

Figure S1. Kaplan-Meier survival curves for overall survival time in patients with gastric cancer. Survival curves determined according to (A) RTEL1-TNFRSF6B, (B) SLCO4A1-AS1 and (C) ZBTB46-AS1 expression from The Cancer Genome Atlas database. Statistical significance was analyzed by log-rank test.

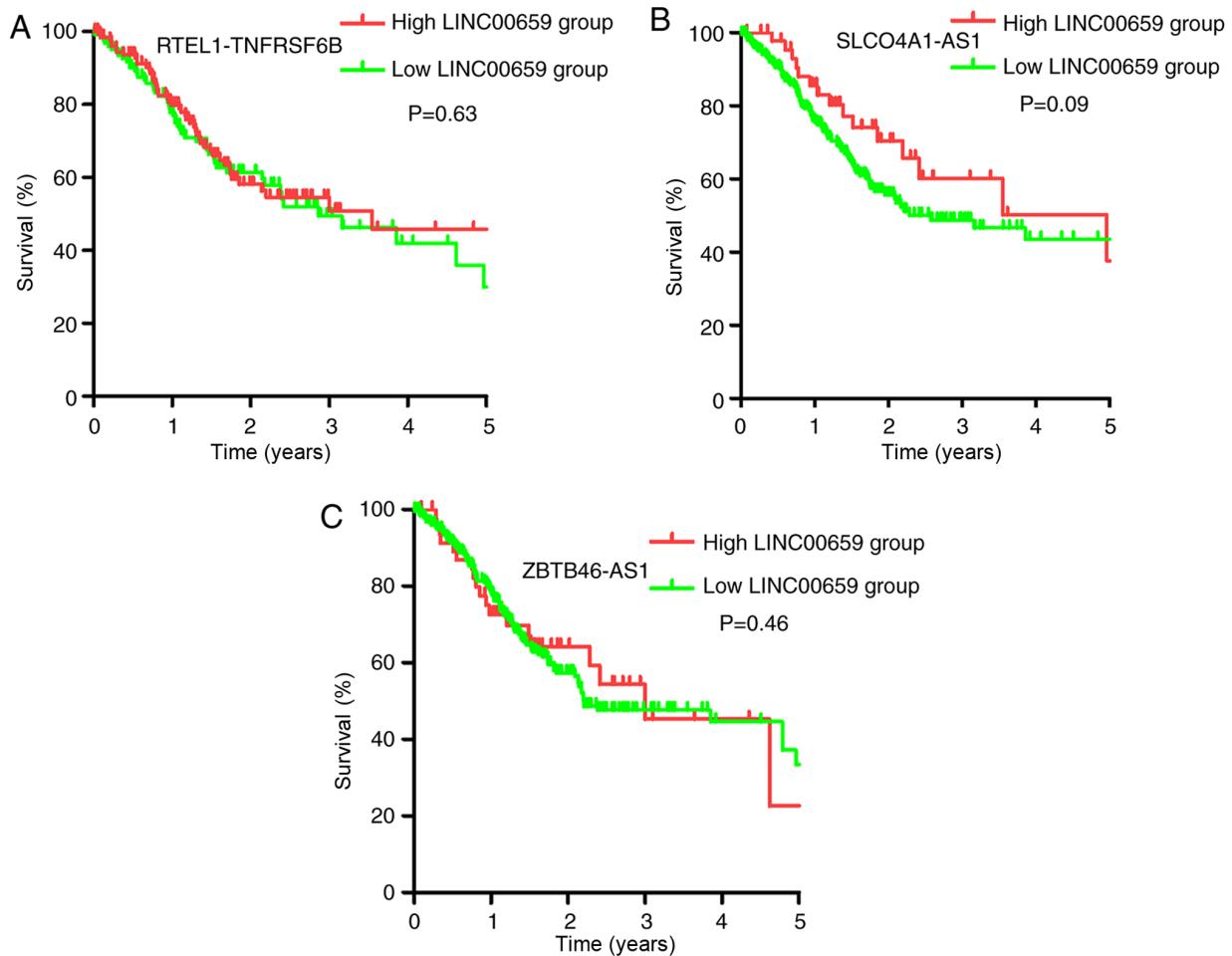


Figure S2. Expression levels of RTEL1-TNFRSF6B, SLCO4A1-AS1 and ZBTB46-AS1 are not associated with tumor stage. Expression levels of (A) RTEL1-TNFRSF6B, (B) SLCO4A1-AS1 and (C) ZBTB46-AS1 in different stages of gastric cancer tissues from The Cancer Genome Atlas database.

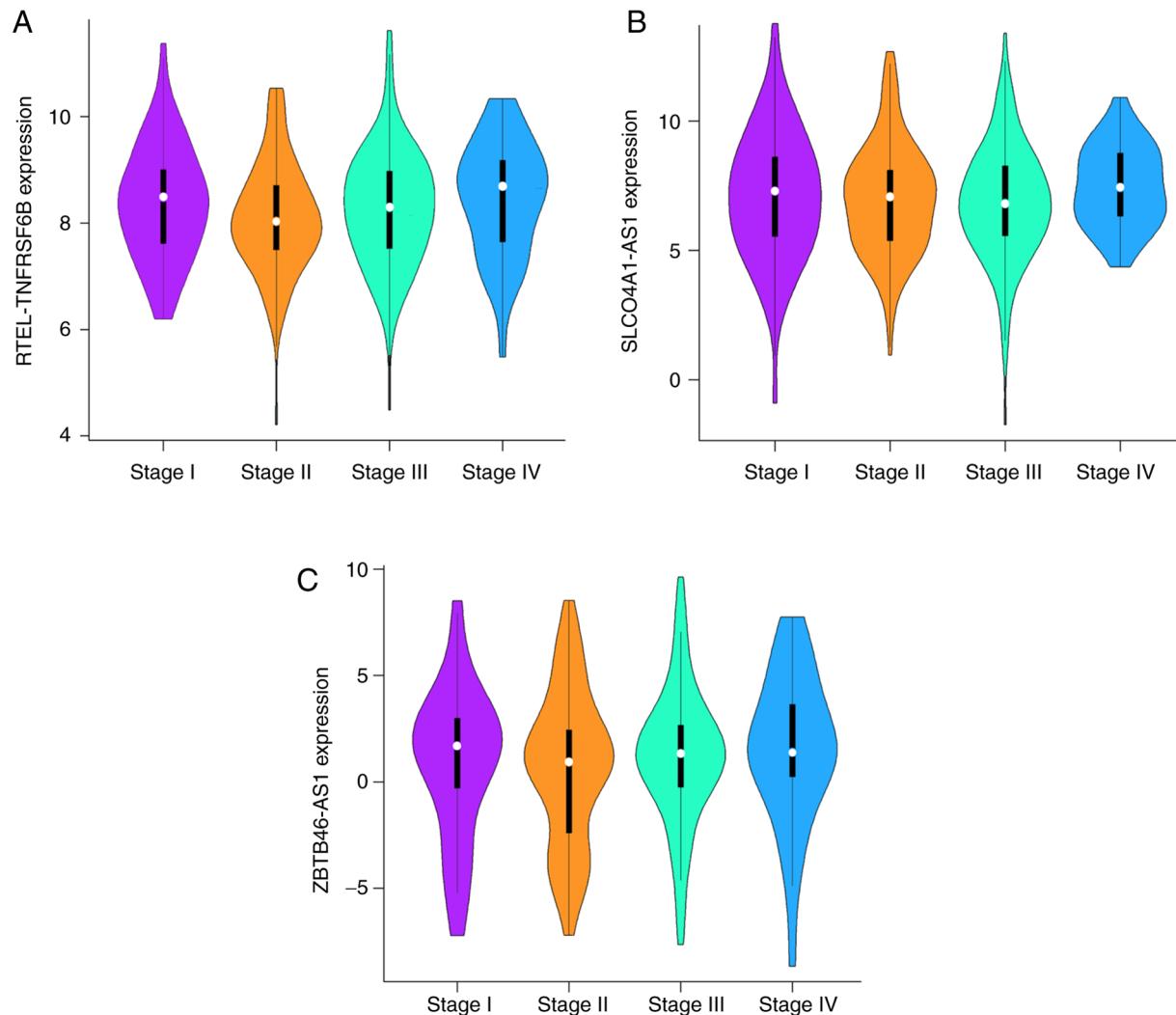


Figure S3. LINC00659 does not affect cell proliferation. Cell proliferation assay performed in (A) AGS and (B) MKN-74 cells transfected with sh-LINC00659. sh-NC, short hairpin RNA negative control.

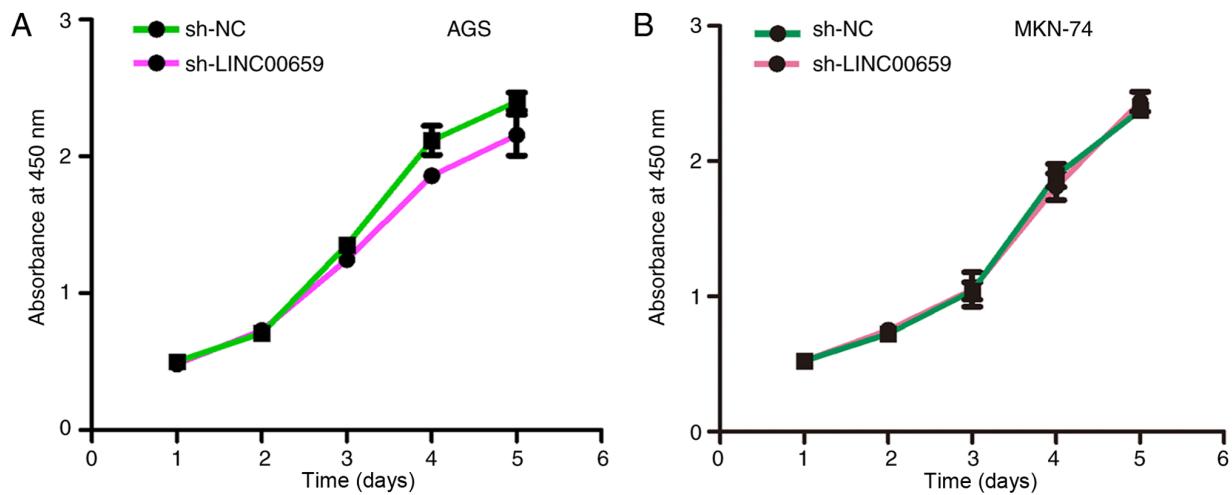


Table SI. Primer sequences used for reverse transcription-quantitative PCR.

Gene	Sequence (5'-3')
IQGAP3	F: GTTCATCCATAGAGCCTGCCA R: GCGATGCTCTCACCAATAAGG
MMP15	F: ATGCGTTCCGCCAGAT R: GCCGCTTCATCCACTCCTT
ITGA6	F: CACATCTCCTCCCTGAGCAC R: TATCTTGCCACCCATCCTTG
LINC00659	F: UUCUCCGAACGGUGUCACGUTT R: ACGUGACACGUUCGGAGAATT
GPRC5A	F: ATGGCTACAACAGTCCCTGAT R: CCACCGTTCTAGGACGATGC
HN1	F: CACTGTGGGCGGGTCC R: GTTGTATTGGTTCGGCACCAT
KRT8	F: CGAGGATATTGCCAACCGCAG R: CCTCAATCTCAGCCTGGAGCC
ELMO3	F: TCATCAGCCGTAATGGGCTC R: CCTCACAAAGGGGATGCTCA
TRAF4	F: AGGAGITCGTCTTGACACCATC R: CTTGAATGGCAGAGCACC
β-actin	F: GTCATTCCAAATATGAGATGCGT R: GCTATCACCTCCCCTGTGTG

F,forward; R,reverse; MMP15, matrix metalloproteinase 15; IQGAP3, IQ motif-containing GTPase activating protein 3; ITGA6, integrin subunit α6; GPRC5A, G protein-coupled receptor class C group 5 member A; HN1, hematological and neurological expressed 1; KRT8, keratin 8; ELMO3, engulfment and cell motility 3; TRAF4, TNF receptor associated factor 4.

Table SII. Association between clinicopathological characteristics and LINC00659 expression in patients with gastric cancer (n=60).

Characteristics	N (%)	LINC00659 expression, n		P-value ^a
		High (n=30)	Low (n=30)	
Sex				
Male	46 (77)	23	23	>0.9999
Female	14 (23)	7	7	
Age, years				
<65	49 (82)	27	22	0.1806
≥65	11 (18)	3	8	
Tumor size, cm				
<5	40 (66)	22	18	0.4113
≥5	20 (34)	8	12	
Differentiation				
Low	45 (75)	29	16	<0.0001 ^b
Middle	15 (25)	1	14	
Lymph node metastasis				
Negative	7 (12)	3	4	0.9999
Positive	53 (88)	27	26	
<i>Helicobacter pylori</i> infection				
Negative	32 (42)	15	17	0.7958
Positive	28 (58)	15	13	
Vessel invasion				
Negative	46 (77)	30	16	<0.0001 ^b
Positive	14 (23)	0	14	

^aCalculated by χ^2 test or Fisher's exact test (lymph node metastasis). ^bP<0.01.