

Supplementary Table SI. siRNA sequences

siRNA	Sequence
PIK3CA-si-NC	CCCTAAGATCCGATGGTAATAATTA
PIK3CA-si1	CCCAAGAATCCTAGTAGAATGTTTA
PIK3CA-si2	CGGCATGCCAGTGTGTGAATTTGAT
KLF2-si-NC	CCTACCAGAGAGCTTCTACTCAGAA
KLF2-si1	CCTACACCAAGAGTTGCGCATCTGAA
KLF2-si2	CGCTGCACATGAAACGGCACATGTA

Supplementary Table SII. Primer sequences for RT-qPCR

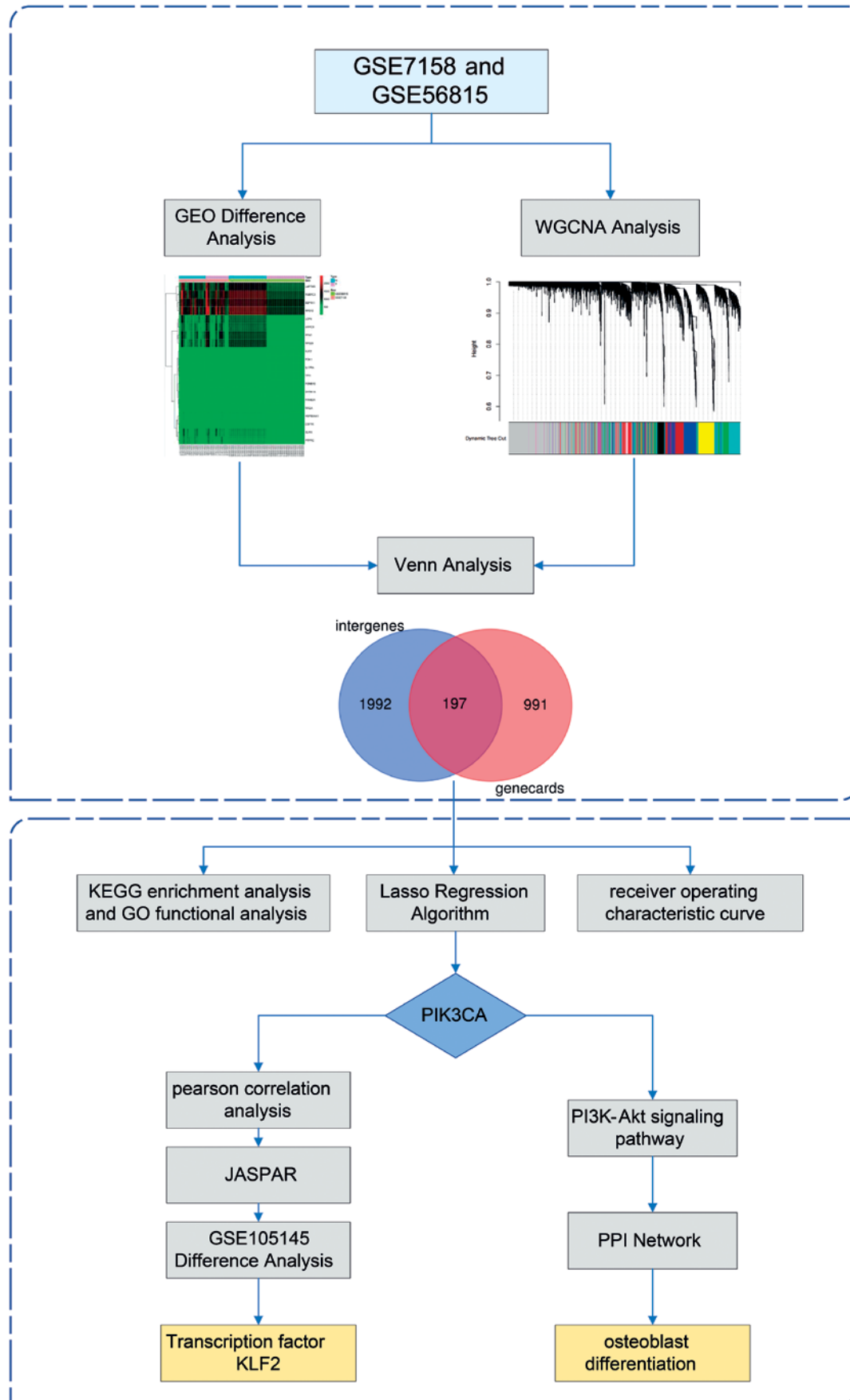
Gene	Sequence
PIK3CA (human)	Forward: 5'-GGACCCGATGCGGTTAGAG-3' Reverse: 5'-ATGGTCGTGGAGGCATTGTT-3'
KLF2 (human)	Forward: 5'-GCTGAGTGAACCCATCCTGC-3' Reverse: 5'-GAAGTCCAGCACGCTGTTGA-3'
GAPDH (human)	Forward: 5'-GAAAGCCTGCCGGTACTAA-3' Reverse: 5'-AGGAAAAGCATCACCCGGAG-3'

Supplementary Table SIII. PIK3CA promoter primer sequences

Primer	Sequence
PIK3CA-promoter1 (human)	Forward: 5'-CCCTCCTCAGCTCTTACCCT-3' Reverse: 5'-TGGTCTCTTTTCCGCTCACA-3'
PIK3CA-promoter2 (human)	Forward: 5'-TGTTTACACGATGTGAGCGGA-3' Reverse: 5'-TCTACTTCTCGCTCCCTCTCC-3'

Supplementary Table SIV. Binding sites between transcription factor KLF2 and PIK3CA promoter region

TF Name	Gene Name	Start	End	Predicted sequence
MA1515.1.KLF2	PIK3CA	1806	1816	CACAACACCCT
MA1515.1.KLF2	PIK3CA	1933	1943	GCCCACTCCCT
MA1515.1.KLF2	PIK3CA	368	378	ATCCACCCCCC
MA1515.1.KLF2	PIK3CA	1648	1658	CACCGCACCTC
MA1515.1.KLF2	PIK3CA	321	331	CACCGCACCTG
MA1515.1.KLF2	PIK3CA	170	180	CGACATGCCCA
MA1515.1.KLF2	PIK3CA	988	998	GTCCATACCCC
MA1515.1.KLF2	PIK3CA	370	380	TGATCCACCCC
MA1515.1.KLF2	PIK3CA	367	377	TCCACCCCT



Supplementary Figure S1. Bioinformatics analysis process