Table S1. NCBI GEO accession numbers and phenotypes of samples used in correlation studies

Study GEO Accession	Phenotype	Sample
GSE130548	Epithelial	GSM3742048.CEL
GSE130548	Epithelial	GSM3742049.CEL
GSE130548	Epithelial	GSM3742050.CEL
GSE130548	Mesenchymal	GSM3742051.CEL
GSE130548	Mesenchymal	GSM3742052.CEL
GSE130548	Mesenchymal	GSM3742053.CEL
GSE55072	Epithelial	GSM1329077.CEL
GSE55072	Epithelial	GSM1329078.CEL
GSE55072	Mesenchymal	GSM1329081.CEL
GSE55072	Mesenchymal	GSM1329082.CEL
GSE55711	Epithelial	GSM1342162.CEL
GSE55711	Epithelial	GSM1342163.CEL
GSE55711	Mesenchymal	GSM1342164.CEL
GSE55711	Mesenchymal	GSM1342165.CEL
GSE77551	Epithelial	GSM2054383.CEL
GSE77551	Epithelial	GSM2054384.CEL
GSE77551	Epithelial	GSM2054385.CEL
GSE77551	Mesenchymal	GSM2054377.CEL
GSE77551	Mesenchymal	GSM2054378.CEL
GSE77551	Mesenchymal	GSM2054379.CEL

Table S2. Sequence information of siRNAs used.

siRNA	Sequences	Vendor
siElf3_2	TTGAACCAACTTGTTCGATAA	Qiagen
siElf3_10	GGUAUUACUACAAACGGGA	Dharmacon
siElf3_12	GGUUGGAGAGAGAGUCGGAAU	Dharmacon
siCntrl	Silencer™ Negative Control No. 1 siRNA	Dharmacon
siEhf_1	AACAATTTATGTTTAATGAAA	Qiagen
siEhf_2	ACCCTTGATCTATTTAATCAA	Qiagen
siEhf_3	AAGGAACACTACAGTTGATAA	Qiagen
siEhf_4	CAGCAAATGGATTCTGATCAA	Qiagen

Table S3. Primers and corresponding UPL probes used in qPCR experiments.

Primers	Forward	Reverse	Probe
Ahr	TGCACAAGGAGTGGACGA	AGGAAGCTGGTCTGGGGTAT	27
Cdh1	ATCCTCGCCCTGCTGATT	ACCACCGTTCTCCTCCGTA	18
Cdh2	TCCCTGAGATACAGCGTCACT	ATAATGAAGATGCCCGTTGG	17
Cebpa	AAACAACGCAACGTGGAGA	GCGGTCATTGTCACTGGTC	67
Ehf	TCATTGTCAAGACTGAACAAACC	GTCCAACAGATCTACTGTGCTACC	33
Elf3	ACCGAACCCTGACACACCT	AGCTGTACATGGCGTTGAAGT	46
Exosc9	CAAGGTGCCCCTATAGTGCT	GGTCTGAGCTCTTATTTTCTTTGG	106
Fn1	AGGTGGACCCCGCTAAAC	TGCCGCAACTACTGTGATTC	31
Gapdh	AGCTTGTCATCAACGGGAAG	TTTGATGTTAGTGGGGTCTCG	9
Grhl3	AAGGAAGATGTCGAATGAACTTG	TCGTCCTCATTACTGTAGGGAAA	100
Ovol2	GTGAGGATTGCGGCTACAC	TGGTCACTGTTCACATGCAG	79
Snai1	CTTGCTCCACAAGCACCA	GAGGATGGGGAGGTAGCAG	71
Snai2	ATCCTTGGGGCGTGTAAGT	TGAACCACTGTGATCCTTGG	6
Zeb1	TGGAGTTCAAAGGTTGTCGTT	TTGCCACATCAACACTGGTC	109
Zeb2	TTGCTCCAGGATGTGTGG	CACACACTTGTTTGTGTGCATATC	64
Casz1	CCACCTTTGACCCAGGAA	AGGCTCCTGCTTCACCTG	66
Sox9	GTACCCGCATCTGCACAAC	CTCCTCCACGAAGGGTCTCT	75
Sp6	TTCGGCCTAGGTCTCTTTCA	CCCACACACACACCTCATCT	32
Tfcp2l1	GGGGACTACTCGGAGCATCT	TTCCGATCAGCTCCCTTG	53
Zfp750	GAGCCAGCGTGAGAACAGA	CAGGAGAGTTCCTTCCGTCA	68
Irf6	GCTTGCTGCTCCTAACCTGA	CTTTCTGGTGGGCAATGAG	34
Vdr	CACCTGGCTGATCTTGTCAGT	CTGGTCATCAGAGGTGAGGTC	89
Elf1	CCAGAGGAAGCAACCATAGC	AACCTGGGTTGAAGCCTGTA	38

Table S4. Sequences of oligonucleotides used for the cloning of the Grhl3 promoter.

	Forward	Reverse
Grhl3 1kb Promoter	GCTAGCCTCGAGTGCCTAGCACAGAGCACTTAC	GGATCCAAGCTTGGTGCCGACTGCAGCTAGAC

Table S5. qPCR primers and UPL probes used in ChIP experiments

Primers	Forward	Reverse	Probe
Grhl3_Prom_52	TCTAGTTCTCCCGTTCCTTCC	TTCTTAGCTGAGGGGGTGAG	52
Grhl3_Prom_108	GGAGAAAAGAGAGGGGACTCA	TCACCTTCTCTACCCGGAAA	108

Table S6. Primers used in RT-PCR experiments

Primers	Forward	Reverse
Casz1_RT	TCTACTACCACGGCTGCCAC	TCGTTGCTGGATTCCTCGTG
Zfp750_RT	CGACTCCAGCAAGCTGAGCA	GGCGTTGCTTGCATACATGG
Elf3_RT	GTCTGGAGGGCAAGAAGAGC	CCAACCTCTTCTTCCTTCCA
Tbp_RT	AGCCTCAGTACAGCAATCAAC	GAACTTCACATCACAGCTCC