

Supplementary Table 2. List of oligo sequences used in the study.

Transcript name	Primer	Oligo sequence
<i>ACTA2</i>	Forward	AGCCAAGCACTGTCAGGAAT
<i>ACTA2</i>	Reverse	TTGTCACACACCAAGGCAGT
<i>CALD1</i>	Forward	CTGTTCTGCTGAAGGTGTACG
<i>CALD1</i>	Reverse	CCTACCTTCAAGCCAGCAGTTTC
<i>CCL2</i>	Forward	AGAATCACCAGCAGCAAGTGTCC
<i>CCL2</i>	Reverse	TCCTGAACCCACTTCTGCTTGG
<i>CCND1</i>	Forward	TCTACACCGACAACCTCCATCCG
<i>CCND1</i>	Reverse	TCTGGCATTGTTGGAGAGGAAGTG
<i>CCND2</i>	Forward	GAGAAGCTGTCTCTGATCCGCA
<i>CCND2</i>	Reverse	CTTCCAGTTGCGATCATCGACG
<i>CDKN1A</i>	Forward	CCTGCCCAAGCTCTACCTT
<i>CDKN1A</i>	Reverse	AAGGCAGAAGATGTAGAGC
<i>CDKN2A</i>	Forward	CGGTCGGAGGCCGATCCAG
<i>CDKN2A</i>	Reverse	GCGCCGTGGAGCAGCAGCAGCT
<i>CENPF</i>	Forward	GCATTGCCATTCTCTACTGC
<i>CENPF</i>	Reverse	ACCCACATAAAACAGAGATTGTG
<i>CKS2</i>	Forward	TTTTGTCTGCTGCGCCCG
<i>CKS2</i>	Reverse	ACATAACATGCCGGTACTCGT
<i>CYBA</i>	Forward	GCTCATCTGTCTGCTGGAGTATC
<i>CYBA</i>	Reverse	CGGACGTAGTAATTCCTGGTGAG
<i>FTH1</i>	Forward	GACGTTCTTCGCCGAGAGT
<i>FTH1</i>	Reverse	GAACGAGCGCCGGTT
<i>FTL</i>	Forward	CGGGTCTGTCTCTTGCTTCA
<i>FTL</i>	Reverse	GGAGATGGCCGAGAAGATGG
<i>GAPDH</i>	Forward	CTCTGCTCCTCTGTTTCGAC
<i>GAPDH</i>	Reverse	ACGACCAAATCCGTTGACTC
<i>GAS6</i>	Forward	GGAAGTGGCTGAACGGAGAA
<i>GAS6</i>	Reverse	GAGAAGCACTGCATCCTCGT
<i>GDF15</i>	Forward	CAACCAGAGCTGGGAAGATTCG
<i>GDF15</i>	Reverse	CCCGAGAGATACGCAGGTGCA
<i>HMGB2</i>	Forward	TCTGAGGAAAAGCTCGCACC
<i>HMGB2</i>	Reverse	GCGTACGAGGACATTTTGCC
<i>MARCKS</i>	Forward	CGTTGGACCCCGCATCTTAT
<i>MARCKS</i>	Reverse	TCCCAGATTTGTAGCCGCAC
<i>MMP1</i>	Forward	TGTGGTGTCTCACAGCTTCC
<i>MMP1</i>	Reverse	CGCTTTTCAACTTGCCTCCC
<i>NEAT1</i>	Forward	GCTGGACCTTTCATGTAACGGG
<i>NEAT1</i>	Reverse	TGAACTCTGCCGGTACAGGGAA
<i>PTMA</i>	Forward	CAGGAGGCTGACAATGAGGT
<i>PTMA</i>	Reverse	GCTTGCCCGTAGCTGACTC
<i>QSOX1</i>	Forward	ACATGGCTGACCTGGAATCTGC
<i>QSOX1</i>	Reverse	GCAGGAAGTTCTGGACTAAGGG
<i>RAB13</i>	Forward	GACATCTTGCTCAAGTCAGGAGG
<i>RAB13</i>	Reverse	CAGGGAGCACTTGTGGGTGTTT
<i>STC1</i>	Forward	ACTCAGCTGAAGTGGTTCGT
<i>STC1</i>	Reverse	TTTCCAGGCATGCAAAAGCC
<i>WFDC1</i>	Forward	TTCTGTGTGCGTCTGGAAGG
<i>WFDC1</i>	Reverse	GGAGGAGAAGTAGCAAGAGGC

Supplementary Table 3. Percent composition of cells from each cluster calculated in each sample of senescence models illustrated in Figure 2A–2C.

Cluster	CTRL	RS	IR	ETO
5	17.04	7.32	0.38	0.18
0	62.85	24.43	0.86	0.77
1	16.13	36.39	15.58	19.67
3	3.47	12.35	28.74	15.29
2	0.30	9.13	23.52	30.87
4	0.20	8.20	22.76	25.47
7	0.00	0.74	3.22	5.16
6	0.02	1.45	4.94	2.59