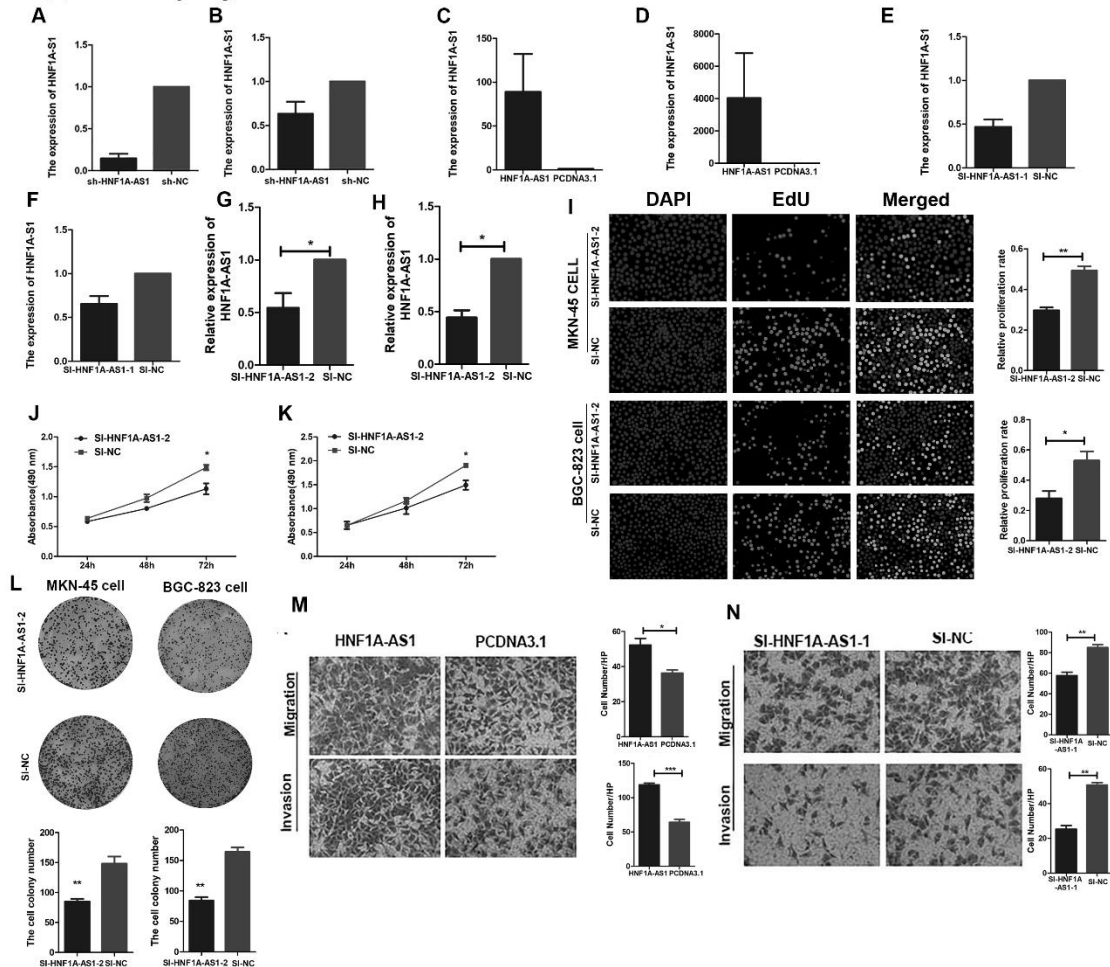


Supplementary Figure 1



Supplementary Figure 1

(A-B). The stably knockdown efficiency of HNF1A-AS1 in MKN-45 cells(A) and BGC-823 cells(B).

(C-D). The overexpression efficiency of HNF1A-AS1 in MKN-45 cells and BGC-823 cells.

(E-F). The knockdown efficiency of SI-HNF1A-AS1-1 in MKN-45 cells and BGC-823 cells.

(G-H). The knockdown efficiency of SI-HNF1A-AS1-2 in MKN-45 cells and BGC-823 cells.

(I). Cell proliferation was evaluated 48 h after transfection with SI-HNF1A-AS1-2 or NC using EdU-incorporation assays.

(J-K). Growth curves of MKN-45 and BGC-823 cells after transfection with SI-HNF1A-AS1-2 or NC were determined by MTS assays.

(L). Colony formation assays were performed to detect the effect of SI-HNF1A-AS1-

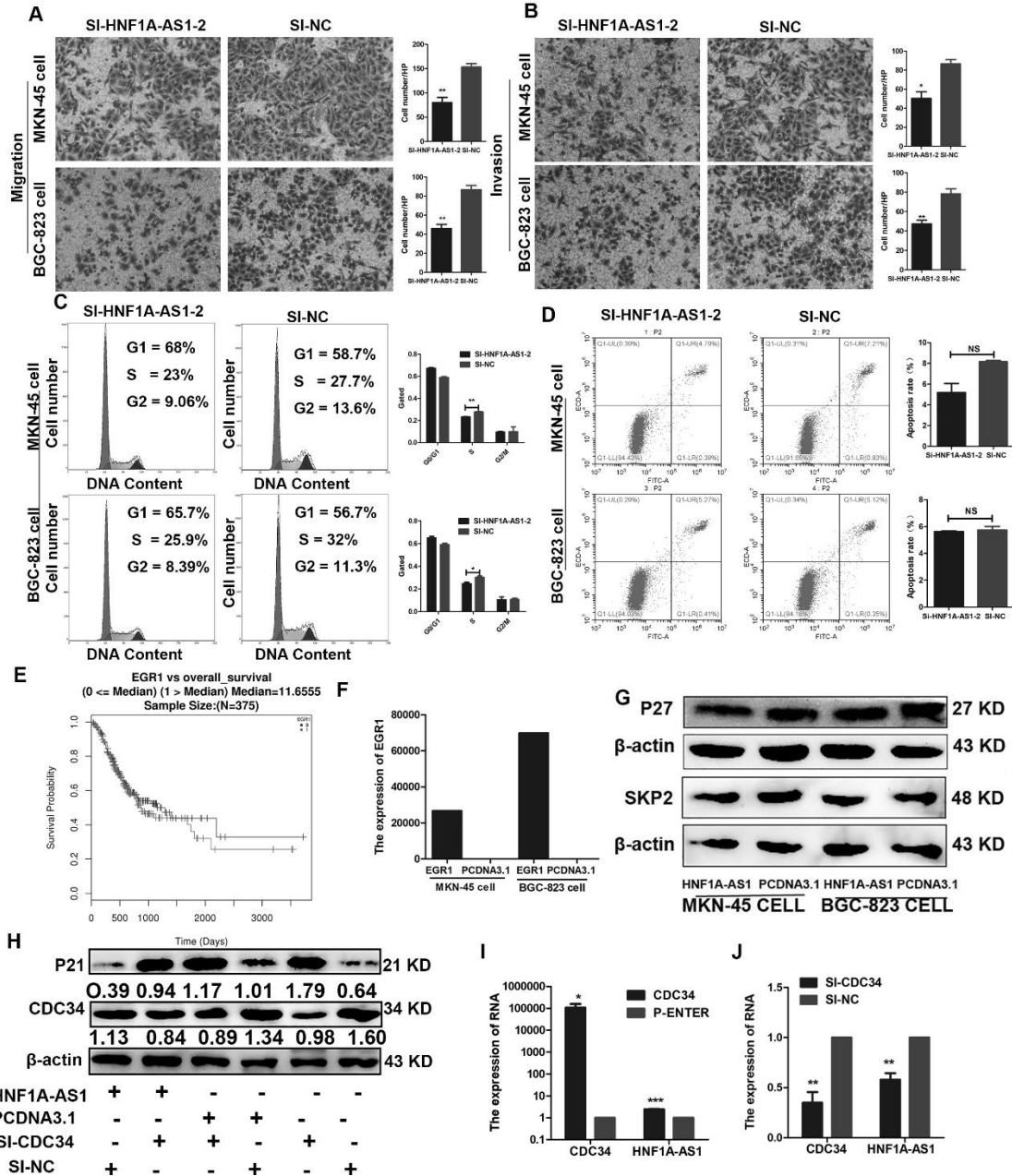
2 on the anchorage-independent growth of MKN-45 and BGC-823 cells.

(M-N). The effect of HNF1A-AS1 upregulation and downregulation on the migration and invasion of MKN-45 cells was evaluated using Transwell assays.

Three independent experiments were performed, and data are shown as mean \pm SD.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

Supplementary Figure 2



Supplementary Figure 2

(A-B). The effect of HNF1A-AS1 downregulation on the migration and invasion of

MKN-45 and BGC-823 cells was evaluated using Transwell assays.

(C). The cell cycle distribution after transfection with SI-HNF1A-AS1-2 or NC was determined by PI staining and flow cytometer analysis in MKN-45 and BGC-823 cells.

(D). The effect of HNF1A-AS1 knockdown on apoptosis in MKN-45 and BGC-823 cells was detected by measuring the percentage of Annexin V-stained cells using flow cytometry.

(E). LinkedOmics database indicated that enhanced EGR1 expression predicted poor patient prognosis.

(F). The overexpression efficiency of EGR1 in MKN-45 cells and BGC-823 cells.

(G). The expressions of P27 and SKP2 were not remarkably altered in HNF1A-AS1 overexpression group when compared with control group.

(H). Western blotting analysis of the p21 in MKN-45 cells overexpressing HNF1A-AS1 or control cells with or without transient transfection with CDC34 siRNA.

(I-J). RT-qPCR assay was performed to detect HNF1A-AS1 expression in CDC34 up- or down-regulating MKN-45 cells.

Three independent experiments were performed, and data are shown as mean \pm SD.

*P < 0.05, ** P < 0.01, *** P < 0.001.

Supplementary Table 1. Sequences of primers.

Name	Sense primer (5'- to 3')	Antisense primer (5'- to 3')
Primers for cloning		
-2000/0	GGGGTACCGTAAGCCCTTTGTGAACTCCA	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
-1014/0	GGGGTACCGCCTCAGACAATCCCAGTCAC	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
-503/0	GGGGTACCAGGAACAGACTTTCCCAAGGTCA	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
-285/0	GG GGTACC CCAGGCCTCAATAGGGGTC	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
-234/0	CC GGTACC ACCCTGACGCTGGAGGCCCA	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
-187/0	CC GGTACC TCCCTTTTGTACCTGAACAAT	GTAGCTAGCCGCCCCAAGCTTGCAAGGA
ELK1	CACAAGCTTCACTCCCCAGCGATGGAC	CGCTCTAGATGGTAGTAGTCATGGCTTCTG
KLF5	CAGAAGCTTATGGCTACAAGGGTGCTGA	GCGGAATTCTCAGTTCTGGTGCCTCTTC

EGR1	CCCAAGCTTAGCTCTCCAGCCTGCGCTG	CACTCTAGATTTCCCCTTTCCCTTTAGCAA
CDC34-3'UTR	CTAGCTAGCCACCACCAGAATAAACTTGC	CCGCTCGAGTTCTCATAAAGTAGTTTTATTAGA

Primers for

ChIP

H1	GACCCAGGACCCACCCCGGC	GAGAGGGGCGGGGACCCCT
H2	CCCTCTCTCCCTGGCTCCTT	TCAACCAGTCCTTGTTCCCTGC
H3	CTGCCTCTGTACCGTCTTCC	AAAGGGATCGGAAAACGCC

Primers for

qPCR

HNF1A-AS1	AATCTCTGCTGTCTCTTTC	AGGGCTCATCCTAACACTTT
CDC34-3'UTR	GGGCCGTTTCCTGACTACTAC	TGAATCCGTCCACTCTGTGC
