

Figure S1. Transfection efficiency of miR-143-3p mimics and inhibitors in OVCAR-3 cells. (A) Cells were transfected with miR-mimics or miR-NC for 12 h. miR-143-3p expression was detected by RT-qPCR. (B) Cells were transfected with miR-inhibitors or Inh-NC for 12 h. miR-143-3p expression was detected by RT-qPCR. (C) Cells were transfected with Cy3 dye-labeled miR-143-3p mimics using X-tremeGENE siRNA Transfection Reagent. After 24 h of incubation, the supernatant was discarded and the cells were washed twice with PBS and 1X fresh culture medium. Images were obtained via analysis with a fluorescence microscope (scale bar, 50 μ M) and the number of positive cells was counted. The transfection efficiency was ~90%. * P <0.05 vs. Inh-NC; ** P <0.01 vs. miR-NC. miR, microRNA; NC, negative control; miR-inhibitors, anti-miR-143-3p; Inh-NC, inhibitors negative control; miR-mimics, miR-143-3p mimics; phase, phase contrast image; RT-qPCR, reverse transcription-quantitative PCR.

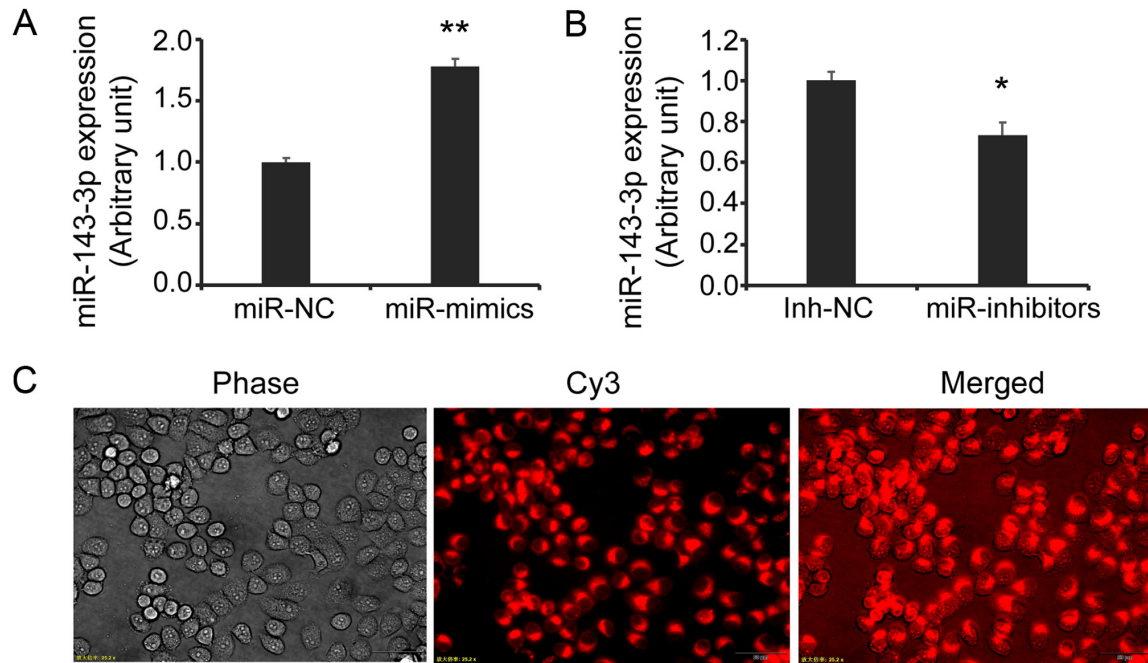


Figure S2. Expression of CSTB in ovarian cancer cells transfected with siRNA. The expression of CSTB mRNA and protein were detected by reverse transcription-quantitative PCR and western blotting, respectively. (A) CSTB mRNA expression in OVCAR-3 cells. (B) CSTB mRNA expression in SK-OV-3 cells. (C) CSTB protein expression in OVCAR-3 cells. (D) CSTB protein expression in SK-OV-3 cells. n=3; **P<0.01 vs. si-NC. Blank, non-transfected cells; si-NC, cells transfected with negative control-small interfering RNA; si-CSTB, cells transfected with cystatin B-small interfering RNA.

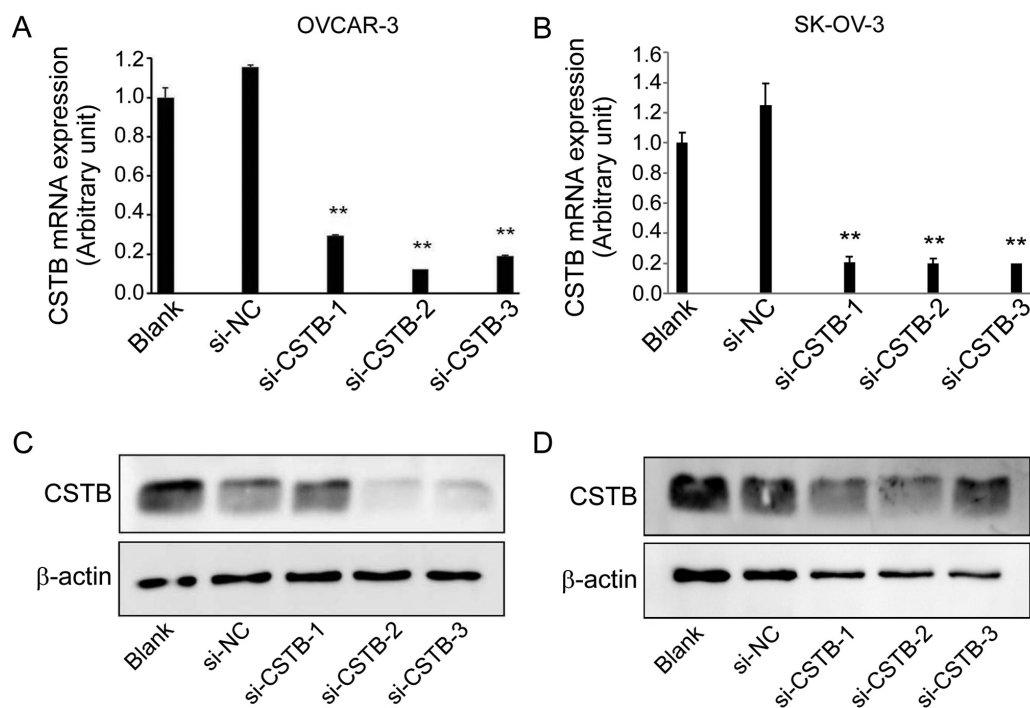


Figure S3. Analysis of OVCAR-3 cell proliferation. (A) Determination of proliferation of cells transfected with si-CSTB (n=3; *P<0.05 vs. si-NC). (B) Detection of the cell cycle by flow cytometry. (C) Cell population in each phase. OD, optical density; Blank, non-transfected cells; Reagent, cells treated with transfection reagent; si-NC, cells transfected with negative control-small interfering RNA; si-CSTB, cells transfected with cystatin B-small interfering RNA.

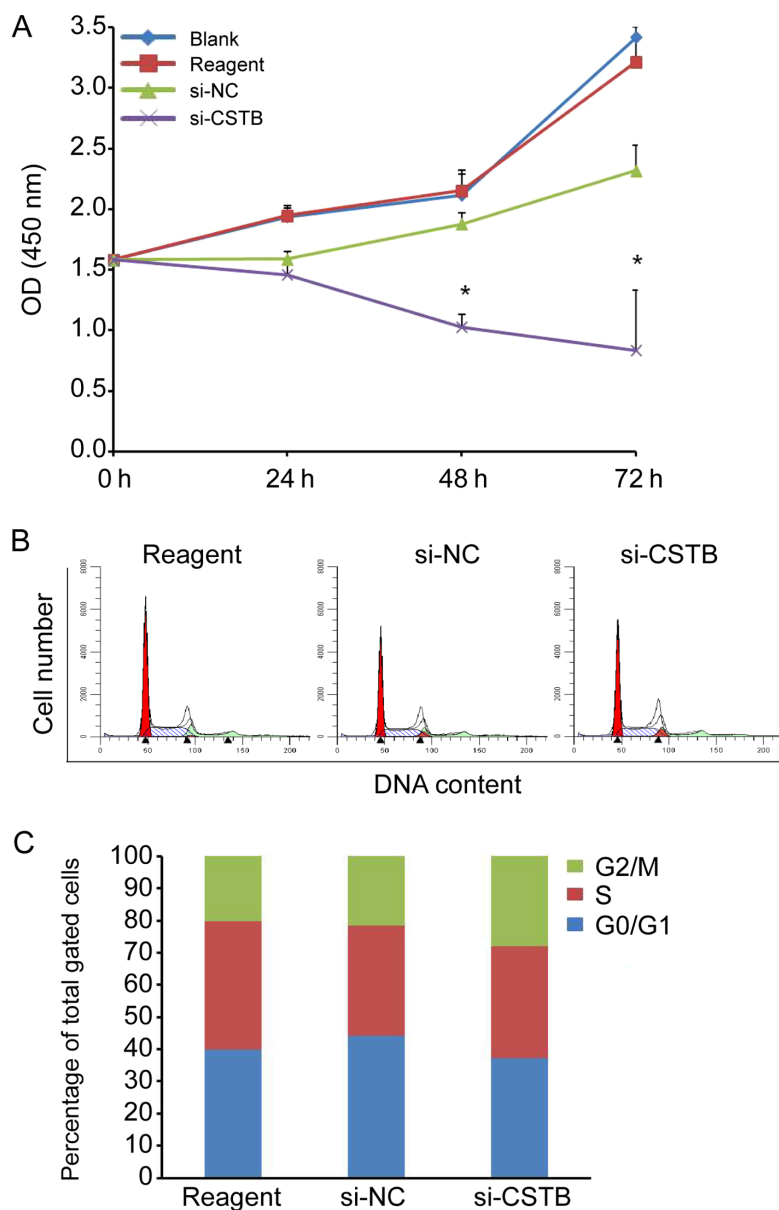


Table S1. Sequences of shRNA, miRNA and primers.

Primer	Sequence (5'→3')	Target position
CSTB-shRNA		
Sense	ccggGGACAAACTACTTCATCAACTCGA GTTGATGAAGTAGTTTGTCTTTTTTg	nt 255-273
Antisense	aattcAAAAAAGGACAAACTACTTCATCA ACTCGAGTTGATGAAGTAGTTTGTCC	
NC-shRNA		
Sense	ccggTTCTCCGAACGTGTCACGTCTCGA GACGTGACACGTTCCGAGAATTTTTTg	Scramble
Antisense	aattcAAAAAATTCTCCGAACGTGTCACG TCTCGAGACGTGACACGTTCCGAGAA	
miR-143-3p		
Mimic	UGAGAUGAAGCACUGUAGCUC	
Control	UCACAACCUCCUAGAAAGAGUAGA	
Anti-miR	GAGCUACAGUGCUUCAUCUCA	
Anti-miR-NC	UCUACUCUUUCUAGGAGGUUGUGA	
CSTB PCR primer		
Forward	CATTCAAGAGCCAGGTGGTC	nt 231-250
Reverse	GGCTTTGTTGGTCTGGTAGTTAG	nt 354-376
18S PCR primer		
Forward	GACTCTGGCATGCTAACTAG	nt 1387-1406
Reverse	GACATCTAAGGGCATCACAG	nt 1493-1512
miR-143-3p primer		
Forward	CTGAGATGAAGCACTGTAGCTC	
Reverse	GTGCAGGGTCCGAGGT	
Pri-miR-143-3p		
Forward	GAAGCAAGAACTCTGGAGAAGC	nt 346-367
Reverse	GGACCTCTGTCTTCTGTTGG	nt 444-463
U6		
Forward	CTCGCTTCGGCAGCACA	
Reverse	AACGCTTCACGAATTTGCGT	
miR-143-3p RT	GTCGTATCCAGTGCAGGGTCCGAGGTA TTCGCACTGGATACGACgagcta	

The position in CSTB mRNA sequence (GenBank accession no. NM_000100), 18S mRNA sequence (GenBank accession no. NR_003286), miR-143-3p (GenBank accession no. NR_029684), and pri-miR-143-3p (GenBank accession no. NR_105059) is shown. Lower case font indicated the linker. bp, base pair; NC, negative control; nt, nucleotide; PCR, polymerase chain reaction; RT, reverse transcription; shRNA, short hairpin RNA.