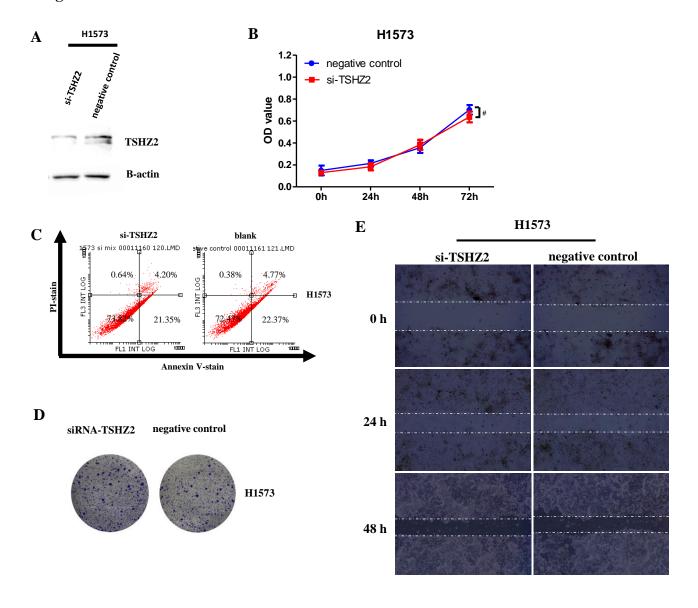


S2 Fig



S1 Fig. Schematic graph of TSHZ2 binding to the EGFR promoter. Five zinc finger structure areas (green) were derived from TSHZ2. Four TSHZ2 specific binding domain (red) were speculated on EGFR promoter regions. The information of EGFR promoter was obtained from www.genecopoeia.com.

S2 Fig. Effects of the down-regulation of the TSHZ2 expression on the proliferation , apoptosis and migration of H1573 cells after transfection with siRNA-TSHZ2 or siRNA-negative control. A. An analysis of the TSZH2 expression from the total protein of siRNA-treated H1573 cells by Western blot. B. The cell proliferation at 24 and 48h was detected using the CCK-8 assay. C. The apoptosis was determined by a FACS analysis. D. A colony formation assay was performed at 14 days. E. Cell migration was analyzed by a wound-healing assay. H1573 cells were seeded into six-well plates and grown to full confluence. Experiments were repeated 3 times and presented as the mean \pm SD (*p<0.05, **p=<0.001 and* p>0.005).

S3 Table. The correlation between EGFR mutations and TSHZ2 protein expression in 153 lung adenocarcinoma specimens.

Factor	TSHZ2		
	Negative (%)	Positive (%)	p-value
EGFR			
Wild	22 (32.4%)	46 (67.6%)	0.035
Mutant	15 (17.6%)	70 (82.4%)	

Notes: EGFR: epidermal growth factor receptor; TSHZ2: teashirt homolog 2.

S4 Table. The correlation between different types of EGFR mutations and TSHZ2 expression.

EGFR-mutation type	N=85	TSHZ2		
		Negative (%)	Positive (%)	p-value
Insert in19 exon	34	8(23.5%)	26(76.5%)	
Deletion in19 exon	1	0(0.0%)	1(100.0%)	
Point mutation in 21 exon	3	0(0.0%)	3(100.0%)	0.591
Other exon mutation	47	7(16.3%)	40(83.7%)	

Notes: EGFR: epidermal growth factor receptor; TSHZ2: teashirt homolog 2.