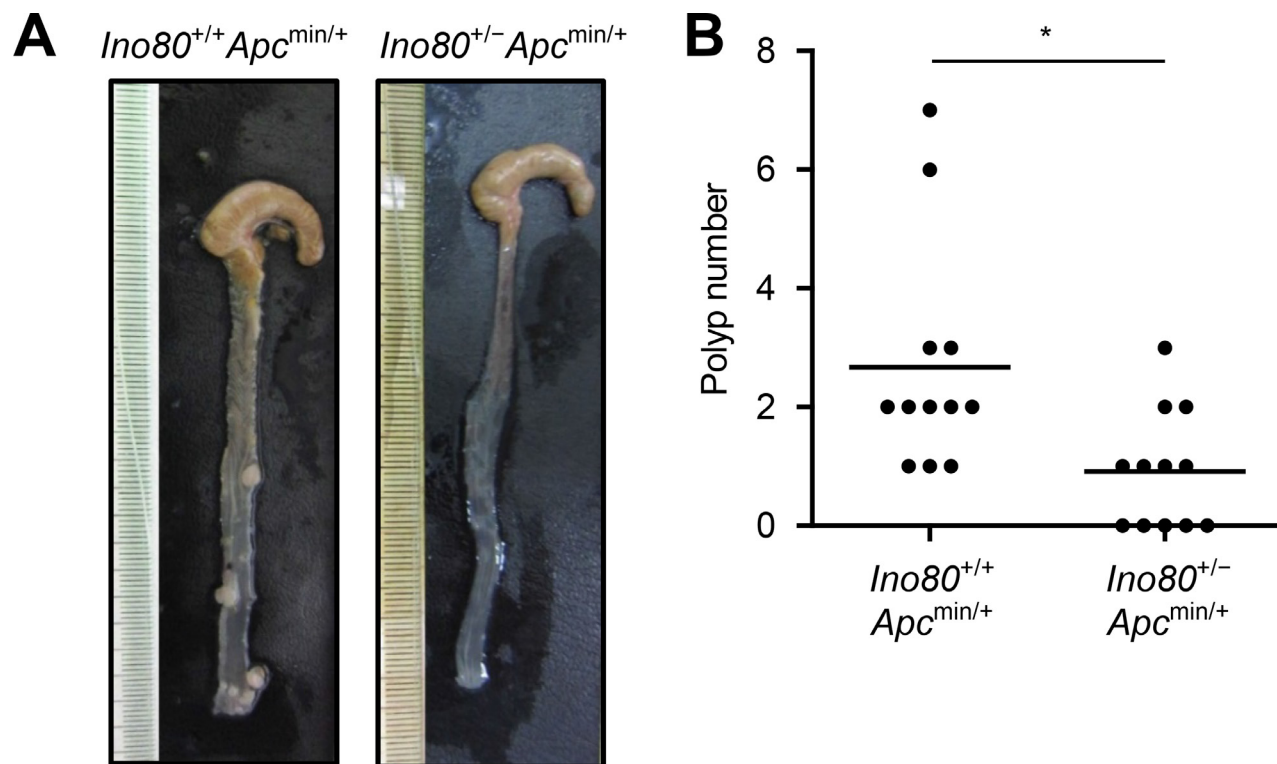# INO80 haploinsufficiency inhibits colon cancer tumorigenesis via replication stress-induced apoptosis

SUPPLEMENTARY MATERIALS
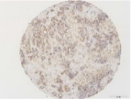

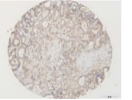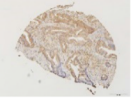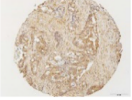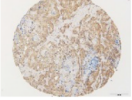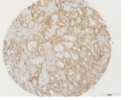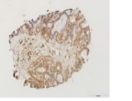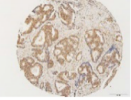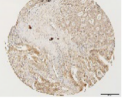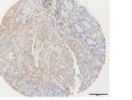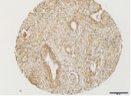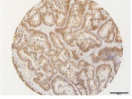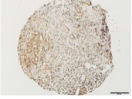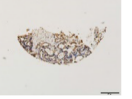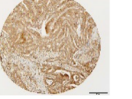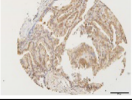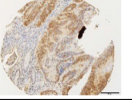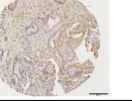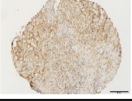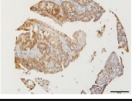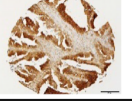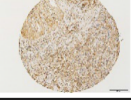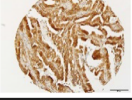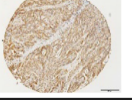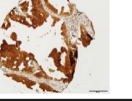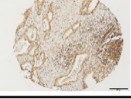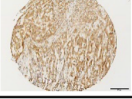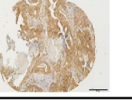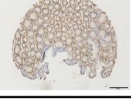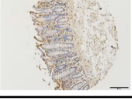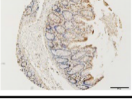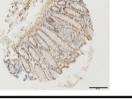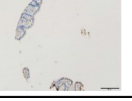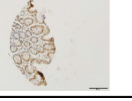**Supplementary Figure 1: *Ino80* haploinsufficiencyinhibits colon tumorigenesis in *Apc*^min/+ mice.** (**A**)Representative microscopic images of colonic polyps obtained from the experiments shown in Figure 1a. Magnification, × 40. (**B**)The number of colonic polyps in the indicated mice (n = 12 for each) was plotted as a graph in which each dot represents the total number of polyps in a single mouse. The horizontal bar indicates the mean value. The pvalues were determined using the Wilcoxon rank-sum test. $^*p < 0.05$.
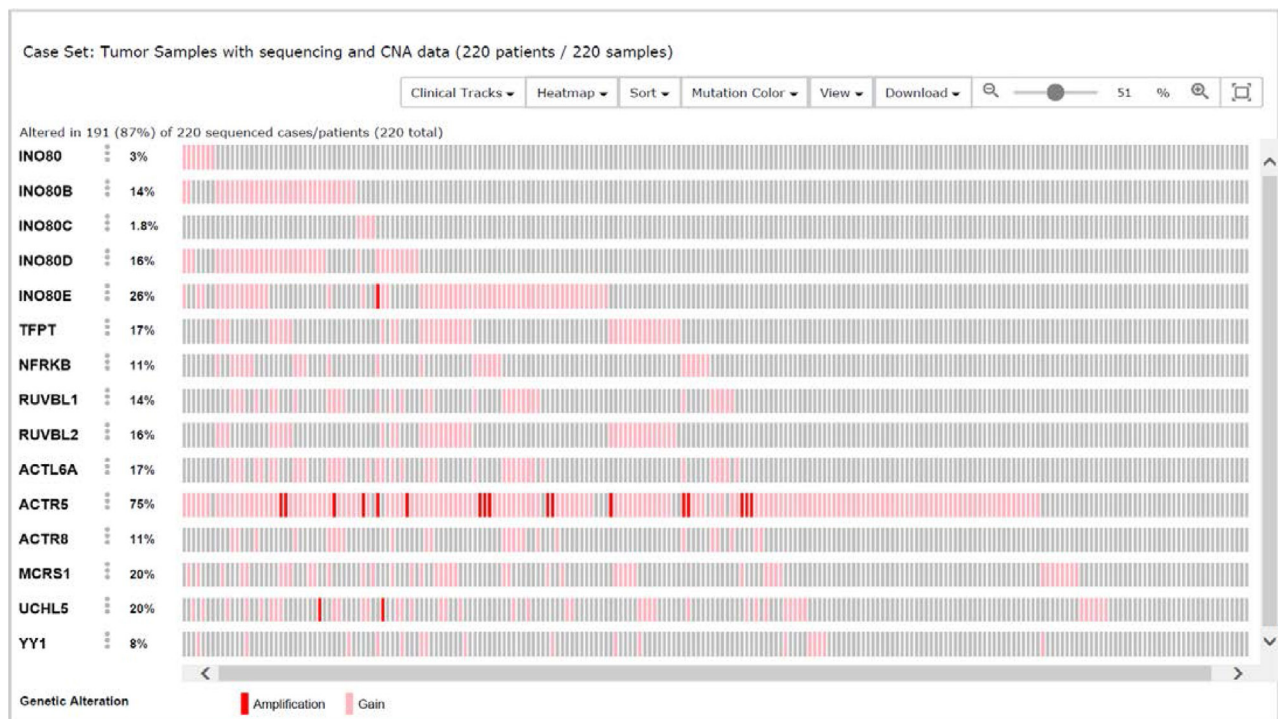
Supplementary Figure 2: Gain and amplification of INO80 subunit genes in colon cancers (TCGA, Provisional; data source, National Institute Cancer). The data were obtained from The Cancer Genome Atlas portal (http://www.cbioportal.org).

	1	2	3	4	5
A		loss	undistinguishable		undistinguishable
B					
C		undistinguishable	loss		
D					
E	loss	undistinguishable			
F	undistinguishable				undistinguishable
G					
H		undistinguishable		undistinguishable	
I				loss	
J	loss	loss	loss		

Colon cancer ⬛ Normal ⬛

Supplementary Figure 3: Whole images of immunohistochemicalstaining of the colon cancer tissue microarray described in Figure 7C.
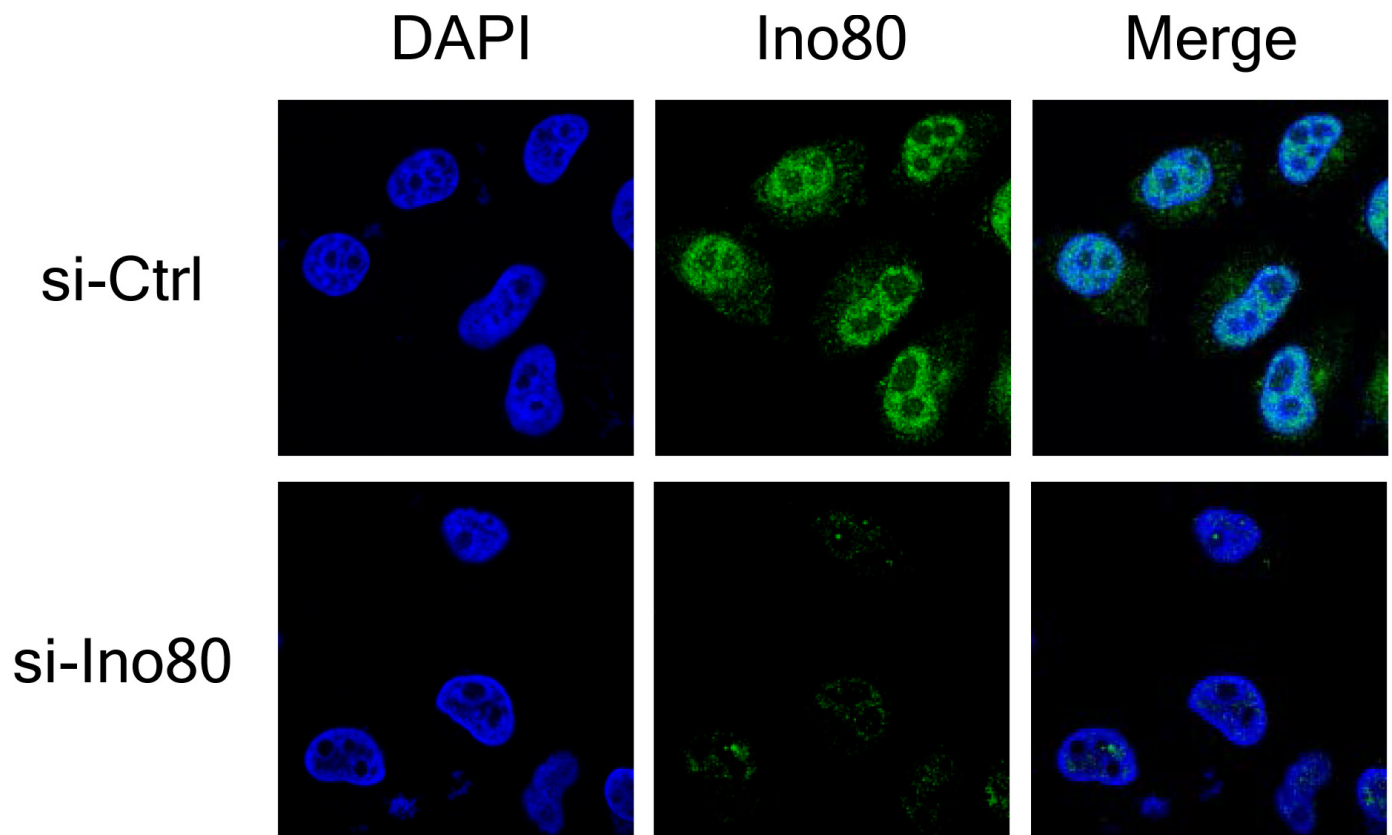
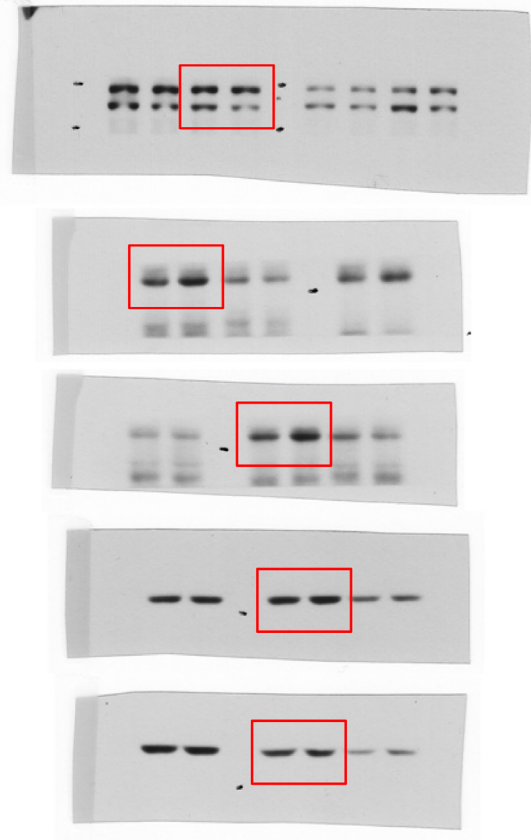**Supplementary Figure 4: Confirmation of the specificity of the anti-Ino80 antibody in immunostaining.HT29 cells were transfected with control or Ino80-specific siRNAs and subjected to immunofluorescence microscopy.** The Ino80 signal in the nuclei disappeared after Ino80 knockdown.
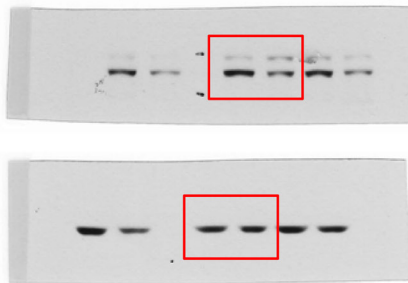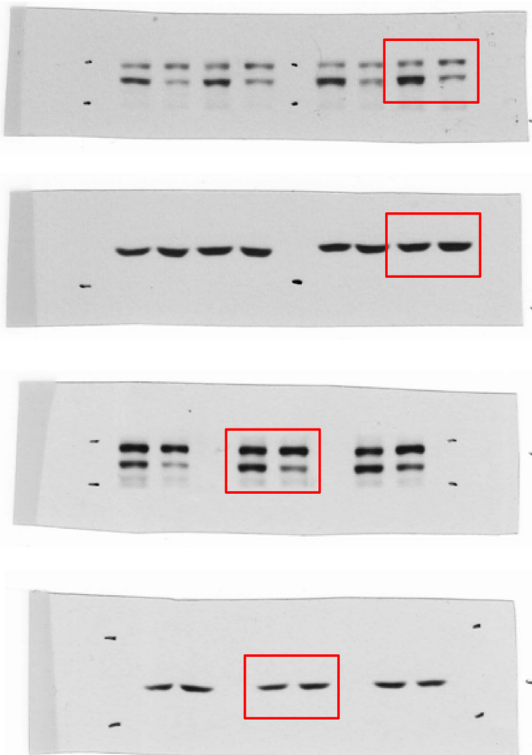
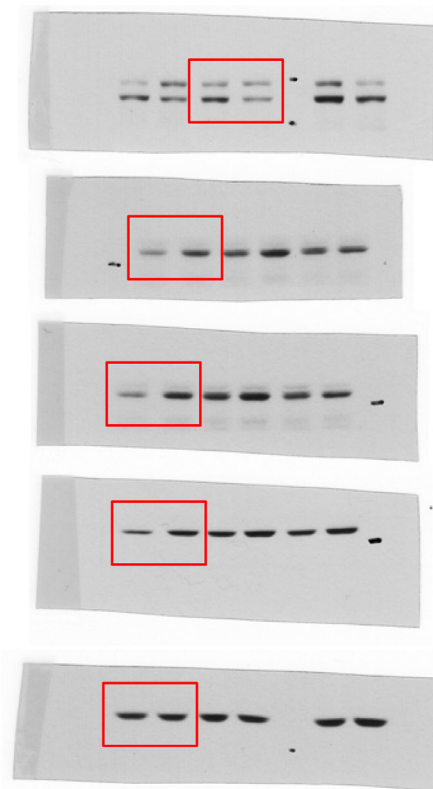Full unedited gel for Figure 3A
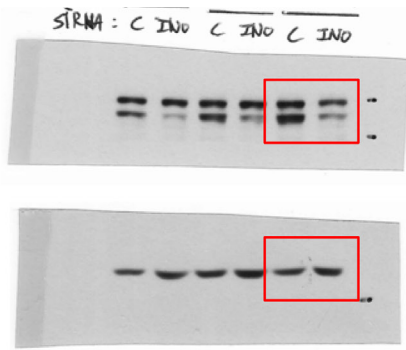
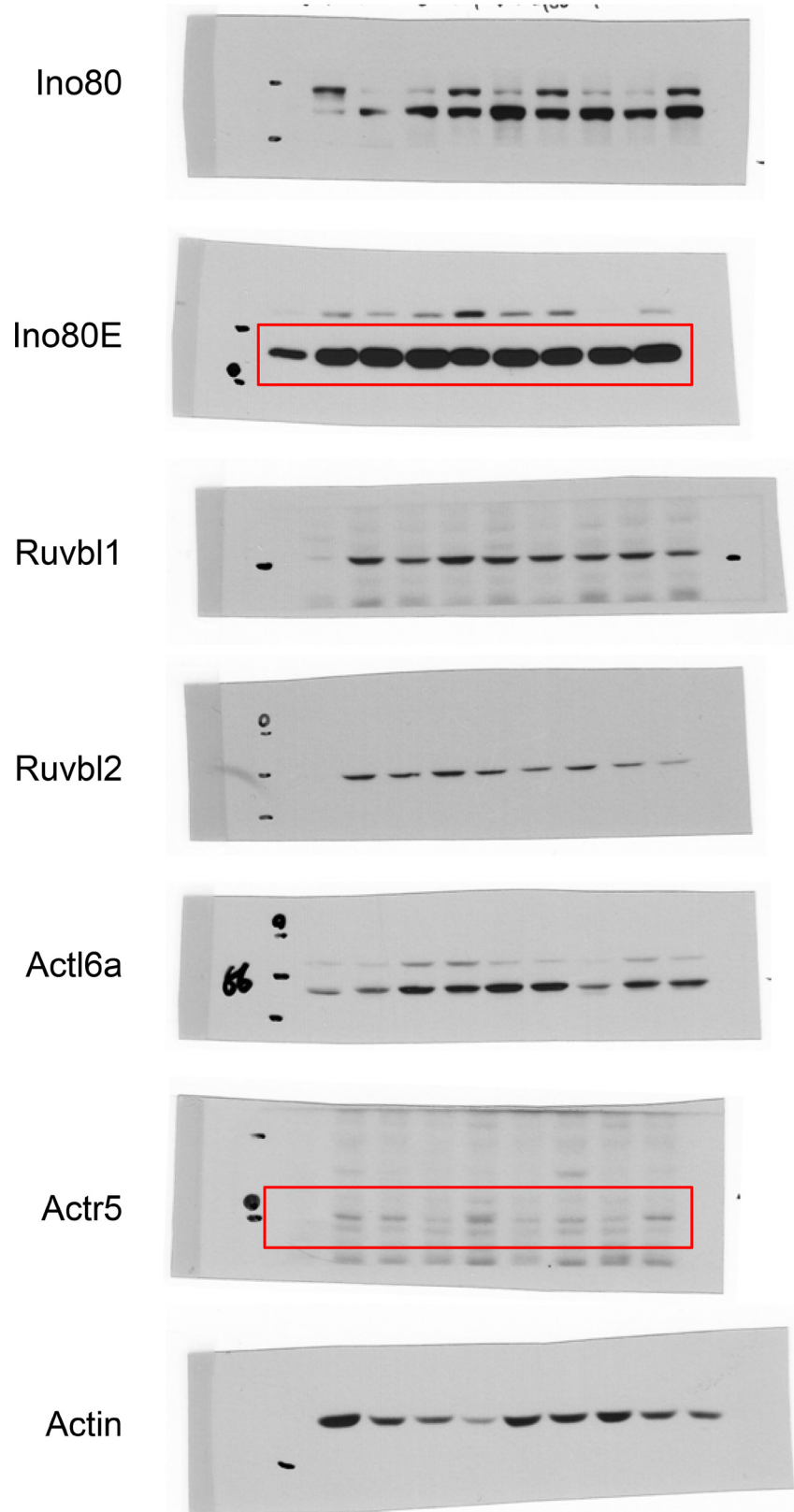Full unedited gel for Figure 5A

Full unedited gel for Figure 3B

Full unedited gel for Figure 4C

Full unedited gel for Figure 5B

Full unedited gel for Figure 7B

Ino80

Ino80E

Ruvbl1

Ruvbl2

Actl6a

Actr5

Actin

Supplementary Figure 5: Uncropped full-length images of immunoblot gels.