Figure S1. Volcano plot and transfection efficiencies of sh-MUC19 and MUC19 overexpression vector. (A) Volcano plot of differentially expressed long non-coding RNAs in breast cancer tissue and paired normal adjacent tissue from The Cancer Genome Atlas (P<0.05, llog2 fold changel>1). (B) Transfection efficiencies of sh-MUC19 and MUC19 overexpression vectors. ***P<0.001 vs. vector or sh-NC. MUC19, mucin 19; sh, short hairpin RNA.



Table SI. Sequences of primers for reverse transcription-quantitative PCR and transfection-related sequences.

Name	Sequence
LOC102724163	
Forward	5'-CTCAGGAGGAGGATGCTGTC-3'
Reverse	5'-ATGCGAGGCAAAATATCCAC-3'
miR-508-5p	
Forward	5'-ACACTCCAGCTGGGTACTCCAGAGGGCGTCA-3'
Reverse	5'-CTCAACTGGTGTCGTGGAGTCGGCAATTCAGTTGAGCATGAGTG-3'
MUC19	
Forward	5'-TTACCACTGGGATAACTACTGGC-3'
Reverse	5'-GCCTCTGTAAGAGCAAATCAAGA-3'
GAPDH	
Forward	5'-GTTGTCTCCTGCGACTTCA-3'
Reverse	5'-GGTGGTCCAGGGTTTCTTA-3'
U6	
Forward	5'-GCTTCGGCAGCACATATACTAAAAT-3'
Reverse	5'-CGCTTCACGAATTTGCGTGTCAT-3'
LOC102724163 shRNA	
Forward	5'-GATCCCCCAGTTTGTTCCTGGAGATAAATGCTTCCTGTCACATTTA
	TCTCCAGGAACAAACTGTTTTTGGAAA-3'
Reverse	5'-AGCTTTTCCAAAAACAGTTTGTTCCTGGAGATAAATGTGACAGGA
	AGCATTTATCTCCAGGAACAAACTGGGG-3'
MUC19 shRNA	
Forward	5'-GATCCCCCTGGAAGTTGCTGAAAGCAAATACTTCCTGTCATATT
	TGCTTTCAGCAACTTCCAGTTTTTGGAAA-3'
Reverse	5'-AGCTTTTCCAAAAACTGGAAGTTGCTGAAAGCAAATATGACAG
	GAAGTATTTGCTTTCAGCAACTTCCAGGGG-3'
sh-NC	
Sense	5'-CCGGCAACAAGATGAAGAGCACCAA
	CTCGAGTTGGTGCTCTTCATCTTGTTGTTGTTTTTG-3'
Anti-sense	5'-AATTCAAAAACAACAAGATGAAGAGCACCAA
	CTCGAGTTGGTGCTCTTCATCTTGTTG-3'
miR-508-5p mimics	
Sense	5'-UACUCCAGAGGGCGUCACUCAUG-3'
Antisense	5'-UGAGUGACGCCCUCUGGAGUAUU-3'
miR-508-5p inhibitor	
Sense	5'-CAUGAGUGACGCCCUCUGGAGUA-3'
miR-NC	
Sense	5'-UUCUCCGAACGUGUCACGUTT-3'
Anti-sense	5'-ACGUGACACGUUCGGAGAATT-3'

miR, microRNA; NC, negative control; sh, small hairpin; MUC19, mucin 19.