

Supplementary file 1

1. Figure S1-S3

2. Table S1-S5

Figure S1

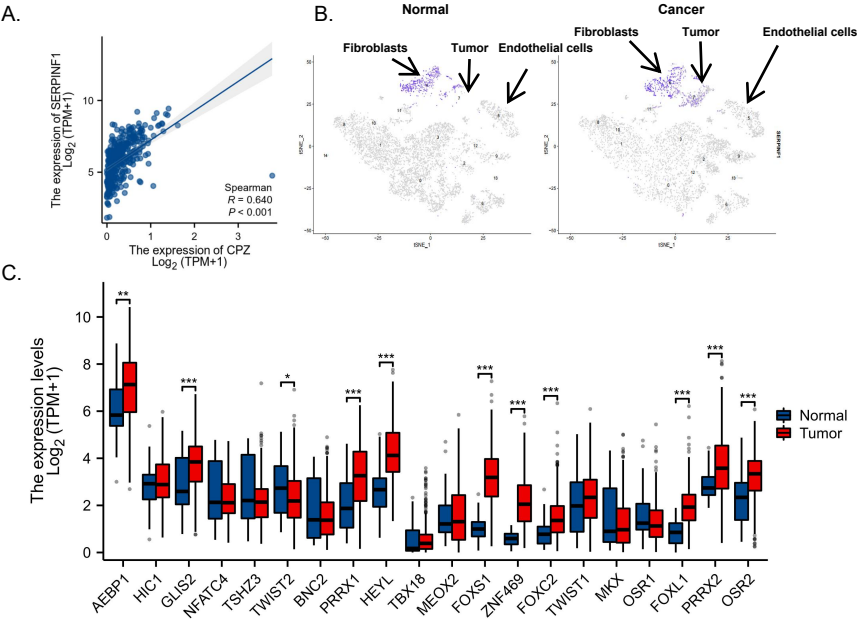


Figure S2.

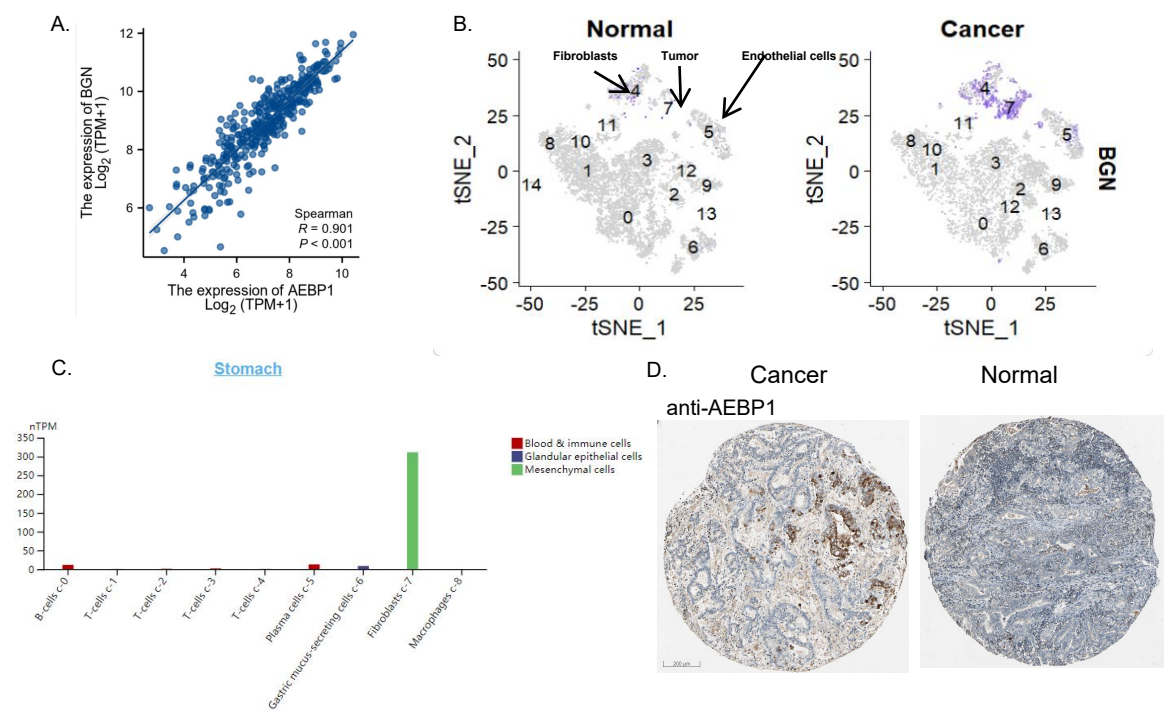


Figure S3.

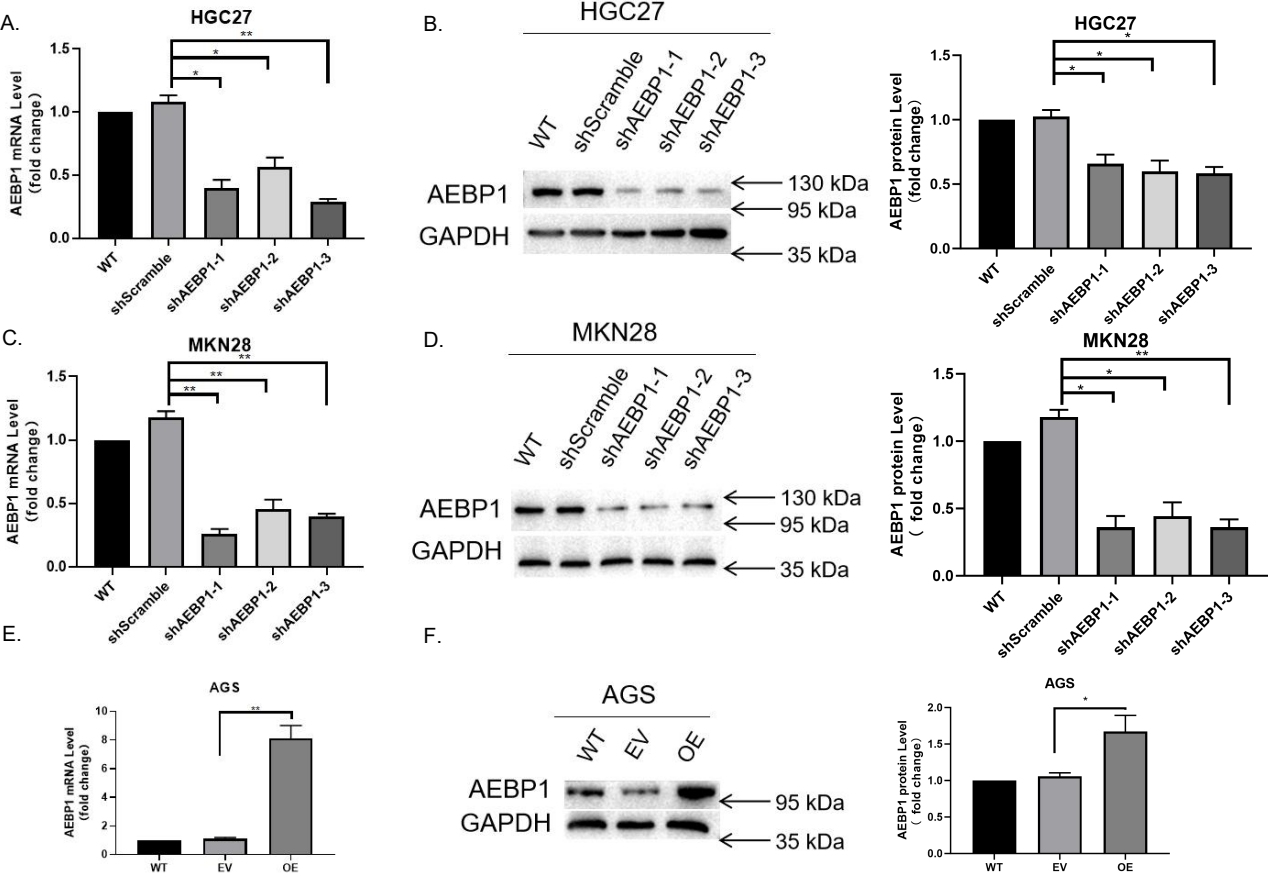


Figure S1. Expression of *CPZ* and its co-expressed genes in gastric cancer tissues. (A)


CPZ expression was highly positively correlated with *SERPINF1* expression in TCGA-STAD. (B) *SERPINF1* is specifically expressed in fibroblasts and tumor cells. (C) Expression heat map of *CPZ* co-expressed genes. 

Figure S2. Expression of *AEBP1* in gastric cancer tissues and specific cell types. (A)

AEBP1 and *BGN* expression levels are highly correlated. (B) *BGN* was specifically expressed in fibroblasts and tumor cells of gastric cancer tissues. (C) *AEBP1* is specifically expressed in fibroblasts of normal gastric tissues (HPA database). (D) *AEBP1* is highly expressed in gastric cancer tissues and low in adjacent tissues based on HPA database.

Figure S3. The impact of *AEBP1* on the expression of its correlated genes.(A-D)

Construction of HGC27 and MKN28 cell lines with *AEBP1* shRNA stably knockdown. (E-F)


AGS cell line with *AEBP1* overexpression. EV: empty vector; OV: over-expression of *AEBP1*. 

Table S1. Sequences of gene knockdown and scramble shRNAs used in this study.

Gene		Sequence(5'→3')	Target Sequence
shScramble for TCF3	Forward	CACCGGTCCAACCGATGCTTGAGTA CGAATACTCAAGCATCGGTTGGACC	GGTCCAACCGA TGCTTGAGTA
	Reverse	AAAAGGTCCAACCGATGCTTGAGTA TTCGTACTCAAGCATCGGTTGGACC	
shTCF3-1	Forward	CACCGGGATATTAACGAGGCCTTCC CGAAGGAAGGCCTCGTTAATATCCC	GGGATATTAAC GAGGCCTTCC
	Reverse	AAAAGGGATATTAACGAGGCCTTCC TTCGGGAAGGCCTCGTTAATATCCC	
shTCF3-2	Forward	CACCGGATATTAACGAGGCCTTCCG CGAACGGAAGGCCTCGTTAATATCC	GGATATTAACG AGGCCTTCCG
	Reverse	AAAAGGATATTAACGAGGCCTTCCG TTCGCGGAAGGCCTCGTTAATATCC	
shScramble for AEBP1	Forward	CACCGCGATGAAACGTGCGTCGTAA CGAATTACGACGCACGTTTCATCGC	GCGATGAAACG TGCGTCGTAA
	Reverse	AAAAGCGATGAAACGTGCGTCGTAA TTCGTTACGACGCACGTTTCATCGC	
shAEBP1-1	Forward	CACCGCCAGACATGGGTGATGTACA CGAATGTACATCACCCATGTCTGGC	GCCAGACATGG GTGATGTACA
	Reverse	AAAAGCCAGACATGGGTGATGTACA TTCGTGTACATCACCCATGTCTGGC	
shAEBP1-2	Forward	CACCGCTATGAGGAAATGACCTTTC CGAAGAAAGGTCATTTCTCATAGC	GCTATGAGGAA ATGACCTTTC
	Reverse	AAAAGCTATGAGGAAATGACCTTTC TTCGGAAGGTCATTTCTCATAGC	
shAEBP1-3	Forward	CACCGCAATGTTGACTATGACATCG CGAACGATGTCATAGTCAACATTGC	GCAATGTTGAC TATGACATCG
	Reverse	AAAAGCAATGTTGACTATGACATCG TTCGCGATGTCATAGTCAACATTGC	

Table S2. Sequences of primers used for qRT-PCR in this study.

Gene		Sequence(5'→3')
<i>AEBP1</i>	Forward	AGACCACGCCATCTTCCG
	Reverse	CCTTGTTGTTCTCCCACTCG
<i>FZD1</i>	Forward	ATCTTCTTGTCCGGCTGTTACA
	Reverse	GTCTTCGGCGAACTTGTCATT
<i>FZD8</i>	Forward	ATCGGCTACAACCTACACCTACA
	Reverse	GTACATGCTGCACAGGAAGAA
<i>WNT2</i>	Forward	CCGAGGTCAACTCTTCATGGT
	Reverse	CCTGGCACATTATCGCACAT
<i>FZD2</i>	Forward	GTGCCATCCTATCTCAGCTACA
	Reverse	CTGCATGTCTACCAAGTACGTG
<i>FZD7</i>	Forward	GTGCCAACGGCCTGATGTA
	Reverse	AGGTGAGAACGGTAAAGAGCG
<i>CPZ</i>	Forward	CTGCTGGTCATCGAGTTCTCC
	Reverse	TGCCACCTCATAGCCGTCA
<i>FBLN2</i>	Forward	ACTGTGGGTTCTTACCACTGT
	Reverse	CCACCTGGGAAAATTCTGACTT
<i>EFEMP2</i>	Forward	AAGAGCCCGACAGCTACAC
	Reverse	AGGGATGGTCAGACACTCGTT
<i>TIMP2</i>	Forward	AAGCGGTCAGTGAGAAGGAAG
	Reverse	GGGGCCGTGTAGATAAACTCTAT
<i>COL8A1</i>	Forward	GGGAGTGCTGCTTACCATTTC
	Reverse	AGCGGCTTGATCCCATAGTAG
<i>FBN1</i>	Forward	TTTAGCGTCCTACACGAGCC
	Reverse	CCATCCAGGGCAACAGTAAGC
<i>β-Actin</i>	Forward	CACCATTGGCAATGAGCGGTTC
	Reverse	AGGTCTTTGCGGATGTCCACGT

Table S3. Sequences of primers used for PCR in ChIP assay.

ChIP sequence		Sequence(5'→3')	Target Sequence
AEBP1 motif 1	Forward	ATTCTTCTCCCCGAGTCTTAA	ATTTC
	Reverse	CAGTTTAAAATCAACGGCAT	
AEBP1 motif 2	Forward	GAGGGCAAGGTTGAGCACCAG	GAAAT
	Reverse	TGCTTCCTGCAGGTCATCT	

Table S4. The explicit data of correlation coefficients and p-values.

	correlation coefficients (spearman)	P _{adj}
LTBP2	0.694293135	4.48535E-51
SRPX2	0.620930224	1.78509E-38
FBLN2	0.679122723	3.5856E-48
HMCN1	0.644018873	3.76723E-42
FBN1	0.653050441	1.03724E-43
THSD4	0.546840035	1.98129E-28
PODN	0.67298752	4.99917E-47
AEBP1	0.668863137	2.34875E-46
LAMA2	0.658674643	1.12388E-44
SRPX	0.557608443	9.45535E-30
COL8A1	0.657134546	1.9104E-44
COL16A1	0.584488899	3.07153E-33
ELN	0.631775546	3.79964E-40
EFEMP2	0.63249372	2.96816E-40
PHLDB1	0.619192977	3.35135E-38
LRP1	0.62168788	1.37521E-38
LTBP3	0.546751742	2.02766E-28
ADAMTS10	0.636316511	7.16892E-41
SH3PXD2B	0.615519794	1.14797E-37
MMP23B	0.570351521	2.36614E-31
SERPINF1	0.639997688	1.73383E-41
TIMP2	0.650822302	2.44798E-43

Table S5. The explicit data of correlation coefficients and p-values.

	correlation coefficients (spearman)	P _{adj}
AEBP1	0.668863137	2.34875E-46
HIC1	0.656396347	2.54641E-44
GLIS2	0.635495858	9.55451E-41
NFATC4	0.616540735	8.30943E-38
TSHZ3	0.612003175	3.78492E-37
TWIST2	0.607700705	1.64749E-36
BNC2	0.59566608	9.39238E-35
PRRX1	0.542980075	5.79071E-28
HEYL	0.542801783	6.06548E-28
TBX18	0.540114655	1.26163E-27
MEOX2	0.520991047	1.91871E-25
FOXS1	0.512652649	1.56459E-24
ZNF469	0.503016743	1.6402E-23
FOXC2	0.498259178	5.04679E-23
TWIST1	0.434481341	4.07387E-17
MKX	0.356216901	2.14762E-11
OSR1	0.355451789	2.40295E-11
FOXL1	0.342218695	1.58612E-10
PRRX2	0.287221893	1.56278E-07
OSR2	0.238675824	2.12673E-05