## Supplementary Table 1. Differentially expressed genes between tumors and paracancerous tissues.

| Gene       | logFC  | t value  | p value   |
|------------|--------|----------|-----------|
| TTPR1      | -1.711211591 | -9.99821276 | 5.82E-19  |
| BIRC5      | 2.330867032 | 9.843078149 | 1.03E-18  |
| TPS3NP2    | -1.917507989 | -9.489545614 | 1.18E-17  |
| PRKN       | -0.715248379 | -9.028062519 | 3.24E-16  |
| FOS        | -3.131625271 | -8.562301729 | 8.74E-15  |
| BCL2       | -1.049274661 | -8.237304029 | 7.86E-14  |
| P4HB       | 1.063285181 | 7.997376366 | 3.74E-13  |
| HSPB8      | -3.161640094 | -7.806600824 | 1.25E-12  |
| GAPDH      | 0.872217802 | 7.664155888 | 2.96E-12  |
| BAX        | 0.966250635 | 7.103778555 | 1.05E-10  |
| RGS19      | 1.074943366 | 7.098956856 | 1.05E-10  |
| BID        | 1.104399899 | 6.936292429 | 2.74E-10  |
| DLC1       | -1.115557486 | -6.892502129 | 3.26E-10  |
| SIRT1      | -0.801197451 | -6.884206661 | 3.26E-10  |
| GABARAPL1  | -1.082117387 | -6.562624851 | 2.25E-09  |
| CCL2       | -2.110885631 | -6.378216224 | 6.41E-09  |
| CX3CL1     | -1.863771279 | -6.253419879 | 1.26E-08  |
| EIF4EBP1   | 1.462683793 | 6.160490835 | 2.05E-08  |
| NFE2L2     | -0.878405044 | -6.086864426 | 2.97E-08  |
| PPPI1R15A  | -1.238860122 | -6.049164758 | 3.51E-08  |
| FKBP1A     | 0.631525371 | 5.86714109 | 9.35E-08  |
| NRG2       | -0.688490178 | -5.610303272 | 3.60E-07  |
| FOXO1      | -0.823404832 | -5.502139746 | 5.96E-07  |
| HSPA5      | 0.692031605 | 5.384284944 | 1.06E-06  |
| HGS        | 0.586627946 | 5.361258889 | 1.15E-06  |
| BAG3       | -0.842208961 | -5.324076357 | 1.30E-06  |
| EEF2K      | -0.635843459 | -5.290228865 | 1.49E-06  |
| PEX14      | -0.634126033 | -5.241922521 | 1.84E-06  |
| DIRAS3     | -0.669057008 | -5.15288417 | 2.80E-06  |
| FOXO3      | -0.632339382 | -5.092963028 | 3.64E-06  |
| FADD       | 0.774549309 | 5.088226043 | 3.64E-06  |
| IKKB       | 0.794189215 | 5.075275645 | 3.68E-06  |
| MYC        | -1.620344213 | -5.074108273 | 3.68E-06  |
| ERO1A      | 0.863593335 | 4.932442322 | 6.97E-06  |
| BCL2L1     | 0.795356613 | 4.741242128 | 1.65E-05  |
| EEF2       | -0.624108868 | -4.678351177 | 2.15E-05  |
| CDKN1A     | -1.1675604 | -4.667755536 | 2.20E-05  |
| MTMR14     | 0.576672037 | 4.591231109 | 3.06E-05  |
| ST13       | -0.510815487 | -4.5036497 | 4.44E-05  |
| NFKB1      | -0.528189417 | -4.448194372 | 5.57E-05  |
| BAK1       | 0.725853364 | 4.350883363 | 8.00E-05  |
| CAPN10     | 0.502578069 | 4.255798895 | 0.000115854 |
| CLN3       | 0.629011097 | 4.15706667 | 0.000177694 |
| TP73       | 0.789795413 | 4.033609467 | 0.000282758 |
| HSP90AB1   | 0.538297421 | 3.991066543 | 0.000329945 |
| SQSTM1     | -0.610674455 | -3.836860888 | 0.000548212 |
| RAB24      | 0.503715753 | 3.827992199 | 0.000558043 |
| CDKN2A     | 1.85525917 | 3.804735379 | 0.000601089 |
| Gene     | Log2 FDR      | Absolute Log2 Fold Change | P Value  |
|----------|---------------|---------------------------|----------|
| NAMPT    | -0.82228314   | -3.771534499              | 0.000664095 |
| CXCR4    | -1.098824531  | -3.748958666              | 0.000710944 |
| EDEM1    | 0.567918074   | 3.719100052               | 0.000772956 |
| CAPN1    | 0.577618874   | 3.70837815                | 0.000792754 |
| BNIP3L   | -0.540217546  | -3.572455587              | 0.001251452 |
| MAPK8IP1 | -0.608998098  | -3.451784435              | 0.001886409 |
| SERPINA1 | 1.366839907   | 3.376820363               | 0.002432076 |
| BAG1     | -0.60803663   | -3.213206241              | 0.00417667 |
| ITGB4    | 1.022664751   | 3.144215358               | 0.005132978 |
| ERBB2    | 0.920099711   | 2.884140581               | 0.010763897 |
| CD46     | 0.531255912   | 2.875118398               | 0.010941547 |
| ATG9B    | 0.544820043   | 2.861400743               | 0.011285774 |
| SPHK1    | 0.867023828   | 2.732212885               | 0.016154964 |
| MAP1LC3A | -0.733939631  | -2.711359379              | 0.016814849 |
| PTK6     | 1.004118835   | 2.623276844               | 0.021296293 |
| ITGA3    | 0.832787674   | 2.591118556               | 0.023112799 |
| CTSD     | 0.507767366   | 2.55879707                | 0.024564372 |
| TP63     | 0.990984207   | 2.456462225               | 0.031102513 |