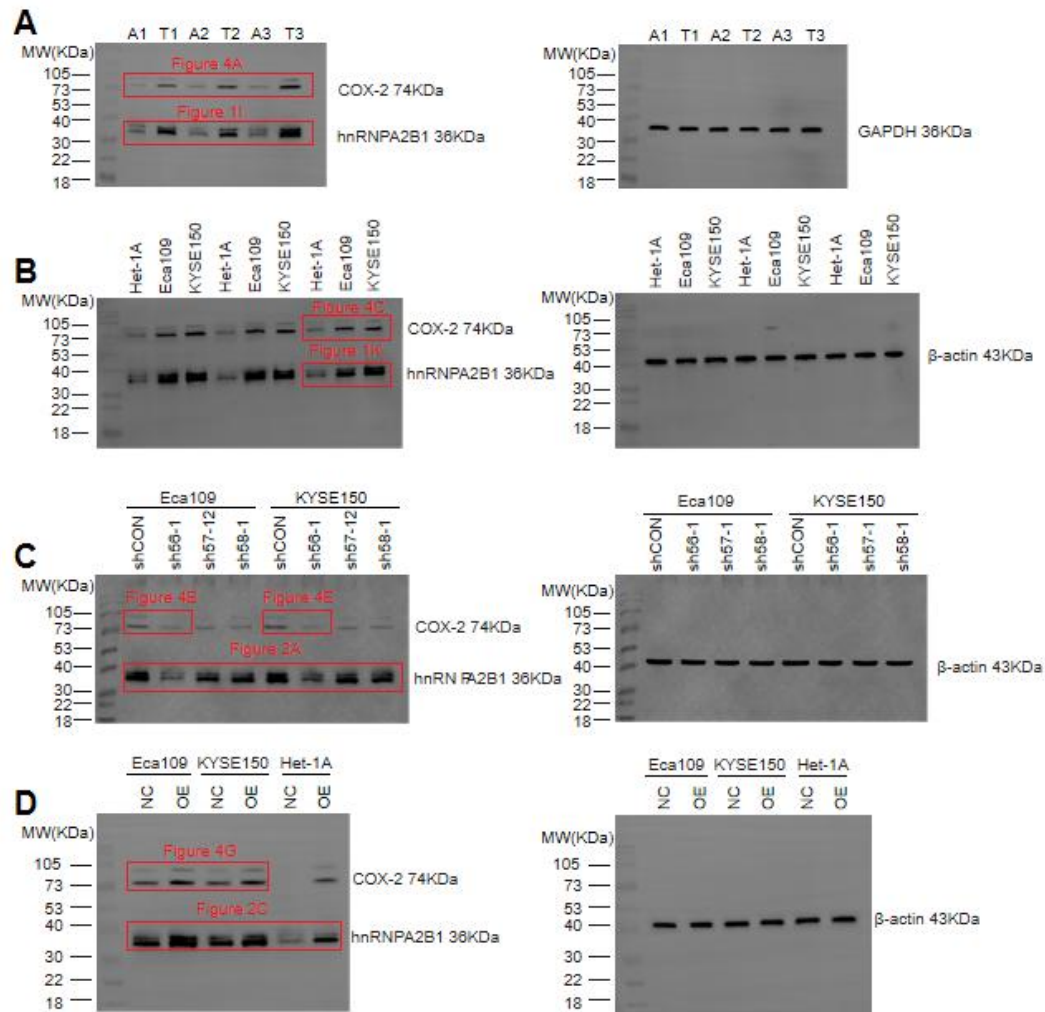
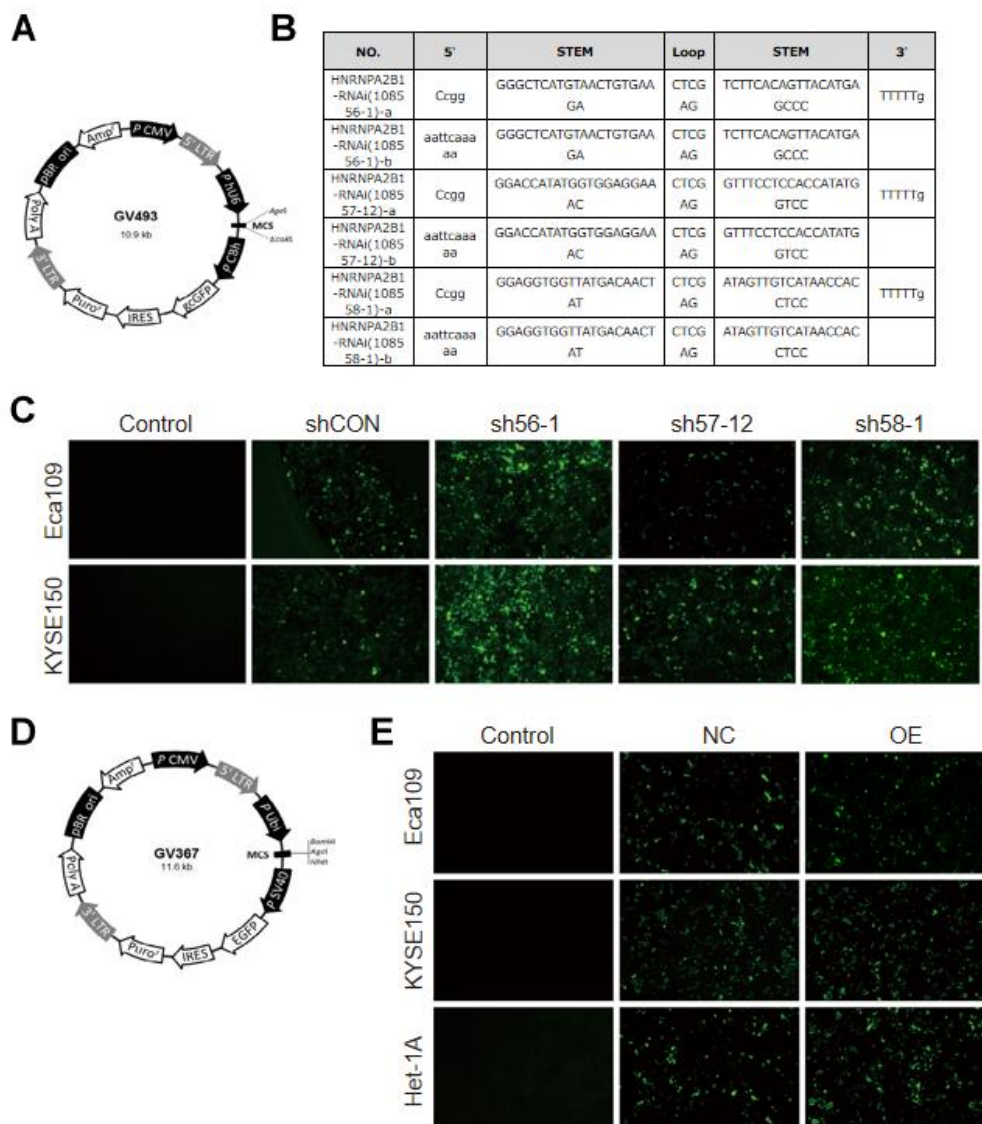




Supplementary Figure 1 Full-length western blots corresponding to the cropped blots shown in Figures 1, 2, and 4. A: Full-length western blots of COX-2 and hnRNPA2B1 in paired adjacent (A) and tumor (T) ESCC tissues from three representative patients, corresponding to the cropped blots shown in Figures 4A and 1I, respectively; the full-length GAPDH blot used as the loading control for the same membrane is shown on the right; **B:** Full-length western blots of COX-2 and hnRNPA2B1 in Het-1A, Eca109, and KYSE150 cells, corresponding to the cropped blots shown in Figures 4C and 1K, respectively; the full-length β -actin blot used as the loading control for the same membrane is shown on the right; **C:** Full-length western blots of COX-2 and hnRNPA2B1 in Eca109 and KYSE150 cells transduced with shCON or hnRNPA2B1-targeting shRNAs, corresponding to the cropped blots shown in

Figures 4E and 2A, respectively; the full-length β -actin blot used as the loading control for the same membrane is shown on the right; **D:** Full-length western blots of COX-2 and hnRNPA2B1 in Eca109, KYSE150, and Het-1A cells transduced with NC or hnRNPA2B1 overexpression vector (OE), corresponding to the cropped blots shown in Figures 4G and 2C, respectively; the full-length β -actin blot used as the loading control for the same membrane is shown on the right. Red boxes indicate the regions used for the cropped blots in the main figures. NC, negative control; OE, overexpression; shCON, control short hairpin RNA.



Supplementary Figure 2 Construction and validation of hnRNPA2B1 knockdown and overexpression systems. **A:** Schematic map of the GV493 Lentiviral vector used for hnRNPA2B1 shRNA expression; **B:** Sequences and stem-loop structures of three hnRNPA2B1-targeting shRNAs (sh56-1, sh57-12, and sh58-1); **C:** Representative fluorescence images showing infection efficiency of control, shCON, and three independent hnRNPA2B1 shRNAs (sh56-1, sh57-12, and sh58-1) in Eca109 and KYSE150 cells; **D:** Schematic map of the GV367 Lentiviral vector used for hnRNPA2B1 overexpression; **E:** Representative fluorescence images showing infection efficiency of control, NC, and hnRNPA2B1 overexpression lentivirus (OE) in Eca109, KYSE150, and Het-

1A cells. NC, negative control; OE, overexpression; shCON, control short hairpin RNA; shRNA, short hairpin RNA.

Supplementary Table 1 PCR primers used in this study

Gene name	Forward primer (5'→3')	Reverse primer (5'→3')
HNRNPA2	ATTGATGGGAGAGTAGTTG	AATTCCGCCAACAAACA
B1	AGCC (23bp)	GCTT (21bp)
COX-2	TCACAGGCTTCCATTGACC	CCGAGGCTTTTCTACCAG
(PTGS2)	AG (21bp)	A (19bp)
ACTB	CATGTACGTTGCTATCCAG	CTCCTTAATGTCACGCAC
	GC (21bp)	GAT (21bp)
GAPDH	GGAGCGAGATCCCTCCAA	GGCTGTTGTCATACTTCTC
	AAT (21bp)	ATGG (23bp)