SUPPLEMENTARY MATERIALS

Figure S1

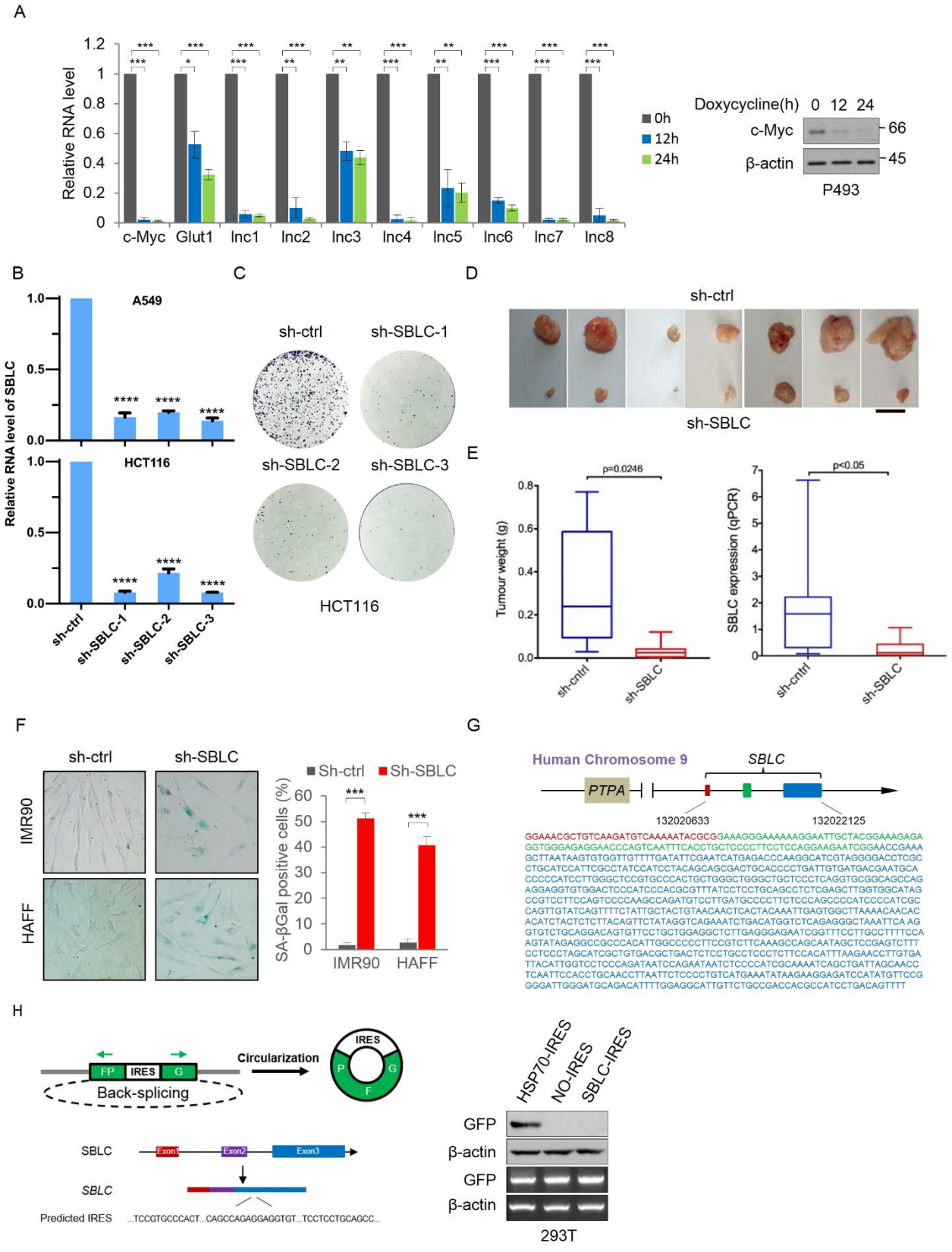


Fig. S1

(A) lncRNA validation. qPCR profiling of lncRNAs 1-8 after induced expression of c-Myc in P493 cells using a doxycycline-driven Tet-Off system. c-Myc mRNA (left) and protein (right) were included as controls. β-actin was used throughout as a blotting control. * $p<0.05$, ** $P<0.01$, *** $P < 0.001$, **** $P < 0.0001$, Students t-test. Mean ± SEM; n=3.

(B) shRNA efficiency. qPCR analysis of SBLC levels in either A549 or HCT116 cells following transduction of three independent shRNAs (sh-SBLC-1, -2, -3) against SBLC compared to an shRNA control (sh-ctrl). **** $p < 0.0001$ by one-way ANOVA, values are mean ± SEM; n = 3.

(C-E) Inhibition of SBLC suppresses tumor growth *in vitro* and *in vivo.* (C) Clonogenic assay following in HCT116 cells following transduction of three independent shRNAs (sh-SBLC-1, -2, -3) against SBLC compared to an shRNA control (sh-ctrl). The results are representative of three experiments. (D) Growth comparison of xenografted HCT116 tumors transduced with either sh-Ctrl or sh-SBLC#3 and injected subcutaneously into the contralateral flanks of nude mice after 3 w. Box and Whisker plot comparing weights of excised tumors. n = 7 tumors/group; statistics, 2 way ANOVA. (E) Relative levels of SBLC expression measured by qPCR in tumors from part D.

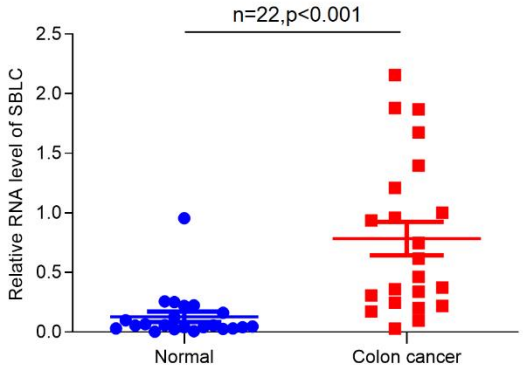
(F) SBLC inhibits senescence induction in non-transformed cells. Photomicrographs of SA β-galactosidase staining in IMR90 or HAFF cells 48 h after shRNA transduction with either control or SBLC-targeting shRNA#3 (left). Quantitation showing significantly increased SA β-galactosidase staining in sh-SBLC#3 treated cells (right). *** $p < 0.001$ by Students t-test, mean ± SEM; n = 3.

(G) Schematic illustration of the intron-exon structure of *SENEBLOC* on chromosome 9. Nucleotide sequences corresponding to the three exons are color highlighted.

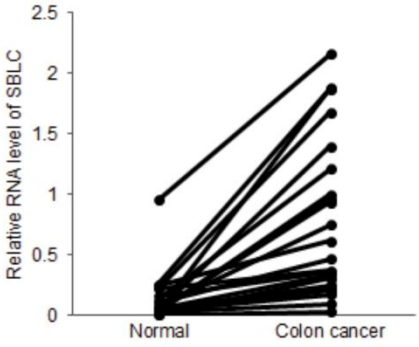
(H) SBLC IRES does not support translation. Schematic illustrating the GFP-IRES translation reporter system (top) and the location of the predicted IRES in SBLC (bottom). GFP present in reverse order is bifurcated by insertion of an IRES-containing sequence. Backsplicing to produce a circular RNA reconstitutes the GFP sequence and allows measurement of IRES-mediated translation. Western blot analysis of transfected 293T cells (right) shows only the positive control HSP70-IRES resulted in GFP expression while no translation was recorded with the SBLC-IRES or the no IRES control. Semi-quantitative RT-PCR of GFP or β-actin from total RNA was used as controls. Data are representative of three independent experiments.

Figure S2

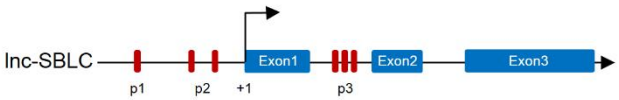
A



B



C



c-Myc binding sites	Position	sequence
P1	-5574 ~ -5564	TGCCACGTGGA
P2-1	-4650 ~ -4640	CAGCACCTGGC
P2-2	-4202 ~ -4192	AGGCCCGTGGT
P3-1	253 ~ 263	AGACACGTGTC
P3-2	292 ~ 302	GACCATGTGCG
P3-3	363 ~ 373	GTCCGCGTGGC

Fig. S2

Analysis of SBLC expression in colon cancer tissues. (A) The relative expression of SBLC RNA was determined using qPCR analysis in 22 paired samples of colorectal cancer versus normal adjacent tissues. **(B)** Pairwise comparisons of SBLC expression in normal versus tumor samples from **(A).**

(C) c-Myc binding sites in *SBLC*. Schematic showing the location of six predicted c-Myc binding sequences in *SBLC* (red; top) with accompanying sequence and location with respect to the transcriptional start site (bottom).

Figure S3

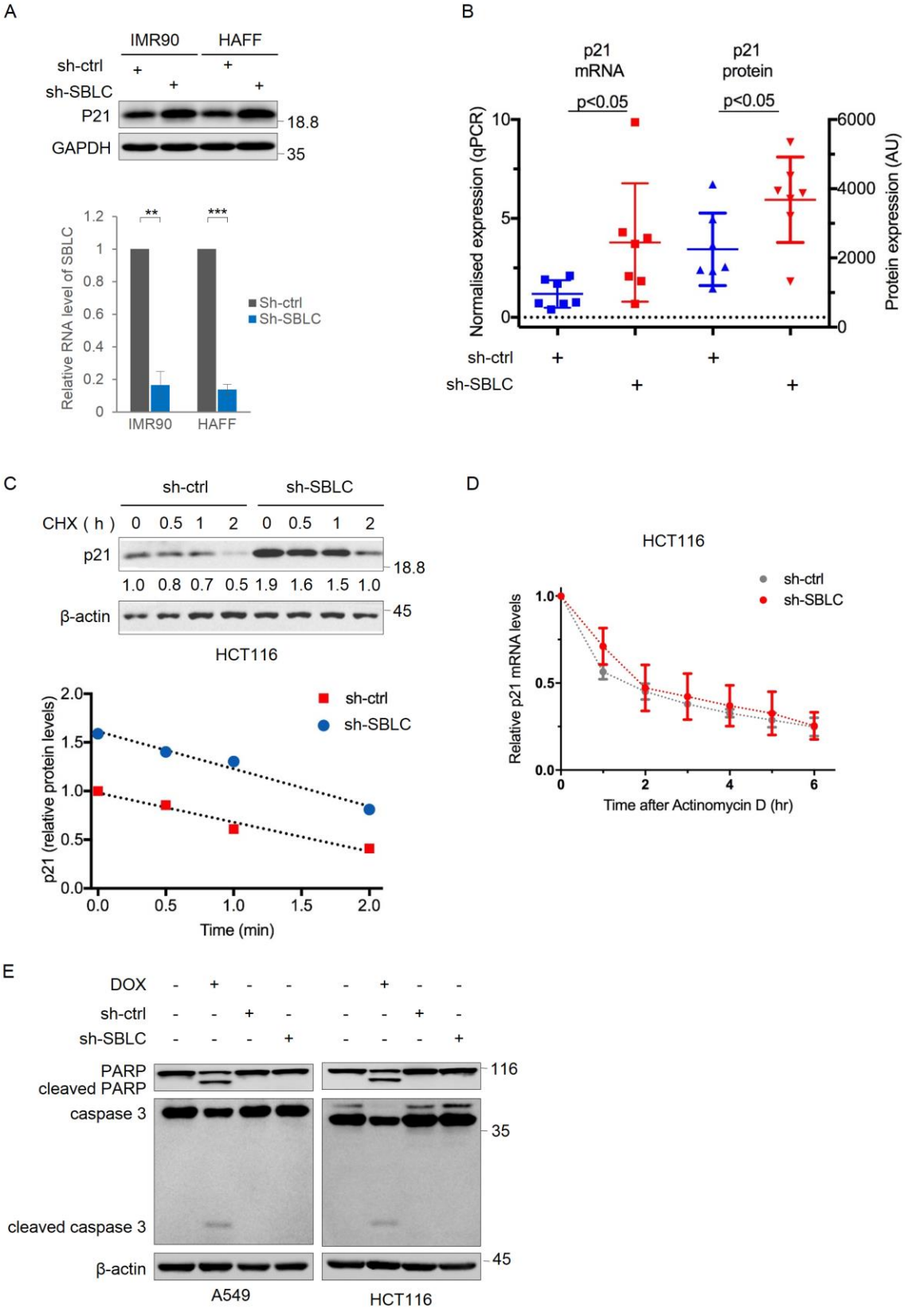

A
IMR90
HAFF
sh-ctrl
sh-SBLC
P21
GAPDH
18.8
35
Relative RNA level of SBLC
Sh-ctrl
Sh-SBLC
B
p21 mRNA
p21 protein
p<0.05
p<0.05
Normalised expression (qPCR)
Protein expression (AU)
C
sh-ctrl
sh-SBLC
CHX (h)
p21
β-actin
HCT116
p21 (relative protein levels)
Time (min)
D
HCT116
Relative p21 mRNA levels
Time after Actinomycin D (hr)
E
DOX
PARP
cleaved PARP
caspase 3
cleaved caspase 3
β-actin
A549
HCT116

Fig. S3

(A) p21 is induced in non-transformed cells after SBLC knockdown. IMR90 and HAFF cells were transduced with sh-Ctrl or sh-SBLC#3 and the levels of p21 along with GAPDH measured using Western blot (top). Depletion of SBLC levels was confirmed by qPCR (bottom). ** $P < 0.01$, *** $P < 0.001$, values are mean ± SEM; n = 3. Results are representative of 3 experiments.

(B) Measurement of p21 in HCT116 sh-control versus sh-SBLC#3 tumors. The levels of p21 mRNA and protein from the experiment shown in Fig. S1D were determined by qPCR and Western blotting, respectively.

(C) SBLC influences p21 protein levels but not stability. HCT116 cells transduced with sh-ctrl or sh-SBLC#3 were treated with 50μM cycloheximide (CHX) with cell lysates subjected to Western blot against p21 or β-actin (top). Comparative rates of p21 degradation in sh-ctrl or sh-SBLC#3 transduced cells are similar as determined by densitometric analysis (bottom). Data are representative of 3 experiments.

(D) SBLC does not influence p21 mRNA transcript stability. HCT116 cells transduced with sh-ctrl or sh-SBLC#3 were treated with actinomycin D (1mg/mL) for the indicated times and p21 mRNA levels determined by qPCR. Values are means ± SEMs; n = 3.

(E) SBLC depletion does not induce apoptosis. Western blotting analysis of PARP and caspase 3 in A549 or HCT116 cells comparing nil addition versus pre-treatment with sh-ctrl or sh-SBLC#3 shRNAs. Doxorubicin (DOX; 1 μg/mL for 24 h) was included as an apoptotic stimulus while β-actin served as a loading control. The results are representative of three experiments.

Figure S4

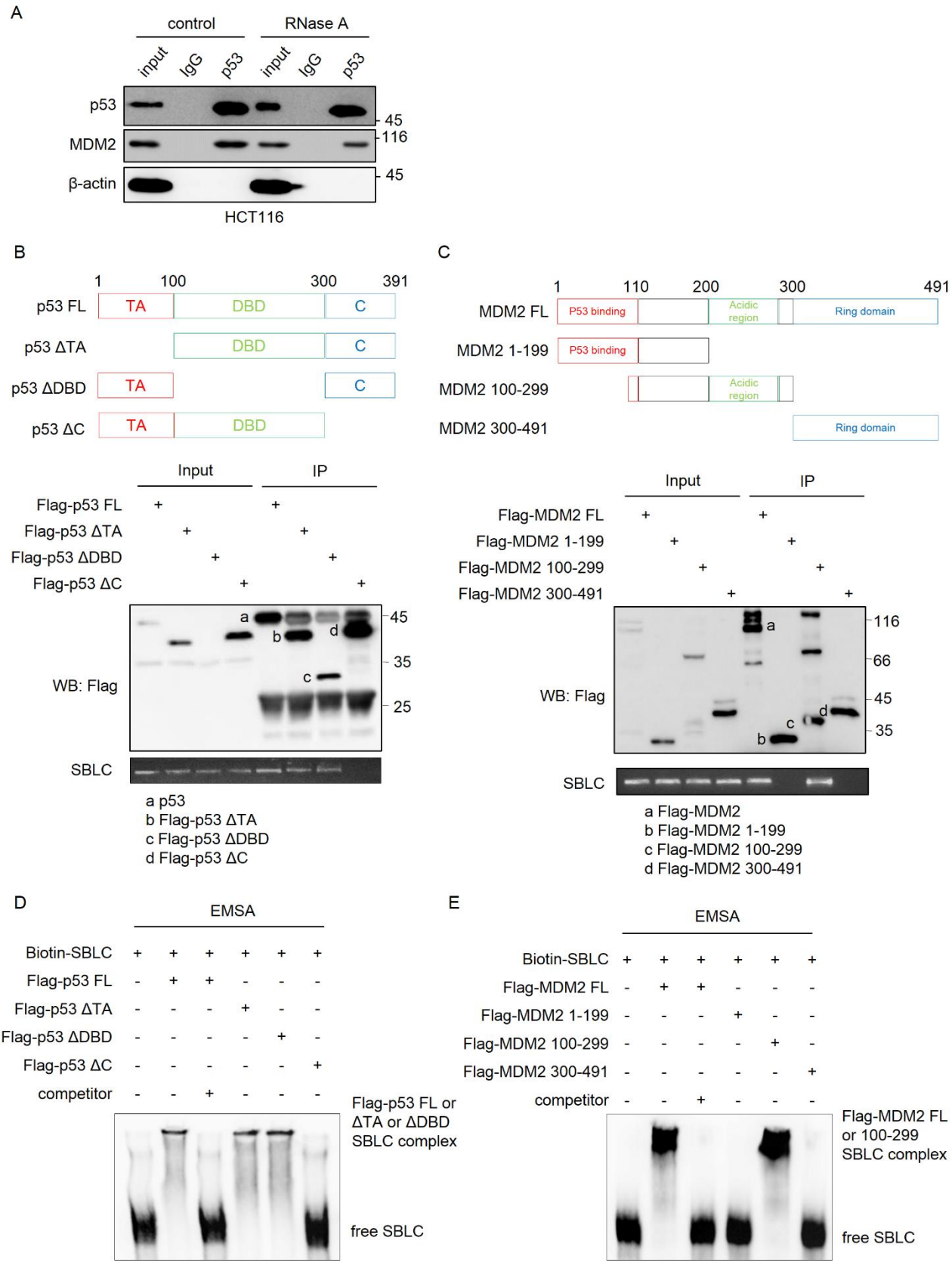

A
control
RNase A
input
IgG
p53
input
IgG
p53
p53
MDM2
β-actin
45
116
45
HCT116
B
1
100
300
391
p53 FL
TA
DBD
C
p53 ΔTA
DBD
C
p53 ΔDBD
TA
C
p53 ΔC
TA
DBD
Input
IP
Flag-p53 FL
Flag-p53 ΔTA
Flag-p53 ΔDBD
Flag-p53 ΔC
WB: Flag
SBLC
45
35
25
a p53
b Flag-p53 ΔTA
c Flag-p53 ΔDBD
d Flag-p53 ΔC
C
1
110
200
300
491
MDM2 FL
P53 binding
Acidic region
Ring domain
MDM2 1-199
P53 binding
MDM2 100-299
Acidic region
MDM2 300-491
Ring domain
Input
IP
Flag-MDM2 FL
Flag-MDM2 1-199
Flag-MDM2 100-299
Flag-MDM2 300-491
WB: Flag
SBLC
116
66
45
35
a Flag-MDM2
b Flag-MDM2 1-199
c Flag-MDM2 100-299
d Flag-MDM2 300-491
D
EMSA
Biotin-SBLC
Flag-p53 FL
Flag-p53 ΔTA
Flag-p53 ΔDBD
Flag-p53 ΔC
competitor
Flag-p53 FL or ΔTA or ΔDBD SBLC complex
free SBLC
E
EMSA
Biotin-SBLC
Flag-MDM2 FL
Flag-MDM2 1-199
Flag-MDM2 100-299
Flag-MDM2 300-491
competitor
Flag-MDM2 FL or 100-299 SBLC complex
free SBLC

Figure S4

(A) RNase treatment disrupts the interaction between p53 and MDM2. Cell lysates from HCT116 cells were untreated or treated with RNAse A before performing immunoprecipitations against p53 or a control. The relative amounts of p53 and co-precipitated MDM2 were assessed by Western blot. β-actin was included as a control.

(B) SBLC interacts with the C-terminal domain of p53. Schematic showing the domain organization of the p53 protein along with corresponding Flag-tagged expression constructs used for mapping experiments (top). Individual expression constructs were used to transfect HCT116 cells before cell lysis and RNA immunoprecipitation assay. Equal proportions of input and IP samples were subjected to Western blotting with anti-Flag antibodies (top) and semi-quantitative PCR to detect SBLC (bottom). Key (a-d) show recombinant protein bands, other bands are non-specific. Results are representative of 3 experiments.

(C) SBLC interacts with the central acidic domain of MDM2. Schematic showing the domain organization of the MDM2 protein along with corresponding Flag-tagged expression constructs used for mapping experiments (top). The experiment from (A) was repeated with individual MDM2 expression constructs. Results are representative of 3 experiments.

(D-E) Gel shift assays confirm that SBLC interacts with the C-terminal domain of p53 and the central acidic domain of MDM2. EMSAs were conducted between SBLC and purified FL Flag-p53 or the p53-domain constructs (△TA, △DBD, △C) **(D)** or between SBLC and FL Flag-MDM2 or the MDM2 domain constructs (1-199, 100-299, 300-491) **(E)**.

Figure S5

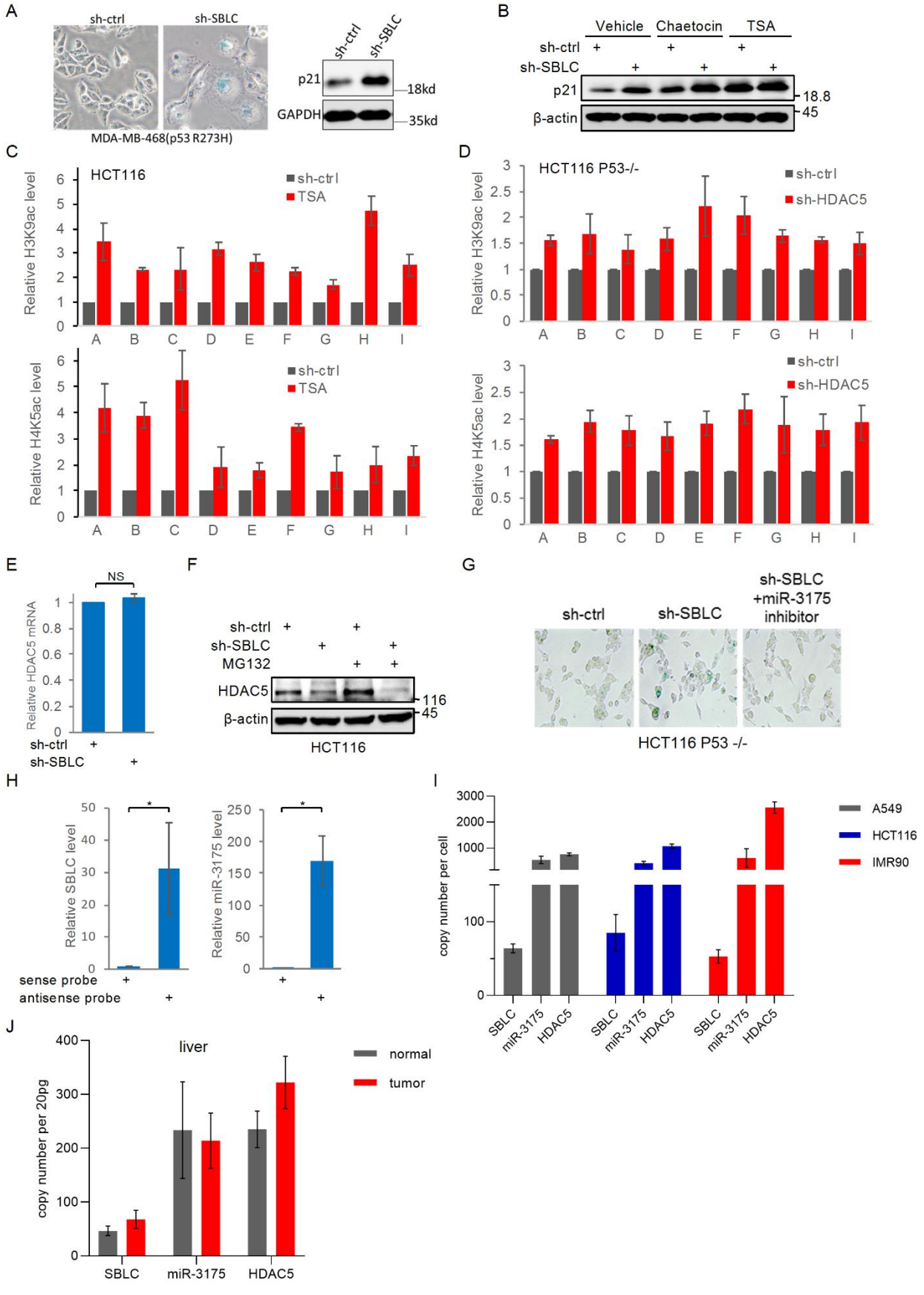

A
sh-ctrl
sh-SBLC
MDA-MB-468(p53 R273H)
p21
GAPDH
18kd
35kd
B
Vehicle
Chaetocin
TSA
sh-ctrl
sh-SBLC
p21
β-actin
18.8
45
C
HCT116
sh-ctrl
TSA
Relative H3K9ac level
Relative H4K5ac level
D
HCT116 P53-/-
sh-ctrl
sh-HDAC5
E
NS
Relative HDAC5 mRNA
F
MG132
HDAC5
β-actin
116
45
HCT116
G
sh-SBLC +miR-3175 inhibitor
HCT116 P53 -/-
H
Relative SBLC level
Relative miR-3175 level
sense probe
antisense probe
I
copy number per cell
A549
HCT116
IMR90
SBLC
miR-3175
HDAC5
J
liver
normal
tumor
copy number per 20pg

Figure S5

(A) SBLC inhibits senescence induction in p53 mutant cells. Photomicrographs of SA β-galactosidase staining in MDA-MB-468 cells 48 h after shRNA transduction with either control or SBLC-targeting shRNA#3 (left). p21 protein levels were measured by Western blotting. GAPDH was included as a loading control. Representative of 3 experiments.

(B) Effect of methyltransferases and histone deacetylase inhibitors in combination with SBLC knockdown on p21 expression. Control or sh-SBLC transduced HCT116 cells (p53-/-) were pre-treated for 24h with 0.5 μM Chaetocin or 1 μM Trichostatin A (TSA) and p21 protein levels measured by Western blotting. β-actin was included throughout as a loading control. Representative of 3 experiments.

(C) Chromatin repression at the p21 promoter is reversed with HDACi treatment. HCT116 were treated with 1 μM TSA for 24 hr before conducting ChIP assays using anti-H3K9ac or H4K5ac antibodies along with normal rabbit IgG as per Fig. 5B. **(D)** The experiment in (B) was repeated in HCT116 p53 -/- cells after shRNA against HDAC5.

(E) qPCR analysis of HDAC5 mRNA in HCT116 cells after sh-SBLC. NS, not significant, Student's t-test. Mean ± SEM; n=3.

(F) HCT116 cells transduced with either sh-ctrl or sh-SBLC#3 were treated with vehicle or 20μM MG132 for 4h before Western blotting against HDAC5. β-actin was included throughout as a loading control. Representative of 3 experiments.

(G) Inhibition of miR-3175 antagonises senescence induction caused by SBLC depletion. HCT116 p53 -/- cells were treatment with sh-SBLC#3 alone and in combination with transfection of miR-3175 inhibitors before conducting by SA-β-galactosidase staining.

(H) RNA pulldown assays using biotin-labeled sense or antisense SBLC DNA probes conducted with HCT116 cells before analysis by qPCR (right). Mean ± SEM, n=3, * P <0.05 Student's t-test.

(I, J) Absolute expression levels of SBLC, miR-3175 and HDAC5 mRNA determined from A549, HCT116 and IMR90 cell lines **(I)** and paired normal and cancer liver tissues **(J)** determined using a standard curve-based qPCR method. Mean ± SEM, n=3.

Figure S6

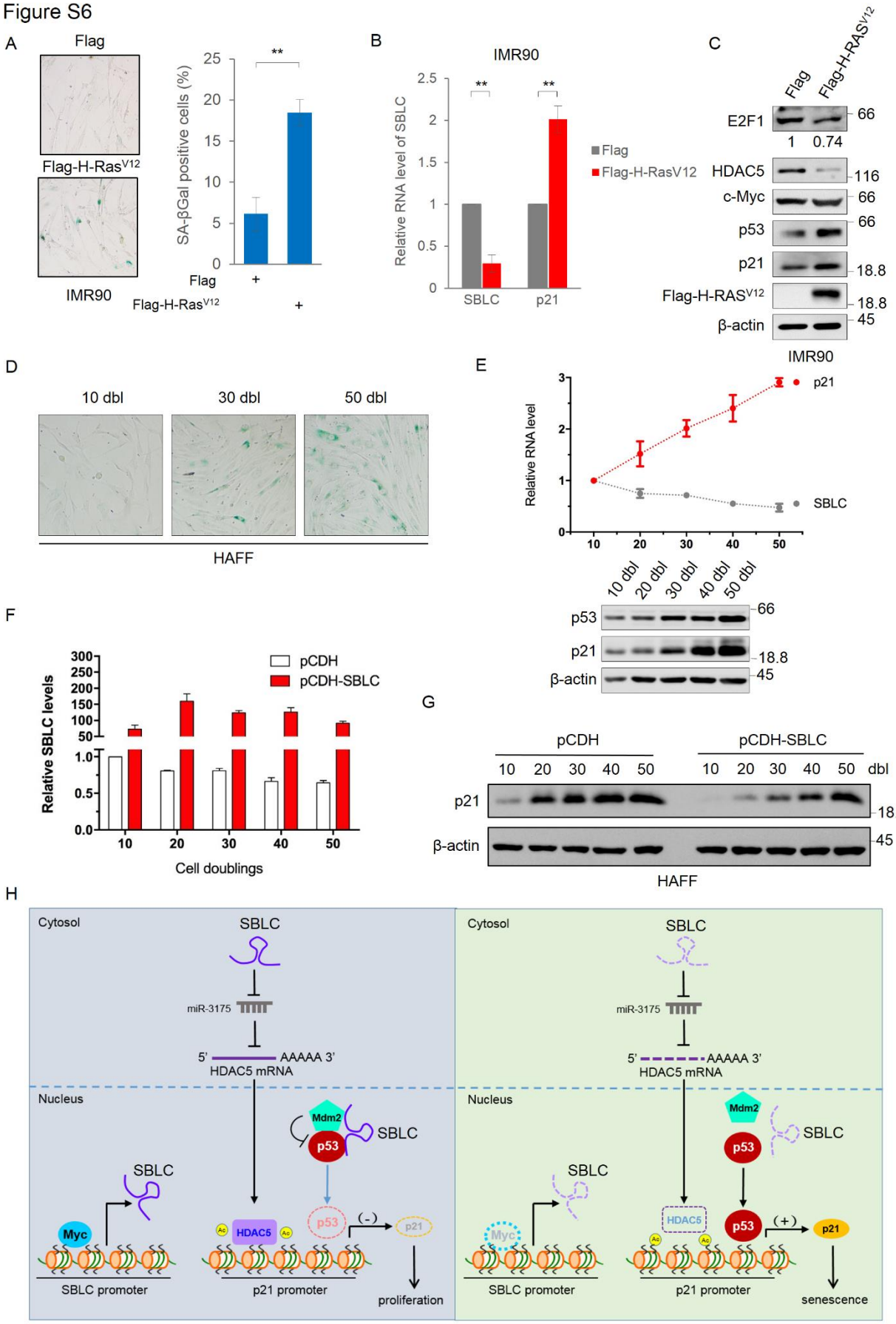

A
Flag
Flag-H-RasV12
IMR90
SA-βGal positive cells (%)
Flag
Flag-H-RasV12
B
IMR90
Relative RNA level of SBLC
Flag
Flag-H-RasV12
SBLC
p21
C
Flag
Flag-H-RASV12
E2F1
1 0.74
HDAC5
c-Myc
p53
p21
Flag-H-RASV12
β-actin
D
10 dbl
30 dbl
50 dbl
HAFF
E
IMR90
Relative RNA level
p21
SBLC
10 dbl
20 dbl
30 dbl
40 dbl
50 dbl
p53
p21
β-actin
F
Relative SBLC levels
pCDH
pCDH-SBLC
Cell doublings
G
pCDH
pCDH-SBLC
dbl
p21
β-actin
HAFF
H
Cytosol
SBLC
miR-3175
5' AAAAA 3'
HDAC5 mRNA
Nucleus
Mdm2
p53
SBLC
Myc
HDAC5
p21
SBLC promoter
p21 promoter
proliferation
senescence

Figure S6

(A-C) SBLC is induced during oncogene induced senescence. (A) IMR90 fibroblasts were transfected with a control (Flag empty vector) or Flag-H-RasV12 for 6 d before staining for SA β-galactosidase. Representative photomicrographs are shown on the left with quantitation at right showing significantly increased SA β-galactosidase staining in H-RasV12 transfected cells (right). ** $p < 0.01$, paired t-test, values are mean ± SEM; n = 3. (B) Quantitation of SBLC and p21 RNA levels using qPCR measurements in cells from (A). ** $p < 0.01$by Students t-test, values are mean ± SEM; n = 3.(C) Western blotting analysis of the indicate proteins in cells from (A). The results are representative of three experiments.

(D-G) SBLC levels diminish during replicative senescence. HAFF fibroblasts were cultured out to 50 doublings with samples collected every 10 doublings. (D) Representative photomicrographs showing progressively increased SA β-galactosidase staining.(E) Quantitation of SBLC and p21 RNA levels using qPCR measurements (left) along with assessment of p53 and p21 protein levels by blotting (right). iβ-actin served as a loading control throughout. (F) HAFF cells were transfected with control (pCDH) or SBLC (pCDH-SBLC) before performing the grow out experiment to 50 doublings. Relative SBLC levels were measured using qPCR. (G) Western blotting analysis was performed on the cells from (F) to measure p21 protein level.

(H) Working model illustrating dual mechanisms of p21 repression by SBLC.

Table S1. Up-regulated lncRNAs

Name	Gene Symbol	RNA length	Site
lnc1	RP11-305N23.1	764	chr11:119,381,835-119,475,708
lnc2	KDM4A-AS1	686	chr1:43,699,923-43,707,341
lnc3	LINC01126	1646	chr2:43,227,210-43,228,855
lnc4	AL773604.8	1031	chr21:44,802,576-44,804,717
lnc5	RP11-343H5.6	358	chr1:206,634,649-206,635,622
lnc6	NR_048535	2060	chr21:44,269,335-44,299,699
lnc7	NR_034160	1156	chr11:119,252,487-119,369,944
lnc8	RP11-344B5.4	966	chr9:129,258,354-129,259,846

Table S2. SBLC potential binding miRNA

miRNA	Number of predicted binding sites in SBLC	Number of predicted binding sites in HDAC5
miR-1321	4	3
miR-4756	4	3
miR-3175	4	2
miR-4739	5	3

Table S3. Antibodies

Antibody	Company	Catalog #	Species	Application
c-Myc	Cell Signaling Technology	9402	Rabbit	Western Blotting and ChIP
GAPDH	CMCTAG	AT0002	Mouse	Western Blotting
β-actin	CMCTAG	AT0001	Mouse	Western Blotting
GFP	Abmart	M20004	Mouse	Western Blotting
p27	abcam	ab32034	Rabbit	Western Blotting
p16	abcam	ab108349	Rabbit	Western Blotting
p21	Sigma	P1484	Mouse	Western Blotting
p53	Santa Cruz Biotechnology	SC-126	Mouse	Western Blotting and Immunofluorescence
Sp1	Proteintech	219962-1-AP	Rabbit	Western Blotting

Sp3	Proteintech	26584-1-AP	Rabbit	Western Blotting
CHK2	Cell Signaling Technology	2662	Rabbit	Western Blotting
Mdm2	Santa Cruz Biotechnology	SC-965	Mouse	Western Blotting and Immunofluorescence
Pirh2	abcam	ab189907	Rabbit	Western Blotting
Cop1	ABclonal	A10463	Rabbit	Western Blotting
HA-tag	Sigma	H-9658	Mouse	Western Blotting
Flag-Tag	Sigma	F-3165	Mouse	Western Blotting
PARP	Santa Cruz Biotechnology	SC-8007	Mouse	Western Blotting
caspase 3	Cell Signaling Technology	9665	Rabbit	Western Blotting
HDAC1	Proteintech	10197-1-AP	Rabbit	Western Blotting
HDAC2	Proteintech	12922-3-AP	Rabbit	Western Blotting
HDAC3	Proteintech	10255-1-AP	Rabbit	Western Blotting
HDAC4	Signalway	21141-1	Rabbit	Western Blotting
HDAC5	Proteintech	16166-1-AP	Rabbit	Western Blotting
HDAC6	Immunoway	YT2147	Rabbit	Western Blotting
HDAC7	Immunoway	YT2119	Rabbit	Western Blotting
HDAC8	Proteintech	17548-1-AP	Rabbit	Western Blotting
HDAC9	Immunoway	YT2149	Rabbit	Western Blotting
HDAC10	Immunoway	YT2146	Rabbit	Western Blotting
E2F1	Proteintech	12171-1-AP	Rabbit	Western Blotting
USF1	Proteintech	22327-1-AP	Rabbit	Western Blotting
MAZ	Proteintech	21068-1-AP	Rabbit	Western Blotting
CREB1	Proteintech	12208-1-AP	Rabbit	Western Blotting
E2F1	abcam	ab179445	Rabbit	ChIP
H3K9ac	Merck Millipore	07-352	Rabbit	ChIP
H4K5ac	Merck Millipore	ABE535	Rabbit	ChIP

Table S4: Reagents

Reagent	Company
MG132	Merck
Cycloheximide	Sigma-Aldrich
M2 beads	Sigma-Aldrich

A/G beads	Thermo Fisher Scientific
Streptavidin beads	Invitrogen
Doxycycline	Sigma-Aldrich
Trypsin	Gibco
FBS	Biological Industries
DMEM	Invitrogen
rapamycin	Sangon
Metformin hydrochloride	MedChemExpress
Spermidine	Sigma
Resveratrol	Sigma

Table S5. Plasmids

Application	Plasmids			
Lentiviral production	pLKO.1	pRSV-Rev	pCMV-VSV-G	pCMV-Gag-Pol
pLKO.1 constructs	pLKO.1-sh-SBLC-1	pLKO.1-sh-SBLC-2	pLKO.1-sh-SBLC-3	pLKO.1-sh-lnc1
	pLKO.1-sh-lnc2	pLKO.1-sh-lnc3	pLKO.1-sh-lnc4	pLKO.1-sh-lnc5
	pLKO.1-sh-lnc6	pLKO.1-sh-lnc7	pLKO.1-sh-c-Myc	pLKO.1-sh-HDAC5
	pLKO.1-sh-E2F1	pLKO.1-sh-p21		
pSIN constructs	pSIN-GFP	pSIN-c-Myc		
pGL3 reporters	pGL3-Basic	pGL3-P1	pGL3-P2	pGL3-P3
pCDH constructs	pCDH-CMV	pCDH-SBLC		
p3 constructs	p3xFLAG	p3Xflag-p53	p3Xflag-HDAC5	p3Xflag-p53ΔTA
	p3Xflag-p53ΔDBD	p3Xflag-p53ΔC	p3Xflag-MDM2	p3Xflag-H-RasV12
pRK5 constructs	pRK5-flag-MDM2	pRK5-flag-MDM2 1-199	pRK5-flag-MDM2 100-299	pRK5-flag-MDM2 300-491
psiCHECK2 constructs	psiCHECK-2	psiCHECK-2-3175-1	psiCHECK-2-3175-2	psiCHECK-2-3175-1-mut
	psiCHECK-2-SBLC	psiCHECK-2-SBLC-mut		
Other constructs	pMD2.G	psPAX2	HA-Ubiquitin	HA-tag
	HA-MDM2			

Table S6. shRNA sequences

Name	Application	Sequence (5'-3')
sh-lnc1-F	plasmid construction	ccggAAAGATGAGTCAGGAACTCggatccGAGTTCCTGACTCATCTTTttttg
sh-lnc1-R	plasmid construction	aattcaaaaaAAAGATGAGTCAGGAACTCggatccGAGTTCCTGACTCATCTTT
sh-lnc2-F	plasmid construction	ccggGGGACCTGGCAAAGTACTTggatccAAGTACTTTGCCAGGTCCCttttg
sh-lnc2-R	plasmid construction	aattcaaaaaGGGACCTGGCAAAGTACTTggatccAAGTACTTTGCCAGGTCCC
sh-lnc3-F	plasmid construction	ccggGGAGATAACATGTGGACATggatccATGTCCACATGTTATCTCCttttg
sh-lnc3-R	plasmid construction	aattcaaaaaGGAGATAACATGTGGACATggatccATGTCCACATGTTATCTCC
sh-lnc4-F	plasmid construction	ccggGCTGTGAGAAATGTGGTTTggatccAAACCACATTTCTCACAGCttttg
sh-lnc4-R	plasmid construction	aattcaaaaaGCTGTGAGAAATGTGGTTTggatccAAACCACATTTCTCACAGC
sh-lnc5-F	plasmid construction	ccggGGCAAAGCCTGAACTAGAAggatccTTCTAGTTCAGGCTTTGCCttttg
sh-lnc5-R	plasmid construction	aattcaaaaaGGCAAAGCCTGAACTAGAAggatccTTCTAGTTCAGGCTTTGCC
sh-lnc6-F	plasmid construction	ccggGCACTCCTGTGGTCTACATggatccATGTAGACCACAGGAGTGCttttg
sh-lnc6-R	plasmid construction	aattcaaaaaGCACTCCTGTGGTCTACATggatccATGTAGACCACAGGAGTGC
sh-lnc7-F	plasmid construction	ccggGCTGGAATCCAGGAAGAATggatccATTCTTCCTGGATTCCAGCttttg
sh-lnc7-R	plasmid construction	aattcaaaaaGCTGGAATCCAGGAAGAATggatccATTCTTCCTGGATTCCAGC
sh-SBLC-1F	plasmid construction	ccggGGAAGAATCGGAACCGAAAggatccTTTCGGTTCCGATTCTTCCttttg
sh-SBLC-1R	plasmid construction	aattcaaaaaGGAAGAATCGGAACCGAAAggatccTTTCGGTTCCGATTCTTCC
sh-SBLC-2F	plasmid construction	ccggGCAATAGCTCCGAGTCTTTggatccAAAGACTCGGAGCTATTGCttttg
sh-SBLC-2R	plasmid construction	aattcaaaaaGCAATAGCTCCGAGTCTTTggatccAAAGACTCGGAGCTATTGC
sh-SBLC-3F	plasmid construction	ccggGGTCTCAGAGGGCTAAATTCAggatccTGAATTTAGCCCTCTGAGACCttttg
sh-SBLC-3R	plasmid construction	aattcaaaaaGGTCTCAGAGGGCTAAATTCAggatccTGAATTTAGCCCTCTGAGACC

Table S7. PCR primers

Name	Application	Sequence (5'-3')
qRT-lnc1-F/R	qPCR	AATATGCTTAAGGGTCTGGCC/ TGGTAGCACAGAAGGGAGG
qRT-lnc2-F/R	qPCR	CCTGCACACAAAGGAAAGATG/ CGCTGGCCTTAATGTCACTT
qRT-lnc3-F/R	qPCR	GACCAGTTTCACTTTTAGCACC/ CAAAGAACAAACCAGACCACAG
qRT-lnc4-F/R	qPCR	AGTGAGTGGGTGTGCTTTCC/ GGGGAGAGACTGCCATCTTG
qRT-lnc5-F/R	qPCR	GACGCTCCCACGGACTTAG/ AGGCTTTGCCGCTTCATGC
qRT-lnc6-F/R	qPCR	GCTGGCACATGTTGATGATG/ TTGGAGAAGGTGGACGCCAG
qRT-lnc7-F/R	qPCR	AGCGAGATGAAGAGTTTACACC/ ACCAAATCCCCAGACCAATG

qRT-SBLC-F/R	qPCR and RT-PCR	CACACATCTACTCTCTTACAGTTCTAT/ TTATCTGGGAGGACCAATGTAATC
c-Myc-F/R	qPCR	CTGAGGAGGAACAAGAAGATGAG/ TGTGAGGAGGTTTGCTGTG
β-actin-F/R	qPCR and RT-PCR	GACCTGACTGACTACCTCATGAAGAT/ GTCACACTTCATGATGGAGTTGAAGG
Glut1-F/R	qPCR	CAGATGATGCGGGAGAAGAA/ CGAAGATGCTCGTGGAGTAATA
p21-F/R	qPCR	GGCGGCAGACCAGCATGACAGATT/ GCAGGGGGCGGCCAGGGTAT
U6-F/R	qPCR	GCTTCGGCAGCACATATACTAAAAT/ CGCTTCACGAATTTGCGTGTCAT
Common miRNA reverse	qPCR	CAGTGCGTGTCGTGGAGT
miR-3175	RT-PCR	GTCGTATCCAGTGCGTGTCGTGGAGTCGGCAATTGCACTGGATACGACACGTCA CTGC
miR-3175 F	qPCR	GTTCGGGGAGAGAACGC
IRES GFP constructs-F/R	plasmid construction	GGAATTCCCCCCATCCTTGGGCTCC/ GGATATCCCACCAAGCTCGAGAGGC
IRES GFP-F/R	RT-PCR	AGTGCTTCAGCCGCTACCC/ GTTGTACTCCAGCTTGTGCC

Table S8. Probes and primers

Name	Application	Sequence (5'-3')
p21 promoter-A-F/A-R	ChIP	CTCAATGCCACCACCTTAAC/ AGCCAGGATGAATTGGTAAAG
p21 promoter-B-F/B-R	ChIP	CCTGAAAGCAGAGGGGCTTC/ CATCCAAAGGGCTGGTTGTC
p21 promoter-C-F/C-R	ChIP	ATTCTAACAGTGCTGTGTCC/ CTGGACACATTTCCCCAC
p21 promoter-D-F/D-R	ChIP	CGGTTGTATATCAGGGCCGC/ TCCGGCTCCACAAGGAACTG
p21 promoter-E-F/E-R	ChIP	CAGCTGCCGAAGTCAGTTCC/ TCACCTCCTCTGAGTGCCTC
p21 promoter-F-F/F-R	ChIP	GCACACGGTGTCTCTAAGTG/ GACCAGGGATTCCTGTACTTG
p21 promoter-G-F/G-R	ChIP	GCTCAAATGATTCTCCCACCTC/ CAGAGAGGCCCATCACAATC
p21 promoter-H-F/H-R	ChIP	GGCTGGAGGAACTGTCAGACTG/ CCCCCCAAATATGTGTGAATTGCC
p21 promoter-I-F/I-R	ChIP	CCCGTGTTCTCCTTTTCCTCTC/ TACCACCCAGCGGACAAGTGG
c-Myc-p1F/p1R	ChIP	CACGATGAGGAAGCAAATAGACC/ CCGTGGGATCATCTGATACCC
c-Myc-p2-1F/1R	ChIP	CTTCTGCGTCTGCTTGTCTT/ GCTTTGAACCCTGGTCTGTATT
c-Myc-p2-2F/2R	ChIP	GCTCTGCTCATCTGTGTGAT/ GGGAAGCCCAATGACCTC
c-Myc-p3-1F/1R	ChIP	CCTCCCATTGGCCGCGGTT/ GCGGCTCCCGGGGACACGTG
c-Myc-p3-2F/2R	ChIP	CCGCCCAGAATTTGACAGGG/ CCCGGCTTCGTTCCCCG
c-Myc-p3-3F/3R	ChIP	AACGAAGCCGGGCGGAG/ AAAGGAAGAGGGGGTGCC
E2F1-B1F/B1R	ChIP	GACCAGGGTTCAAAGCCAGA/ CAGGAGAGCTGGCTACACAC
E2F1-B2F/B2R	ChIP	CCGGGAGCCGCCCAGAATTTG/ CTCCGCCCGGCTTCGTTCC
SBLC-1-sense	Biotin probe	CTTCCTCCAGGAAGAATCGGAACCGAAAGC

SBLC-2-sense	Biotin probe	AGCCAGCAATAGCTCCGAGTCTTTCCTCCC
SBLC-3-sense	Biotin probe	TGACATGGTCTCAGAGGGCTAAATTCAAGG
SBLC-1-antisense	Biotin probe	GCTTTCGGTTCCGATTCTTCCTGGAGGAAG
SBLC-2-antisense	Biotin probe	GGGAGGAAAGACTCGGAGCTATTGCTGGCT
SBLC-3-antisense	Biotin probe	CCTTGAATTTAGCCCTCTGAGACCATGTCA
SBLC-antisense-F	ISH	GGAAACGCTGTCAAGATGTC
SBLC-antisense-R	ISH	TAATACGACTCACTATAGGGAAAACTGTCAGGATGGCGTG