

Table S1. The sgRNA design for the modulation of *OCT4*, *KLF4*, *MYC*, *SOX2* in the experiments.

Type	Function	Gene	Sequence
sgRNA1	enhance	OCT4	GGAAAACCGGGAGACACAAC
sgRNA2	enhance	OCT4	GGATGTTTGCCTAATGGTGG
sgRNA1	enhance	KLF4	CTCTTTCCGCCTGTTCCCGG
sgRNA2	enhance	KLF4	CAGTTCACGCTGCACAGTGC
sgRNA1	enhance	MYC	AGCTAGAGTGCTCGGCTGCC
sgRNA2	enhance	MYC	GAACCCGGGAGGGGCGCTTA
sgRNA1	enhance	SOX2	AAACAGCACTAAGACTACGT
sgRNA2	enhance	SOX2	GCCCCCTTTCATGCAAAACC

Table S2. Primers used in qRT-PCR.

Gene	Forward primer	Reverse primer
<i>OCT4</i>	GGGAGATTGATAACTGGTGTGTT	GTGTATATCCCAGGGTGATCCTC
<i>KLF4</i>	CGGACATCAACGACGTGAG	GACGCCTTCAGCACGAACT
<i>SOX2</i>	GCTTAGCCTCGTCGATGAAC	AACCCCAAGATGCACAACCTC
<i>MYC</i>	GGCTCCTGGCAAAGGTCA	CTGCGTAGTTGTGCTGATGT
<i>ER</i>	CAGGCATTCGGTTTGATGAGT	TTGGACGAAGTACAGTTCCCG
<i>HER2</i>	TGTGACTGCCTGTCCCTACAA	CCAGACCATAGCACACTCGG
<i>GAPDH</i>	CCCACTCCTCCACCTTTGAC	ATGAGGTCCACCACCCTGTT