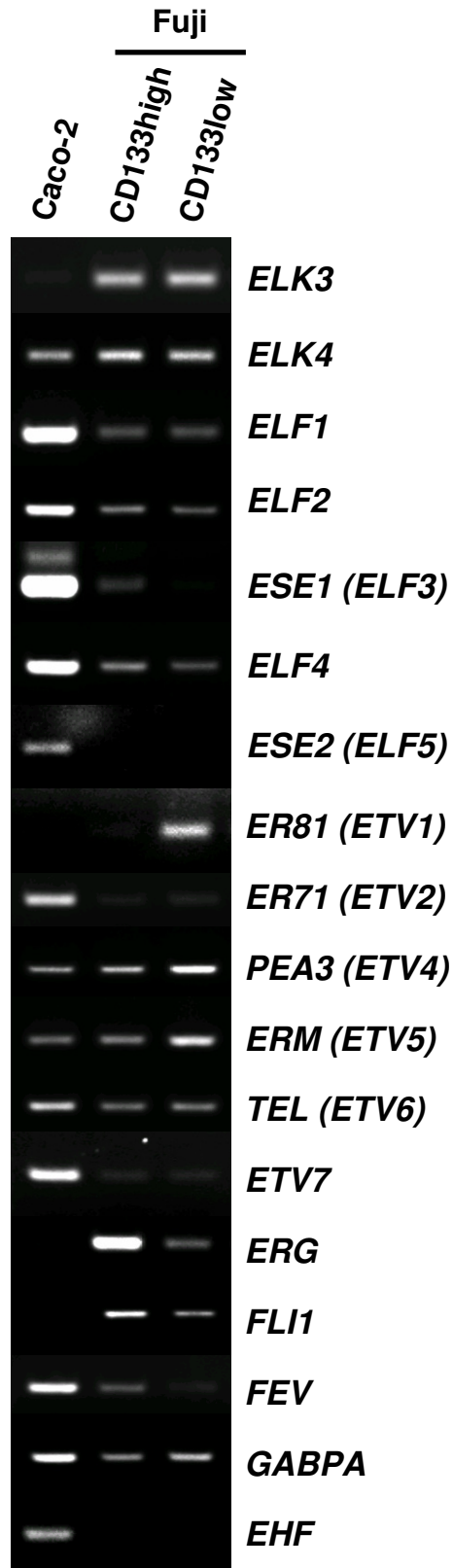


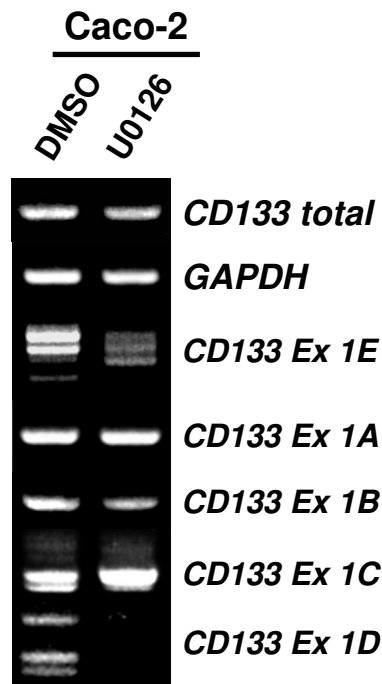
Targets	Primer Sequences (5'→3')	Expected size of product (bp)	PCR annealing temperature (°C)	Number of cycles
<i>CD133</i>	sense: TGGCAACAGCGATCAAGGAGAC antisense: TCGGGGTGGCATGCCTGTCATA	633	60	30-32
<i>GAPDH</i>	sense: CTCATGACCACAGTCCATGC antisense: TTA CTCTTGGAGGCCATGT	489	58	30
<i>ETS1</i>	sense: GCATGCCCAGTGTGTTCCAC antisense: AGGGCAGCAGCAGGAATGAC	483	63	30
<i>ETS2</i>	sense: GCCAGTCGTCCTTGCTGGAT antisense: AGGATGGCGTGCAGTTCCTC	490	63	30
<i>ELK1</i>	sense: GTGAGCGGCCAGAAGTTCGT antisense: CCCAAACCCGGCTCCACATTA	497	63	35
<i>ELK3</i>	sense: ATTCCCTGCAGAACCCACCA antisense: GCCTTTGGGGGAAGAGATGG	427	63	30
<i>ELK4</i>	sense: AACTCAGCCGAGCCCTCAGA antisense: CGGTGGCTTTTTGGAAGGTG	428	63	30
<i>ELF1</i>	sense: CATGGTTGTTGCCCCAGTCA antisense: CCAAGCGCTGACCTTCCACT	464	63	30
<i>ELF2</i>	sense: TCCAACAACAGCGACCTCTCC antisense: AGCTGAAGGGCGACTGACAA	457	63	30
<i>ESE1</i>	sense: GCCCCAGTTCTGGTGAAGA antisense: GTGGGATCCAGTCCACGTC	477	63	30
<i>ELF4</i>	sense: TGGACCCAGCGAGAGAAAGG antisense: TGCTGGAGAGACGAGCATGG	465	63	30
<i>ESE2</i>	sense: GGGAGTGGCTCCAGTTCTGC antisense: TTGCCAGGGCTTCCGATTTA	429	63	30
<i>ER81</i>	sense: TCATGGCCTGCCACTGAAAA antisense: TGGTGGGAAGGGGATGTTTG	430	63	30
<i>ER71</i>	sense: TGCACAGCCTGGGACTCTTG antisense: GCCACAGCTGAATGGGACCT	448	63	35
<i>PEA3</i>	sense: CCCCTGGACATTTGCCACTC antisense: AAATGCACCGACCCCTTCTCT	426	63	30
<i>ERM</i>	sense: CCCCTTACCAGAGGCGAGGT antisense: AGGAGGTAAGCGGGGCTGTC	403	63	30
<i>TEL</i>	sense: GAGCGCTCAGGATGGAGGAA antisense: GCGGTGCAACAGTTCAATGG	428	63	30
<i>ETV7</i>	sense: CCCACCCAGCACTCTCCAGT antisense: GAGTTTCTGCCCCGGTTCTCT	498	63	30
<i>ERG</i>	sense: ATCACCTGGGAAGGCACCAA antisense: TATGGCTGGTGGGGAGCCTA	424	63	30
<i>FLI1</i>	sense: GCGAGTCCAACCCCATGAAC antisense: TGCCCAAGCTCCTCTTCTG	411	63	30
<i>FEV</i>	sense: AAAGGCAGCGGACAGATCCA antisense: GCGCCATGAGGTTGAGTTT	425	63	35
<i>GABPA</i>	sense: ACGCGCCAGCTGAATGTGTA antisense: CAGTGCAGCAGCCCATCTTG	416	63	30
<i>EHF</i>	sense: CCGGCAACAACCTCTTCAC antisense: GAGATCTGAGCCCGGCAGAA	478	63	30

**Figure S1. Oligonucleotide primers and PCR conditions used for RT-PCR analysis**

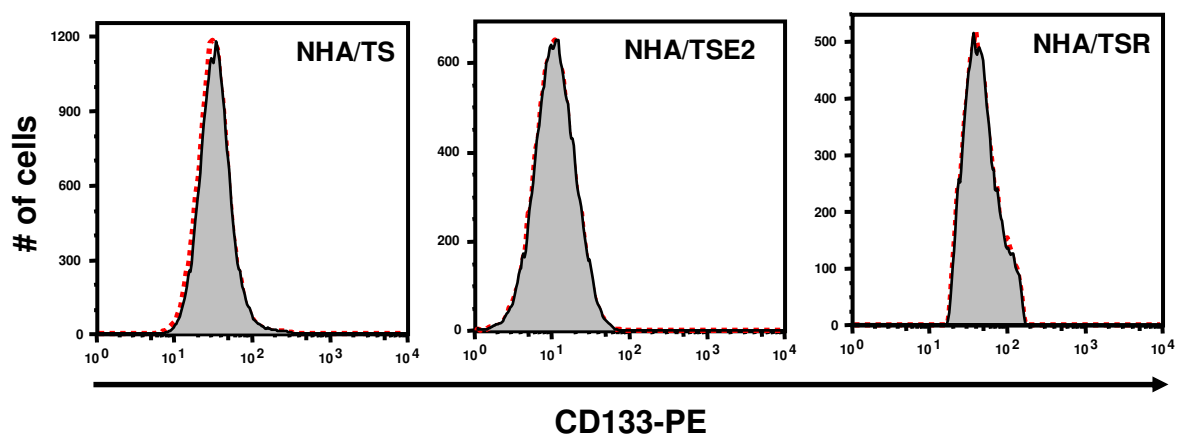




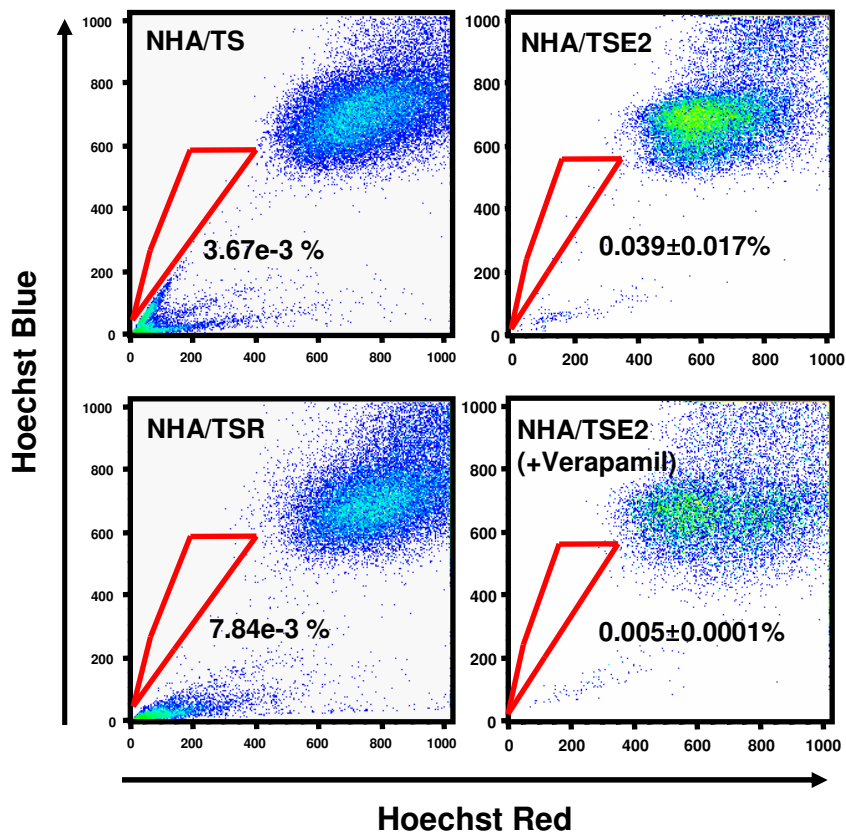
**Figure S3. mRNA expression of ETS family genes in Caco-2 and Fuji cells**  
 Primer sequences and PCR conditions are shown in Additional file 1, Figure S1.  
 Fuji cells with high level of CD133 (CD133<sup>high</sup>) were enriched by MACS.



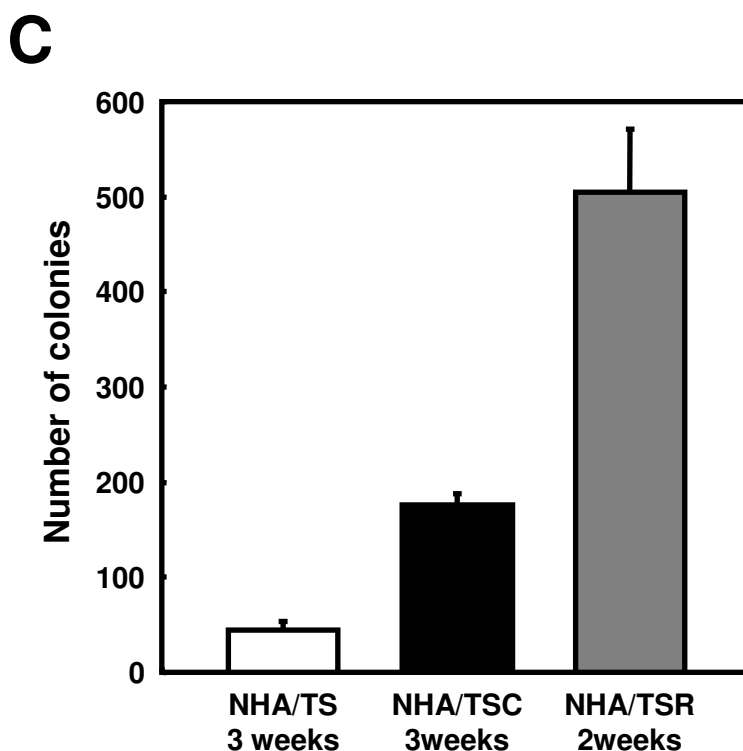
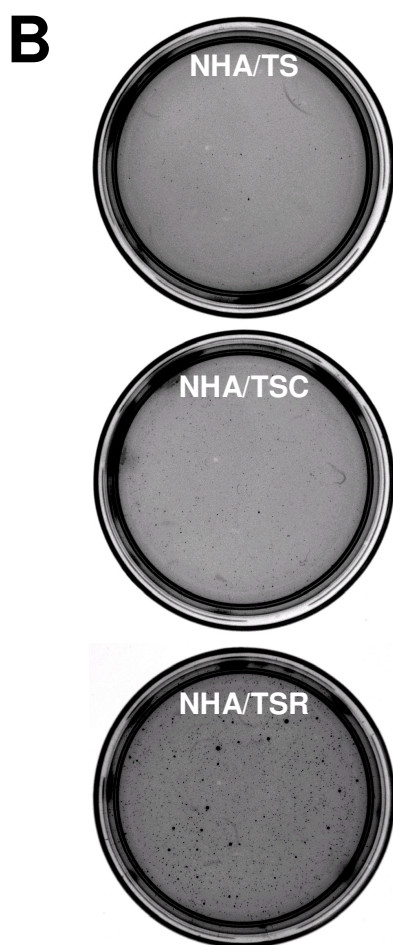
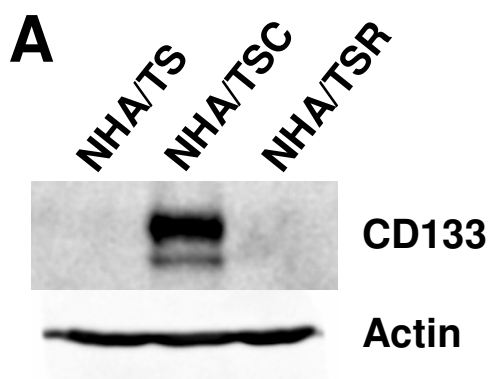
**Figure S4. Effect of U0126 on the expression of CD133 mRNA in Caco-2 cells**  
 Cells were incubated with DMSO or U0126 for 72 hours, and the expression of *CD133* transcripts containing exons 1A, 1B, 1C, 1D and 1E were analyzed. PCR amplification was performed using five forward primers located in each of the exon 1s and reverse primer located in the common exon 2 of *CD133* gene. The number of PCR cycle was 25 for total *CD133*, 30 for *exon 1A* and *1B*, and 40 for *exon 1C*, *1D*, and *1E*, respectively. *GAPDH* is an internal control.



**Figure S5. CD133 protein expression in NHA/TSE2 and NHA/TSR cells**  
FACS analysis was performed using CD133/2-PE antibody. The gray region represents a staining with CD133-PE antibody, and the dotted red line represents the isotype control antibody IgG2b-PE. CD133-positive cells were not detected.



**Figure S6. SP analysis of NHA/TSE2 and NHA/TSR cells**  
 Cells were stained with Hoechst 33342, and its fluorescence was resolved with a Hoechst blue (y-axis) and Hoechst red (x-axis). Red boxes are defined as SP fractions with low intensity of Hoechst staining. SP cells were visible in only NHA/TSE2 cells.



**Figure S7. Effect of CD133 expression on soft-agar colony formation activity of NHA/TS**

NHA/TS cells infected with retroviral vectors encoding CD133 (NHA/TSC) were established (**A**), and subjected to soft-agar colony formation assay (**B** and **C**). Note that NHA/TSR cells were cultured for only 2 weeks, whereas NHA/TS and NHA/TSC cells were cultured for 3 weeks.