.07 | 0.17 | **0.35** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.503 | 1.000 | 0.906 | 0.046 |
| CTH | -0.35 | 0.37 | 0.37 | 0.26 | **-0.72** | 0.17 | -0.08 | 0.16 | 0.13 | -0.16 | 0.02 | 0.81 | 0.19 | 0.06 | **2.02** | 1.000 | 0.905 | 1.000 | 1.000 | 0.050 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.195 | 1.000 | 1.000 | 0.045 |
| DVL3 | -0.02 | 0.22 | 0.12 | 0.15 | 0.13 | 0.06 | 0.16 | 0.07 | 0.1 | 0.11 | 0.6 | -0.32 | 0.16 | 0.23 | **-0.79** | 1.000 | 0.540 | 1.000 | 1.000 | 0.941 | 1.000 | 0.265 | 1.000 | 1.000 | 1.000 | 0.172 | 0.243 | 0.984 | 0.615 | 0.035 |
| LINC00338 | -0.25 | -0.24 | -0.21 | -0.19 | -0.32 | -0.3 | 0.05 | -0.08 | -0.05 | 0.12 | -0.04 | -0.35 | -0.13 | -0.49 | **-0.86** | 0.759 | 0.451 | 1.000 | 1.000 | 0.193 | 0.457 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.423 | 0.796 | 0.162 | 0.032 |
| TBX3 | 0.16 | 0.3 | 0.58 | 0.1 | -0.32 | -0.1 | 0.26 | -0.24 | -0.04 | -0.09 | 0.22 | 1.01 | 0.02 | -0.05 | **2.47** | 1.000 | 0.472 | 1.000 | 1.000 | 0.624 | 1.000 | 0.582 | 1.000 | 1.000 | 1.000 | 0.757 | 0.119 | 1.000 | 1.000 | 0.016 |
| AHCTF1 | 0.06 | 0.09 | -0.05 | -0.02 | 0.1 | 0.18 | 0.58 | 0.23 | 0.17 | 0.44 | 0.6 | 0.25 | 0.22 | 0.61 | **0.61** | 1.000 | 0.605 | 1.000 | 1.000 | 1.000 | 0.940 | 0.234 | 1.000 | 1.000 | 0.080 | 0.195 | 0.611 | 0.549 | 0.082 | 0.036 |
| LETMD1 | -0.05 | -0.12 | -0.04 | 0.12 | **-0.66** | -0.3 | -0.44 | 0.19 | 0.05 | -0.59 | -0.37 | 0.34 | -0.06 | -0.2 | 0.14 | 1.000 | 0.975 | 1.000 | 1.000 | 0.049 | 0.636 | 0.198 | 1.000 | 1.000 | 0.149 | 0.102 | 0.168 | 1.000 | 0.373 | 0.841 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SNIP1 | 0.1 | 0.19 | -0.1 | 0.3 | 0.23 | 0.26 | 0.55 | 0.15 | 0.17 | 0.59 | 0.44 | 0.43 | 0.27 | 0.31 | **1.04** |
| PRC1 | -0.08 | 0.18 | 0.11 | 0.05 | -0.48 | 0.21 | -0.02 | -0.05 | 0.09 | 0.21 | 0.16 | 0.65 | 0.12 | 0.25 | **0.27** |
| SCLT1 | -0.26 | -0.49 | -0.08 | 0 | -0.33 | 0.26 | -0.15 | 0.3 | 0.41 | -0.07 | -0.68 | 0.31 | -0.31 | -0.54 | **0.74** |
| ETS1 | 0.91 | 0.52 | 0.16 | -0.02 | 0.7 | -0.17 | -0.18 | -0.15 | -0.32 | -0.31 | -0.19 | 0.37 | -0.15 | -0.31 | **0.88** |
| CALCOCO1 | 0.03 | 0.01 | -0.09 | 0.07 | -0.24 | -0.19 | -0.17 | 0.1 | -0.04 | -0.28 | 0.07 | -0.24 | 0 | -0.15 | **-0.57** |
| PPARGC1B | -0.5 | -0.85 | 0.57 | 1.08 | -1.57 | -0.2 | -0.88 | 0.05 | -0.04 | **-0.99** | -1.57 | -0.09 | -0.12 | -0.35 | 0.21 |
| RBM28 | -0.12 | 0.2 | 0.21 | -0.04 | 0.13 | 0.17 | 0.04 | -0.1 | -0.05 | 0.21 | 0.26 | 0.42 | 0.06 | 0.27 | **0.18** |
| CLMN | 0.27 | 0.06 | 0.36 | 0.03 | **-0.41** | 0.36 | 0.15 | 0.26 | -0.48 | 0.14 | 0.51 | 0.65 | 0.36 | -0.32 | 0.28 |
| PTGES3 | 0.07 | 0.18 | 0.08 | 0.05 | 0.12 | 0.09 | 0.19 | 0.02 | 0.05 | 0.13 | 0.3 | 0.19 | 0.11 | 0.23 | **0.44** |
| MRPL47 | 0.07 | 0.09 | 0.02 | -0.01 | 0.16 | 0.17 | 0.18 | 0.13 | 0.16 | 0.16 | 0 | 0.12 | -0.03 | 0.06 | **0.27** |
| TMEM30A | -0.05 | -0.09 | -0.04 | -0.02 | -0.09 | -0.17 | -0.15 | 0 | -0.14 | -0.2 | -0.09 | -0.16 | 0.02 | -0.03 | **-0.36** |
| SNHG3 | -0.37 | -0.39 | -0.2 | -0.45 | 0.15 | -0.59 | -0.41 | -0.42 | -0.17 | -0.52 | -0.06 | -1.35 | 0.06 | -0.33 | **-3.03** |
| TLCD2 | -0.07 | 0.23 | -0.17 | -0.27 | 0.34 | 0.13 | 0.24 | 0.02 | 0.22 | 0.98 | 0.86 | 1.1 | 0.23 | 0.19 | **2.46** |
| RARB | -0.36 | -0.6 | 0.31 | 0.04 | **-0.92** | -0.33 | -0.72 | -0.33 | -0.55 | -0.59 | -0.66 | 0.17 | -0.39 | -0.79 | 0.38 |
| RFTN2 | -0.52 | -1.17 | 0.77 | 0.17 | -1.65 | 0.32 | -1.17 | -0.4 | -0.24 | **-1.66** | -0.75 | 0.58 | -0.33 | -0.92 | -0.26 |
| PLK2 | 0.32 | 0.51 | 0.12 | 0.12 | 0.28 | -0.11 | -0.01 | 0.05 | 0.08 | -0.11 | -0.12 | -0.36 | -0.03 | -0.09 | **-0.8** |
| HSDL1 | 0.11 | 0.08 | -0.05 | -0.03 | **0.16** | 0.15 | 0.35 | -0.02 | -0.05 | 0.08 | 0.28 | -0.51 | 0.02 | 0.18 | -0.23 |
| ME1 | 0.37 | 0.59 | 0.39 | 0.16 | **0.57** | 0.15 | 0.34 | -0.09 | 0.03 | 0.51 | 0.63 | 0.42 | 0.45 | 0.52 | 0.19 |
| NDUFA12 | 0.08 | 0.07 | 0.1 | 0.09 | 0.04 | 0.17 | 0.18 | 0.11 | 0.13 | 0.16 | 0 | 0.1 | -0.03 | 0.03 | **0.22** |
| CCNA2 | 0.06 | 0.11 | 0.42 | 0.21 | -0.57 | 0.28 | -0.41 | 0.02 | -0.12 | -0.66 | -0.41 | 0.38 | -0.15 | 0.06 | **0.83** |
| PLSCR1 | 0.11 | -0.33 | 0.07 | 0.04 | **-0.58** | -0.02 | -0.23 | -0.03 | 0.21 | -0.4 | -0.55 | 0.24 | -0.2 | -0.24 | -0.11 |
| SESN1 | -0.38 | -0.47 | -0.2 | -0.16 | **-0.7** | -0.28 | -0.49 | -0.04 | -0.2 | -0.04 | -0.32 | -0.26 | -0.01 | 0 | -0.56 |
| ULBP2 | -0.24 | -0.15 | 0.27 | -0.06 | -0.32 | 0.24 | 0.17 | 0.16 | 0.17 | 0.36 | 0.36 | 0.27 | -0.05 | 0.2 | **0.58** |
| CHD4 | 0.19 | 0.12 | 0.03 | 0.05 | **0.37** | -0.08 | -0.25 | -0.07 | -0.02 | -0.19 | -0.04 | -0.07 | -0.11 | -0.19 | 0.15 |
| PTPN4 | -0.55 | -0.27 | -0.29 | -0.14 | -0.27 | -0.01 | -0.06 | -0.05 | 0.13 | -0.12 | -0.52 | -2.2 | 0.22 | -0.13 | **-1.03** |
| RFX2 | 0 | 0.02 | 0.16 | 0.03 | 0.23 | 0.3 | 0.07 | 0.07 | 0.03 | 0.64 | 0.02 | 0.36 | 0.04 | **0.04** | 0.17 |
| FKBP5 | -0.11 | -0.36 | 0.06 | -0.04 | **-0.31** | -0.07 | -0.3 | -0.03 | -0.03 | -0.5 | -0.27 | 0.09 | 0 | -0.18 | 0.19 |
| RANBP1 | 0 | -0.09 | -0.01 | -0.02 | -0.15 | 0.51 | 0.15 | 0.35 | 0.34 | 0.11 | -0.22 | 0.3 | 0.08 | 0.11 | **0.63** |
| ZMYM6NB | 0.27 | -0.15 | 0.08 | -0.16 | -0.26 | 0.16 | -0.17 | -0.06 | 0.02 | **-0.65** | -0.81 | 0.21 | -0.11 | -0.43 | -0.1 |
| GABBR1 | -0.11 | 0 | -0.07 | 0.08 | -0.18 | -0.19 | -0.09 | -0.03 | 0.2 | -0.1 | 0.19 | -0.57 | -0.06 | 0.2 | **-1.19** |
| BMP6 | -0.12 | 0.28 | 0.27 | 0.16 | -0.04 | 0.13 | 0.2 | 0.01 | 0.13 | 0.29 | 0.3 | -0.24 | 0.24 | 0.33 | **-0.5** |
| CCDC14 | -0.41 | -0.4 | -0.16 | -0.25 | **-0.61** | -0.55 | -0.39 | -0.14 | -0.08 | -0.85 | -0.48 | -0.12 | -0.14 | -0.17 | -0.25 |
| GNAI3 | 0.08 | 0.2 | 0.02 | 0.18 | **0.24** | 0.24 | 0.35 | 0.26 | 0.29 | 0.2 | 0.74 | -0.12 | 0.22 | 0.49 | 0.25 |
| LOC728705 | 0.06 | 0 | -0.01 | -0.04 | -0.05 | -0.25 | -0.09 | -0.23 | -0.24 | -0.08 | 0.04 | 1.09 | -0.01 | 0 | **2.27** |
| USP30 | -0.18 | -0.23 | 0.33 | 0.15 | -0.84 | 0.41 | -0.04 | 0.42 | 0.31 | -0.29 | -0.51 | -0.25 | -0.06 | -0.06 | **-0.52** |
| NHLH1 | 0.03 | 0.16 | 0.02 | 0.01 | 0.2 | 0.02 | 0.11 | 0 | 0.09 | 0.23 | 0.38 | 1.64 | 0.03 | 0.21 | **3.39** |
| TDRKH | 0.32 | 0.53 | 0.45 | 0.46 | -1.26 | -0.32 | -1.08 | -0.56 | -0.51 | -0.94 | -0.31 | 0.46 | -0.12 | 0.07 | **0.95** |
| MLF1 | 0.01 | 0.02 | 0.08 | -0.14 | -0.1 | 0.12 | 0.47 | 0.29 | -0.03 | -0.01 | 0.76 | 0.52 | 0.1 | 0.05 | **1.07** |
| DNAJC6 | -0.24 | -0.3 | 0.06 | -0.14 | **-0.49** | -0.17 | 0.16 | -0.22 | -0.08 | 0.71 | 0.6 | 0.37 | 0.37 | 0.51 | 0.18 |
| UGP2 | 0.57 | 0.55 | 0.08 | 0.75 | 0.18 | -0.71 | -1.04 | -0.24 | 0.06 | -0.02 | 0.82 | -1.99 | -0.09 | -0.04 | **-3.99** |
| DSN1 | -0.44 | -0.3 | -0.01 | -0.18 | **-0.72** | -0.16 | -0.32 | -0.16 | -0.26 | -0.54 | -0.24 | 0.08 | -0.16 | -0.18 | -0.04 |
| FGFRL1 | 0.26 | 0.55 | -0.04 | -0.13 | 0.81 | 0.37 | 0.45 | 0.32 | -0.02 | 0.49 | 0.41 | 0.08 | 0.45 | **0.67** | -0.16 |
| SLC7A11-AS1 | 0.04 | 0.36 | 0.02 | 0.04 | 0.54 | 0.01 | 0.87 | 0.02 | 0.01 | **0.75** | 0.28 | -0.04 | 0.2 | 0.1 | -0.02 |
| ZNF521 | -0.51 | -0.38 | -0.03 | -0.16 | **-0.72** | -0.03 | -0.2 | 0.05 | 0.01 | -0.2 | -0.29 | 0.17 | -0.01 | 0.01 | 0.34 |
| CLU | 0 | -0.08 | 0.04 | -0.09 | -0.01 | -0.07 | -0.16 | -0.05 | 0.04 | 0.08 | -0.15 | 0.22 | -0.12 | -0.09 | **0.44** |
| EFCAB11 | -0.48 | -0.36 | 0.08 | -0.17 | **-0.87** | 0.27 | 0.09 | 0.64 | 0.45 | -0.17 | -0.28 | 1.04 | 0.08 | -0.11 | 0.52 |
| LEPROT | 0 | -0.33 | -0.07 | -0.07 | **-0.46** | -0.14 | -0.2 | -0.07 | -0.05 | -0.12 | -0.19 | 0.06 | -0.01 | -0.15 | -0.03 |
| LOC400099 | -0.46 | -0.22 | -0.06 | 0.01 | **-0.7** | 0.49 | 0.59 | 0.4 | -0.09 | -1.68 | 0.15 | 1.02 | 0.13 | 0.46 | 0.51 |
| NDUFS5 | 0 | -0.05 | -0.05 | -0.06 | -0.05 | 0.26 | 0.12 | 0.18 | 0.16 | 0.07 | -0.11 | 0.06 | -0.04 | 0.03 | **0.12** |
| SUB1 | 0.09 | -0.08 | -0.04 | -0.12 | 0.08 | 0.28 | 0.19 | 0.25 | 0.24 | 0.05 | -0.25 | 0.07 | -0.14 | 0.03 | **0.14** |
| MAFB | -0.3 | -1.12 | -0.07 | 0.57 | -1.42 | 0.08 | -0.83 | 0.14 | -0.51 | -0.59 | -1.58 | 1.04 | -0.66 | -0.86 | **2.07** |
| ZNF230 | 0.21 | -0.16 | -0.23 | -0.05 | -0.35 | -0.71 | -0.45 | -0.56 | -0.6 | -0.03 | -1.19 | -1.42 | -1.29 | -1.29 | **-0.72** |
| PAK2 | 0.16 | 0.21 | 0 | 0.07 | 0.16 | 0 | 0.27 | -0.05 | -0.04 | **0.48** | 0.4 | -0.47 | 0.18 | 0.14 | -0.24 |
| BCAS2 | 0.03 | 0.1 | -0.04 | 0.1 | -0.07 | 0.16 | 0.18 | -0.01 | 0.08 | 0.18 | 0.5 | 0.46 | 0.3 | 0.42 | **0.9** |
| SMIM7 | 0.12 | 0.19 | 0.02 | 0.46 | -0.25 | -1.16 | -1.07 | -1.09 | -0.92 | 0.1 | -0.09 | 0.84 | -0.14 | -0.23 | **0.43** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 0.739 | 1.000 | 1.000 | 0.756 | 0.960 | 0.533 | 1.000 | 1.000 | 0.311 | 0.532 | 0.357 | 0.779 | 0.655 | 0.024 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.312 | 0.892 | 1.000 | 1.000 | 1.000 | 0.815 | 0.971 | 0.126 | 1.000 | 0.900 | 0.049 |
| 1.000 | 0.698 | 1.000 | 1.000 | 0.242 | 1.000 | 0.716 | 0.770 | 0.860 | 1.000 | 0.140 | 0.319 | 0.911 | 0.240 | 0.040 |
| 0.104 | 0.072 | 1.000 | 1.000 | 0.055 | 0.984 | 0.864 | 1.000 | 1.000 | 0.804 | 0.439 | 0.109 | 0.962 | 0.523 | 0.048 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.402 | 0.947 | 0.750 | 1.000 | 1.000 | 0.477 | 0.689 | 0.100 | 1.000 | 0.960 | 0.033 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.174 | 1.000 | 0.473 | 1.000 | 1.000 | 0.039 | 0.257 | 1.000 | 1.000 | 0.900 | 0.931 |
| 1.000 | 0.618 | 0.769 | 1.000 | 0.976 | 0.804 | 1.000 | 1.000 | 1.000 | 0.380 | 0.330 | 0.199 | 1.000 | 0.832 | 0.025 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.032 | 0.896 | 0.585 | 1.000 | 0.977 | 0.923 | 0.148 | 0.188 | 1.000 | 1.000 | 0.723 |
| 0.306 | 0.062 | 0.752 | 1.000 | 0.263 | 0.632 | 0.115 | 1.000 | 1.000 | 0.221 | 0.076 | 0.064 | 0.358 | 0.301 | 0.032 |
| 1.000 | 0.636 | 1.000 | 1.000 | 0.184 | 0.896 | 0.500 | 1.000 | 0.914 | 0.504 | 1.000 | 0.319 | 1.000 | 1.000 | 0.040 |
| 1.000 | 0.736 | 1.000 | 1.000 | 0.821 | 0.896 | 0.571 | 1.000 | 0.993 | 0.287 | 0.112 | 0.127 | 1.000 | 0.900 | 0.028 |
| 0.899 | 0.590 | 1.000 | 1.000 | 1.000 | 0.328 | 0.577 | 1.000 | 1.000 | 0.537 | 1.000 | 0.097 | 1.000 | 0.852 | 0.021 |
| 1.000 | 0.800 | 1.000 | 0.960 | 0.831 | 1.000 | 0.813 | 1.000 | 1.000 | 0.569 | 0.105 | 0.092 | 0.760 | 0.678 | 0.019 |
| 0.564 | 0.145 | 1.000 | 1.000 | 0.019 | 0.224 | 0.062 | 0.687 | 0.186 | 0.552 | 0.090 | 0.683 | 0.744 | 0.222 | 0.516 |
| 0.718 | 0.151 | 1.000 | 1.000 | 0.171 | 1.000 | 0.219 | 1.000 | 1.000 | 0.039 | 0.230 | 0.608 | 1.000 | 0.623 | 1.000 |
| 0.212 | 0.171 | 1.000 | 1.000 | 0.349 | 0.716 | 1.000 | 1.000 | 1.000 | 0.841 | 0.751 | 0.061 | 1.000 | 0.900 | 0.032 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.039 | 0.896 | 0.334 | 1.000 | 1.000 | 0.999 | 0.125 | 0.134 | 1.000 | 0.900 | 0.373 |
| 0.356 | 0.093 | 1.000 | 1.000 | 0.041 | 1.000 | 0.521 | 1.000 | 1.000 | 0.181 | 0.138 | 0.074 | 0.334 | 0.196 | 0.598 |
| 0.521 | 0.623 | 0.937 | 1.000 | 0.821 | 0.720 | 0.268 | 1.000 | 1.000 | 0.613 | 1.000 | 0.335 | 1.000 | 1.000 | 0.036 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.429 | 0.821 | 0.293 | 1.000 | 1.000 | 0.487 | 0.624 | 0.538 | 1.000 | 1.000 | 0.047 |
| 1.000 | 0.395 | 1.000 | 1.000 | 0.012 | 1.000 | 0.681 | 1.000 | 1.000 | 0.231 | 0.353 | 0.383 | 0.659 | 0.472 | 0.667 |
| 0.679 | 0.362 | 1.000 | 1.000 | 0.034 | 0.532 | 0.082 | 1.000 | 0.964 | 1.000 | 0.176 | 0.200 | 1.000 | 1.000 | 0.084 |
| 1.000 | 0.938 | 0.810 | 1.000 | 0.356 | 0.559 | 0.836 | 1.000 | 1.000 | 0.273 | 0.125 | 0.272 | 1.000 | 0.812 | 0.048 |
| 0.435 | 0.800 | 1.000 | 1.000 | 0.035 | 0.491 | 0.173 | 0.943 | 1.000 | 0.884 | 0.709 | 0.459 | 0.753 | 0.442 | 0.770 |
| 0.685 | 0.922 | 1.000 | 1.000 | 0.434 | 1.000 | 1.000 | 1.000 | 1.000 | 0.928 | 0.364 | 0.086 | 0.945 | 1.000 | 0.023 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.825 | 0.912 | 1.000 | 1.000 | 1.000 | 0.733 | 0.369 | 0.440 | 0.258 | 0.005 | 0.763 |
| 0.701 | 0.069 | 1.000 | 1.000 | 0.048 | 1.000 | 0.133 | 1.000 | 1.000 | 0.254 | 0.249 | 0.698 | 1.000 | 0.791 | 0.154 |
| 1.000 | 0.520 | 1.000 | 1.000 | 0.821 | 0.205 | 0.753 | 0.812 | 0.977 | 1.000 | 0.725 | 0.406 | 1.000 | 1.000 | 0.021 |
| 0.837 | 0.853 | 1.000 | 1.000 | 0.413 | 0.575 | 0.383 | 1.000 | 1.000 | 0.035 | 0.097 | 0.234 | 1.000 | 0.206 | 0.589 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 0.995 | 0.935 | 0.613 | 0.090 | 1.000 | 0.862 | 0.045 |
| 1.000 | 0.727 | 1.000 | 1.000 | 1.000 | 0.896 | 0.354 | 1.000 | 1.000 | 0.252 | 0.230 | 0.272 | 0.756 | 0.335 | 0.022 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.023 | 0.273 | 0.201 | 1.000 | 1.000 | 0.169 | 0.104 | 0.713 | 0.878 | 0.887 | 0.487 |
| 0.233 | 0.656 | 1.000 | 0.774 | 0.029 | 0.670 | 0.356 | 0.961 | 0.483 | 0.884 | 0.085 | 0.863 | 1.000 | 0.392 | 0.643 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.657 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.751 | 0.338 | 1.000 | 0.908 | 0.031 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.334 | 0.483 | 1.000 | 0.776 | 0.972 | 0.674 | 0.242 | 0.445 | 1.000 | 1.000 | 0.023 |
| 0.480 | 0.731 | 0.189 | 1.000 | 0.655 | 0.979 | 0.713 | 1.000 | 1.000 | 0.884 | 0.751 | 0.337 | 0.327 | 0.892 | 0.021 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.353 | 0.694 | 0.335 | 0.751 | 0.755 | 0.129 | 0.652 | 0.412 | 1.000 | 1.000 | 0.047 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.560 | 0.896 | 0.663 | 1.000 | 1.000 | 1.000 | 0.117 | 0.205 | 1.000 | 0.894 | 0.031 |
| 1.000 | 0.693 | 1.000 | 1.000 | 0.039 | 0.824 | 0.690 | 1.000 | 1.000 | 0.193 | 0.088 | 0.221 | 0.796 | 0.338 | 0.384 |
| 0.953 | 0.709 | 1.000 | 1.000 | 1.000 | 0.638 | 0.227 | 1.000 | 1.000 | 1.000 | 0.427 | 0.178 | 1.000 | 1.000 | 0.027 |
| 0.681 | 0.883 | 1.000 | 1.000 | 0.042 | 0.931 | 0.500 | 1.000 | 1.000 | 0.187 | 0.469 | 0.764 | 1.000 | 1.000 | 1.000 |
| 1.000 | 0.438 | 1.000 | 1.000 | 0.106 | 0.877 | 0.367 | 0.909 | 1.000 | 0.563 | 0.426 | 0.683 | 0.875 | 0.023 | 0.276 |
| 0.815 | 0.464 | 1.000 | 1.000 | 0.097 | 0.814 | 0.096 | 1.000 | 1.000 | 0.035 | 0.751 | 0.331 | 1.000 | 0.900 | 0.627 |
| 0.072 | 0.472 | 1.000 | 0.780 | 0.041 | 1.000 | 0.296 | 1.000 | 1.000 | 0.484 | 0.500 | 0.128 | 1.000 | 1.000 | 0.074 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.760 | 0.782 | 1.000 | 1.000 | 1.000 | 0.605 | 0.331 | 0.475 | 0.900 | 0.047 |
| 1.000 | 0.666 | 1.000 | 1.000 | 0.046 | 0.896 | 1.000 | 1.000 | 0.943 | 0.884 | 0.751 | 0.187 | 1.000 | 1.000 | 0.424 |
| 1.000 | 0.085 | 1.000 | 1.000 | 0.032 | 0.228 | 0.097 | 1.000 | 1.000 | 0.997 | 0.075 | 0.683 | 1.000 | 0.622 | 1.000 |
| 0.881 | 0.946 | 1.000 | 1.000 | 0.039 | 0.532 | 0.661 | 0.888 | 1.000 | 0.535 | 1.000 | 0.280 | 1.000 | 0.597 | 0.610 |
| 1.000 | 0.922 | 1.000 | 1.000 | 0.519 | 0.339 | 0.100 | 0.333 | 0.665 | 0.890 | 0.495 | 0.649 | 1.000 | 1.000 | 0.031 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.871 | 0.676 | 0.581 | 0.978 | 0.947 | 0.917 | 0.258 | 0.715 | 0.904 | 1.000 | 0.044 |
| 1.000 | 0.148 | 1.000 | 1.000 | 0.387 | 1.000 | 0.097 | 1.000 | 0.805 | 0.086 | 0.195 | 0.340 | 1.000 | 0.747 | 0.030 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.616 | 0.904 | 1.000 | 1.000 | 1.000 | 0.682 | 0.625 | 0.451 | 0.988 | 0.820 | 0.033 |
| 0.279 | 0.365 | 1.000 | 1.000 | 0.821 | 1.000 | 0.373 | 1.000 | 1.000 | 0.038 | 0.066 | 0.066 | 0.648 | 0.900 | 0.366 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.821 | 0.629 | 0.255 | 1.000 | 1.000 | 0.719 | 0.073 | 0.167 | 0.590 | 0.314 | 0.019 |
| 1.000 | 0.871 | 1.000 | 1.000 | 0.921 | 0.901 | 0.861 | 1.000 | 1.000 | 1.000 | 1.000 | 0.122 | 1.000 | 0.906 | 0.038 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SF3B2 | 0.02 | 0.05 | 0.03 | -0.04 | 0.05 | 0.08 | -0.09 | -0.02 | 0.03 | 0.08 | -0.11 | 0.31 | -0.08 | 0.12 | **0.16** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.611 | 1.000 | 1.000 | 0.522 | 0.613 | 0.068 | 1.000 | 0.883 | 0.048 |
| VEGFC | 0.61 | 0.27 | 0.18 | 0.03 | 0.69 | 0.1 | -0.38 | 0.02 | -0.06 | -0.32 | -0.12 | 0.31 | -0.11 | -0.18 | **0.6** | 0.306 | 0.502 | 1.000 | 1.000 | 0.169 | 0.896 | 0.589 | 1.000 | 1.000 | 0.884 | 0.661 | 0.347 | 1.000 | 1.000 | 0.043 |
| HSCB | -0.04 | -0.08 | -0.03 | 0.02 | -0.15 | 0.06 | 0.04 | 0.02 | 0.02 | 0.04 | 0.09 | 0.43 | 0.01 | 0.15 | **0.83** | 1.000 | 0.905 | 1.000 | 1.000 | 0.360 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.403 | 0.131 | 1.000 | 0.835 | 0.047 |
| FRAS1 | -0.14 | -0.11 | -0.09 | 0.03 | -0.12 | -0.25 | -0.23 | -0.14 | -0.31 | -0.04 | -0.06 | -0.28 | 0.2 | 0.13 | **-0.54** | 1.000 | 0.953 | 1.000 | 1.000 | 1.000 | 0.896 | 0.822 | 1.000 | 1.000 | 1.000 | 1.000 | 0.359 | 1.000 | 0.917 | 0.032 |
| PKN1 | 0.14 | 0.05 | -0.01 | -0.11 | 0.09 | 0.18 | -0.44 | 0.18 | -0.11 | -0.15 | -0.28 | 1.04 | 0.11 | 0.22 | **0.54** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.672 | 0.624 | 1.000 | 1.000 | 1.000 | 0.573 | 0.078 | 1.000 | 0.963 | 0.020 |
| SYNJ2 | 0.48 | 0.41 | 0.07 | 0.28 | **0.65** | 0.35 | 0.29 | 0.11 | 0.35 | 0.26 | 0.09 | -0.5 | 0.07 | 0.25 | -0.26 | 0.212 | 0.078 | 1.000 | 0.917 | 0.029 | 0.390 | 0.164 | 1.000 | 0.371 | 0.298 | 0.709 | 0.155 | 1.000 | 0.353 | 0.229 |
| PSEN1 | 0.51 | 0.59 | -0.22 | -0.04 | **1.14** | 0.07 | 0.69 | 0.16 | 0.11 | 0.54 | 0.66 | -0.23 | 0.17 | -0.06 | 0.12 | 0.189 | 0.526 | 1.000 | 1.000 | 0.038 | 1.000 | 0.059 | 1.000 | 1.000 | 0.118 | 0.356 | 0.411 | 0.939 | 1.000 | 1.000 |
| MLL3 | 0.04 | 0.26 | 0.08 | -0.01 | 0.2 | -0.02 | 0.21 | 0.04 | 0.04 | 0.36 | 0.3 | -0.88 | 0.07 | 0.11 | **-0.46** | 1.000 | 0.084 | 1.000 | 1.000 | 0.565 | 1.000 | 0.301 | 1.000 | 1.000 | 0.203 | 0.495 | 0.099 | 1.000 | 1.000 | 0.042 |
| TRAF3IP1 | 0.22 | 0.06 | 0.26 | 0.14 | -0.27 | -0.21 | -0.06 | -0.27 | -0.23 | 0.04 | -0.62 | -1.76 | -0.42 | -0.62 | **-0.92** | 0.652 | 1.000 | 1.000 | 1.000 | 0.197 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.731 | 0.150 | 1.000 | 0.900 | 0.005 |
| SLC2A4RG | 0.87 | 0.75 | 0.21 | 0.22 | **0.68** | 0.14 | 0.32 | 0.45 | 0.22 | 0.14 | 0.23 | -0.45 | 0.16 | 0.32 | -0.86 | 0.136 | 0.298 | 1.000 | 1.000 | 0.028 | 0.976 | 0.572 | 1.000 | 1.000 | 0.940 | 0.243 | 0.252 | 0.800 | 0.602 | 0.119 |
| TRIM46 | -0.11 | -0.18 | -0.1 | 0.14 | 0 | -0.11 | -0.17 | -0.1 | 0.92 | **0** | -0.22 | 0.21 | -0.17 | -0.17 | 0.11 | 1.000 | 0.689 | 1.000 | 1.000 | 0.797 | 1.000 | 0.813 | 1.000 | 1.000 | 0.023 | 0.666 | 0.726 | 1.000 | 0.900 | 0.589 |
| RBBP7 | -0.13 | 0.09 | 0.08 | -0.02 | 0.05 | 0.14 | 0 | 0.02 | 0.09 | -0.01 | 0.13 | 0.38 | 0.1 | 0.18 | **0.2** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.532 | 1.000 | 1.000 | 1.000 | 1.000 | 0.286 | 0.058 | 0.875 | 0.770 | 0.037 |
| KIAA1551 | 0.3 | 0.51 | 0 | 0.08 | 0.36 | -0.14 | 0.09 | 0.06 | 0.04 | 0.04 | 0.08 | -0.57 | 0.02 | 0.19 | **-1.08** | 0.982 | 0.396 | 1.000 | 1.000 | 0.321 | 0.896 | 0.517 | 1.000 | 1.000 | 1.000 | 1.000 | 0.052 | 1.000 | 0.848 | 0.028 |
| GIMAP4 | -0.27 | -0.42 | -0.05 | -0.16 | **-0.66** | -0.04 | -0.67 | -0.05 | -0.12 | -0.77 | -0.9 | -0.19 | -0.07 | -0.29 | -0.36 | 0.936 | 0.352 | 1.000 | 1.000 | 0.041 | 1.000 | 0.115 | 1.000 | 1.000 | 0.103 | 0.063 | 0.282 | 1.000 | 0.410 | 0.227 |
| SDC4 | 0.94 | 0.21 | -0.06 | 0.1 | **1.04** | -0.28 | -0.57 | -0.12 | -0.29 | -0.35 | -0.66 | 0.37 | -0.32 | -0.53 | **0.7** | 0.249 | 0.781 | 1.000 | 1.000 | 0.044 | 0.720 | 0.100 | 1.000 | 0.949 | 0.459 | 0.061 | 0.135 | 0.603 | 0.329 | 0.017 |
| TRIM37 | 0.7 | 0.41 | 0.39 | 1.29 | 0.09 | -0.04 | -0.26 | -0.22 | -0.17 | -0.02 | 0.43 | 3.1 | 0.52 | 0.79 | **1.64** | 0.367 | 0.674 | 1.000 | 1.000 | 1.000 | 1.000 | 0.940 | 1.000 | 1.000 | 1.000 | 0.751 | 0.073 | 1.000 | 0.682 | 0.009 |
| RALGAPA2 | 0.52 | 0.21 | -0.01 | 0 | **0.52** | -0.06 | -0.03 | -0.03 | -0.05 | 0.07 | -0.47 | -0.51 | -0.02 | -0.21 | -0.27 | 0.351 | 0.514 | 1.000 | 1.000 | 0.049 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.195 | 0.087 | 1.000 | 0.386 | 0.352 |
| FZD8 | -0.24 | 0.33 | 0.15 | 0.14 | -0.19 | 0.1 | 0.2 | 0.27 | 0.52 | 0.27 | 0.36 | -1.08 | 0.07 | 0.18 | **-2.02** | 1.000 | 0.777 | 1.000 | 1.000 | 0.821 | 0.896 | 0.520 | 0.974 | 0.773 | 0.748 | 0.063 | 0.054 | 1.000 | 0.485 | 0.018 |
| ZNF550 | 0.05 | 0.07 | -0.04 | -0.09 | 0.36 | 0.15 | 0.4 | -0.08 | -0.03 | 0.48 | 0.46 | -0.23 | 0.22 | 0.19 | **-0.43** | 1.000 | 1.000 | 1.000 | 1.000 | 0.542 | 1.000 | 0.345 | 1.000 | 1.000 | 0.397 | 0.260 | 0.535 | 1.000 | 0.900 | 0.043 |
| AES | 0.37 | 0.1 | 0.04 | 0.01 | 0.04 | 0.13 | -0.01 | -0.03 | -0.02 | 0.32 | 0.07 | 0.71 | 0.07 | 0.02 | **0.38** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.935 | 1.000 | 1.000 | 1.000 | 0.557 | 1.000 | 0.099 | 1.000 | 1.000 | 0.045 |
| PCDH12 | -0.3 | -0.31 | 0.13 | -0.01 | -0.08 | -0.38 | -0.49 | 0.13 | 0.04 | -0.29 | -0.32 | 0.28 | -0.15 | -0.25 | **-0.52** | 0.686 | 0.400 | 1.000 | 1.000 | 1.000 | 0.205 | 0.080 | 1.000 | 1.000 | 0.345 | 0.124 | 0.283 | 0.929 | 0.893 | 0.031 |
| STX2 | 0.16 | 0.11 | -0.06 | 0 | **0.25** | 0 | 0.2 | 0.04 | 0.04 | 0.08 | 0.13 | -0.26 | 0.04 | -0.06 | -0.14 | 0.715 | 0.781 | 1.000 | 1.000 | 0.045 | 1.000 | 0.282 | 1.000 | 1.000 | 0.884 | 0.092 | 0.153 | 0.796 | 0.900 | 0.728 |
| GORASP2 | 0.15 | 0.24 | 0.06 | 0.05 | 0.21 | 0.36 | 0.3 | 0.18 | 0.27 | 0.29 | 0.18 | 0.37 | 0.08 | 0.33 | **0.2** | 1.000 | 0.498 | 1.000 | 1.000 | 0.489 | 0.187 | 0.306 | 1.000 | 0.582 | 0.138 | 0.384 | 0.116 | 0.942 | 0.557 | 0.047 |
| LOC440900 | 0.01 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 | 0 | 0.07 | 0 | 0.81 | 0 | 0 | **1.49** | 1.000 | 0.905 | 1.000 | 1.000 | 0.821 | 0.896 | 0.813 | 1.000 | 1.000 | 0.837 | 0.751 | 0.267 | 1.000 | 1.000 | 0.002 |
| SMYD3 | -0.15 | -0.15 | 0.12 | -0.02 | -0.21 | 0.57 | 0.18 | 0.55 | 0.39 | 0.18 | 0.17 | 0.37 | -0.09 | -0.1 | **0.68** | 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.644 | 1.000 | 1.000 | 1.000 | 0.884 | 1.000 | 0.645 | 1.000 | 1.000 | 0.043 |
| EEF1E1 | -0.29 | -0.36 | 0.02 | -0.09 | -0.34 | 0 | -0.11 | 0.11 | 0.05 | -0.32 | -0.37 | 0.24 | -0.03 | -0.03 | **0.44** | 0.475 | 0.257 | 1.000 | 1.000 | 0.058 | 1.000 | 0.813 | 1.000 | 1.000 | 0.257 | 0.226 | 0.130 | 1.000 | 1.000 | 0.025 |
| EFNB1 | 0.84 | 0.38 | -0.06 | -0.12 | **0.71** | -0.13 | -0.3 | -0.1 | -0.36 | -0.22 | -0.33 | 0.11 | -0.11 | -0.21 | 0.06 | 0.092 | 0.273 | 1.000 | 1.000 | 0.049 | 1.000 | 0.670 | 1.000 | 1.000 | 0.884 | 0.450 | 0.731 | 0.774 | 0.768 | 1.000 |
| RNF144B | -0.25 | -0.37 | 0 | -0.08 | **-0.45** | -0.16 | -0.16 | -0.07 | -0.13 | -0.29 | -0.13 | -0.06 | 0.03 | -0.05 | 0.11 | 0.277 | 0.067 | 1.000 | 1.000 | 0.030 | 0.448 | 0.065 | 0.857 | 0.796 | 0.105 | 0.058 | 0.729 | 1.000 | 0.900 | 0.147 |
| SNAPC4 | 0.3 | 0.61 | 0 | 0.07 | **0.57** | 0.04 | 0.04 | 0.03 | 0.16 | 0.09 | 0.06 | 0.06 | -0.16 | 0.04 | -0.11 | 0.777 | 0.698 | 1.000 | 1.000 | 0.041 | 0.896 | 0.813 | 1.000 | 1.000 | 0.544 | 0.925 | 0.855 | 1.000 | 1.000 | 0.404 |
| ZNF438 | -0.21 | 0.61 | 0.21 | 0.12 | 0.66 | 0.6 | 0.43 | 0.26 | 0.18 | 0.24 | 0.53 | 0.64 | 0.11 | 0.53 | **1.17** | 1.000 | 0.384 | 1.000 | 1.000 | 0.129 | 0.511 | 0.216 | 1.000 | 1.000 | 0.693 | 0.169 | 0.177 | 1.000 | 0.724 | 0.035 |
| NDUFB1 | 0.04 | -0.26 | -0.09 | -0.13 | -0.25 | -0.78 | -0.6 | -0.47 | -0.25 | -0.37 | -0.18 | -1.15 | 0.01 | -0.55 | **-2.1** | 1.000 | 0.905 | 1.000 | 1.000 | 0.780 | 0.641 | 0.522 | 1.000 | 1.000 | 0.842 | 0.594 | 0.339 | 1.000 | 0.900 | 0.019 |
| C19orf18 | 0.03 | 0.01 | -0.18 | 0.01 | -0.67 | -0.25 | -0.26 | -0.21 | 0.26 | -1.02 | 0.01 | 0.73 | 0.65 | 0.23 | **-1.33** | 1.000 | 1.000 | 1.000 | 1.000 | 0.135 | 0.934 | 0.813 | 1.000 | 1.000 | 0.800 | 1.000 | 0.275 | 0.764 | 1.000 | 0.037 |
| DUSP10 | 0.88 | 0.09 | 0.95 | 0.1 | 0.59 | -0.44 | -0.4 | -0.09 | -0.29 | -0.3 | -0.41 | 2.6 | -0.13 | -0.51 | **4.73** | 0.930 | 1.000 | 1.000 | 1.000 | 0.466 | 0.641 | 0.466 | 1.000 | 1.000 | 0.962 | 0.505 | 0.065 | 1.000 | 0.427 | 0.002 |
| MAPK3 | 0.08 | -0.12 | -0.08 | -0.12 | 0.32 | 0.09 | -0.07 | 0.01 | -0.11 | 0.23 | -0.1 | 0.6 | -0.04 | 0.06 | **0.33** | 1.000 | 0.905 | 1.000 | 1.000 | 0.406 | 1.000 | 1.000 | 1.000 | 1.000 | 0.817 | 0.787 | 0.052 | 1.000 | 1.000 | 0.033 |
| EGR2 | 0 | 0 | 0 | 0 | 0 | -0.01 | -0.01 | -0.01 | -0.01 | 0 | 0 | 2.3 | 0 | 0 | **4.18** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.813 | 1.000 | 1.000 | 1.000 | 1.000 | 0.114 | 1.000 | 1.000 | 0.050 |
| PLA2G4C | 0.54 | 0.95 | -0.01 | 0.41 | **1.7** | 0.73 | 0.69 | 0.91 | 0.7 | 0.73 | 0.67 | 0.89 | -0.11 | 0.45 | -0.49 | 0.134 | 0.163 | 1.000 | 0.619 | 0.020 | 0.680 | 0.474 | 0.873 | 1.000 | 0.803 | 0.338 | 0.169 | 1.000 | 0.870 | 0.536 |
| PER1 | -0.15 | 0.13 | -0.11 | -0.17 | -0.2 | -1.19 | -1.19 | -1.14 | -1.14 | 0.02 | 0.03 | 1.03 | 0.01 | -0.02 | **1.87** | 0.872 | 1.000 | 1.000 | 1.000 | 0.805 | 0.896 | 0.813 | 1.000 | 1.000 | 1.000 | 0.592 | 0.121 | 1.000 | 1.000 | 0.042 |
| MDN1 | -0.37 | -0.39 | -0.01 | -0.06 | -0.78 | -0.57 | -0.51 | -0.3 | -0.41 | -0.4 | -0.32 | -0.16 | 0.08 | -0.08 | **-0.29** | 0.209 | 0.190 | 1.000 | 1.000 | 0.367 | 0.208 | 0.149 | 0.899 | 0.569 | 0.460 | 0.245 | 0.672 | 1.000 | 1.000 | 0.040 |
| KIAA1462 | 0.26 | 0.08 | 0.25 | 0.17 | 0.07 | -0.12 | -0.02 | -0.06 | -0.01 | 0.05 | -0.22 | -0.37 | -0.07 | -0.15 | **-0.67** | 0.971 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.256 | 0.078 | 1.000 | 0.707 | 0.001 |
| SGCB | 0.12 | 0.04 | -0.01 | -0.01 | -0.23 | 0.03 | -0.03 | 0.01 | -0.03 | -0.08 | -0.13 | -0.67 | -0.03 | -0.02 | **-0.37** | 1.000 | 1.000 | 1.000 | 1.000 | 0.096 | 1.000 | 1.000 | 1.000 | 1.000 | 0.883 | 0.313 | 0.066 | 1.000 | 1.000 | 0.030 |
| MDM4 | 0.15 | -0.15 | -0.04 | 0 | -0.05 | -0.39 | -0.16 | -0.06 | 0.08 | 0.04 | -0.09 | -0.78 | 0 | -0.07 | **-1.41** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 0.400 | 0.383 | 1.000 | 1.000 | 1.000 | 1.000 | 0.116 | 1.000 | 1.000 | 0.026 |
| CCT2 | -0.07 | 0.03 | -0.02 | -0.06 | 0.17 | 0.09 | 0.14 | 0.07 | 0.11 | 0.2 | 0.22 | 0.25 | 0 | 0.17 | **0.45** | 0.901 | 1.000 | 1.000 | 1.000 | 0.538 | 0.917 | 0.358 | 1.000 | 1.000 | 0.350 | 0.167 | 0.113 | 1.000 | 0.408 | 0.018 |
| SPCS1 | -0.07 | -0.12 | 0.01 | -0.04 | **-0.27** | 0.11 | 0.1 | 0.08 | 0.05 | 0.04 | -0.05 | 0.09 | 0.05 | -0.04 | 0.05 | 1.000 | 0.348 | 1.000 | 1.000 | 0.031 | 0.371 | 0.303 | 0.873 | 1.000 | 0.960 | 0.198 | 0.327 | 0.692 | 1.000 | 0.781 |
| SETBP1 | -0.81 | -0.61 | -0.32 | -0.43 | **-1.26** | -1.15 | -1.1 | -0.98 | -1.18 | -0.86 | -0.2 | -1.2 | -0.33 | -0.43 | -0.67 | 0.059 | 0.130 | 1.000 | 0.641 | 0.047 | 0.802 | 0.659 | 1.000 | 1.000 | 0.358 | 1.000 | 0.242 | 1.000 | 1.000 | 0.508 |
| TMEM170B | 0.09 | 0.34 | 0.12 | -0.02 | -1.05 | -0.13 | 0.04 | -0.31 | -0.21 | -0.34 | -0.58 | -0.5 | 0.22 | 0 | **-0.89** | 1.000 | 0.826 | 1.000 | 1.000 | 0.178 | 1.000 | 1.000 | 1.000 | 1.000 | 0.716 | 0.287 | 0.614 | 1.000 | 1.000 | 0.040 |
| TYK2 | 0.66 | 0.18 | -0.09 | 0.1 | 0.55 | -0.15 | -0.17 | 0.1 | 0.1 | 0.22 | -0.01 | 0.32 | -0.18 | 0.03 | **-0.18** | 0.653 | 1.000 | 1.000 | 1.000 | 0.462 | 1.000 | 0.259 | 1.000 | 1.000 | 0.885 | 1.000 | 0.331 | 1.000 | 1.000 | 0.038 |
| IRF3 | 0.13 | 0.17 | -0.01 | 0.04 | -0.28 | 0.13 | -0.23 | 0.04 | 0.08 | 0.05 | -0.64 | 0.4 | -0.39 | -0.56 | **0.71** | 1.000 | 0.663 | 1.000 | 1.000 | 0.821 | 0.969 | 0.717 | 1.000 | 1.000 | 1.000 | 0.524 | 0.700 | 1.000 | 0.851 | 0.026 |
| TUFT1 | 0.01 | -0.01 | -0.04 | 0 | -0.26 | -0.01 | -0.01 | 0.02 | 0 | 0.01 | -0.36 | 0.73 | -0.04 | 0.08 | **1.29** | 1.000 | 1.000 | 1.000 | 1.000 | 0.077 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.388 | 0.060 | 1.000 | 1.000 | 0.034 |
| KGFLP1 | -0.39 | -0.34 | 0.35 | -0.34 | 0.2 | 0.07 | -0.48 | -0.8 | -0.25 | 0.09 | -0.2 | 1.06 | -0.7 | 0.05 | **1.87** | 0.964 | 0.719 | 1.000 | 1.000 | 0.460 | 1.000 | 0.813 | 1.000 | 1.000 | 1.000 | 0.576 | 0.259 | 1.000 | 1.000 | 0.041 |
| SURF2 | 0.19 | -0.04 | 0.04 | 0 | -0.01 | 0.21 | -0.03 | 0.04 | 0.16 | -0.22 | -0.36 | 0.33 | -0.04 | -0.08 | **0.58** | 1.000 | 0.823 | 1.000 | 1.000 | 0.804 | 0.896 | 0.507 | 1.000 | 1.000 | 0.710 | 0.393 | 0.417 | 1.000 | 0.645 | 0.021 |
| TYSND1 | -0.9 | -1.05 | -0.52 | -0.55 | **-1.48** | -0.45 | -0.75 | -0.27 | -0.41 | -1.02 | -0.53 | 1.06 | 0.04 | -0.67 | 1.86 | 1.000 | 0.722 | 1.000 | 1.000 | 0.031 | 0.726 | 0.236 | 1.000 | 0.949 | 0.533 | 0.586 | 0.366 | 1.000 | 0.743 | 0.416 |
| DENND4C | 0.09 | -0.07 | -0.01 | -0.02 | -0.23 | -0.12 | -0.24 | 0.02 | -0.06 | -0.14 | 0.01 | -0.24 | 0.06 | 0.15 | **-0.42** | 1.000 | 1.000 | 1.000 | 1.000 | 0.304 | 0.686 | 0.217 | 1.000 | 1.000 | 0.697 | 1.000 | 0.063 | 1.000 | 0.626 | 0.045 |
| LDLR | -0.07 | 0.47 | -0.29 | -0.16 | 0.04 | 0.39 | 0.75 | 0 | 0.24 | 0.2 | 0.26 | 0.52 | -0.25 | 0.01 | **0.91** | 1.000 | 0.119 | 0.627 | 1.000 | 1.000 | 0.583 | 0.050 | 1.000 | 0.977 | 0.906 | 0.872 | 0.113 | 1.000 | 1.000 | 0.042 |
| TTC39C | 1.61 | 1.74 | 0.12 | 0.19 | 1.27 | 1.17 | 1.63 | 0.65 | 0.27 | 1.33 | 0.46 | -0.67 | -0.26 | -0.01 | **1.17** | 0.129 | 0.056 | 1.000 | 1.000 | 0.132 | 0.624 | 0.414 | 1.000 | 1.000 | 0.185 | 0.192 | 0.059 | 1.000 | 1.000 | 0.011 |
| WASF3 | 0.09 | 0.23 | 0.1 | 0.02 | 0.05 | -0.13 | 0.25 | -0.08 | -0.02 | 0.09 | 0.2 | -0.3 | 0.01 | 0.06 | **-0.52** | 1.000 | 0.096 | 1.000 | 1.000 | 1.000 | 0.896 | 0.366 | 1.000 | 1.000 | 0.886 | 0.625 | 0.387 | 1.000 | 1.000 | 0.049 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TGIF1 | 0.23 | 0.48 | 0.1 | -0.15 | 0.45 | 0.13 | 0.2 | 0.27 | 0.14 | 0.25 | -0.05 | 0.4 | -0.16 | -0.01 | **0.69** | 0.726 | 0.262 | 1.000 | 1.000 | 0.455 | 0.828 | 0.614 | 0.998 | 0.918 | 0.386 | 1.000 | 0.091 | 0.580 | 1.000 | 0.035 |
| LSM11 | -0.29 | -0.11 | -0.04 | -0.05 | 0.13 | -0.07 | -0.13 | -0.11 | -0.03 | 0.07 | 0.3 | -0.32 | 0.19 | 0.05 | **-0.55** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.345 | 1.000 | 1.000 | 1.000 | 0.183 | 0.150 | 0.945 | 1.000 | 0.047 |
| CHMP1B | 0.35 | 0.58 | 0.22 | 0.05 | 0.55 | 0.16 | 0.54 | 0.21 | 0.17 | 0.45 | 0.68 | 0.51 | 0.24 | 0.35 | **0.87** | 0.531 | 0.127 | 1.000 | 1.000 | 0.118 | 0.942 | 0.185 | 1.000 | 1.000 | 0.293 | 0.117 | 0.275 | 0.800 | 0.396 | 0.009 |
| BUD31 | 0.05 | 0.18 | -0.09 | -0.03 | 0.17 | 0.27 | 0.17 | 0.14 | 0.13 | 0.18 | 0.15 | 0.37 | 0.05 | 0.17 | **0.63** | 1.000 | 0.501 | 1.000 | 1.000 | 0.514 | 0.587 | 0.192 | 1.000 | 1.000 | 0.738 | 0.751 | 0.131 | 1.000 | 0.799 | 0.004 |
| EPG5 | -0.11 | -0.02 | -0.14 | 0.01 | -0.41 | 0 | 0.17 | 0.17 | 0.04 | 0.05 | 0.49 | -0.3 | 0.2 | 0.36 | **-0.51** | 0.882 | 1.000 | 1.000 | 1.000 | 0.904 | 1.000 | 0.525 | 1.000 | 1.000 | 1.000 | 0.488 | 0.324 | 1.000 | 0.754 | 0.025 |
| ZNF496 | 0.31 | -0.55 | -1.08 | -0.71 | -0.05 | -1.22 | -0.93 | -1.09 | -1.12 | 0.29 | -1.05 | -2.31 | -0.78 | -0.79 | **-1.38** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 0.883 | 0.699 | 0.912 | 0.977 | 1.000 | 0.395 | 0.081 | 0.979 | 1.000 | 0.049 |
| DYRK2 | 0.11 | 0.29 | 0.24 | 0.22 | 0.15 | 0.42 | 0.67 | 0.03 | 0.29 | 0.79 | 0.47 | -0.45 | 0.42 | 0.45 | **-0.75** | 1.000 | 0.800 | 1.000 | 1.000 | 1.000 | 0.546 | 0.143 | 1.000 | 0.939 | 0.189 | 0.210 | 0.271 | 0.893 | 0.330 | 0.036 |
| F11R | 0.02 | -0.12 | -0.08 | -0.11 | -0.09 | -0.04 | 0 | -0.04 | -0.07 | -0.03 | -0.29 | -0.3 | -0.33 | -0.27 | **-0.18** | 1.000 | 0.373 | 1.000 | 1.000 | 0.590 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.427 | 0.356 | 0.859 | 0.720 | 0.040 |
| HDAC2 | -0.03 | 0.01 | -0.02 | -0.12 | -0.02 | 0.08 | 0 | 0.04 | 0.07 | -0.06 | -0.14 | 0.15 | 0.01 | 0.16 | **0.25** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.787 | 0.586 | 0.385 | 1.000 | 0.750 | 0.036 |
| ICAM3 | -0.14 | -0.66 | -0.02 | -0.08 | -0.14 | -0.03 | -0.37 | -0.1 | -0.15 | 0.05 | -0.78 | 0.7 | -0.04 | -0.22 | **0.42** | 1.000 | 0.104 | 1.000 | 1.000 | 0.821 | 1.000 | 0.505 | 1.000 | 1.000 | 1.000 | 0.211 | 0.123 | 1.000 | 0.470 | 0.034 |
| RAPH1 | 0.46 | 0.34 | 0.07 | 0.1 | **0.47** | -0.03 | -0.09 | -0.04 | -0.16 | -0.21 | 0.11 | -0.35 | -0.01 | 0.04 | -0.21 | 0.083 | 0.105 | 1.000 | 1.000 | 0.028 | 1.000 | 0.590 | 1.000 | 0.995 | 0.481 | 0.799 | 0.107 | 1.000 | 1.000 | 0.499 |
| TNPO3 | -0.27 | 0.04 | -0.24 | -0.18 | 0.16 | 0.16 | 0.22 | 0.18 | 0.27 | 0.31 | 0.25 | 0.3 | -0.06 | 0.05 | **0.5** | 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.498 | 0.352 | 0.974 | 0.900 | 0.720 | 0.445 | 0.301 | 1.000 | 1.000 | 0.047 |
| DLX2 | 0 | 0 | 0 | 0.07 | 0.01 | -0.06 | -0.01 | -0.06 | -0.06 | -0.02 | 0.21 | 2.95 | 0.8 | 0 | **4.88** | 1.000 | 0.905 | 1.000 | 1.000 | 0.809 | 0.897 | 1.000 | 1.000 | 1.000 | 1.000 | 0.751 | 0.079 | 1.000 | 1.000 | 0.034 |
| TSIX | -0.23 | 0.09 | -0.01 | -0.22 | -0.4 | -0.28 | -0.21 | 0.06 | -0.04 | -0.51 | -0.19 | -1.6 | -0.22 | -0.06 | **-2.64** | 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.827 | 0.908 | 1.000 | 1.000 | 0.314 | 0.751 | 0.058 | 1.000 | 1.000 | 0.042 |
| DAAM1 | 0.65 | 0.44 | -0.05 | 0.1 | **0.73** | -0.14 | 0.31 | -0.06 | -0.01 | 0.55 | 0.38 | -0.28 | 0.05 | 0.07 | -0.17 | 0.054 | 0.179 | 1.000 | 1.000 | 0.049 | 0.896 | 0.305 | 1.000 | 1.000 | 0.121 | 0.096 | 0.118 | 1.000 | 1.000 | 0.504 |
| PRKD3 | 0.41 | 0.43 | -0.04 | 0.05 | **0.39** | -0.14 | 0.07 | -0.07 | 0.13 | 0.11 | 0.41 | -0.34 | 0.22 | 0.25 | -0.56 | 0.349 | 0.206 | 1.000 | 1.000 | 0.029 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.346 | 0.384 | 0.894 | 0.624 | 0.170 |
| TATDN3 | 0 | 0 | 0.1 | 0 | -0.03 | 0.01 | 0 | 0.08 | 0 | -0.03 | -0.06 | 0.14 | -0.01 | 0.13 | **0.23** | 1.000 | 1.000 | 0.993 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 0.550 | 0.370 | 0.814 | 1.000 | 0.900 | 0.017 |
| CNKSR3 | 1.18 | 0.61 | -0.18 | 0.06 | 0.72 | -0.2 | 0.02 | -0.24 | -0.4 | 0.02 | 1.19 | 0.44 | 0.03 | 0.3 | **0.72** | 0.308 | 0.615 | 1.000 | 1.000 | 0.056 | 0.950 | 1.000 | 1.000 | 0.958 | 1.000 | 0.092 | 0.141 | 1.000 | 0.646 | 0.011 |
| TNIK | -0.48 | -0.31 | 0.13 | 0.01 | -0.43 | -0.11 | -0.08 | -0.1 | -0.06 | 0.04 | -0.41 | -0.22 | -0.01 | -0.07 | **0.36** | 0.193 | 0.125 | 0.834 | 1.000 | 0.093 | 0.967 | 0.958 | 1.000 | 1.000 | 1.000 | 0.204 | 0.131 | 1.000 | 1.000 | 0.047 |
| ZC3H12A | 0.15 | 0.11 | 0 | 0.01 | 0.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0.92 | 0 | 0 | **1.5** | 1.000 | 0.568 | 1.000 | 1.000 | 0.744 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.226 | 1.000 | 1.000 | 0.050 |
| CSRP2 | 3.48 | 2.04 | 0.57 | 0.92 | 1.67 | -0.3 | -0.44 | -0.07 | 0.02 | 0.8 | 2.32 | 2.18 | 0.92 | 1.98 | **3.55** | 0.115 | 0.094 | 1.000 | 1.000 | 0.366 | 1.000 | 0.344 | 1.000 | 1.000 | 0.896 | 0.053 | 0.051 | 0.875 | 0.198 | 0.014 |
| LINC00520 | 1.57 | 1.89 | 0.84 | 1.89 | 1.53 | 0.43 | 0.58 | -0.29 | 0.42 | 1.3 | 2.08 | 1.1 | 0.3 | 1.11 | **1.79** | 0.507 | 0.064 | 0.871 | 1.000 | 0.115 | 0.991 | 0.662 | 1.000 | 1.000 | 0.577 | 0.115 | 0.337 | 1.000 | 0.604 | 0.019 |
| MYO5C | -0.5 | -0.52 | -0.21 | -0.27 | -0.25 | -0.51 | -0.47 | -0.33 | -0.21 | -0.39 | -0.53 | -0.24 | -0.14 | -0.4 | **-0.39** | 0.233 | 0.103 | 1.000 | 1.000 | 0.422 | 0.205 | 0.102 | 0.580 | 1.000 | 0.224 | 0.065 | 0.173 | 0.908 | 0.627 | 0.048 |
| RPS14P3 | 0.01 | 0 | 0.04 | -0.01 | -0.01 | 0.1 | 0.07 | 0.07 | 0.08 | 0.02 | -0.16 | 0.08 | -0.05 | 0 | **0.13** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.492 | 0.328 | 0.866 | 1.000 | 1.000 | 0.364 | 0.207 | 0.982 | 1.000 | 0.023 |
| HSPA4 | -0.1 | 0.15 | 0.03 | 0.04 | 0.29 | 0.19 | 0.22 | 0.08 | 0.13 | 0.1 | 0.28 | 0.34 | 0.08 | 0.22 | **0.55** | 1.000 | 0.726 | 1.000 | 1.000 | 0.554 | 0.842 | 0.395 | 1.000 | 1.000 | 0.934 | 0.242 | 0.198 | 1.000 | 0.353 | 0.027 |
| MICA | -0.15 | 0.07 | 0.08 | -0.05 | 0.16 | -0.1 | -0.07 | 0.12 | 0.03 | 0.3 | 0.34 | 0.34 | 0 | -0.02 | **0.55** | 0.756 | 0.789 | 1.000 | 1.000 | 0.634 | 0.909 | 1.000 | 1.000 | 1.000 | 0.440 | 0.121 | 0.058 | 1.000 | 1.000 | 0.024 |
| TGM2 | -0.34 | -0.44 | 0.11 | -0.16 | -0.44 | -0.18 | -0.49 | -0.08 | -0.17 | -0.53 | -0.37 | 0.55 | -0.16 | -0.29 | **0.34** | 0.083 | 0.388 | 0.760 | 0.846 | 0.108 | 0.896 | 0.073 | 1.000 | 1.000 | 0.094 | 0.088 | 0.059 | 0.803 | 0.299 | 0.019 |
| BNIP1 | 0.59 | 0.7 | 0.58 | 0.4 | 0.49 | 0.29 | 0.04 | -0.15 | -0.06 | 0.06 | -0.3 | 0.75 | -0.11 | 0.03 | **1.2** | 0.360 | 0.256 | 0.724 | 1.000 | 0.280 | 0.890 | 1.000 | 1.000 | 1.000 | 1.000 | 0.528 | 0.116 | 1.000 | 1.000 | 0.033 |
| MTUS1 | -0.66 | -0.62 | 0.02 | -0.03 | **-0.85** | -0.27 | -0.19 | -0.11 | -0.09 | -0.15 | -0.17 | 0.1 | 0.02 | -0.08 | -0.16 | 0.108 | 0.073 | 1.000 | 1.000 | 0.002 | 0.326 | 0.080 | 0.725 | 0.751 | 0.419 | 0.190 | 0.299 | 1.000 | 0.814 | 0.209 |
| PEX14 | -0.24 | -0.13 | 0.02 | -0.12 | -0.26 | 0.07 | 0.31 | 0.28 | 0.08 | **0.84** | 0.27 | 0.64 | -0.14 | 0.11 | 0.4 | 1.000 | 1.000 | 1.000 | 1.000 | 0.819 | 1.000 | 0.836 | 1.000 | 1.000 | 0.038 | 0.513 | 0.683 | 1.000 | 1.000 | 0.723 |
| PECR | -0.06 | -0.09 | 0.18 | 0.06 | -0.09 | 0.31 | -0.06 | 0.13 | 0.04 | -0.01 | 0.01 | 0.54 | 0.03 | 0.15 | **0.86** | 1.000 | 1.000 | 1.000 | 1.000 | 0.175 | 0.896 | 0.884 | 1.000 | 1.000 | 1.000 | 1.000 | 0.226 | 1.000 | 0.900 | 0.021 |
| IPO9 | -0.06 | -0.08 | 0.23 | 0.27 | -0.35 | -0.33 | -0.14 | 0.01 | -0.01 | -0.36 | -0.46 | -1.3 | -0.18 | -0.18 | **-2.07** | 1.000 | 1.000 | 1.000 | 1.000 | 0.276 | 0.767 | 0.944 | 1.000 | 1.000 | 0.989 | 0.373 | 0.058 | 1.000 | 1.000 | 0.021 |
| MECR | 0.01 | 0.07 | 0.07 | 0.19 | -0.05 | 0.2 | 0.2 | 0.34 | 0.3 | 0.08 | -0.26 | 0.78 | -0.08 | 0.03 | **0.49** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 0.803 | 0.279 | 1.000 | 0.245 | 1.000 | 0.386 | 0.067 | 1.000 | 1.000 | 0.034 |
| GDPD3 | -0.08 | -0.33 | -0.07 | -0.18 | -0.38 | -0.92 | -0.86 | -0.35 | -0.39 | -0.61 | -0.59 | -2.41 | -0.74 | -1.02 | **-3.81** | 1.000 | 0.491 | 1.000 | 1.000 | 0.696 | 0.357 | 0.061 | 0.630 | 0.573 | 0.404 | 0.249 | 0.105 | 0.241 | 0.368 | 0.031 |
| MED14 | -0.01 | -0.1 | -0.16 | 0.02 | -0.64 | -0.33 | -0.49 | 0.11 | -0.36 | -0.51 | -0.42 | -0.5 | 0.08 | -0.06 | **-0.32** | 1.000 | 1.000 | 1.000 | 1.000 | 0.164 | 0.823 | 0.196 | 1.000 | 1.000 | 0.469 | 0.306 | 0.477 | 1.000 | 1.000 | 0.045 |
| AKT1S1 | 0.09 | -0.16 | -0.04 | 0.01 | -0.02 | -0.13 | 0.07 | -0.08 | 0.05 | 0.41 | 0.13 | 0.43 | -0.04 | -0.06 | **0.67** | 1.000 | 0.973 | 1.000 | 1.000 | 1.000 | 0.952 | 1.000 | 1.000 | 1.000 | 0.513 | 0.751 | 0.059 | 1.000 | 0.945 | 0.021 |
| KRT8P12 | -0.2 | -0.11 | -0.13 | -0.21 | 0.13 | 0.32 | 0.05 | 0.1 | 0.07 | -0.03 | 0.17 | 0.45 | 0.13 | 0.22 | **0.29** | 0.682 | 0.761 | 1.000 | 1.000 | 0.531 | 0.444 | 1.000 | 1.000 | 1.000 | 1.000 | 0.460 | 0.083 | 0.875 | 0.396 | 0.021 |
| NOP58 | -0.04 | -0.11 | 0.23 | 0.03 | 0.07 | -0.03 | 0.16 | 0.06 | 0.24 | 0.07 | 0.15 | 0.49 | 0.08 | 0.16 | **0.76** | 1.000 | 0.701 | 1.000 | 1.000 | 0.822 | 1.000 | 0.359 | 1.000 | 0.953 | 1.000 | 0.341 | 0.079 | 1.000 | 0.660 | 0.028 |
| FRMD6 | 0.39 | 0.48 | 0.04 | 0.16 | 0.55 | -0.01 | 0.12 | 0.13 | -0.04 | -0.03 | -0.26 | -0.2 | -0.1 | -0.11 | **-0.31** | 0.467 | 0.087 | 1.000 | 1.000 | 0.231 | 1.000 | 0.817 | 1.000 | 1.000 | 1.000 | 0.475 | 0.326 | 1.000 | 1.000 | 0.039 |
| CD93 | -0.14 | -0.08 | -0.06 | -0.05 | -0.2 | -0.13 | -0.18 | -0.04 | -0.08 | -0.21 | -0.17 | -0.24 | -0.05 | -0.05 | **-0.37** | 1.000 | 0.905 | 1.000 | 1.000 | 0.081 | 0.290 | 0.062 | 1.000 | 0.882 | 0.233 | 0.149 | 0.132 | 0.599 | 0.900 | 0.025 |
| C6orf48 | -0.09 | -0.16 | -0.07 | -0.09 | -0.08 | -0.03 | -0.07 | 0.02 | 0.04 | -0.03 | -0.39 | 0.26 | -0.1 | -0.15 | **0.4** | 0.972 | 0.564 | 1.000 | 1.000 | 0.511 | 1.000 | 0.546 | 1.000 | 1.000 | 1.000 | 0.109 | 0.055 | 0.850 | 0.900 | 0.042 |
| PATL1 | 0.74 | 0.54 | 0.15 | 0.22 | **0.62** | 0.24 | 0.4 | 0.06 | 0.27 | 0.3 | 0.31 | 0.13 | 0.14 | 0.14 | 0.2 | 0.243 | 0.359 | 1.000 | 1.000 | 0.033 | 0.486 | 0.109 | 1.000 | 0.679 | 0.235 | 0.186 | 0.767 | 1.000 | 0.892 | 0.685 |
| ALKBH8 | 0 | -0.67 | 0.16 | 0.03 | **-0.49** | -0.28 | -0.45 | -0.23 | -0.17 | -0.21 | -0.58 | 0.71 | 0.22 | -0.02 | 1.09 | 1.000 | 0.217 | 1.000 | 1.000 | 0.034 | 0.679 | 0.078 | 1.000 | 0.952 | 0.884 | 0.166 | 0.116 | 0.659 | 1.000 | 0.074 |
| INO80B | 0.09 | -0.07 | -0.06 | -0.14 | 0.16 | 0.15 | 0.18 | 0.04 | 0.1 | 0.2 | 0.17 | 0.96 | -0.13 | -0.05 | **0.63** | 1.000 | 1.000 | 1.000 | 1.000 | 0.792 | 1.000 | 0.817 | 1.000 | 1.000 | 0.863 | 1.000 | 0.137 | 1.000 | 1.000 | 0.047 |
| BST1 | 0.62 | 0.16 | 0.32 | 0.3 | 0.15 | 0.3 | 0.19 | 0.28 | 0.15 | -0.29 | -0.02 | 0.25 | 0.06 | -0.27 | **0.38** | 0.386 | 0.637 | 0.726 | 1.000 | 0.896 | 0.648 | 0.563 | 0.856 | 1.000 | 0.391 | 1.000 | 0.113 | 1.000 | 0.825 | 0.038 |
| PDPR | 0 | 0.03 | -0.1 | 0.07 | **-0.61** | -0.17 | -0.21 | -0.07 | -0.03 | -0.09 | -0.1 | -0.39 | -0.19 | -0.03 | -0.59 | 1.000 | 1.000 | 1.000 | 1.000 | 0.041 | 0.952 | 0.813 | 1.000 | 1.000 | 1.000 | 0.931 | 0.114 | 0.888 | 1.000 | 0.051 |
| BNIP2 | 0.1 | 0.24 | 0 | 0.09 | **0.23** | 0.1 | 0.23 | -0.01 | 0 | 0.26 | 0.52 | 0.09 | 0.26 | 0.39 | 0.06 | 1.000 | 0.424 | 1.000 | 1.000 | 0.019 | 0.896 | 0.154 | 1.000 | 1.000 | 0.138 | 0.052 | 0.786 | 0.680 | 0.298 | 0.724 |
| IFITM2 | 0.02 | -0.09 | 0.04 | -0.03 | -0.01 | 0.06 | -0.08 | -0.01 | 0.02 | 0.02 | -0.05 | 0.36 | -0.06 | -0.06 | **0.24** | 1.000 | 0.666 | 1.000 | 1.000 | 1.000 | 1.000 | 0.307 | 1.000 | 1.000 | 1.000 | 1.000 | 0.120 | 1.000 | 0.998 | 0.046 |
| ROCK2 | 0.16 | 0.06 | -0.08 | -0.04 | 0.06 | 0 | 0.03 | -0.02 | 0 | -0.08 | -0.16 | -0.66 | -0.07 | -0.15 | **-0.44** | 0.185 | 0.840 | 0.993 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.837 | 0.378 | 0.052 | 1.000 | 0.429 | 0.043 |
| ERCC1 | 0.05 | 0.06 | 0.16 | 0.08 | 0.08 | 0.22 | 0.05 | 0.17 | 0.09 | 0.1 | -0.04 | 0.48 | -0.09 | 0.04 | **0.32** | 1.000 | 0.620 | 1.000 | 1.000 | 0.628 | 0.621 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.124 | 1.000 | 1.000 | 0.043 |
| INTS7 | -0.15 | -0.24 | 0.08 | -0.18 | **-1.11** | -0.37 | -0.59 | -0.4 | -0.3 | -0.85 | -0.87 | 0.02 | -0.34 | -0.76 | 0.03 | 1.000 | 1.000 | 1.000 | 1.000 | 0.026 | 0.897 | 0.241 | 1.000 | 1.000 | 0.213 | 0.116 | 1.000 | 0.947 | 0.503 | 1.000 |
| RELB | 1.85 | 1.07 | -0.04 | 0.52 | **2.27** | 0.04 | 0.03 | -0.05 | 0.02 | 0.05 | 0.01 | 0.04 | -0.01 | 0.04 | 0.06 | 0.796 | 0.223 | 1.000 | 1.000 | 0.041 | 0.640 | 0.863 | 1.000 | 1.000 | 0.538 | 1.000 | 0.302 | 1.000 | 0.626 | 0.386 |
| TAF3 | 0.04 | -0.02 | 0.03 | 0.14 | 0.11 | 0.14 | 0.18 | -0.14 | -0.15 | -0.02 | 0.43 | 0.38 | 0.08 | 0.35 | **0.57** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.813 | 1.000 | 1.000 | 1.000 | 0.398 | 0.528 | 1.000 | 0.840 | 0.047 |
| TARS | 0 | 0.03 | -0.02 | 0.07 | 0.03 | 0.13 | 0.15 | 0 | 0.14 | 0.05 | 0.11 | 0.28 | 0.07 | 0.1 | **0.42** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.419 | 0.321 | 1.000 | 0.315 | 0.411 | 0.394 | 0.113 | 1.000 | 0.888 | 0.044 |
| CYR61 | 0.09 | 0.23 | 0.01 | -0.03 | 0.33 | 0.1 | 0.26 | 0.16 | 0.15 | 0.23 | 0.1 | -0.59 | -0.07 | 0.18 | **-0.88** | 0.892 | 0.636 | 1.000 | 1.000 | 0.692 | 0.897 | 0.514 | 1.000 | 0.869 | 0.532 | 0.930 | 0.078 | 1.000 | 0.554 | 0.037 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ZNF710 | 0.72 | -0.13 | 0.11 | -0.01 | 0.47 | -0.29 | -0.09 | -0.08 | 0.08 | 0.23 | -0.33 | 0.57 | 0.1 | 0.24 | **0.85** | 1.000 | 1.000 | 1.000 | 1.000 | 0.140 | 0.723 | 0.599 | 1.000 | 1.000 | 0.757 | 0.352 | 0.149 | 1.000 | 0.838 | 0.023 |
| TTC28 | -0.08 | -0.13 | -0.09 | 0 | -0.06 | -0.35 | -0.06 | -0.12 | -0.06 | 0.07 | -0.1 | -0.45 | -0.04 | -0.01 | **-0.67** | 1.000 | 0.510 | 1.000 | 1.000 | 0.847 | 0.482 | 1.000 | 1.000 | 1.000 | 1.000 | 0.868 | 0.103 | 1.000 | 1.000 | 0.049 |
| FAM46A | -0.67 | -1.65 | -0.06 | -0.69 | **-1.29** | -0.63 | -1.49 | -0.1 | -0.7 | -1.54 | -0.89 | 1.61 | -0.39 | -1.02 | **2.39** | 0.184 | 0.054 | 1.000 | 0.799 | 0.028 | 0.409 | 0.050 | 1.000 | 0.526 | 0.145 | 0.061 | 0.062 | 1.000 | 0.209 | 0.031 |
| PPP1CA | 0.06 | -0.03 | -0.07 | -0.05 | -0.08 | 0.23 | 0.03 | 0.15 | 0.11 | 0.14 | -0.05 | 0.4 | -0.02 | -0.03 | **0.27** | 1.000 | 1.000 | 1.000 | 1.000 | 0.678 | 0.389 | 1.000 | 0.974 | 1.000 | 0.893 | 1.000 | 0.075 | 1.000 | 1.000 | 0.012 |
| KBTBD2 | 0.2 | -0.01 | -0.01 | 0.16 | -0.1 | 0.13 | 0.19 | 0.15 | 0.28 | 0.26 | 0.39 | 0.38 | 0.07 | 0.15 | **0.56** | 0.804 | 1.000 | 1.000 | 1.000 | 0.440 | 0.772 | 0.520 | 1.000 | 0.615 | 0.208 | 0.097 | 0.145 | 1.000 | 0.816 | 0.039 |
| NEDD8 | 0.02 | -0.03 | -0.02 | -0.04 | -0.03 | 0.13 | 0.15 | 0.15 | 0.08 | 0.07 | -0.08 | 0.17 | -0.03 | 0.08 | **0.25** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.609 | 0.377 | 0.816 | 1.000 | 0.752 | 0.662 | 0.227 | 1.000 | 0.769 | 0.020 |
| ZNF664 | 0.27 | 0.22 | 0.09 | 0.1 | 0.24 | 0.03 | 0.08 | -0.05 | -0.02 | -0.02 | 0.05 | -0.25 | 0.07 | 0.11 | **-0.17** | 0.214 | 0.051 | 0.912 | 1.000 | 0.465 | 0.952 | 0.327 | 1.000 | 1.000 | 1.000 | 0.766 | 0.132 | 0.908 | 0.648 | 0.021 |
| HAX1 | 0 | -0.1 | 0.04 | -0.02 | 0.04 | 0.2 | 0.22 | 0.16 | 0.2 | 0.14 | -0.04 | 0.32 | -0.1 | -0.09 | **0.47** | 1.000 | 0.625 | 1.000 | 1.000 | 0.900 | 0.896 | 0.545 | 1.000 | 1.000 | 0.807 | 0.971 | 0.116 | 0.834 | 0.766 | 0.018 |
| PMVK | 0.2 | -0.18 | -0.04 | 0.01 | -0.58 | 0.35 | 0.21 | 0.46 | 0.28 | 0.05 | -0.43 | 0.37 | -0.28 | -0.39 | **0.54** | 1.000 | 1.000 | 1.000 | 1.000 | 0.367 | 0.444 | 0.714 | 1.000 | 1.000 | 1.000 | 0.161 | 0.233 | 0.911 | 0.539 | 0.035 |
| NAP1L1 | 0.29 | 0.03 | 0.17 | 0.14 | -0.06 | -0.05 | -0.2 | 0 | -0.1 | -0.27 | -0.04 | -0.51 | -0.09 | 0.2 | **-0.35** | 0.069 | 1.000 | 0.981 | 0.960 | 1.000 | 1.000 | 0.246 | 1.000 | 1.000 | 0.884 | 1.000 | 0.097 | 1.000 | 0.900 | 0.016 |
| ANKRD19P | 0.02 | 0 | -0.01 | 0.03 | 0.17 | 0.06 | -0.01 | 0.02 | 0.03 | 0.11 | -0.04 | 0.32 | -0.03 | -0.02 | **0.22** | 1.000 | 1.000 | 1.000 | 1.000 | 0.457 | 1.000 | 1.000 | 1.000 | 1.000 | 0.453 | 0.751 | 0.135 | 1.000 | 1.000 | 0.032 |
| APOA1BP | -0.25 | -0.35 | -0.09 | -0.15 | **-0.36** | 0.17 | -0.14 | 0.22 | 0.14 | -0.09 | -0.45 | 0.32 | -0.1 | -0.28 | 0.22 | 1.000 | 0.180 | 1.000 | 1.000 | 0.015 | 0.723 | 0.802 | 0.903 | 1.000 | 1.000 | 0.117 | 0.221 | 1.000 | 0.282 | 0.398 |
| FAM162A | -0.21 | -0.2 | 0 | -0.07 | -0.21 | 0.3 | 0.06 | 0.1 | 0.17 | 0.13 | -0.22 | 0.33 | -0.02 | -0.03 | **0.48** | 1.000 | 0.629 | 1.000 | 1.000 | 0.262 | 0.578 | 0.820 | 1.000 | 0.977 | 0.478 | 0.376 | 0.054 | 1.000 | 1.000 | 0.032 |
| ZDHHC20 | -0.01 | -0.02 | 0.08 | 0.06 | -0.2 | -0.02 | -0.11 | 0.1 | -0.07 | -0.16 | -0.08 | -0.2 | 0.08 | 0.17 | **-0.29** | 1.000 | 1.000 | 1.000 | 1.000 | 0.130 | 1.000 | 0.840 | 1.000 | 1.000 | 0.771 | 0.721 | 0.479 | 0.875 | 0.676 | 0.033 |
| LPCAT1 | -0.08 | -0.13 | -0.09 | -0.08 | -0.15 | 0.02 | 0.05 | 0.14 | 0.16 | 0.01 | -0.19 | -0.38 | -0.1 | -0.12 | **-0.55** | 0.637 | 0.562 | 0.924 | 1.000 | 0.701 | 1.000 | 1.000 | 1.000 | 0.808 | 1.000 | 0.273 | 0.064 | 0.982 | 0.900 | 0.033 |
| CTNNBL1 | 0.27 | 0.29 | 0.07 | 0.05 | 0.17 | 0.34 | 0.16 | 0.21 | 0.37 | 0.24 | 0.05 | 0.47 | 0.12 | 0.22 | **0.68** | 1.000 | 0.286 | 1.000 | 1.000 | 0.821 | 0.522 | 0.524 | 1.000 | 0.870 | 0.784 | 1.000 | 0.261 | 1.000 | 0.900 | 0.025 |
| HDGF | 0.29 | 0.33 | -0.01 | 0.06 | **0.42** | 0.23 | 0.05 | 0.14 | 0.11 | -0.02 | -0.08 | 0.13 | -0.07 | -0.01 | 0.09 | 0.469 | 0.103 | 1.000 | 1.000 | 0.041 | 0.618 | 0.816 | 0.866 | 1.000 | 1.000 | 0.143 | 0.377 | 0.928 | 1.000 | 0.723 |
| STARD3NL | 0.06 | 0.14 | -0.02 | 0.02 | **0.25** | 0.19 | 0.29 | 0.15 | 0.16 | 0.14 | 0.21 | 0.09 | 0.14 | 0.16 | 0.13 | 1.000 | 0.601 | 1.000 | 1.000 | 0.035 | 0.623 | 0.209 | 1.000 | 0.990 | 0.245 | 0.605 | 0.738 | 0.827 | 0.633 | 0.226 |
| LOC100134445 | 0.82 | 0.73 | -0.5 | 0.27 | -0.17 | -0.54 | 0.46 | -0.06 | 0.32 | -0.54 | -0.03 | -1.95 | -0.45 | -0.76 | **-2.81** | 1.000 | 0.881 | 1.000 | 1.000 | 1.000 | 0.853 | 0.716 | 1.000 | 1.000 | 0.663 | 1.000 | 0.198 | 0.942 | 0.848 | 0.041 |
| CNTNAP3 | -0.37 | -0.14 | -0.07 | 0.01 | **-0.5** | -0.28 | -0.24 | -0.1 | -0.07 | -0.22 | -0.2 | -0.16 | 0.04 | -0.14 | -0.23 | 1.000 | 1.000 | 1.000 | 1.000 | 0.012 | 0.445 | 0.062 | 0.868 | 1.000 | 0.625 | 0.499 | 0.683 | 1.000 | 0.900 | 0.289 |
| PCBD1 | 0.02 | -0.03 | 0.08 | -0.09 | 0.02 | 0.22 | 0.08 | 0.15 | 0.07 | 0.35 | -0.08 | 0.32 | -0.16 | -0.11 | **0.46** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.633 | 0.997 | 1.000 | 1.000 | 0.219 | 0.977 | 0.116 | 0.862 | 0.900 | 0.028 |
| LAMC1 | 0 | 0.01 | -0.08 | -0.04 | -0.04 | -0.11 | -0.05 | -0.06 | -0.08 | -0.12 | -0.06 | -0.23 | 0.06 | -0.03 | **-0.33** | 1.000 | 1.000 | 1.000 | 1.000 | 0.911 | 0.812 | 0.828 | 1.000 | 1.000 | 0.466 | 0.751 | 0.141 | 1.000 | 1.000 | 0.047 |
| C1orf86 | 0 | 0.07 | -0.13 | -0.12 | 0.16 | -0.04 | -0.09 | -0.09 | -0.08 | 0.04 | 0 | 0.86 | 0.01 | -0.03 | **0.6** | 1.000 | 1.000 | 1.000 | 1.000 | 0.781 | 1.000 | 0.497 | 1.000 | 1.000 | 1.000 | 1.000 | 0.132 | 1.000 | 1.000 | 0.012 |
| LNP1 | -0.2 | -0.27 | 0.01 | -0.23 | -0.32 | 0.22 | -0.05 | -0.03 | -0.11 | -0.07 | -0.14 | 1.67 | -0.06 | -0.21 | **2.39** | 1.000 | 0.867 | 1.000 | 1.000 | 0.821 | 1.000 | 0.813 | 1.000 | 0.981 | 0.922 | 0.751 | 0.101 | 1.000 | 0.780 | 0.033 |
| THSD1 | -0.97 | -1.03 | 0 | -0.22 | **-1.27** | -0.43 | -0.64 | -0.02 | -0.04 | -0.36 | -1.87 | -0.1 | -0.62 | -0.61 | -0.07 | 0.059 | 0.103 | 1.000 | 0.774 | 0.042 | 0.409 | 0.095 | 1.000 | 1.000 | 0.354 | 0.090 | 1.000 | 0.990 | 0.823 | 1.000 |
| QKI | 0.16 | 0.13 | -0.03 | 0.07 | -0.13 | 0.16 | 0.14 | 0.01 | 0.1 | 0.1 | -0.07 | -0.57 | -0.02 | 0.04 | **-0.4** | 0.964 | 0.853 | 1.000 | 1.000 | 0.937 | 0.557 | 0.220 | 1.000 | 0.950 | 0.404 | 0.636 | 0.097 | 1.000 | 1.000 | 0.033 |
| RICTOR | 0.17 | 0.37 | 0.17 | 0 | 0.32 | -0.06 | 0.17 | -0.12 | -0.02 | 0.28 | 0.42 | -0.4 | 0.08 | 0.16 | **-0.57** | 0.831 | 0.277 | 1.000 | 1.000 | 0.085 | 1.000 | 0.360 | 1.000 | 1.000 | 0.195 | 0.187 | 0.191 | 1.000 | 0.847 | 0.042 |
| FDX1L | 0.33 | 0.17 | 0.15 | -0.13 | 0.12 | 0.1 | -0.06 | -0.33 | -0.13 | 0.18 | -0.38 | 0.59 | -0.35 | -0.5 | **0.84** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.463 | 0.205 | 1.000 | 0.448 | 0.016 |
| ANP32E | 0.7 | 0.12 | -0.05 | 0.06 | 0.36 | 0.19 | 0.52 | 0.11 | -0.01 | 0.57 | 0.36 | 0.5 | 0.09 | 0.25 | **0.71** | 0.552 | 1.000 | 1.000 | 1.000 | 0.855 | 1.000 | 0.551 | 1.000 | 1.000 | 0.852 | 0.998 | 0.696 | 1.000 | 1.000 | 0.014 |
| ANKRD36C | 0.04 | -1.8 | -0.6 | -0.59 | **-1.83** | -0.83 | -1.07 | 0.65 | 0.68 | -0.76 | -2.11 | -2.41 | -1.1 | -1.28 | -1.7 | 1.000 | 0.291 | 1.000 | 1.000 | 0.044 | 0.853 | 0.600 | 1.000 | 1.000 | 0.704 | 0.293 | 0.191 | 1.000 | 0.900 | 0.370 |
| CERK | -0.04 | 0 | 0.07 | 0.01 | -0.04 | 0.13 | 0.11 | 0.15 | 0.09 | 0.38 | 0.26 | 0.17 | 0.09 | 0.15 | **-0.12** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.726 | 1.000 | 1.000 | 0.120 | 0.180 | 0.368 | 1.000 | 0.848 | 0.027 |
| ALKBH3 | -0.15 | 0.01 | 0.07 | 0.18 | -0.09 | 0.05 | -0.04 | -0.01 | -0.01 | -0.12 | -0.09 | 0.27 | -0.1 | 0.06 | **0.38** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.309 | 0.457 | 0.988 | 1.000 | 0.042 |
| GLRX | -0.34 | -0.28 | 0.11 | 0.02 | 0.02 | 0.29 | 0.08 | 0.17 | 0.17 | 0.12 | -0.13 | 0.42 | 0.03 | 0.03 | **0.59** | 0.148 | 0.206 | 1.000 | 1.000 | 1.000 | 0.684 | 0.785 | 1.000 | 0.879 | 0.728 | 0.923 | 0.065 | 1.000 | 1.000 | 0.043 |
| BOLA3 | -0.08 | -0.2 | 0.15 | 0 | -0.09 | 0.49 | 0.14 | 0.03 | 0.29 | 0.2 | 0.12 | 0.62 | 0.12 | 0.27 | **0.87** | 1.000 | 0.771 | 1.000 | 1.000 | 0.935 | 0.871 | 0.696 | 1.000 | 0.939 | 0.790 | 0.751 | 0.125 | 1.000 | 0.580 | 0.031 |
| SLC2A3 | -0.17 | -0.53 | -0.1 | -0.04 | -0.7 | 0.02 | 0.79 | 0.33 | -0.17 | -0.12 | -0.02 | 0.8 | 0.06 | 0.12 | **1.12** | 1.000 | 0.463 | 1.000 | 1.000 | 0.321 | 1.000 | 0.648 | 1.000 | 1.000 | 0.887 | 1.000 | 0.072 | 1.000 | 0.924 | 0.026 |
| PARP9 | 0.41 | -0.66 | -0.16 | -0.18 | **-0.75** | -0.09 | -0.81 | -0.23 | 0.85 | -1.6 | -1.71 | 0.25 | -0.85 | -1.03 | 0.35 | 0.684 | 0.211 | 1.000 | 1.000 | 0.041 | 1.000 | 0.597 | 1.000 | 0.935 | 0.610 | 0.375 | 0.897 | 0.602 | 0.410 | 0.723 |
| OGFRL1 | 0.66 | -0.12 | 0.07 | -0.02 | 0.58 | -0.21 | -0.01 | 0.08 | -0.04 | -0.4 | 0.04 | -0.88 | 0.24 | 0.17 | **-1.23** | 0.625 | 1.000 | 1.000 | 1.000 | 0.239 | 0.950 | 1.000 | 1.000 | 1.000 | 0.398 | 1.000 | 0.190 | 1.000 | 1.000 | 0.028 |
| ADIPOR2 | -0.08 | 0.02 | 0.1 | 0.05 | -0.32 | 0.07 | 0.1 | 0.08 | -0.05 | -0.11 | 0.21 | 0.48 | 0.04 | -0.02 | **0.67** | 1.000 | 1.000 | 1.000 | 1.000 | 0.197 | 0.823 | 0.600 | 1.000 | 1.000 | 0.636 | 0.082 | 0.058 | 1.000 | 1.000 | 0.047 |
| PTRH2 | 0.07 | 0.22 | 0 | 0.04 | 0.17 | 0.3 | 0.34 | 0.21 | 0.31 | 0.25 | 0.39 | 0.43 | 0.07 | 0.13 | **0.6** | 1.000 | 0.069 | 1.000 | 1.000 | 0.629 | 0.187 | 0.166 | 0.751 | 0.519 | 0.499 | 0.300 | 0.091 | 1.000 | 0.882 | 0.046 |
| FAM73A | 0.04 | 0.01 | 0.02 | 0.02 | 0.12 | 0.02 | 0.39 | -0.03 | 0.04 | 0.15 | 0.46 | -0.92 | 0.25 | 0.28 | **-0.66** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.451 | 1.000 | 1.000 | 0.884 | 0.268 | 0.178 | 0.873 | 0.915 | 0.039 |
| TTC1 | -0.15 | 0 | -0.01 | -0.01 | -0.03 | 0.27 | 0.11 | 0.18 | 0.08 | -0.08 | 0.2 | 0.54 | 0.09 | 0.13 | **0.39** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.443 | 0.315 | 0.747 | 1.000 | 0.984 | 0.309 | 0.059 | 1.000 | 0.735 | 0.020 |
| C19orf33 | 0 | -0.09 | 0.04 | -0.06 | 0.04 | 0.15 | -0.21 | 0.08 | -0.07 | 0.13 | -0.53 | 0.52 | -0.34 | -0.3 | **0.72** | 1.000 | 0.980 | 1.000 | 1.000 | 1.000 | 0.896 | 0.329 | 1.000 | 1.000 | 1.000 | 0.421 | 0.158 | 0.766 | 0.684 | 0.043 |
| SLC38A9 | -0.04 | -0.17 | 0.25 | 0.79 | -0.61 | -0.83 | -0.94 | -0.19 | -0.36 | 0.02 | -2.77 | -7.14 | -2.08 | -2.26 | **-5.18** | 1.000 | 1.000 | 1.000 | 1.000 | 0.905 | 0.896 | 0.465 | 1.000 | 1.000 | 1.000 | 0.388 | 0.065 | 0.982 | 0.776 | 0.025 |
| DST | -0.24 | 0.23 | -0.16 | -0.08 | 0.95 | -0.23 | 0.58 | -0.01 | 0.06 | 0.61 | 0.99 | -1.46 | 0.19 | 0.43 | **-2.01** | 1.000 | 0.905 | 1.000 | 1.000 | 0.261 | 0.697 | 0.409 | 1.000 | 1.000 | 0.711 | 0.064 | 0.066 | 1.000 | 0.641 | 0.043 |
| LOC388796 | 0.01 | -0.15 | 0 | -0.12 | **0.21** | 0.04 | 0.2 | 0.05 | 0.23 | 0.34 | -0.21 | -0.08 | -0.1 | -0.21 | 0.11 | 1.000 | 0.719 | 1.000 | 1.000 | 0.042 | 1.000 | 0.709 | 1.000 | 0.991 | 0.337 | 0.465 | 0.919 | 1.000 | 0.717 | 0.894 |
| LOC283357 | 0.24 | 0.03 | -0.03 | -0.13 | -0.15 | -0.47 | -0.22 | -0.32 | -0.22 | -0.03 | -0.41 | -1.07 | -0.03 | 0.07 | **-0.78** | 1.000 | 1.000 | 1.000 | 1.000 | 0.994 | 0.628 | 0.744 | 1.000 | 1.000 | 1.000 | 0.369 | 0.066 | 1.000 | 1.000 | 0.018 |
| RBCK1 | 0.38 | 0 | -0.05 | 0.03 | 0.01 | 0.04 | -0.24 | -0.12 | -0.17 | -0.12 | -0.02 | 0.48 | -0.03 | -0.03 | **0.35** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.218 | 1.000 | 1.000 | 0.797 | 1.000 | 0.235 | 1.000 | 1.000 | 0.036 |
| LZIC | -0.08 | -0.14 | -0.1 | -0.07 | 0.02 | 0.5 | 0.35 | 0.26 | 0.38 | 0.12 | 0.03 | 0.3 | 0.05 | -0.03 | **0.41** | 1.000 | 0.948 | 1.000 | 1.000 | 1.000 | 0.570 | 0.296 | 0.333 | 0.417 | 0.533 | 1.000 | 0.382 | 1.000 | 1.000 | 0.037 |
| CRY2 | 0.1 | 0.19 | 0.2 | 0.03 | 0.53 | 0.2 | 0.01 | 0 | 0.23 | 0.16 | 0.17 | 0.11 | **0** | 0 | 0.15 | 1.000 | 0.800 | 1.000 | 1.000 | 0.354 | 0.896 | 0.813 | 1.000 | 1.000 | 0.950 | 0.478 | 0.683 | 0.038 | 0.635 | 0.591 |
| MRPL54 | 0.49 | 0.01 | 0.03 | 0.01 | 0.21 | 0.19 | 0 | 0.16 | 0.1 | 0.19 | -0.34 | 0.47 | -0.21 | -0.18 | **0.64** | 1.000 | 1.000 | 1.000 | 1.000 | 0.618 | 0.896 | 1.000 | 0.998 | 1.000 | 0.884 | 0.505 | 0.109 | 0.875 | 0.838 | 0.036 |
| PLK4 | -0.1 | -0.36 | 0.12 | -0.32 | -0.24 | -0.2 | -0.13 | -0.32 | -0.24 | 0.08 | 0.23 | 0.5 | 0.25 | 0.03 | **0.68** | 1.000 | 0.699 | 1.000 | 1.000 | 0.759 | 0.896 | 0.813 | 1.000 | 1.000 | 1.000 | 0.948 | 0.246 | 1.000 | 1.000 | 0.026 |
| CSF2RB | 0.26 | -0.14 | -0.01 | -0.12 | -0.59 | -0.89 | -0.88 | -0.59 | -0.68 | **-0.71** | -0.71 | -0.64 | -0.05 | -0.44 | -0.87 | 1.000 | 1.000 | 1.000 | 1.000 | 0.122 | 0.896 | 0.797 | 1.000 | 1.000 | 0.039 | 0.134 | 0.132 | 1.000 | 0.748 | 0.264 |
| FADS2 | 0.1 | 0.01 | 0 | -0.08 | -0.06 | 0.13 | -0.03 | -0.08 | -0.02 | -0.04 | -0.08 | 0.87 | -0.03 | -0.01 | **0.64** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.844 | 0.969 | 1.000 | 1.000 | 1.000 | 0.641 | 0.118 | 0.818 | 0.918 | 0.043 |
| ERCC8 | 0.1 | -0.1 | -0.14 | 0.06 | -0.15 | 0.79 | 0.65 | 0.49 | 0.52 | -0.25 | 0.02 | 1.18 | 0.67 | 0.79 | **0.87** | 1.000 | 1.000 | 1.000 | 1.000 | 0.879 | 0.886 | 0.665 | 1.000 | 1.000 | 0.887 | 1.000 | 0.232 | 0.878 | 0.728 | 0.010 |
| TMEM219 | 0.12 | -0.01 | 0.02 | 0.17 | -0.39 | -0.26 | -0.13 | 0.12 | -0.03 | -0.52 | -0.24 | -2.33 | -0.09 | -0.23 | **-3.16** | 1.000 | 1.000 | 1.000 | 1.000 | 0.746 | 0.780 | 0.992 | 1.000 | 1.000 | 0.443 | 0.292 | 0.112 | 1.000 | 0.900 | 0.034 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RUFY3 | -0.19 | -0.16 | -0.08 | 0.31 | -0.15 | -0.67 | -0.12 | -0.12 | 0.05 | 0.33 | 0.58 | -1.35 | 0.35 | 0.18 | **-1.83** | 1.000 | 0.952 | 1.000 | 1.000 | 1.000 | 0.627 | 0.905 | 1.000 | 1.000 | 0.686 | 0.198 | 0.064 | 0.876 | 0.997 | 0.033 |
| ANKRD36B | -0.19 | -0.19 | -0.12 | -0.01 | -0.3 | -0.41 | -0.48 | 0.11 | 0.07 | -0.14 | -0.61 | -1.27 | -0.11 | -0.2 | **-1.72** | 1.000 | 0.714 | 1.000 | 1.000 | 0.821 | 0.533 | 0.178 | 1.000 | 1.000 | 1.000 | 0.114 | 0.076 | 1.000 | 0.918 | 0.034 |
| SIGIRR | 0.24 | 0.03 | 0.04 | -0.03 | -0.07 | 0.18 | -0.17 | 0.26 | 0.07 | 0.01 | -0.44 | 0.46 | -0.16 | -0.27 | **0.34** | 1.000 | 1.000 | 1.000 | 1.000 | 0.762 | 0.573 | 0.584 | 0.630 | 1.000 | 1.000 | 0.141 | 0.122 | 0.976 | 0.535 | 0.043 |
| SCARNA17 | 0 | 0.12 | 0 | 0.01 | 0.08 | 0.04 | 0.06 | 0 | 0 | 0.06 | 0 | 1.04 | 0 | 0.27 | **0.77** | 1.000 | 0.905 | 1.000 | 1.000 | 0.610 | 0.896 | 0.813 | 1.000 | 1.000 | 0.658 | 0.911 | 0.077 | 1.000 | 0.328 | 0.019 |
| SRM | 0.03 | 0.1 | 0.2 | 0.03 | 0.17 | 0.32 | -0.11 | -0.03 | -0.05 | 0.31 | 0.15 | 0.93 | 0.11 | 0.15 | **0.69** | 1.000 | 1.000 | 1.000 | 1.000 | 0.871 | 0.389 | 0.534 | 1.000 | 1.000 | 0.689 | 0.751 | 0.068 | 1.000 | 0.919 | 0.014 |
| YY1AP1 | 0.28 | 0.36 | 0.09 | 0.02 | 0.36 | 0.28 | 0.16 | 0.03 | 0.14 | 0.46 | 0.39 | 0.46 | 0.03 | 0.3 | **0.62** | 0.611 | 0.415 | 1.000 | 1.000 | 0.280 | 0.386 | 0.487 | 1.000 | 1.000 | 0.159 | 0.171 | 0.130 | 1.000 | 0.687 | 0.039 |
| GOLGB1 | 0.15 | 0.22 | 0.12 | 0.04 | -0.03 | 0.08 | 0.11 | -0.04 | 0.06 | 0.17 | 0.12 | -0.29 | 0.04 | 0.14 | **-0.39** | 0.466 | 0.696 | 1.000 | 1.000 | 1.000 | 0.828 | 0.841 | 1.000 | 1.000 | 0.926 | 0.601 | 0.132 | 1.000 | 0.963 | 0.021 |
| TM2D3 | -0.13 | -0.1 | -0.01 | 0.07 | -0.03 | 0.08 | 0.14 | -0.01 | 0.07 | 0.17 | 0.25 | -0.32 | 0.1 | 0.05 | **-0.43** | 0.253 | 0.296 | 1.000 | 1.000 | 1.000 | 0.896 | 0.385 | 1.000 | 1.000 | 0.742 | 0.181 | 0.120 | 1.000 | 1.000 | 0.033 |
| PIAS1 | 0.22 | 0.25 | 0.27 | 0.16 | -0.14 | 0.14 | 0.07 | 0.04 | 0.26 | -0.09 | 0.24 | -0.47 | 0.07 | 0.23 | **-0.35** | 0.107 | 0.244 | 1.000 | 1.000 | 0.821 | 1.000 | 0.827 | 1.000 | 1.000 | 1.000 | 0.492 | 0.184 | 1.000 | 0.288 | 0.028 |
| EMP3 | 0.3 | 0.08 | -0.04 | -0.02 | **0.52** | -0.15 | -0.29 | -0.04 | -0.14 | 0.03 | -0.04 | 0.51 | -0.01 | 0.07 | 0.38 | 1.000 | 0.997 | 1.000 | 1.000 | 0.041 | 0.896 | 0.092 | 1.000 | 1.000 | 1.000 | 1.000 | 0.121 | 1.000 | 1.000 | 0.074 |
| NOP56 | -0.51 | -0.34 | 0.13 | -0.04 | -0.2 | 0.2 | -0.1 | 0.29 | 0.22 | 0.11 | -0.67 | 0.79 | -0.12 | -0.29 | **1.06** | 0.796 | 0.800 | 1.000 | 1.000 | 0.503 | 0.775 | 1.000 | 1.000 | 1.000 | 1.000 | 0.225 | 0.066 | 1.000 | 0.841 | 0.020 |
| KANK2 | -0.31 | 0.11 | 0.24 | 0.06 | -0.23 | 0.21 | 0.31 | 0.04 | 0.26 | 0.53 | 0.38 | -0.5 | -0.04 | 0.1 | **-0.67** | 0.249 | 0.905 | 0.926 | 1.000 | 0.603 | 0.896 | 0.521 | 1.000 | 1.000 | 0.328 | 0.162 | 0.132 | 1.000 | 0.918 | 0.049 |
| THTPA | 0.37 | -0.16 | -0.25 | -0.03 | -0.18 | -1.15 | -0.75 | -0.43 | -0.26 | -0.25 | -0.84 | -2.2 | **-0.86** | -0.79 | -1.65 | 1.000 | 0.508 | 1.000 | 1.000 | 1.000 | 0.443 | 0.095 | 0.816 | 1.000 | 0.782 | 0.052 | 0.085 | 0.010 | 0.064 | 0.213 |
| RPLP1 | 0.01 | 0 | 0 | -0.01 | 0.02 | 0.03 | 0.01 | 0.03 | 0.05 | 0.03 | -0.11 | 0.09 | -0.08 | -0.04 | **0.12** | 1.000 | 1.000 | 1.000 | 1.000 | 0.973 | 0.966 | 0.899 | 1.000 | 0.667 | 0.933 | 0.407 | 0.063 | 0.800 | 0.740 | 0.034 |
| SHH | -0.01 | 0 | 0 | 0.05 | 0.04 | 0 | 0.1 | **-0.12** | 0 | -0.02 | 0.05 | 0.52 | 0.13 | 0.02 | 0.39 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.813 | 0.006 | 1.000 | 0.886 | 0.773 | 0.482 | 1.000 | 1.000 | 0.623 |
| EID2B | 0.08 | -0.67 | 0.38 | -0.21 | -0.5 | 0.5 | -0.24 | 0.23 | -0.18 | -0.3 | 0.85 | 1.33 | -0.05 | 0.13 | **-1** | 1.000 | 0.880 | 1.000 | 1.000 | 0.844 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.529 | 0.650 | 1.000 | 1.000 | 0.035 |
| MTAP | -0.43 | -0.61 | 0.05 | 0.22 | -0.53 | -0.39 | -0.47 | -0.26 | -0.25 | -0.55 | -0.77 | 0.46 | 0.29 | -0.12 | **0.61** | 0.824 | 0.407 | 1.000 | 1.000 | 0.109 | 0.828 | 0.697 | 1.000 | 1.000 | 0.267 | 0.080 | 0.090 | 1.000 | 0.906 | 0.049 |
| ST6GALNAC2 | -0.08 | -0.1 | -0.07 | 0.24 | -0.28 | 0.39 | 0.19 | 0.21 | 0.21 | 0 | 0.02 | 0.4 | -0.1 | 0.05 | **0.53** | 1.000 | 1.000 | 1.000 | 1.000 | 0.596 | 0.680 | 0.835 | 1.000 | 1.000 | 0.940 | 1.000 | 0.683 | 1.000 | 1.000 | 0.040 |
| IFT140 | -0.52 | -0.59 | -0.12 | -0.18 | **-0.7** | -0.74 | -1.17 | -0.53 | -0.84 | -0.84 | -0.27 | -0.37 | -0.41 | -0.1 | -0.49 | 1.000 | 0.611 | 1.000 | 1.000 | 0.041 | 0.746 | 0.404 | 1.000 | 1.000 | 0.480 | 0.592 | 0.450 | 0.884 | 1.000 | 0.442 |
| ARPC1B | 0.08 | -0.09 | 0.03 | -0.04 | -0.01 | 0.11 | -0.06 | 0.13 | 0.04 | 0.06 | -0.09 | 0.45 | 0.01 | 0.1 | **0.34** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.496 | 0.065 | 1.000 | 0.831 | 0.046 |
| RFC2 | 0 | -0.04 | 0.12 | -0.05 | -0.35 | 0.06 | -0.01 | -0.07 | 0.06 | -0.04 | 0 | 0.68 | 0.15 | 0.27 | **0.9** | 1.000 | 1.000 | 1.000 | 1.000 | 0.144 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.105 | 0.939 | 0.901 | 0.043 |
| ZNF543 | 0.66 | 0.43 | 0.11 | 0.4 | **0.8** | 0.2 | 0.38 | 0.14 | 0.07 | 0.48 | -0.03 | -0.28 | 0.28 | -0.06 | -0.37 | 1.000 | 0.677 | 1.000 | 1.000 | 0.022 | 0.896 | 0.637 | 1.000 | 1.000 | 0.212 | 1.000 | 0.340 | 1.000 | 1.000 | 0.723 |
| SLC25A33 | -0.78 | -0.48 | -0.85 | -0.49 | -0.01 | 0.23 | 0.49 | -0.04 | 0.09 | 0.31 | 0.99 | 0.97 | 0.58 | 0.53 | **1.28** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.787 | 0.329 | 1.000 | 1.000 | 0.479 | 0.051 | 0.073 | 0.829 | 0.484 | 0.021 |
| NHLRC2 | 0.14 | -0.13 | 0.06 | 0.13 | -0.26 | -0.37 | -0.36 | -0.22 | -0.28 | -0.46 | -0.24 | -1.13 | 0.1 | -0.14 | **-1.49** | 0.709 | 0.625 | 1.000 | 1.000 | 0.219 | 0.797 | 0.666 | 1.000 | 1.000 | 0.380 | 0.715 | 0.091 | 1.000 | 0.900 | 0.027 |
| JOSD2 | 0.19 | -0.12 | -0.11 | -0.04 | 0.05 | 0.24 | 0.12 | 0.01 | 0.01 | -0.08 | -0.04 | 0.44 | -0.07 | 0.21 | **0.58** | 1.000 | 0.905 | 1.000 | 1.000 | 0.860 | 0.828 | 0.460 | 1.000 | 1.000 | 0.916 | 1.000 | 0.238 | 1.000 | 1.000 | 0.031 |
| HMGB2 | -0.17 | -0.17 | 0 | -0.05 | **-0.51** | -0.13 | -0.2 | 0 | -0.08 | -0.12 | -0.14 | 0.3 | 0.06 | -0.04 | 0.23 | 1.000 | 0.905 | 1.000 | 1.000 | 0.026 | 1.000 | 0.813 | 1.000 | 1.000 | 0.904 | 0.544 | 0.074 | 1.000 | 1.000 | 0.305 |
| PTPN11 | 0.13 | 0.13 | 0.12 | 0.16 | 0.07 | 0.01 | 0.09 | -0.04 | -0.01 | 0.12 | 0.13 | -0.23 | 0.17 | 0.14 | **-0.3** | 1.000 | 0.657 | 1.000 | 1.000 | 0.821 | 1.000 | 0.792 | 1.000 | 1.000 | 0.494 | 0.215 | 0.073 | 0.417 | 0.369 | 0.042 |
| ZBTB44 | -0.18 | -0.2 | -0.19 | -0.01 | -0.48 | -0.33 | -0.32 | -0.09 | -0.37 | -0.16 | -0.5 | -0.86 | -0.07 | -0.22 | **-0.66** | 1.000 | 0.463 | 1.000 | 1.000 | 0.125 | 0.486 | 0.811 | 1.000 | 0.766 | 0.884 | 0.473 | 0.210 | 1.000 | 1.000 | 0.048 |
| CDK1 | 0.03 | 0.22 | 0.06 | -0.02 | 0.26 | -0.04 | -0.17 | -0.13 | -0.21 | -0.09 | 0.19 | 0.6 | 0.12 | 0.11 | **0.78** | 1.000 | 0.597 | 1.000 | 1.000 | 0.875 | 1.000 | 0.866 | 1.000 | 1.000 | 1.000 | 0.602 | 0.050 | 0.803 | 1.000 | 0.033 |
| FAM63B | 0.34 | 0.11 | 0.05 | 0.12 | -0.43 | 0.02 | -0.07 | -0.01 | -0.46 | -0.3 | -0.33 | -1 | -0.16 | -0.69 | **-0.77** | 0.900 | 1.000 | 1.000 | 1.000 | 0.315 | 1.000 | 1.000 | 1.000 | 1.000 | 0.449 | 0.385 | 0.178 | 1.000 | 0.900 | 0.028 |
| GALM | -0.41 | -0.46 | 0.07 | 0.03 | -1.48 | -0.31 | -0.04 | 0.45 | 0.37 | -0.16 | -0.82 | 0.98 | 0.65 | -0.13 | **1.27** | 1.000 | 0.887 | 1.000 | 1.000 | 0.139 | 0.883 | 1.000 | 1.000 | 1.000 | 1.000 | 0.081 | 0.055 | 0.462 | 1.000 | 0.037 |
| CSTF3 | 0.15 | 0.17 | -0.13 | -0.14 | 0.1 | 0.04 | -0.11 | 0.01 | -0.07 | 0.05 | -0.13 | 0.57 | -0.15 | 0.1 | **0.44** | 1.000 | 0.358 | 1.000 | 1.000 | 1.000 | 0.949 | 0.813 | 1.000 | 1.000 | 1.000 | 0.602 | 0.065 | 0.948 | 1.000 | 0.034 |
| C8orf59 | 0.03 | -0.02 | 0.04 | -0.2 | -0.02 | 0.27 | 0.36 | 0.16 | 0.14 | 0.38 | 0.5 | 0.53 | 0.2 | 0.11 | **0.41** | 1.000 | 1.000 | 1.000 | 0.969 | 1.000 | 0.830 | 0.231 | 1.000 | 1.000 | 0.107 | 0.119 | 0.073 | 0.866 | 0.888 | 0.038 |
| MRPL48 | -0.11 | -0.2 | 0.17 | 0.01 | -0.11 | -0.03 | -0.07 | 0.06 | 0.11 | 0.15 | -0.15 | 0.28 | 0 | 0 | **0.36** | 1.000 | 0.365 | 1.000 | 1.000 | 0.601 | 1.000 | 1.000 | 1.000 | 1.000 | 0.745 | 0.162 | 0.070 | 1.000 | 1.000 | 0.024 |
| FAM27A | -0.7 | -0.18 | 0.31 | -0.08 | -0.27 | 0.44 | -0.03 | 0.02 | -0.1 | -0.05 | 0.35 | 1.31 | 0.38 | 0.11 | **1.02** | 0.950 | 0.911 | 1.000 | 1.000 | 0.578 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.812 | 0.268 | 1.000 | 1.000 | 0.030 |
| CERCAM | -0.06 | -0.11 | -0.06 | 0.09 | 0.09 | -0.14 | -0.32 | 0.06 | 0.02 | 0.05 | -0.11 | 1.04 | 0.04 | 0.03 | **0.81** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.491 | 1.000 | 1.000 | 1.000 | 0.928 | 0.117 | 1.000 | 1.000 | 0.016 |
| ZNF141 | -0.08 | -0.38 | -0.27 | -0.12 | -0.61 | -1.18 | -1.02 | -0.48 | -0.43 | -0.36 | -0.94 | -2.03 | -0.52 | -0.9 | **-2.6** | 1.000 | 0.686 | 1.000 | 1.000 | 0.091 | 0.376 | 0.238 | 1.000 | 1.000 | 0.908 | 0.125 | 0.051 | 0.823 | 0.300 | 0.047 |
| CSNK2A2 | -0.22 | -0.08 | -0.06 | -0.1 | 0.09 | 0.02 | 0.13 | 0.01 | 0.09 | 0.12 | 0.12 | -0.18 | 0.09 | 0.2 | **-0.23** | 0.527 | 0.881 | 1.000 | 1.000 | 0.917 | 1.000 | 0.778 | 1.000 | 1.000 | 0.326 | 0.264 | 0.111 | 0.462 | 0.126 | 0.033 |
| EPRS | -0.19 | -0.03 | -0.06 | -0.09 | 0.06 | 0.17 | 0.06 | 0.02 | 0.08 | 0.19 | 0.17 | 0.18 | -0.04 | 0.02 | **0.23** | 0.781 | 1.000 | 1.000 | 1.000 | 1.000 | 0.707 | 1.000 | 1.000 | 1.000 | 0.699 | 0.463 | 0.281 | 1.000 | 1.000 | 0.013 |
| C6orf57 | 0.62 | -0.59 | 0.04 | 0.28 | -0.56 | -0.03 | 0.08 | 0.41 | 0.16 | -0.71 | -0.76 | 0.94 | 0.52 | 0.05 | **1.2** | 0.678 | 0.905 | 1.000 | 1.000 | 0.491 | 1.000 | 0.867 | 1.000 | 1.000 | 0.417 | 0.438 | 0.268 | 1.000 | 1.000 | 0.010 |
| NUP54 | -0.09 | 0.13 | 0.13 | -0.07 | 0.03 | -0.18 | -0.23 | -0.15 | 0.07 | -0.04 | 0.02 | 0.29 | 0.18 | 0.38 | **0.37** | 1.000 | 0.905 | 1.000 | 1.000 | 1.000 | 0.884 | 0.077 | 0.974 | 1.000 | 1.000 | 1.000 | 0.195 | 0.617 | 0.329 | 0.040 |
| DBI | 0.12 | 0.04 | 0 | -0.03 | 0.07 | 0.23 | 0.17 | 0.16 | 0.16 | 0.16 | -0.11 | 0.22 | -0.04 | -0.04 | **0.28** | 1.000 | 1.000 | 1.000 | 1.000 | 0.480 | 0.637 | 0.199 | 0.590 | 0.699 | 0.340 | 0.527 | 0.122 | 1.000 | 1.000 | 0.030 |
| PAICS | -0.17 | -0.1 | 0.05 | 0.03 | -0.06 | 0.09 | -0.13 | 0.05 | -0.03 | -0.04 | -0.12 | 0.33 | -0.06 | 0.01 | **0.42** | 1.000 | 0.885 | 1.000 | 1.000 | 1.000 | 1.000 | 0.551 | 1.000 | 1.000 | 1.000 | 0.676 | 0.143 | 1.000 | 1.000 | 0.020 |
| MTBP | -0.24 | -0.32 | -0.12 | -0.16 | 0.08 | -0.1 | -0.23 | -0.03 | 0.1 | -0.17 | -0.04 | 0.55 | 0.07 | -0.02 | **0.7** | 0.995 | 0.633 | 1.000 | 1.000 | 1.000 | 1.000 | 0.788 | 1.000 | 1.000 | 0.517 | 0.751 | 0.108 | 1.000 | 0.900 | 0.036 |
| KDSR | 0.21 | 0.02 | 0.1 | -0.04 | 0.01 | -0.04 | 0.23 | -0.26 | 0.19 | -0.17 | 0.33 | -0.19 | -0.04 | -0.2 | **-0.15** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.494 | 0.747 | 1.000 | 1.000 | 0.220 | 0.361 | 1.000 | 0.705 | 0.020 |
| GABBR2 | -0.22 | 0.19 | -0.19 | -0.2 | 0.28 | 0.18 | 0.36 | -0.22 | 0.08 | 0.31 | 0.21 | 0.98 | -0.11 | 0.02 | **1.24** | 1.000 | 0.905 | 1.000 | 1.000 | 0.513 | 0.947 | 0.216 | 1.000 | 1.000 | 0.195 | 0.991 | 0.076 | 1.000 | 1.000 | 0.030 |
| MARS | 0.46 | 0.45 | 0 | 0.54 | 0.39 | -0.56 | 0.12 | 0.04 | 0.21 | 0.13 | 0.64 | -2.54 | 0.12 | 0.09 | **-3.21** | 0.378 | 0.498 | 1.000 | 1.000 | 0.165 | 0.413 | 0.873 | 1.000 | 1.000 | 1.000 | 0.092 | 0.073 | 1.000 | 1.000 | 0.032 |
| ADAMTS9 | 0.19 | -0.03 | -0.02 | -0.2 | -0.31 | -0.16 | 0.38 | 0.34 | 0.91 | 0.9 | 0.45 | -2.7 | 0.31 | 0.27 | **-3.4** | 1.000 | 1.000 | 1.000 | 1.000 | 0.995 | 1.000 | 0.323 | 0.937 | 0.991 | 0.493 | 1.000 | 0.100 | 1.000 | 1.000 | 0.016 |
| MOAP1 | 0.23 | 0.33 | 0.03 | 0.11 | 0.18 | 0.25 | 0.27 | 0.17 | 0.19 | 0.16 | 0.34 | 0.35 | 0.2 | 0.22 | **0.44** | 1.000 | 0.122 | 1.000 | 1.000 | 0.389 | 0.492 | 0.258 | 1.000 | 1.000 | 0.496 | 0.360 | 0.106 | 0.871 | 0.504 | 0.020 |
| RAC2 | 0 | -0.16 | 0.06 | -0.03 | -0.08 | 0.16 | -0.06 | 0.1 | -0.01 | -0.08 | -0.16 | 0.49 | -0.02 | -0.1 | **0.39** | 1.000 | 0.617 | 1.000 | 1.000 | 0.922 | 0.307 | 0.408 | 1.000 | 1.000 | 0.892 | 0.463 | 0.077 | 1.000 | 0.917 | 0.031 |
| C2orf76 | 0.65 | 0.05 | 0.01 | -0.14 | **0.31** | 0.6 | 0.54 | 0.33 | 0.49 | 0.29 | 0.33 | 0.32 | 0.14 | 0.16 | 0.4 | 0.870 | 1.000 | 1.000 | 0.772 | 0.033 | 0.425 | 0.173 | 0.950 | 0.800 | 0.525 | 0.165 | 0.226 | 1.000 | 0.900 | 0.291 |
| CLTC | -0.04 | 0.01 | -0.04 | -0.01 | 0 | 0 | 0.03 | 0.03 | 0 | **0.05** | 0.06 | -0.08 | 0.02 | 0.08 | -0.1 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.540 | 1.000 | 1.000 | 0.035 | 0.379 | 0.092 | 1.000 | 0.285 | 0.179 |
| MTHFD1 | -0.25 | -0.49 | 0.29 | -0.05 | -0.14 | 0.13 | -0.15 | 0.04 | 0.07 | -0.21 | -0.26 | 0.4 | -0.04 | -0.25 | **0.32** | 0.843 | 0.407 | 1.000 | 1.000 | 0.861 | 0.896 | 0.689 | 1.000 | 1.000 | 0.592 | 0.544 | 0.306 | 1.000 | 0.770 | 0.048 |
| ZYX | 0.23 | 0.21 | 0.11 | 0.03 | 0.21 | 0.31 | 0 | 0.05 | 0.01 | 0.14 | 0.07 | 0.4 | -0.01 | 0.12 | **0.32** | 1.000 | 1.000 | 1.000 | 1.000 | 0.992 | 0.570 | 1.000 | 1.000 | 1.000 | 1.000 | 0.974 | 0.184 | 1.000 | 0.900 | 0.030 |
| UHMK1 | -0.13 | -0.06 | -0.04 | 0 | -0.16 | 0.04 | 0.04 | 0.05 | -0.03 | -0.04 | 0.02 | -0.56 | 0.12 | 0.11 | **-0.7** | 1.000 | 0.905 | 1.000 | 1.000 | 0.457 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.119 | 0.592 | 0.416 | 0.014 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TMEM97 | -0.14 | -0.26 | -0.04 | 0.02 | -0.43 | -0.25 | -0.29 | -0.03 | -0.28 | -0.22 | -0.17 | 0.57 | -0.04 | -0.37 | **0.71** |
| TATDN1 | -0.07 | 0.1 | -0.07 | -0.04 | -0.04 | 0.26 | 0.36 | 0.15 | 0.32 | 0.17 | 0.21 | 0.45 | 0.09 | 0.16 | **0.56** |
| C9orf72 | 0.1 | 0.02 | 0.17 | 0.15 | -0.11 | -0.17 | 0.01 | -0.09 | -0.18 | -0.22 | -0.26 | 0.5 | 0.06 | -0.06 | **0.62** |
| RPP21 | 0.21 | -0.01 | 0.16 | 0.1 | 0.36 | 0.41 | 0.17 | 0.2 | 0.19 | 0.4 | 0.06 | 0.59 | -0.09 | 0.01 | **0.73** |
| YLPM1 | 0.47 | 0.06 | -0.28 | -0.13 | 0.61 | -1.3 | -1.14 | 0.17 | 0.22 | -0.89 | -0.35 | -3.12 | -0.89 | -0.68 | **-3.86** |
| C1orf21 | -0.96 | -1.08 | 0.06 | -0.42 | **-1.45** | 0.25 | 0 | 0.28 | -0.1 | -0.19 | -0.38 | 0.63 | -0.39 | 0.06 | 0.51 |
| STK3 | 0.19 | 0.13 | 0.14 | 0.03 | -0.17 | 0.03 | 0.21 | -0.02 | -0.14 | -0.1 | 0.31 | 0.34 | 0.19 | 0.14 | **0.42** |
| FAIM | -0.28 | -0.37 | 0 | -0.06 | -0.38 | 0.31 | -0.13 | 0.32 | 0.17 | -0.41 | -0.23 | 0.43 | -0.08 | -0.1 | **0.53** |
| CPEB3 | 0.47 | -0.19 | 0.37 | 0.72 | -0.39 | -0.37 | -0.3 | 0 | -0.14 | -0.66 | 0.2 | 1.6 | 0.58 | 0.21 | **1.3** |
| C17orf89 | -0.06 | -0.04 | 0.03 | 0.03 | -0.07 | 0.19 | 0.06 | 0.22 | 0.07 | -0.06 | -0.03 | 0.13 | -0.06 | -0.08 | **0.16** |
| NDUFS3 | -0.03 | -0.24 | -0.02 | -0.03 | -0.12 | 0.08 | -0.08 | 0.06 | 0.08 | -0.02 | -0.41 | 0.27 | 0 | -0.13 | **0.22** |
| LOC284513 | -0.2 | -0.57 | -0.22 | 0.07 | -1.53 | 0.11 | 0.07 | 0.39 | 0.69 | -0.25 | -1.26 | -2.16 | -0.82 | -1.32 | **-2.65** |
| KLF5 | 0.15 | 0.29 | 0.23 | 0.85 | 0.29 | 0.3 | 1.04 | 0.34 | 0.45 | 0.16 | 1.04 | 1.5 | -0.13 | 0 | **1.84** |
| PLA2G16 | 0 | -0.13 | 0.06 | -0.12 | -0.08 | 0.34 | 0.11 | 0.16 | 0.33 | 0.04 | -0.21 | 0.31 | -0.07 | 0.01 | **0.38** |
| MGC16121 | -0.47 | 0.04 | 0.5 | 0.22 | -0.15 | -0.63 | -0.79 | -0.3 | 0.13 | -0.33 | -1.13 | -2.13 | -0.34 | -0.33 | **-2.61** |
| OARD1 | -0.31 | -0.47 | 0 | 0.15 | -0.36 | 0.36 | -0.18 | -0.17 | -0.04 | -0.16 | 0.07 | 0.4 | 0.04 | 0.1 | **0.49** |
| MLF1IP | -0.08 | 0.26 | 0.66 | 0.51 | -0.21 | -0.23 | -0.45 | -0.1 | -0.32 | -0.57 | 0.25 | 0.94 | 0.39 | 0.03 | **0.77** |
| ASH1L | 0.16 | 0.13 | 0.04 | -0.02 | 0.24 | 0.01 | 0.14 | -0.2 | -0.13 | -0.03 | 0.01 | -0.83 | 0.09 | -0.03 | **-0.68** |
| LRRC69 | 0 | -0.23 | 0.07 | 0.31 | -0.94 | -0.46 | -0.21 | 0.12 | 0.16 | -0.32 | -0.73 | -2.18 | 0.29 | -0.75 | **-2.66** |
| RMND5A | -0.12 | -0.1 | 0.04 | 0 | -0.2 | -0.06 | 0.06 | -0.09 | -0.2 | 0 | -0.05 | -0.39 | 0.06 | -0.06 | **-0.32** |
| CCNB1IP1 | -0.04 | -0.11 | 0.06 | 0.07 | 0.04 | 0.01 | -0.05 | 0.15 | 0.1 | 0.04 | -0.16 | 0.55 | -0.04 | -0.03 | **0.67** |
| BMPR1A | 0.28 | 0.16 | 0.71 | 0.42 | **-0.61** | -0.08 | -1.01 | -0.36 | -0.31 | -1.06 | -0.15 | 0.46 | 0.27 | 0.01 | 0.56 |
| SNHG15 | -0.02 | 0.28 | 0.06 | 0.08 | 0.11 | 0.03 | 0.44 | 0.04 | 0.33 | 0.81 | 0.57 | 0.46 | 0.08 | **0.3** | 0.56 |
| LOC283508 | 0.11 | 0.25 | -0.03 | 0.27 | 0.19 | 0.02 | -0.21 | 0.22 | 0.1 | -0.1 | -0.03 | -1.15 | 0.04 | 0.13 | **-1.4** |
| LSS | -0.02 | -0.08 | -0.08 | -0.18 | 0.04 | 0.08 | 0.05 | 0.02 | 0.17 | 0.08 | 0.19 | 0.45 | 0.06 | 0.04 | **0.37** |
| TMEM181 | -0.34 | -0.29 | 0.01 | -0.04 | -0.33 | -0.17 | -0.18 | -0.02 | -0.06 | -0.1 | -0.09 | -0.37 | 0 | 0 | **-0.45** |
| GALK2 | -0.15 | -0.26 | -0.08 | -0.12 | 0.2 | 0.26 | 0.18 | 0.14 | 0.34 | -0.59 | -0.14 | 0.51 | -0.09 | 0.12 | **0.42** |
| NDUFB6 | -0.06 | -0.03 | 0.03 | 0.06 | -0.17 | 0.09 | -0.01 | 0.16 | 0.03 | -0.04 | -0.15 | 0.34 | 0.01 | -0.02 | **0.28** |
| SS18L2 | 0.09 | 0.12 | 0.01 | -0.05 | 0.03 | 0.09 | 0.2 | 0.03 | 0.08 | 0.06 | -0.04 | -0.14 | 0.02 | 0.06 | **-0.17** |
| ZC3HAV1L | 0.01 | -0.11 | 0.09 | 0.04 | -0.17 | -0.26 | -0.13 | -0.13 | -0.19 | -0.32 | -0.29 | -0.56 | 0.19 | -0.05 | **-0.68** |
| KRT18 | -0.31 | -0.49 | 0.01 | -0.13 | -0.17 | 0.03 | -0.18 | 0.06 | 0 | 0.05 | -0.38 | 0.52 | -0.16 | -0.35 | **0.63** |
| FNBP4 | 0.2 | 0.11 | -0.19 | 0.04 | -0.22 | -0.67 | -0.07 | -0.31 | -0.12 | -0.03 | 0.49 | -2.01 | 0.08 | -0.13 | **-1.66** |
| PLAUR | -0.16 | -0.16 | 0.04 | -0.04 | 0.13 | -0.06 | 0.14 | 0.05 | 0 | 0.17 | 0.2 | 0.38 | -0.04 | -0.09 | **0.46** |
| TCTA | -0.02 | 0.18 | 0.26 | 0.35 | **-0.45** | 0.04 | -0.09 | 0.06 | -0.1 | -0.06 | -0.04 | 0.29 | -0.12 | -0.14 | 0.35 |
| ST7L | -0.69 | -0.57 | -0.32 | -0.38 | -1.23 | -1.08 | -0.2 | -0.04 | -0.06 | 0.02 | -0.32 | -1.86 | -0.53 | -1.16 | **-2.24** |
| RBBP6 | 0.02 | 0.29 | -0.26 | -0.1 | 0.3 | 0.17 | 0.08 | 0.08 | 0.23 | -0.04 | -0.01 | 0.79 | -0.38 | -0.16 | **0.95** |
| SLC30A1 | -0.3 | -0.23 | -0.13 | -0.11 | -0.42 | -0.12 | -0.14 | -0.04 | -0.21 | -0.34 | -0.01 | -0.36 | -0.23 | -0.11 | **0.3** |
| ZNF75A | -0.01 | 0.04 | -0.52 | -0.04 | 0.37 | -0.07 | -0.03 | -0.12 | -0.23 | 0.02 | -0.28 | -0.3 | -0.28 | -0.14 | **-0.36** |
| ZP3 | 0.02 | 0.3 | 0.32 | 0.15 | -0.17 | 0.18 | -0.03 | -0.05 | -0.02 | 0.55 | 0.44 | 0.66 | 0.06 | 0.32 | **0.55** |
| LINC00493 | 0.07 | -0.16 | 0.02 | -0.06 | -0.1 | 0.32 | 0.24 | 0.27 | 0.18 | 0.02 | -0.1 | 0.25 | -0.05 | 0.05 | **0.3** |
| PURB | 0.27 | 0.2 | 0.16 | 0.09 | 0.23 | 0.18 | 0.28 | -0.12 | 0.03 | 0.24 | 0.34 | -0.3 | 0.14 | 0.26 | **-0.25** |
| HP1BP3 | -0.04 | 0.14 | -0.28 | -0.13 | 0.54 | 0.14 | 0.21 | -0.1 | 0.06 | 1.28 | 0.29 | 0.73 | -0.14 | -0.21 | **0.61** |
| EIF3C | -0.43 | -0.33 | -0.57 | -0.36 | -0.45 | -1.21 | -0.49 | -0.63 | -0.11 | -0.09 | 0.33 | -3.9 | -0.18 | -0.86 | **-3.26** |
| BIRC5 | -0.08 | -0.28 | -0.01 | -0.03 | -0.08 | -0.08 | -0.23 | -0.23 | -0.14 | 0.22 | -0.09 | 0.61 | 0.04 | -0.14 | **0.51** |
| CCNT1 | 0.13 | 0.12 | 0.04 | 0.01 | 0.06 | -0.05 | 0.21 | -0.05 | -0.05 | 0.08 | 0.19 | -0.46 | 0.18 | 0.11 | **-0.55** |
| ZNF548 | 0.14 | 0.3 | 0.18 | 0.03 | 0.16 | 0.01 | -0.09 | 0.18 | 0.23 | 0.11 | 0.21 | 1.28 | 0 | 0.24 | **1.53** |
| DPCD | 0.15 | -0.06 | 0.11 | 0.03 | 0.06 | 0.19 | -0.07 | 0.05 | 0 | -0.13 | -0.28 | 0.36 | 0.05 | -0.07 | **0.43** |
| GADD45GIP1 | 0.22 | 0.02 | 0.04 | -0.01 | 0.03 | 0.08 | -0.03 | 0.08 | 0.05 | 0.05 | -0.02 | 0.31 | 0.06 | 0.03 | **0.26** |
| RPLP0P6 | -0.07 | -0.04 | 0.02 | 0.01 | 0.02 | 0.12 | 0.11 | 0.13 | 0.17 | 0.06 | -0.12 | 0.19 | 0.02 | -0.02 | **0.16** |
| DHCR7 | 0.09 | -0.09 | 0.09 | 0.03 | -0.21 | -0.17 | -0.44 | -0.32 | -0.34 | -0.26 | -0.28 | 0.8 | -0.01 | 0.05 | **0.95** |
| INSIG1 | 0.28 | 0.26 | 0.03 | 0.1 | -0.16 | 0.19 | 0.32 | -0.06 | -0.02 | -0.01 | 0.23 | 0.6 | 0.12 | 0.09 | **0.71** |
| BLCAP | -0.13 | -0.1 | 0 | -0.01 | **-0.22** | -0.02 | -0.01 | 0 | -0.01 | -0.11 | -0.11 | -0.13 | 0.03 | -0.06 | -0.11 |
| CHCHD5 | 0.28 | -0.25 | -0.12 | -0.12 | -0.17 | 0.32 | 0.01 | 0.26 | 0.22 | 0.44 | -0.58 | 0.85 | -0.35 | -0.08 | **0.72** |
| NSD1 | -0.46 | -0.32 | -0.33 | -0.19 | **-0.64** | -0.21 | -0.01 | 0.04 | 0.04 | -0.4 | -0.1 | -0.59 | 0.61 | 0.03 | 0.5 |
| CAPG | 0.1 | -0.02 | 0.12 | -0.02 | 0.05 | 0.16 | 0 | -0.07 | -0.04 | 0.24 | 0.08 | 0.53 | -0.16 | 0.07 | **0.45** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 0.529 | 1.000 | 1.000 | 0.310 | 0.555 | 0.468 | 1.000 | 0.693 | 0.867 | 0.575 | 0.103 | 1.000 | 0.371 | 0.034 |
| 1.000 | 0.839 | 1.000 | 1.000 | 0.920 | 0.591 | 0.195 | 1.000 | 0.715 | 0.322 | 0.062 | 0.058 | 0.896 | 0.900 | 0.021 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 0.499 | 0.423 | 0.075 | 1.000 | 1.000 | 0.009 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.477 | 0.555 | 0.626 | 0.903 | 1.000 | 0.562 | 1.000 | 0.164 | 1.000 | 1.000 | 0.047 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.410 | 0.360 | 1.000 | 1.000 | 0.273 | 1.000 | 0.099 | 1.000 | 0.964 | 0.042 |
| 0.228 | 0.179 | 1.000 | 1.000 | 0.034 | 0.897 | 1.000 | 1.000 | 1.000 | 1.000 | 0.460 | 0.074 | 0.811 | 1.000 | 0.245 |
| 1.000 | 0.783 | 1.000 | 1.000 | 0.408 | 1.000 | 0.506 | 1.000 | 1.000 | 0.957 | 0.128 | 0.135 | 0.933 | 0.726 | 0.047 |
| 0.494 | 0.789 | 1.000 | 1.000 | 0.566 | 0.788 | 0.876 | 1.000 | 1.000 | 0.388 | 0.705 | 0.295 | 1.000 | 1.000 | 0.027 |
| 0.756 | 1.000 | 1.000 | 1.000 | 0.441 | 0.230 | 0.402 | 1.000 | 1.000 | 0.585 | 0.737 | 0.159 | 0.689 | 0.706 | 0.027 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.825 | 0.168 | 0.772 | 0.400 | 1.000 | 0.884 | 1.000 | 0.375 | 1.000 | 1.000 | 0.026 |
| 1.000 | 0.369 | 1.000 | 1.000 | 0.329 | 0.896 | 0.694 | 1.000 | 1.000 | 1.000 | 0.057 | 0.204 | 1.000 | 0.851 | 0.038 |
| 1.000 | 0.366 | 1.000 | 1.000 | 0.147 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.213 | 0.083 | 0.823 | 0.400 | 0.020 |
| 0.315 | 0.095 | 0.189 | 1.000 | 0.989 | 0.896 | 0.195 | 1.000 | 0.978 | 0.921 | 0.086 | 0.157 | 1.000 | 1.000 | 0.032 |
| 1.000 | 0.848 | 1.000 | 1.000 | 0.552 | 0.596 | 0.639 | 1.000 | 0.631 | 0.572 | 0.063 | 0.242 | 1.000 | 1.000 | 0.028 |
| 0.719 | 1.000 | 1.000 | 1.000 | 1.000 | 0.837 | 0.312 | 1.000 | 1.000 | 0.728 | 0.127 | 0.054 | 1.000 | 0.955 | 0.038 |
| 1.000 | 0.735 | 1.000 | 1.000 | 0.525 | 0.827 | 0.491 | 0.901 | 1.000 | 1.000 | 0.522 | 0.054 | 1.000 | 1.000 | 0.038 |
| 1.000 | 0.266 | 0.862 | 0.805 | 0.580 | 0.896 | 0.113 | 1.000 | 1.000 | 0.323 | 0.699 | 0.092 | 0.802 | 1.000 | 0.011 |
| 1.000 | 0.690 | 1.000 | 1.000 | 0.413 | 1.000 | 0.870 | 1.000 | 1.000 | 1.000 | 1.000 | 0.106 | 1.000 | 1.000 | 0.007 |
| 1.000 | 0.663 | 1.000 | 1.000 | 0.218 | 0.706 | 0.716 | 1.000 | 1.000 | 1.000 | 0.555 | 0.058 | 1.000 | 0.900 | 0.042 |
| 0.453 | 0.944 | 1.000 | 1.000 | 0.528 | 1.000 | 0.753 | 1.000 | 0.634 | 1.000 | 1.000 | 0.139 | 1.000 | 0.900 | 0.016 |
| 1.000 | 0.741 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.731 | 0.655 | 0.099 | 1.000 | 1.000 | 0.033 |
| 0.871 | 1.000 | 0.886 | 0.988 | 0.043 | 1.000 | 0.278 | 1.000 | 1.000 | 0.795 | 0.907 | 0.568 | 1.000 | 1.000 | 0.508 |
| 1.000 | 0.501 | 1.000 | 1.000 | 0.821 | 1.000 | 0.132 | 1.000 | 0.646 | 0.084 | 0.052 | 0.081 | 0.755 | 0.028 | 0.252 |
| 1.000 | 0.583 | 1.000 | 1.000 | 0.554 | 1.000 | 0.242 | 0.885 | 1.000 | 0.942 | 1.000 | 0.055 | 1.000 | 1.000 | 0.016 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.804 | 0.835 | 1.000 | 0.751 | 1.000 | 0.363 | 0.062 | 1.000 | 1.000 | 0.038 |
| 0.212 | 0.217 | 1.000 | 1.000 | 0.071 | 0.604 | 0.195 | 1.000 | 1.000 | 0.884 | 0.573 | 0.091 | 1.000 | 1.000 | 0.045 |
| 1.000 | 0.831 | 1.000 | 1.000 | 0.841 | 0.798 | 0.924 | 1.000 | 0.969 | 0.886 | 0.772 | 0.328 | 1.000 | 0.904 | 0.040 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.488 | 0.627 | 1.000 | 0.855 | 1.000 | 1.000 | 0.407 | 0.094 | 1.000 | 1.000 | 0.045 |
| 1.000 | 0.669 | 1.000 | 1.000 | 1.000 | 0.896 | 0.064 | 1.000 | 1.000 | 1.000 | 1.000 | 0.212 | 1.000 | 0.903 | 0.042 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.441 | 0.896 | 0.192 | 0.931 | 0.997 | 0.435 | 0.169 | 0.255 | 0.468 | 1.000 | 0.047 |
| 1.000 | 0.289 | 1.000 | 1.000 | 0.310 | 1.000 | 0.345 | 1.000 | 1.000 | 1.000 | 0.230 | 0.123 | 0.542 | 0.227 | 0.042 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.763 | 0.608 | 1.000 | 0.661 | 1.000 | 1.000 | 0.055 | 0.086 | 1.000 | 0.911 | 0.041 |
| 0.364 | 0.728 | 1.000 | 1.000 | 0.429 | 0.835 | 0.234 | 1.000 | 1.000 | 0.120 | 0.794 | 0.151 | 1.000 | 0.900 | 0.031 |
| 1.000 | 0.905 | 0.912 | 0.838 | 0.023 | 1.000 | 1.000 | 1.000 | 1.000 | 0.884 | 1.000 | 0.070 | 1.000 | 0.839 | 0.278 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.303 | 0.509 | 1.000 | 1.000 | 1.000 | 1.000 | 0.512 | 0.062 | 0.680 | 0.299 | 0.043 |
| 1.000 | 0.400 | 0.931 | 1.000 | 0.403 | 0.703 | 0.839 | 1.000 | 0.776 | 1.000 | 1.000 | 0.098 | 0.530 | 0.838 | 0.033 |
| 0.258 | 0.297 | 1.000 | 1.000 | 0.088 | 0.970 | 0.695 | 1.000 | 0.860 | 0.293 | 1.000 | 0.401 | 0.422 | 0.622 | 0.046 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.433 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.645 | 0.326 | 0.933 | 0.900 | 0.045 |
| 1.000 | 0.837 | 1.000 | 1.000 | 1.000 | 0.727 | 1.000 | 1.000 | 1.000 | 0.544 | 0.082 | 0.182 | 1.000 | 0.833 | 0.044 |
| 1.000 | 0.602 | 1.000 | 1.000 | 0.497 | 0.373 | 0.092 | 0.747 | 0.670 | 1.000 | 0.426 | 0.305 | 1.000 | 1.000 | 0.013 |
| 0.266 | 0.138 | 1.000 | 1.000 | 0.338 | 0.416 | 0.116 | 1.000 | 1.000 | 0.310 | 0.084 | 0.344 | 0.765 | 0.275 | 0.047 |
| 1.000 | 0.919 | 1.000 | 1.000 | 0.074 | 0.653 | 0.732 | 1.000 | 1.000 | 0.499 | 0.390 | 0.184 | 1.000 | 0.852 | 0.018 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.610 | 0.409 | 0.744 | 1.000 | 1.000 | 1.000 | 0.757 | 0.087 | 1.000 | 0.629 | 0.048 |
| 1.000 | 0.478 | 1.000 | 1.000 | 1.000 | 1.000 | 0.835 | 1.000 | 1.000 | 0.542 | 0.970 | 0.058 | 1.000 | 0.738 | 0.045 |
| 1.000 | 0.905 | 1.000 | 1.000 | 0.972 | 1.000 | 0.328 | 1.000 | 1.000 | 0.969 | 0.228 | 0.068 | 0.689 | 0.602 | 0.049 |
| 1.000 | 0.856 | 1.000 | 1.000 | 0.530 | 1.000 | 1.000 | 0.974 | 1.000 | 1.000 | 0.788 | 0.362 | 1.000 | 1.000 | 0.030 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.435 | 1.000 | 1.000 | 1.000 | 0.957 | 0.315 | 0.102 | 1.000 | 1.000 | 0.019 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.399 | 1.000 | 0.806 | 1.000 | 0.884 | 1.000 | 0.120 | 1.000 | 0.843 | 0.037 |
| 1.000 | 0.931 | 1.000 | 1.000 | 1.000 | 0.775 | 0.360 | 0.747 | 0.466 | 0.319 | 0.944 | 0.131 | 1.000 | 1.000 | 0.049 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.826 | 0.441 | 0.950 | 1.000 | 0.808 | 0.494 | 0.090 | 1.000 | 1.000 | 0.028 |
| 0.476 | 0.058 | 1.000 | 1.000 | 0.646 | 0.778 | 0.115 | 1.000 | 1.000 | 1.000 | 0.245 | 0.060 | 1.000 | 1.000 | 0.014 |
| 0.075 | 0.120 | 1.000 | 1.000 | 0.029 | 0.912 | 0.988 | 1.000 | 1.000 | 0.495 | 0.106 | 0.068 | 1.000 | 0.660 | 0.272 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.696 | 0.896 | 1.000 | 1.000 | 1.000 | 0.728 | 0.404 | 0.169 | 0.630 | 1.000 | 0.034 |
| 0.140 | 0.180 | 1.000 | 1.000 | 0.019 | 0.896 | 1.000 | 1.000 | 1.000 | 0.884 | 0.524 | 0.285 | 0.730 | 1.000 | 0.286 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 0.598 | 1.000 | 0.099 | 1.000 | 1.000 | 0.033 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RASAL2 | -0.19 | -0.23 | 0.07 | -0.01 | **-0.44** | -0.25 | -0.06 | 0 | -0.01 | -0.43 | -0.31 | -0.51 | 0.03 | -0.05 | -0.6 | 1.000 | 0.523 | 1.000 | 1.000 | 0.033 | 0.650 | 1.000 | 1.000 | 1.000 | 0.105 | 0.192 | 0.187 | 1.000 | 1.000 | 0.065 |
| KIF1C | 0.21 | 0.04 | 0.01 | -0.02 | 0.29 | 0.11 | 0.21 | -0.03 | 0.01 | 0.13 | 0.16 | -0.47 | 0.04 | -0.04 | **-0.4** | 0.765 | 1.000 | 1.000 | 1.000 | 0.077 | 0.408 | 0.238 | 1.000 | 1.000 | 0.265 | 0.526 | 0.112 | 1.000 | 1.000 | 0.025 |
| LOC440434 | -0.09 | 0.08 | -0.11 | -0.11 | 0.09 | -0.29 | 0.06 | -0.22 | -0.2 | 0.05 | 0.08 | -0.88 | -0.21 | -0.15 | **-1.03** | 1.000 | 1.000 | 1.000 | 1.000 | 0.947 | 0.663 | 0.470 | 0.897 | 1.000 | 0.941 | 0.751 | 0.069 | 0.823 | 0.549 | 0.033 |
| GUSBP3 | -0.57 | -0.74 | -0.78 | -0.41 | -0.68 | -0.77 | -0.87 | -0.47 | -0.38 | -0.76 | -1.85 | -2.1 | -0.6 | -1.16 | **-1.8** | 0.752 | 0.385 | 0.955 | 1.000 | 0.195 | 0.142 | 0.068 | 1.000 | 1.000 | 0.105 | 0.094 | 0.104 | 1.000 | 0.533 | 0.036 |
| UFC1 | -0.01 | -0.05 | 0.04 | 0 | 0.01 | 0.17 | 0.16 | 0.18 | 0.13 | -0.06 | -0.03 | 0.35 | 0.02 | 0.11 | **0.3** | 1.000 | 0.963 | 1.000 | 1.000 | 1.000 | 0.741 | 0.374 | 0.897 | 1.000 | 0.884 | 1.000 | 0.053 | 1.000 | 0.622 | 0.047 |
| LOC642852 | -0.33 | -0.18 | -0.08 | -0.02 | -0.48 | -0.22 | -0.42 | -0.19 | -0.14 | -0.7 | -0.19 | -0.66 | -0.14 | -0.22 | **-0.77** | 1.000 | 1.000 | 1.000 | 1.000 | 0.137 | 0.430 | 0.103 | 1.000 | 1.000 | 0.064 | 0.459 | 0.103 | 0.905 | 0.839 | 0.033 |
| CMC1 | 0.15 | 0.01 | 0.36 | 0.12 | -0.39 | 0.29 | -0.11 | 0.14 | 0.15 | -0.17 | -0.32 | 0.37 | -0.04 | -0.18 | **0.43** | 1.000 | 1.000 | 0.981 | 1.000 | 0.151 | 0.742 | 1.000 | 1.000 | 1.000 | 0.884 | 0.195 | 0.075 | 1.000 | 0.606 | 0.042 |
| PHACTR2 | -0.32 | -0.18 | -0.08 | -0.04 | -0.22 | -0.13 | -0.06 | -0.1 | -0.1 | -0.08 | -0.28 | -0.25 | -0.01 | -0.2 | **-0.29** | 0.315 | 0.228 | 1.000 | 1.000 | 0.715 | 0.415 | 0.739 | 1.000 | 1.000 | 0.255 | 0.152 | 0.064 | 1.000 | 0.657 | 0.037 |
| CLDN1 | 1.81 | 0.06 | 0.37 | 0.17 | **2.3** | -0.24 | -0.63 | 0.1 | -0.32 | -0.81 | -1.81 | -0.8 | -0.48 | -1.55 | -0.69 | 0.072 | 1.000 | 1.000 | 1.000 | 0.022 | 0.967 | 0.418 | 1.000 | 1.000 | 0.209 | 0.100 | 0.422 | 1.000 | 0.327 | 0.250 |
| SLC9A3R2 | 0.09 | -0.28 | -0.07 | -0.01 | 0.48 | 0.22 | -0.16 | 0.21 | 0.19 | 0.62 | -0.18 | 0.88 | -0.01 | 0.08 | **0.76** | 1.000 | 0.905 | 1.000 | 1.000 | 0.529 | 0.896 | 0.827 | 1.000 | 1.000 | 0.419 | 0.949 | 0.231 | 1.000 | 1.000 | 0.031 |
| MED9 | -0.52 | 0.39 | -0.11 | -0.15 | 0.08 | 0.3 | 0.36 | 0.2 | 0.26 | 0.41 | 0.42 | -1.69 | -0.02 | 0.06 | **-1.46** | 1.000 | 0.439 | 1.000 | 1.000 | 1.000 | 0.897 | 0.723 | 1.000 | 1.000 | 0.874 | 0.353 | 0.139 | 1.000 | 1.000 | 0.044 |
| MYLIP | -0.16 | -0.7 | 0.06 | -0.08 | **-0.98** | -0.08 | -0.08 | 0.08 | -0.14 | 0.02 | -0.66 | 0.4 | -0.03 | -0.34 | 0.46 | 0.765 | 0.051 | 1.000 | 1.000 | 0.041 | 0.896 | 0.813 | 1.000 | 0.954 | 1.000 | 0.059 | 0.104 | 1.000 | 0.480 | 0.096 |
| NFKBIE | 0.73 | 0.33 | 0.03 | 0.16 | **0.99** | 0.19 | -0.16 | 0.06 | 0.11 | -0.12 | -0.13 | 0.23 | 0.01 | -0.03 | -0.2 | 0.275 | 0.954 | 1.000 | 1.000 | 0.035 | 0.826 | 0.813 | 1.000 | 1.000 | 0.912 | 0.689 | 0.416 | 1.000 | 1.000 | 0.820 |
| MRPL15 | -0.1 | -0.04 | 0.07 | 0.01 | 0.01 | 0.13 | 0.1 | 0.05 | 0.12 | 0.06 | -0.1 | 0.31 | 0 | 0.06 | **0.27** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.813 | 1.000 | 0.927 | 0.998 | 0.704 | 0.090 | 1.000 | 0.947 | 0.047 |
| AMACR | -0.44 | -1.02 | 0.11 | -0.03 | **-1.33** | -0.09 | -0.99 | 0 | -0.43 | -1.03 | -2.39 | -0.48 | -0.52 | -1.03 | 0.42 | 0.914 | 0.229 | 1.000 | 1.000 | 0.035 | 1.000 | 0.398 | 1.000 | 0.710 | 0.456 | 0.084 | 0.580 | 1.000 | 0.438 | 0.866 |
| FAM96A | -0.07 | -0.09 | 0.07 | 0.01 | **-0.24** | 0.09 | 0.03 | 0.13 | 0.1 | -0.09 | -0.21 | 0.08 | 0.03 | -0.03 | 0.07 | 1.000 | 0.492 | 1.000 | 1.000 | 0.037 | 0.896 | 1.000 | 1.000 | 1.000 | 0.758 | 0.239 | 0.454 | 1.000 | 1.000 | 0.860 |
| IPW | -0.21 | -0.08 | 0.13 | 0.26 | -0.17 | -0.47 | -0.34 | -0.24 | -0.22 | 0.01 | 0.06 | -0.43 | 0.03 | 0.13 | **-0.49** | 1.000 | 1.000 | 1.000 | 1.000 | 0.945 | 0.591 | 0.313 | 1.000 | 1.000 | 1.000 | 1.000 | 0.415 | 1.000 | 1.000 | 0.023 |
| LOC387647 | 0.35 | 0.39 | 0.16 | 0.23 | **0.47** | 0.1 | 0.32 | -0.17 | -0.15 | 0.34 | 0.53 | 0.37 | 0.41 | 0.23 | 0.42 | 0.946 | 0.446 | 1.000 | 1.000 | 0.038 | 1.000 | 0.163 | 1.000 | 1.000 | 0.664 | 0.186 | 0.088 | 0.439 | 0.220 | 0.253 |
| ACAP2 | 0.23 | 0.28 | 0.11 | 0.16 | 0.19 | 0.09 | 0.37 | 0.09 | 0.2 | 0.25 | 0.64 | -0.52 | 0.24 | 0.51 | **-0.59** | 0.158 | 0.261 | 1.000 | 1.000 | 0.099 | 1.000 | 0.204 | 0.781 | 0.371 | 0.342 | 0.056 | 0.113 | 0.550 | 0.133 | 0.018 |
| SCD | -0.09 | -0.14 | 0.05 | -0.03 | **-0.31** | -0.07 | -0.21 | -0.16 | -0.14 | -0.24 | -0.27 | 0.23 | -0.11 | -0.16 | 0.26 | 0.216 | 0.472 | 1.000 | 0.641 | 0.021 | 0.952 | 0.369 | 1.000 | 0.995 | 0.312 | 0.053 | 0.071 | 0.852 | 0.303 | 0.069 |
| LEO1 | -0.24 | -0.04 | 0.09 | -0.13 | -0.12 | 0.24 | -0.06 | 0.01 | -0.01 | -0.02 | -0.4 | 0.35 | -0.02 | -0.18 | **0.31** | 0.942 | 1.000 | 1.000 | 1.000 | 0.791 | 0.681 | 1.000 | 1.000 | 1.000 | 1.000 | 0.203 | 0.236 | 1.000 | 0.893 | 0.049 |
| C1QBP | -0.04 | -0.02 | 0.15 | 0.01 | -0.26 | -0.03 | -0.19 | 0 | -0.06 | **-0.19** | -0.29 | 0.27 | 0.04 | -0.01 | 0.24 | 1.000 | 1.000 | 1.000 | 1.000 | 0.213 | 1.000 | 0.279 | 1.000 | 1.000 | 0.028 | 0.231 | 0.111 | 1.000 | 1.000 | 0.282 |
| C22orf28 | 0.1 | 0.09 | 0.07 | 0.05 | 0.2 | 0.18 | 0.14 | 0.19 | 0.11 | 0.04 | -0.06 | 0.27 | 0.11 | 0.13 | **0.24** | 0.949 | 0.941 | 0.981 | 1.000 | 0.685 | 0.353 | 0.358 | 0.590 | 0.939 | 1.000 | 1.000 | 0.108 | 0.866 | 0.557 | 0.031 |
| PQBP1 | 0.2 | 0.02 | -0.06 | -0.04 | **0.51** | 0.05 | 0.02 | -0.09 | -0.07 | 0.31 | -0.3 | 0.54 | -0.19 | -0.21 | 0.48 | 1.000 | 1.000 | 1.000 | 1.000 | 0.031 | 1.000 | 1.000 | 1.000 | 1.000 | 0.352 | 0.733 | 0.191 | 1.000 | 0.833 | 0.137 |
| KCNAB1 | -0.18 | 0.12 | -0.32 | -0.11 | 0.17 | 0.26 | 0.39 | 0.01 | 0.13 | **0.51** | 0.25 | -0.41 | 0.11 | -0.32 | -0.46 | 1.000 | 1.000 | 1.000 | 1.000 | 0.773 | 1.000 | 0.801 | 1.000 | 1.000 | 0.050 | 0.740 | 0.337 | 1.000 | 0.871 | 0.265 |
| PSME1 | 0.31 | 0.03 | 0.02 | -0.04 | 0.15 | 0.24 | 0.13 | 0.11 | 0.24 | 0.15 | -0.21 | 0.28 | -0.02 | -0.09 | **0.25** | 0.841 | 1.000 | 1.000 | 1.000 | 0.540 | 0.837 | 0.730 | 1.000 | 0.995 | 0.884 | 0.339 | 0.118 | 1.000 | 0.728 | 0.032 |
| CDK5R1 | 0 | 0.03 | -0.16 | 0.3 | 0.04 | -0.3 | 0.08 | 0.09 | -0.08 | 0.82 | 0.16 | 1.38 | -0.04 | 0.12 | **1.54** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.957 | 1.000 | 1.000 | 0.766 | 0.320 | 0.721 | 0.091 | 1.000 | 1.000 | 0.003 |
| NMNAT2 | 1.42 | 0.37 | 0.05 | 0.16 | 1.09 | 0.18 | -0.26 | -0.07 | 0.05 | -0.72 | 0.3 | 1.45 | -0.2 | -0.33 | **1.3** | 1.000 | 1.000 | 1.000 | 1.000 | 0.523 | 0.926 | 0.947 | 1.000 | 1.000 | 0.993 | 1.000 | 0.569 | 1.000 | 1.000 | 0.016 |
| ZFAND2B | 0.06 | 0.19 | -0.4 | -0.19 | 0.36 | 0.04 | 0.18 | -0.13 | -0.14 | 0.93 | 0.77 | 0.68 | 0.23 | 0.5 | **0.61** | 1.000 | 0.931 | 1.000 | 1.000 | 0.879 | 1.000 | 0.601 | 1.000 | 1.000 | 0.279 | 0.096 | 0.080 | 0.908 | 0.505 | 0.032 |
| LRRC37A4P | -0.34 | -0.39 | 0.67 | 0.36 | -1.11 | -0.43 | -0.59 | 0.08 | -0.1 | -1.14 | -1.08 | -1.07 | -0.32 | -0.68 | **-0.96** | 1.000 | 0.783 | 1.000 | 1.000 | 0.161 | 0.858 | 0.209 | 1.000 | 1.000 | 0.108 | 0.216 | 0.147 | 1.000 | 0.553 | 0.014 |
| GPSM3 | 0.16 | 0.02 | 0.36 | 0.19 | -0.21 | 0.08 | -0.13 | 0.03 | -0.01 | 0.07 | -0.1 | 0.59 | -0.07 | -0.05 | **0.53** | 1.000 | 1.000 | 1.000 | 1.000 | 0.683 | 0.649 | 0.824 | 0.999 | 1.000 | 0.900 | 0.406 | 0.121 | 1.000 | 1.000 | 0.033 |
| AQR | 0.06 | 0.17 | -0.08 | -0.01 | 0.19 | 0.01 | 0.06 | -0.01 | 0.08 | 0.13 | 0.09 | -0.18 | -0.07 | 0.13 | **-0.2** | 1.000 | 0.647 | 1.000 | 1.000 | 0.587 | 1.000 | 1.000 | 1.000 | 1.000 | 0.833 | 0.853 | 0.154 | 0.998 | 0.319 | 0.020 |
| STX10 | -0.17 | -0.17 | -0.02 | -0.1 | -0.29 | 0.13 | -0.36 | 0.12 | -0.03 | -0.02 | -0.73 | 0.5 | -0.16 | -0.47 | **0.45** | 1.000 | 1.000 | 1.000 | 1.000 | 0.441 | 0.897 | 0.116 | 1.000 | 1.000 | 1.000 | 0.164 | 0.125 | 0.848 | 0.613 | 0.036 |
| ZNF503 | -0.46 | -0.69 | -0.1 | 0.11 | **-1.02** | 0.07 | -1.04 | -0.81 | -0.66 | 0.86 | 0.32 | 1.65 | -0.12 | 0.21 | 1.83 | 1.000 | 0.798 | 1.000 | 1.000 | 0.023 | 1.000 | 0.367 | 1.000 | 1.000 | 1.000 | 0.829 | 0.073 | 1.000 | 1.000 | 0.124 |
| FKTN | 0.16 | 0.06 | 0.26 | 0.08 | -0.23 | 0.03 | 0 | -0.17 | 0.04 | -0.08 | -0.56 | -0.95 | -0.17 | -0.15 | **-1.05** | 1.000 | 1.000 | 1.000 | 1.000 | 0.871 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.583 | 0.319 | 1.000 | 1.000 | 0.012 |
| DDX17 | 0.02 | -0.02 | 0.02 | 0.06 | -0.09 | -0.16 | -0.09 | -0.04 | -0.03 | -0.18 | -0.15 | -0.19 | -0.04 | -0.06 | **-0.21** | 1.000 | 1.000 | 1.000 | 1.000 | 0.558 | 0.380 | 0.094 | 1.000 | 1.000 | 0.230 | 0.094 | 0.069 | 1.000 | 0.857 | 0.021 |
| ACVR2A | -0.08 | 0.07 | -0.08 | -0.27 | **0.61** | 0.05 | 0.3 | 0.09 | 0 | 0.23 | 0.68 | 1.05 | 0.71 | 1.25 | 1.16 | 1.000 | 1.000 | 1.000 | 1.000 | 0.042 | 1.000 | 0.676 | 1.000 | 1.000 | 1.000 | 0.149 | 0.247 | 0.823 | 0.456 | 0.466 |
| SORT1 | -0.35 | -0.24 | 0.05 | -0.05 | 0.07 | -0.03 | 0.1 | 0.04 | 0.02 | -0.02 | -0.17 | -0.53 | -0.03 | -0.11 | **-0.48** | 0.378 | 0.675 | 1.000 | 1.000 | 1.000 | 1.000 | 0.808 | 1.000 | 1.000 | 1.000 | 0.777 | 0.130 | 1.000 | 1.000 | 0.023 |
| MCRS1 | -0.12 | -0.05 | 0.11 | 0.05 | 0.14 | 0.36 | 0.26 | 0.09 | 0.27 | 0.33 | -0.04 | 0.43 | 0.08 | 0 | **0.39** | 1.000 | 1.000 | 1.000 | 1.000 | 0.781 | 0.270 | 0.301 | 1.000 | 1.000 | 0.287 | 1.000 | 0.090 | 1.000 | 1.000 | 0.021 |
| NIPSNAP1 | -0.35 | -0.3 | -0.01 | -0.06 | -0.47 | 0.09 | -0.12 | 0 | -0.02 | -0.34 | -0.39 | 0.66 | 0.05 | -0.07 | **0.6** | 0.705 | 0.487 | 1.000 | 1.000 | 0.399 | 0.896 | 0.813 | 1.000 | 1.000 | 0.453 | 0.195 | 0.097 | 1.000 | 1.000 | 0.033 |
| SMAD5 | 0.11 | -0.16 | 0.09 | -0.01 | -0.3 | 0.03 | -0.12 | 0.04 | -0.05 | -0.2 | -0.28 | -0.55 | -0.03 | -0.25 | **-0.5** | 0.959 | 0.290 | 1.000 | 1.000 | 0.178 | 1.000 | 0.512 | 1.000 | 1.000 | 0.590 | 0.247 | 0.102 | 1.000 | 0.557 | 0.049 |
| NFAT5 | -0.25 | -0.18 | -0.17 | -0.05 | -0.31 | -0.04 | -0.09 | 0.07 | -0.03 | -0.14 | 0.25 | -0.2 | 0.12 | 0.2 | **-0.22** | 1.000 | 0.544 | 1.000 | 1.000 | 0.309 | 1.000 | 0.831 | 1.000 | 1.000 | 0.582 | 0.193 | 0.632 | 0.988 | 0.637 | 0.021 |
| WLS | 0.02 | 0.16 | 0.01 | -0.04 | 0.11 | 0.22 | 0.34 | 0.17 | 0.23 | 0.28 | 0.06 | -0.2 | -0.02 | 0.17 | **-0.22** | 1.000 | 0.421 | 1.000 | 1.000 | 0.958 | 0.579 | 0.181 | 1.000 | 0.707 | 0.064 | 1.000 | 0.082 | 1.000 | 0.861 | 0.024 |
| LINC00657 | 0.02 | 0.07 | 0.08 | 0.12 | 0.01 | -0.03 | 0.07 | 0.04 | -0.03 | -0.06 | 0.07 | -0.56 | 0.13 | 0.14 | **-0.51** | 1.000 | 0.601 | 0.981 | 1.000 | 1.000 | 1.000 | 0.937 | 1.000 | 1.000 | 1.000 | 0.691 | 0.083 | 0.738 | 0.387 | 0.023 |
| RBM42 | 0.19 | 0.03 | 0.07 | -0.12 | 0.16 | 0.3 | 0.2 | 0.29 | 0.15 | 0.39 | -0.01 | 0.47 | -0.2 | 0.05 | **0.43** | 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 0.489 | 0.517 | 0.661 | 1.000 | 0.515 | 1.000 | 0.116 | 0.837 | 0.900 | 0.048 |
| SHMT2 | 0.1 | 0.02 | 0.17 | -0.05 | -0.12 | 0.22 | 0.2 | 0.15 | 0.19 | 0.14 | -0.15 | 0.44 | -0.06 | -0.02 | **0.48** | 1.000 | 1.000 | 1.000 | 1.000 | 0.874 | 0.326 | 0.726 | 1.000 | 1.000 | 1.000 | 0.575 | 0.131 | 0.921 | 1.000 | 0.023 |
| MTF2 | 0.16 | 0.08 | -0.11 | -0.05 | -0.68 | -0.28 | -0.06 | -0.06 | 0.05 | -0.04 | -0.47 | 0.62 | -0.02 | -0.22 | **0.57** | 1.000 | 1.000 | 1.000 | 1.000 | 0.640 | 0.705 | 1.000 | 1.000 | 1.000 | 1.000 | 0.342 | 0.157 | 1.000 | 0.948 | 0.011 |
| UQCR11 | 0 | 0 | 0.04 | -0.03 | 0 | 0.13 | 0.09 | 0.08 | 0.1 | 0.2 | -0.13 | 0.23 | 0 | 0.01 | **0.25** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.881 | 0.801 | 1.000 | 1.000 | 0.548 | 0.655 | 0.054 | 1.000 | 1.000 | 0.047 |
| GTF3C4 | 0.16 | 0.21 | -0.2 | -0.11 | 0.27 | 0.1 | 0.73 | -0.03 | 0 | 0.01 | 0.02 | -1.16 | 0.02 | -0.15 | **-1.26** | 1.000 | 0.148 | 0.700 | 1.000 | 0.703 | 0.896 | 0.813 | 1.000 | 1.000 | 1.000 | 1.000 | 0.073 | 1.000 | 1.000 | 0.031 |
| HTR2B | 1.25 | 1.02 | 0.13 | 0.44 | **0.87** | 0.61 | 0.82 | 0.06 | 0.38 | 0.47 | 0.78 | -0.35 | 0.11 | 0.39 | -0.38 | 0.235 | 0.206 | 1.000 | 1.000 | 0.043 | 0.380 | 0.102 | 1.000 | 0.859 | 0.315 | 0.204 | 0.683 | 1.000 | 0.870 | 0.524 |
| ZNF569 | 0.19 | -0.01 | 0.57 | 0.22 | 0.08 | -0.24 | -0.15 | -0.4 | -0.34 | 0.44 | 0.45 | 1.17 | 0.46 | 0.25 | **1.27** | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.627 | 0.908 | 0.815 | 0.813 | 0.949 | 0.062 | 0.069 | 0.381 | 0.871 | 0.048 |
| TMEM62 | 0.02 | -0.49 | -0.22 | 0.14 | -0.57 | -0.18 | -0.55 | -0.09 | -0.19 | -0.35 | -0.32 | 0.59 | -0.02 | 0 | **0.64** | 1.000 | 0.326 | 1.000 | 1.000 | 0.288 | 0.896 | 0.255 | 1.000 | 1.000 | 0.590 | 0.480 | 0.052 | 1.000 | 1.000 | 0.021 |
| ENTPD4 | -0.03 | -0.05 | -0.02 | -0.01 | -0.08 | 0.01 | 0.06 | -0.09 | -0.09 | 0.18 | 0.01 | -0.48 | -0.04 | 0.05 | **-0.52** | 1.000 | 1.000 | 1.000 | 1.000 | 0.819 | 1.000 | 0.813 | 0.863 | 1.000 | 0.884 | 1.000 | 0.196 | 1.000 | 1.000 | 0.049 |
| LETM2 | -0.16 | -0.14 | 0.56 | 0.15 | -0.4 | 0.39 | 0.19 | 0.19 | 0.37 | 0.47 | 0.24 | 1.2 | 0.34 | 0.16 | **1.3** | 1.000 | 1.000 | 0.717 | 1.000 | 0.697 | 0.610 | 0.909 | 1.000 | 0.604 | 0.415 | 0.769 | 0.128 | 1.000 | 1.000 | 0.047 |
| KNSTRN | -0.2 | -0.03 | 0.17 | 0.07 | -0.14 | 0.14 | -0.06 | -0.06 | -0.11 | 0.19 | -0.08 | 0.53 | 0.04 | 0.17 | **0.49** | 1.000 | 1.000 | 1.000 | 1.000 | 0.895 | 0.525 | 0.863 | 1.000 | 1.000 | 0.944 | 1.000 | 0.128 | 1.000 | 1.000 | 0.020 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ZNF821 | -0.17 | -0.03 | -0.18 | -0.15 | 0.02 | 0.38 | -0.07 | -0.01 | 0.04 | 0.15 | 0 | 0.82 | -0.02 | 0.06 | **0.76** |
| RPL12 | 0.04 | -0.04 | -0.04 | 0 | -0.02 | 0.13 | 0.04 | 0.14 | 0.12 | 0.05 | 0 | 0.14 | 0.01 | 0.03 | **0.13** |
| COMMD9 | -0.13 | -0.04 | 0.06 | -0.09 | -0.1 | 0.26 | 0.2 | 0.22 | 0.03 | 0.14 | 0.05 | 0.39 | 0.1 | 0.05 | **0.42** |
| TMF1 | -0.13 | -0.29 | -0.16 | -0.13 | -0.04 | 0.02 | -0.22 | -0.05 | -0.17 | -0.18 | -0.38 | -0.87 | 0.03 | -0.19 | **-0.81** |
| LOC100289230 | -0.99 | -0.79 | -0.52 | -0.89 | **-1.73** | -0.97 | -0.81 | -0.9 | -0.45 | -1.08 | -0.74 | -2.32 | -0.52 | -0.47 | -2.17 |
| CCDC85A | -0.27 | -0.6 | 0.09 | 0.03 | **-0.72** | -0.22 | -0.25 | -0.06 | -0.03 | -0.4 | -0.33 | 0.29 | 0.36 | 0.01 | 0.31 |
| TXNDC17 | -0.09 | -0.23 | -0.03 | -0.08 | -0.04 | 0.31 | 0.13 | 0.18 | 0.24 | 0.08 | -0.13 | 0.29 | 0.01 | 0 | **0.31** |
| TBC1D16 | 0.27 | 0.39 | -0.05 | -0.05 | 0.46 | 0.19 | 0.16 | 0.29 | 0.05 | 0.08 | 0.29 | 0.44 | 0.34 | 0.53 | **-0.47** |
| CTU2 | -0.11 | -0.02 | 0.11 | 0 | 0.14 | 0.05 | -0.02 | -0.02 | 0.03 | -0.04 | 0 | 0.16 | 0 | 0 | **0.15** |
| CNOT7 | -0.2 | -0.42 | -0.55 | -0.11 | -0.5 | -1.48 | -0.74 | -0.5 | -0.78 | -0.71 | -0.07 | -3.49 | -0.21 | -0.47 | **-3.28** |
| MRPL27 | 0.09 | -0.16 | 0 | -0.03 | 0.01 | 0.12 | -0.07 | -0.01 | 0.05 | 0.08 | -0.25 | 0.35 | 0 | -0.05 | **0.37** |
| TPRKB | -0.06 | -0.21 | 0.09 | 0.06 | **-0.28** | -0.02 | -0.11 | -0.04 | 0.02 | -0.06 | -0.06 | 0.37 | 0.06 | 0.02 | 0.35 |
| NUB1 | 0.57 | 0.07 | 0.01 | -0.05 | 0.51 | -1.66 | -0.39 | -0.35 | -0.28 | 0.35 | -0.42 | -3.21 | -0.15 | -0.69 | **-3.39** |
| MPC1 | -0.11 | -0.02 | 0 | -0.1 | 0.03 | 0.17 | 0.27 | 0.05 | 0.17 | 0.31 | 0.23 | 0.36 | 0.05 | -0.02 | **0.38** |
| LOC100506748 | 0.39 | 0.2 | 0.19 | 0.31 | 0.12 | -0.02 | 0.05 | -0.11 | -0.14 | -0.09 | 0.09 | -0.79 | 0.03 | 0.03 | **-0.75** |
| PREX2 | 0.2 | -0.05 | 0.03 | 0.15 | 0.03 | -0.12 | -0.02 | 0.07 | -0.07 | -0.58 | 0.12 | -0.76 | 0.27 | 0.29 | **-0.8** |
| PTPN22 | -0.02 | -0.1 | 0.16 | -0.02 | -0.16 | -0.47 | -0.54 | -0.49 | -0.43 | -0.28 | -0.48 | 1.49 | 0.08 | -0.42 | **1.42** |
| KLF10 | 0.21 | 0.37 | 0.12 | 0.23 | 0.1 | 0.19 | 0.31 | -0.03 | -0.01 | 0.17 | 0.3 | 0.67 | 0.07 | 0.08 | **0.64** |
| SLC26A2 | -0.39 | -0.17 | -0.04 | -0.02 | -0.24 | 0.08 | 0.06 | 0.08 | 0.02 | -0.27 | -0.12 | -0.43 | 0.07 | -0.08 | **-0.45** |
| IGFBP6 | -0.32 | -0.33 | 0.03 | -0.16 | -0.32 | 0.26 | -0.15 | 0.03 | -0.22 | 0.4 | -0.43 | 0.89 | -0.51 | -0.4 | **0.93** |
| CPSF6 | -0.14 | -0.41 | -0.22 | -0.12 | -0.6 | -0.32 | -0.2 | 0.15 | 0.09 | -0.38 | -0.75 | -1.43 | -0.22 | -0.35 | **-1.37** |
| SLFNL1 | -0.19 | -0.71 | -0.23 | -0.82 | -0.04 | -0.83 | 0.16 | -0.01 | 0.62 | -0.49 | -0.8 | -2.64 | -0.11 | -0.3 | **-2.53** |
| C2CD2 | 0.25 | 0.21 | -0.16 | -0.01 | 0.31 | 0.12 | 0.28 | 0.23 | 0.29 | 0.18 | 0.2 | -0.48 | -0.04 | 0.09 | **-0.5** |
| UBALD2 | 0.27 | 0.82 | 0.12 | 0.16 | 0.56 | 0.29 | 0.41 | 0.09 | 0.03 | 0.4 | 0.82 | 0.96 | 0.08 | 0.4 | **1** |
| AKAP9 | -0.53 | -0.97 | 0.52 | -0.21 | -0.53 | -1.21 | -0.15 | -0.16 | -0.08 | -0.8 | -1.43 | -2.93 | -0.14 | -1.32 | **-3.05** |
| GIMAP1 | -1.22 | -1.57 | -0.12 | -0.15 | **-1.47** | -0.53 | -1.34 | -0.24 | -0.41 | -1.29 | -1.89 | -0.52 | -0.36 | -0.79 | -0.5 |
| NRP2 | -0.35 | -0.18 | -0.11 | -0.11 | -0.31 | 0.03 | 0 | -0.02 | 0.07 | -0.12 | -0.43 | -0.5 | -0.13 | -0.03 | **-0.52** |
| TRMT10B | 0.33 | -0.14 | 0.08 | -0.1 | 0.03 | -0.13 | 0.17 | -0.01 | 0.05 | 0.47 | -0.09 | -3.09 | -0.28 | -0.63 | **-3.21** |
| MYBL1 | -0.52 | -0.84 | 0.69 | 0.44 | 0.27 | -0.64 | -1.05 | -0.58 | -0.44 | -1.63 | -0.76 | 1.05 | -0.15 | -0.85 | **1.09** |
| NOL12 | 0.39 | -0.31 | -0.03 | -0.18 | 0.33 | 0.04 | -0.24 | 0.12 | -0.11 | -0.03 | -0.22 | 1.05 | -0.04 | -0.18 | **1.09** |
| MYL6B | 0.06 | 0 | 0.05 | 0.04 | 0.15 | 0.14 | 0.01 | 0.11 | 0.07 | 0.02 | -0.27 | 0.28 | -0.11 | -0.03 | **0.27** |
| NQO2 | 0.1 | 0.35 | 0.08 | 0.03 | **0.56** | 0.81 | 1.02 | 0.34 | 0.46 | 0.91 | 0.47 | 0.27 | 0.23 | 0.46 | 0.28 |
| EIF2AK2 | 0.36 | -0.18 | 0.19 | 0.05 | -0.2 | -0.24 | -0.13 | -0.16 | 0.19 | -0.16 | -0.34 | -0.57 | -0.15 | -0.35 | **-0.55** |
| LOC100288152 | 0.42 | 0.26 | -0.07 | -0.13 | -0.67 | 0.26 | -0.05 | 0.11 | 0.09 | -0.55 | -0.52 | -1.39 | -0.54 | -0.78 | **-1.44** |
| LRRC57 | 0.33 | 0.21 | 0.34 | 0.37 | 0.27 | 0.11 | -0.12 | -0.16 | 0.15 | -0.15 | 0.21 | -0.84 | 0.11 | -0.01 | **-0.87** |
| AASDH | 0.06 | 0.04 | 0.24 | 0.24 | -0.75 | -0.48 | -0.5 | -0.19 | -0.04 | -0.3 | -0.89 | -0.28 | -0.27 | -0.39 | **-0.29** |
| TTC18 | -0.62 | -0.28 | -0.49 | -0.41 | -0.88 | -0.92 | -0.22 | -0.57 | -0.8 | 0.2 | 0.51 | -2.25 | -0.33 | -0.86 | **-2.33** |
| NOSIP | 0.34 | 0.27 | 0.24 | 0 | 0.07 | 0.41 | 0.1 | 0.12 | 0.16 | 0.19 | 0.42 | 0.59 | 0.19 | 0.44 | **0.57** |
| ZNF12 | 0.19 | 0.4 | 0.21 | -0.04 | 0.23 | 0.15 | 0.1 | 0.08 | 0.17 | -0.06 | 0.43 | -0.6 | 0.05 | 0.21 | **-0.58** |
| C9orf89 | -0.11 | 0.07 | 0.1 | 0.03 | 0.08 | 0.25 | 0.27 | 0.2 | 0.2 | 0.44 | 0.27 | 0.59 | 0.1 | 0.1 | **0.61** |
| COPS3 | -0.07 | 0.09 | 0.02 | 0.03 | -0.02 | 0.2 | 0.1 | 0.16 | 0.19 | 0.14 | 0.05 | 0.32 | 0.03 | 0.2 | **0.31** |
| NDUFS8 | 0.13 | 0 | -0.13 | -0.14 | -0.18 | 0.28 | 0.15 | 0.16 | -0.03 | 0.06 | -0.21 | 0.64 | -0.09 | -0.18 | **0.62** |
| ST3GAL2 | -0.01 | -0.01 | 0.13 | -0.01 | 0.11 | 0.02 | -0.04 | 0 | 0.09 | 0.08 | -0.13 | -0.32 | -0.02 | 0.03 | **-0.31** |
| RUVBL2 | 0.01 | -0.02 | 0.23 | 0.07 | 0 | 0.34 | 0.04 | 0.13 | 0.25 | 0.04 | -0.09 | 0.36 | -0.19 | -0.1 | **0.35** |
| RBMS2 | -0.16 | -0.38 | -0.03 | -0.02 | -0.35 | 0.02 | -0.15 | 0.11 | 0.19 | -0.44 | -0.81 | -0.75 | -0.15 | -0.25 | **-0.73** |
| BOLA2 | -1.02 | -0.99 | -1.33 | -1.06 | -0.54 | -0.34 | -0.23 | -0.15 | 0.25 | -0.62 | -0.31 | -2.67 | -0.45 | -1.22 | **-2.61** |
| SIMC1 | -0.49 | -0.65 | -0.16 | -0.16 | -0.34 | -0.01 | -0.33 | 0.02 | 0.13 | 0.23 | -0.05 | 0.46 | 0.39 | 0.22 | **0.45** |
| CLPP | 0.09 | -0.07 | 0.04 | -0.05 | -0.04 | 0.34 | 0.03 | 0.24 | 0.1 | 0.17 | -0.46 | 0.46 | 0.03 | 0 | **0.47** |
| MLL2 | 0.13 | 0.04 | -0.15 | -0.04 | 0.37 | -0.3 | 0.24 | -0.13 | -0.05 | 0.17 | 0.34 | -0.5 | 0.21 | 0.24 | **-0.49** |
| BUB1B | 0.1 | -0.12 | 0.07 | -0.05 | -0.17 | 0.07 | -0.29 | 0.02 | 0.11 | -0.3 | -0.53 | 0.5 | 0.14 | 0.12 | **0.51** |
| FRG1B | -0.04 | -0.29 | -0.07 | -0.02 | -0.07 | -0.45 | -0.4 | -0.21 | 0.15 | -0.06 | -0.11 | -1.01 | 0.04 | -0.44 | **-1.03** |
| YTHDF2 | -0.04 | 0.2 | -0.15 | 0.23 | 0.3 | 0.32 | 0.29 | 0.11 | 0.28 | 0.29 | 0.2 | 0.54 | 0.07 | 0.11 | **0.53** |
| BCL2L1 | -0.1 | 0.21 | -0.13 | 0.02 | 0.95 | 0.42 | 0.18 | -0.15 | -0.04 | 0.01 | 0.4 | 0.56 | -0.15 | 0.3 | **0.55** |
| SYTL4 | 0.03 | -0.09 | 0.07 | 0.06 | -0.15 | -0.1 | -0.16 | -0.01 | 0.09 | -0.24 | -0.26 | -0.59 | -0.16 | -0.27 | **-0.58** |
| CBX5 | -0.1 | -0.11 | -0.12 | -0.07 | -0.17 | -0.15 | -0.4 | 0.08 | -0.1 | -0.31 | -0.62 | -0.69 | -0.12 | -0.1 | **-0.68** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 0.837 | 0.897 | 0.748 | 1.000 | 1.000 | 0.727 | 1.000 | 0.114 | 1.000 | 0.872 | 0.004 |
| 1.000 | 0.839 | 1.000 | 1.000 | 1.000 | 0.827 | 0.770 | 0.401 | 0.348 | 0.596 | 1.000 | 0.072 | 1.000 | 0.934 | 0.033 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.436 | 0.296 | 0.299 | 0.747 | 1.000 | 0.619 | 0.752 | 0.099 | 0.875 | 1.000 | 0.020 |
| 0.823 | 0.365 | 1.000 | 1.000 | 1.000 | 1.000 | 0.192 | 1.000 | 0.964 | 0.556 | 0.159 | 0.059 | 1.000 | 0.496 | 0.021 |
| 0.176 | 0.533 | 1.000 | 0.846 | 0.035 | 0.607 | 0.549 | 1.000 | 1.000 | 0.510 | 0.406 | 0.114 | 1.000 | 1.000 | 0.074 |
| 0.513 | 0.100 | 1.000 | 1.000 | 0.041 | 0.896 | 0.361 | 1.000 | 1.000 | 0.435 | 0.423 | 0.408 | 0.680 | 1.000 | 0.402 |
| 1.000 | 0.224 | 1.000 | 1.000 | 1.000 | 0.587 | 0.216 | 0.844 | 0.204 | 0.904 | 0.137 | 0.064 | 1.000 | 1.000 | 0.045 |
| 0.955 | 0.520 | 1.000 | 1.000 | 0.205 | 0.917 | 0.813 | 0.970 | 1.000 | 1.000 | 0.482 | 0.639 | 0.661 | 0.453 | 0.047 |
| 0.719 | 0.868 | 1.000 | 1.000 | 0.540 | 0.898 | 0.977 | 1.000 | 1.000 | 1.000 | 0.925 | 0.683 | 1.000 | 0.900 | 0.009 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.626 | 0.210 | 0.580 | 1.000 | 1.000 | 0.579 | 1.000 | 0.090 | 1.000 | 0.848 | 0.033 |
| 1.000 | 0.631 | 1.000 | 1.000 | 1.000 | 0.982 | 0.827 | 1.000 | 1.000 | 0.906 | 0.310 | 0.146 | 1.000 | 1.000 | 0.023 |
| 1.000 | 0.460 | 1.000 | 1.000 | 0.049 | 1.000 | 0.835 | 1.000 | 1.000 | 0.884 | 0.814 | 0.199 | 1.000 | 1.000 | 0.074 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.163 | 0.639 | 0.549 | 1.000 | 1.000 | 0.884 | 0.904 | 0.067 | 1.000 | 0.900 | 0.022 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.482 | 0.157 | 1.000 | 0.600 | 0.441 | 0.225 | 0.130 | 1.000 | 1.000 | 0.020 |
| 0.571 | 0.617 | 1.000 | 1.000 | 0.860 | 1.000 | 1.000 | 1.000 | 1.000 | 0.884 | 1.000 | 0.105 | 1.000 | 1.000 | 0.019 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.700 | 0.756 | 0.060 | 0.798 | 0.523 | 0.044 |
| 1.000 | 0.889 | 1.000 | 1.000 | 0.385 | 0.668 | 0.407 | 1.000 | 1.000 | 0.313 | 0.421 | 0.079 | 1.000 | 0.788 | 0.009 |
| 1.000 | 0.317 | 1.000 | 1.000 | 0.669 | 0.592 | 0.108 | 1.000 | 1.000 | 0.631 | 0.087 | 0.073 | 1.000 | 0.967 | 0.021 |
| 0.804 | 0.442 | 1.000 | 1.000 | 0.068 | 1.000 | 1.000 | 1.000 | 1.000 | 0.613 | 0.531 | 0.193 | 1.000 | 0.900 | 0.038 |
| 1.000 | 0.757 | 1.000 | 1.000 | 0.309 | 0.896 | 0.813 | 1.000 | 1.000 | 0.838 | 0.186 | 0.058 | 0.811 | 0.639 | 0.040 |
| 1.000 | 0.867 | 1.000 | 1.000 | 0.210 | 0.528 | 0.569 | 1.000 | 1.000 | 0.616 | 0.240 | 0.052 | 1.000 | 0.900 | 0.041 |
| 1.000 | 0.757 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 0.923 | 0.410 | 0.135 | 1.000 | 1.000 | 0.019 |
| 0.334 | 0.165 | 0.872 | 1.000 | 0.241 | 0.916 | 0.217 | 0.853 | 0.579 | 0.424 | 0.363 | 0.074 | 1.000 | 0.957 | 0.014 |
| 1.000 | 0.065 | 1.000 | 1.000 | 0.122 | 0.681 | 0.056 | 1.000 | 1.000 | 0.743 | 0.057 | 0.064 | 1.000 | 0.823 | 0.037 |
| 0.996 | 0.352 | 1.000 | 1.000 | 0.532 | 0.390 | 1.000 | 1.000 | 1.000 | 0.612 | 0.076 | 0.064 | 1.000 | 0.628 | 0.019 |
| 0.078 | 0.141 | 1.000 | 1.000 | 0.021 | 0.483 | 0.153 | 1.000 | 0.977 | 0.201 | 0.075 | 0.222 | 0.878 | 0.371 | 0.169 |
| 0.658 | 0.256 | 0.907 | 1.000 | 0.441 | 1.000 | 1.000 | 1.000 | 1.000 | 0.884 | 0.088 | 0.096 | 1.000 | 1.000 | 0.014 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.642 | 1.000 | 1.000 | 0.908 | 1.000 | 0.070 | 0.997 | 0.495 | 0.006 |
| 0.437 | 0.754 | 0.923 | 1.000 | 0.880 | 0.854 | 0.489 | 1.000 | 1.000 | 0.233 | 0.522 | 0.337 | 1.000 | 0.794 | 0.043 |
| 1.000 | 0.871 | 1.000 | 1.000 | 0.219 | 1.000 | 0.613 | 1.000 | 1.000 | 1.000 | 1.000 | 0.071 | 1.000 | 0.918 | 0.031 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.444 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.211 | 0.059 | 1.000 | 0.900 | 0.034 |
| 1.000 | 0.459 | 1.000 | 1.000 | 0.042 | 0.346 | 0.105 | 1.000 | 0.949 | 0.107 | 0.065 | 0.238 | 0.675 | 0.194 | 0.201 |
| 0.434 | 0.531 | 1.000 | 1.000 | 0.563 | 0.821 | 0.897 | 1.000 | 1.000 | 0.884 | 0.523 | 0.144 | 1.000 | 0.740 | 0.032 |
| 1.000 | 0.895 | 1.000 | 1.000 | 0.132 | 0.806 | 1.000 | 1.000 | 1.000 | 0.632 | 0.418 | 0.091 | 0.562 | 0.365 | 0.031 |
| 0.200 | 0.696 | 0.820 | 0.772 | 0.817 | 1.000 | 0.865 | 1.000 | 1.000 | 1.000 | 0.256 | 0.058 | 0.994 | 1.000 | 0.049 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.282 | 0.456 | 0.252 | 1.000 | 1.000 | 0.763 | 0.097 | 0.574 | 1.000 | 0.685 | 0.021 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.406 | 0.476 | 1.000 | 1.000 | 0.860 | 1.000 | 1.000 | 0.101 | 1.000 | 0.900 | 0.023 |
| 1.000 | 0.685 | 1.000 | 1.000 | 1.000 | 0.507 | 1.000 | 1.000 | 1.000 | 0.941 | 0.142 | 0.128 | 0.905 | 0.374 | 0.047 |
| 0.804 | 0.219 | 1.000 | 1.000 | 0.551 | 0.821 | 0.813 | 1.000 | 1.000 | 1.000 | 0.112 | 0.071 | 1.000 | 0.355 | 0.044 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.677 | 0.371 | 0.161 | 1.000 | 1.000 | 0.388 | 0.661 | 0.068 | 1.000 | 1.000 | 0.044 |
| 1.000 | 0.654 | 1.000 | 1.000 | 1.000 | 0.533 | 0.784 | 0.964 | 0.672 | 0.884 | 0.910 | 0.055 | 1.000 | 0.765 | 0.031 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.452 | 0.399 | 0.870 | 1.000 | 1.000 | 1.000 | 0.510 | 0.126 | 1.000 | 0.626 | 0.048 |
| 1.000 | 1.000 | 0.445 | 1.000 | 0.760 | 1.000 | 0.818 | 1.000 | 1.000 | 1.000 | 0.395 | 0.303 | 1.000 | 1.000 | 0.042 |
| 1.000 | 1.000 | 0.412 | 1.000 | 1.000 | 0.580 | 1.000 | 1.000 | 1.000 | 1.000 | 0.662 | 0.267 | 0.755 | 0.900 | 0.019 |
| 0.746 | 0.098 | 1.000 | 1.000 | 0.182 | 1.000 | 0.815 | 1.000 | 0.915 | 0.190 | 0.158 | 0.071 | 0.638 | 0.498 | 0.034 |
| 0.478 | 0.452 | 0.924 | 1.000 | 0.410 | 0.896 | 0.535 | 1.000 | 1.000 | 0.824 | 0.979 | 0.069 | 0.982 | 0.429 | 0.047 |
| 0.965 | 0.629 | 1.000 | 1.000 | 0.104 | 1.000 | 0.213 | 1.000 | 1.000 | 0.962 | 1.000 | 0.403 | 0.951 | 1.000 | 0.044 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.317 | 1.000 | 1.000 | 1.000 | 0.986 | 0.130 | 0.153 | 1.000 | 1.000 | 0.048 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.174 | 0.552 | 0.463 | 1.000 | 1.000 | 0.540 | 0.751 | 0.148 | 1.000 | 0.760 | 0.049 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.821 | 1.000 | 0.813 | 1.000 | 1.000 | 0.511 | 0.199 | 0.121 | 1.000 | 1.000 | 0.047 |
| 1.000 | 0.392 | 1.000 | 1.000 | 1.000 | 0.638 | 0.624 | 1.000 | 1.000 | 1.000 | 1.000 | 0.114 | 1.000 | 0.783 | 0.043 |
| 1.000 | 0.580 | 1.000 | 1.000 | 0.363 | 0.237 | 0.065 | 1.000 | 0.405 | 0.320 | 0.620 | 0.062 | 1.000 | 0.909 | 0.037 |
| 0.999 | 0.691 | 1.000 | 1.000 | 0.402 | 0.988 | 1.000 | 1.000 | 1.000 | 1.000 | 0.456 | 0.340 | 1.000 | 0.900 | 0.023 |
| 1.000 | 1.000 | 1.000 | 1.000 | 0.590 | 1.000 | 0.813 | 1.000 | 1.000 | 0.728 | 0.212 | 0.051 | 1.000 | 0.571 | 0.047 |
| 1.000 | 0.945 | 1.000 | 1.000 | 0.825 | 0.984 | 0.470 | 1.000 | 1.000 | 0.466 | 0.068 | 0.132 | 0.886 | 1.000 | 0.040 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BMPR2 | -0.16 | -0.24 | -0.04 | -0.07 | -0.39 | -0.2 | -0.22 | 0.03 | -0.13 | -0.29 | -0.16 | -0.95 | 0 | 0.02 | **-0.95** |
| DCUN1D1 | 0.61 | 0.7 | 0.22 | 0.22 | **0.61** | -0.14 | 0.43 | 0.28 | 0.15 | 0.59 | 0.78 | -0.26 | 0.39 | 0.47 | -0.26 |
| FBL | -0.05 | -0.04 | -0.07 | -0.07 | 0.07 | 0.09 | 0.05 | 0.08 | 0.09 | 0.05 | -0.04 | 0.46 | -0.01 | -0.11 | **0.46** |
| GARS | 0.01 | 0.14 | 0.07 | 0.06 | 0.17 | 0.2 | 0.23 | 0.04 | 0.18 | 0.27 | 0.49 | 0.33 | 0.12 | 0.33 | **0.33** |
| GPR176 | 0.32 | 0.29 | 0.16 | 0.22 | **0.4** | 0.13 | 0.12 | -0.15 | -0.01 | 0.19 | 0.04 | -0.12 | 0.01 | -0.14 | -0.12 |
| LDHB | -0.1 | -0.07 | 0.02 | 0 | 0.01 | 0.1 | 0 | 0.04 | 0.07 | -0.03 | -0.08 | 0.15 | -0.01 | 0.04 | **0.15** |
| LMNA | 0.03 | 0.06 | 0.05 | 0.01 | -0.05 | 0.04 | 0.07 | 0.03 | 0.11 | 0.14 | 0.06 | 0.32 | 0 | 0.07 | **0.32** |
| LRRC8A | -0.22 | -0.23 | 0.03 | -0.01 | -0.07 | -0.03 | -0.06 | -0.08 | -0.07 | 0.1 | 0.12 | 0.15 | 0.01 | -0.01 | **0.15** |
| MZT2A | 0.22 | 0.04 | 0.02 | -0.01 | -0.01 | 0.2 | -0.15 | 0.2 | 0 | -0.04 | -0.23 | 0.51 | -0.11 | 0.03 | **0.51** |
| PTGFRN | 0.11 | -0.02 | 0 | 0 | -0.13 | -0.09 | -0.07 | -0.02 | -0.02 | -0.06 | -0.25 | -0.44 | -0.05 | -0.14 | **-0.44** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 0.463 | 1.000 | 1.000 | 0.093 | 0.729 | 0.268 | 1.000 | 1.000 | 0.253 | 0.392 | 0.079 | 1.000 | 1.000 | 0.006 |
| 0.112 | 0.137 | 1.000 | 1.000 | 0.041 | 1.000 | 0.357 | 1.000 | 1.000 | 0.322 | 0.197 | 0.686 | 0.852 | 0.674 | 0.508 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.813 | 1.000 | 1.000 | 1.000 | 1.000 | 0.065 | 1.000 | 0.900 | 0.024 |
| 1.000 | 0.859 | 1.000 | 1.000 | 0.821 | 0.760 | 0.142 | 1.000 | 1.000 | 0.554 | 0.066 | 0.197 | 0.757 | 0.351 | 0.046 |
| 0.746 | 0.272 | 1.000 | 1.000 | 0.030 | 0.796 | 0.552 | 1.000 | 1.000 | 0.337 | 1.000 | 0.884 | 1.000 | 0.900 | 0.725 |
| 0.379 | 0.778 | 1.000 | 1.000 | 1.000 | 0.896 | 1.000 | 1.000 | 1.000 | 1.000 | 0.751 | 0.072 | 1.000 | 0.900 | 0.049 |
| 1.000 | 0.947 | 1.000 | 1.000 | 1.000 | 0.883 | 1.000 | 1.000 | 1.000 | 0.529 | 0.586 | 0.310 | 1.000 | 0.624 | 0.026 |
| 1.000 | 0.344 | 1.000 | 1.000 | 0.875 | 1.000 | 0.940 | 1.000 | 1.000 | 0.884 | 0.246 | 0.504 | 1.000 | 1.000 | 0.026 |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.896 | 0.925 | 1.000 | 1.000 | 1.000 | 0.436 | 0.085 | 1.000 | 1.000 | 0.044 |
| 0.862 | 1.000 | 1.000 | 1.000 | 0.576 | 0.896 | 0.507 | 1.000 | 1.000 | 0.330 | 0.050 | 0.098 | 0.997 | 0.419 | 0.028 |