

## Supplementary information

### Regulation of functional *KCNQ1OT1* lncRNA by $\beta$ -catenin

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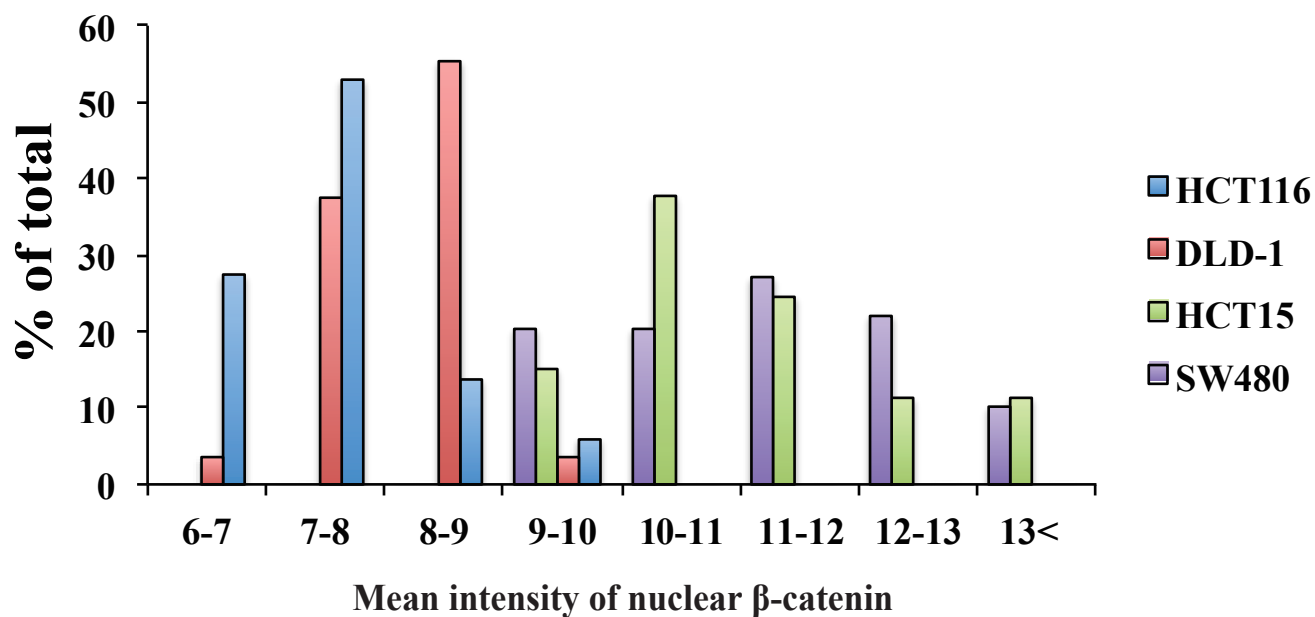
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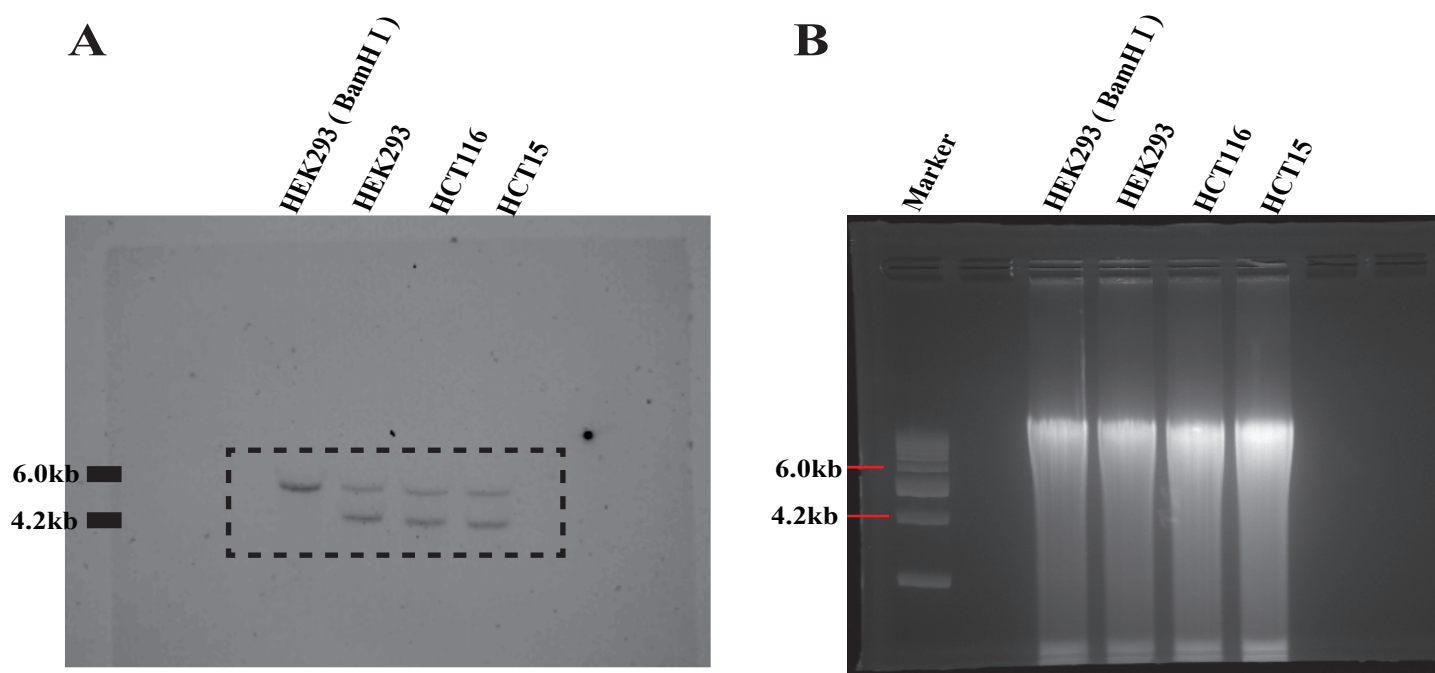
## Supplementary Figure S1



### Supplementary Figure S1. Level of nuclear $\beta$ -catenin protein in colorectal cancer cell lines.

Relative mean intensity of nuclear  $\beta$ -catenin protein in colorectal cancer cell lines was evaluated using immunofluorescence staining. The graphs indicate the mean intensity of a single nucleus in each colorectal cell line and nuclei are classified into several groups according to the level of nuclear  $\beta$ -catenin intensity.

## Supplementary Figure S2



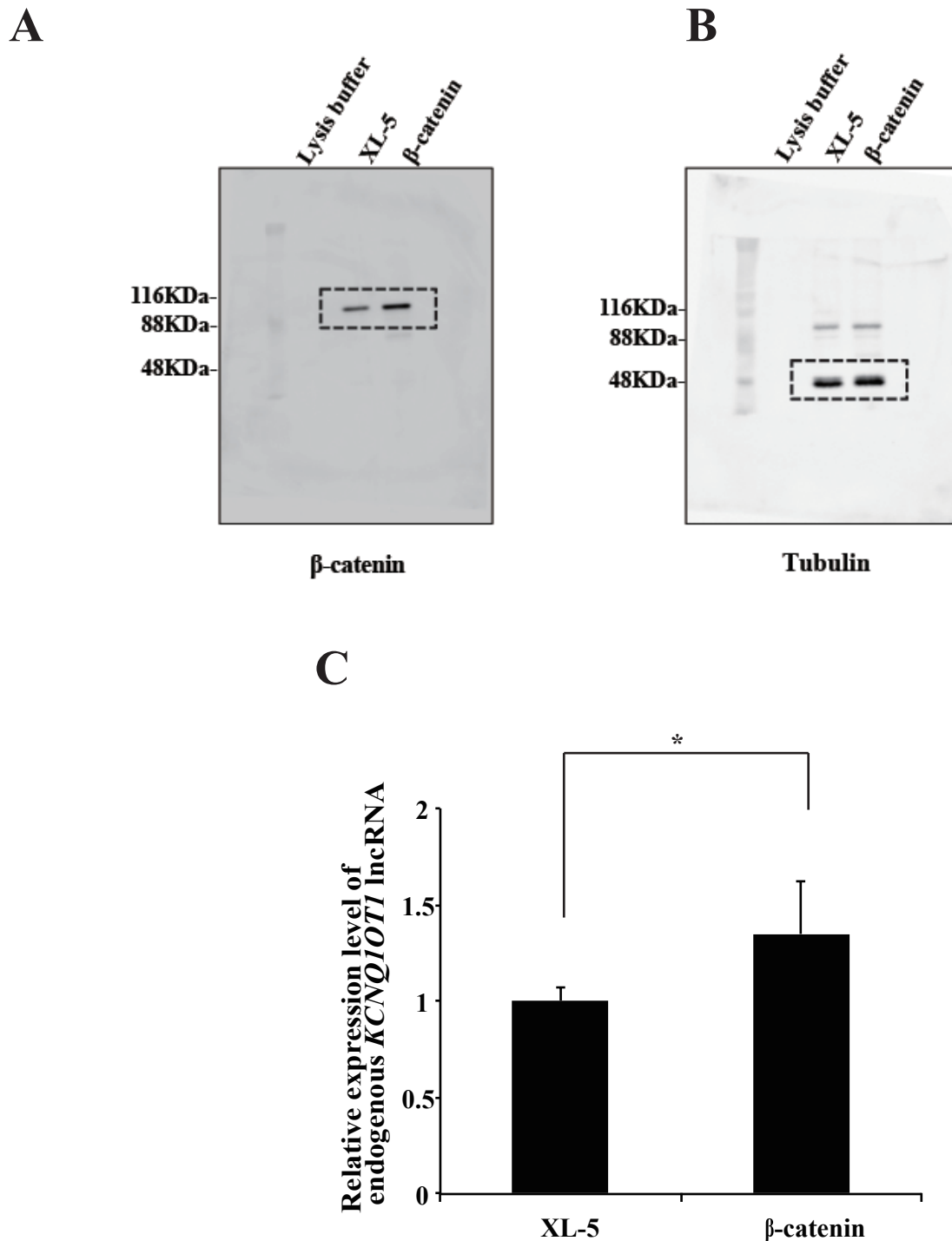
Supplementary Figure S2. Full-length southern blot image (A) and full-gel image (B) shown in Figure 1F. Dotted lines show the cropped areas (see Figure 1F).

# Supplementary Table S1

|        | Copy number of <i>KCNQ1OT1</i> (%) |    |   |   |   |
|--------|------------------------------------|----|---|---|---|
|        | 1                                  | 2  | 3 | 4 | 5 |
| HCT116 | 14                                 | 84 | 2 | 0 | 0 |
| HCT15  | 0                                  | 94 | 0 | 6 | 0 |

Supplementary Table S1. Copy number of *KCNQ1OT1* locus in HCT116 and HCT15 cells .

# Supplementary Figure S3

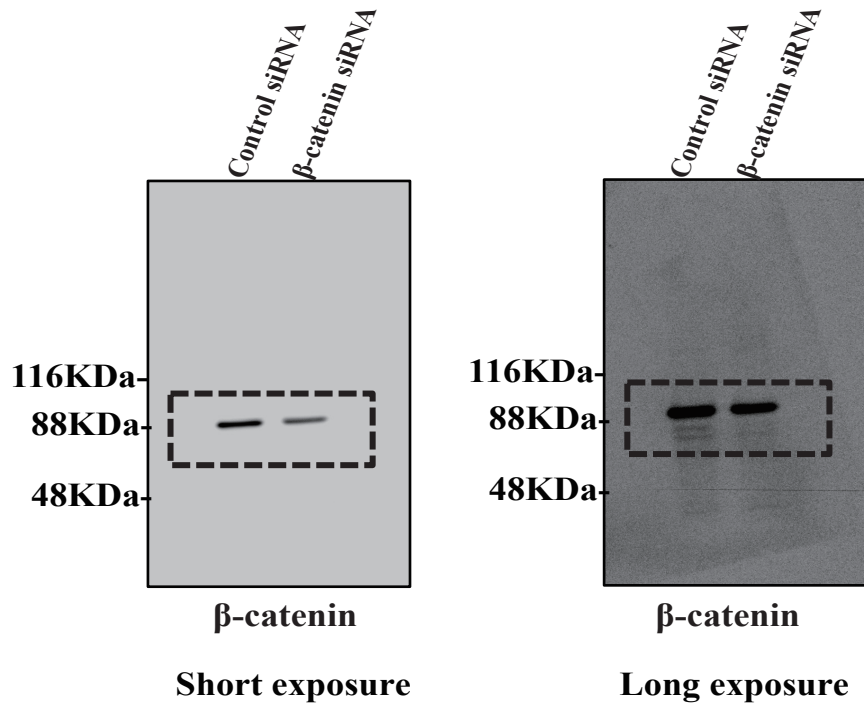


**Supplementary Figure S3. Full-length images of the Western blots shown in Figure 2B in the manuscript and qRT-PCR analysis of relative endogenous *KCNQ10T1* lncRNA transcription under the condition of excess  $\beta$ -catenin.**

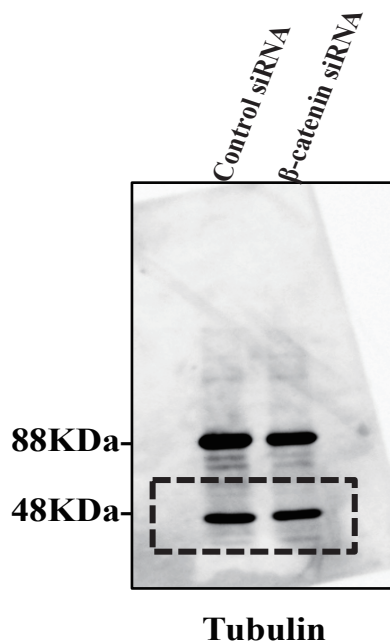
The full-length Western blot image of (A) the anti- $\beta$ -catenin antibody blot and (B) the anti-tubulin antibody blot of Figure 2B. Dotted lines show the cropped areas (see Figure 2B). (C) Expression levels were normalized to *GAPDH* mRNA control. The expression level in HCT116 cells transfected with XL-5 vector was arbitrarily assigned as 1. Error bars represent means  $\pm$  S.D. of four independent experiments (\* $p$ <0.05).

# Supplementary Figure S4

**A**



**B**



**Supplementary Figure S4. Full-length images of the Western blots shown in Figure 3B in the manuscript.**

The full-length Western blot images of Fig. 3B in the manuscript using (A) an anti- $\beta$ -catenin antibody and detected with a short (Left) and a long (Right) exposure, and (B) an anti-tubulin antibody. Dotted lines show the cropped areas (see Figure 3B).