| Gene Name | Transcript Name | Estimated Proportion |  |  |  | qRT-PCR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ret-RSTQ | base EM | Cufflinks | RSEM | Results |
| ERBB2 | NM_001005862 | $26.16 \%$ | $7.79 \%$ | $3.35 \%$ | $6.34 \%$ | $7.35 \pm 0.75 \%$ |
|  | NM_004448 | $73.84 \%$ | $92.21 \%$ | $96.65 \%$ | $93.66 \%$ | $92.65 \pm 6.0 \%$ |
| NSD1 | NM_022455 | $46.77 \%$ | $20.08 \%$ | $21.94 \%$ | $17.14 \%$ | $58.34 \pm 0.70 \%$ |
|  | NM_172349 | $53.23 \%$ | $79.92 \%$ | $78.06 \%$ | $82.86 \%$ | $41.66 \pm 0.75 \%$ |
| U2AF1* | NM_001025203 | $26.68 \%$ | $21.11 \%$ | $73.15 \%$ | $25.33 \%$ | $39.13 \pm 0.50 \%$ |
|  | NM_006758 | $73.32 \%$ | $78.89 \%$ | $26.85 \%$ | $74.67 \%$ | $60.87 \pm 2.5 \%$ |
| PDGFB | NM_002608 | $21.51 \%$ | $18.03 \%$ | $43.93 \%$ | $18.12 \%$ | $97.69 \pm 6.5 \%$ |
|  | NM_033016 | $78.49 \%$ | $81.97 \%$ | $56.07 \%$ | $81.88 \%$ | $2.31 \pm 1.4 \%$ |
| DNMT3A* | NM_153759 | $99.53 \%$ | $99.77 \%$ | $99.45 \%$ | $99.46 \%$ | $11.06 \pm 3.0 \%$ |
|  | NM_175630 | $0.47 \%$ | $0.23 \%$ | $0.55 \%$ | $0.54 \%$ | $88.94 \pm 4.0 \%$ |
| GNAS* | NM_016592 | $69.65 \%$ | $87.11 \%$ | $93.62 \%$ | $89.66 \%$ | $98.27 \pm 5.0 \%$ |
|  | NM_080425 | $30.35 \%$ | $12.89 \%$ | $6.38 \%$ | $10.34 \%$ | $1.73 \pm 0 \%$ |
| RBM15 | NM_001201545 | $51.65 \%$ | $77.37 \%$ | $63.21 \%$ | $73.85 \%$ | $30.21 \pm 0.55 \%$ |
|  | NM_022768 | $48.35 \%$ | $22.63 \%$ | $36.79 \%$ | $26.15 \%$ | $69.79 \pm 1.8 \%$ |
| RET | NM_020630 | $57.13 \%$ | $60.36 \%$ | $70.78 \%$ | $67.76 \%$ | $37.04 \pm 1.3 \%$ |
|  | NM_020975 | $42.87 \%$ | $39.64 \%$ | $29.22 \%$ | $32.24 \%$ | $62.96 \pm 2.3 \%$ |
| TCF3 | NM_001136139 | $35.90 \%$ | $31.51 \%$ | $6.70 \%$ | $36.31 \%$ | $26.85 \pm 1.1 \%$ |
|  | NM_003200 | $64.10 \%$ | $68.49 \%$ | $93.30 \%$ | $63.69 \%$ | $73.15 \pm 4.0 \%$ |
| WHSC1L1 | NM_017778 | $59.60 \%$ | $54.38 \%$ | $77.61 \%$ | $62.43 \%$ | $77.36 \pm 2.0 \%$ |
|  | NM_023034 | $40.40 \%$ | $45.62 \%$ | $22.39 \%$ | $37.57 \%$ | $22.64 \pm 0.18 \%$ |
| CBFB | NM_001755 | $51.89 \%$ | $52.80 \%$ | $13.84 \%$ | $57.67 \%$ | $63.75 \pm 1.1 \%$ |
|  | NM_022845 | $48.11 \%$ | $47.20 \%$ | $86.16 \%$ | $42.33 \%$ | $36.25 \pm 1.2 \%$ |
| TP53 | Nso Group1 | $96.90 \%$ | $99.37 \%$ | $99.10 \%$ | $97.41 \%$ | $98.12 \pm 6.0 \%$ |
|  | Iso Group2 | $3.10 \%$ | $0.63 \%$ | $0.90 \%$ | $2.59 \%$ | $1.88 \pm 0.30 \%$ |
| NF1* | NM_000267 | $98.08 \%$ | $98.56 \%$ | $15.14 \%$ | $94.55 \%$ | $85.76 \pm 2.5 \%$ |
|  | NM_001128147 | $1.92 \%$ | $1.44 \%$ | $84.86 \%$ | $5.45 \%$ | $14.24 \pm 2.0 \%$ |

S7 Table. qRT-PCR results on MCF7 cancer cell line. * Gene contains more transcript(s) which can not be quantified by qRT-PCR.

