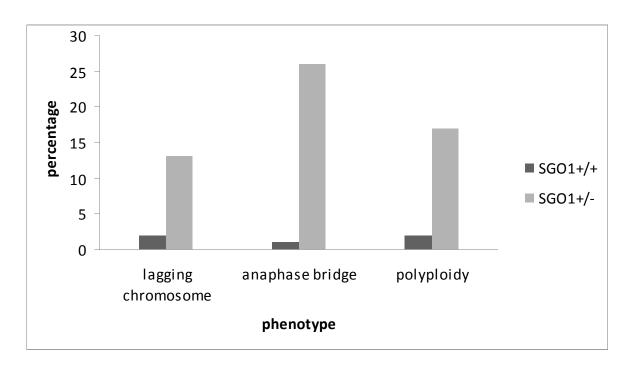
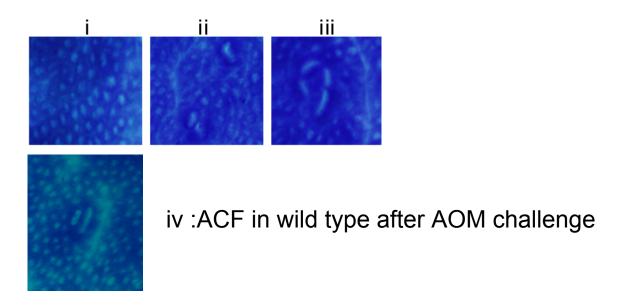
## Supplementary Figure S-1 Percentage of mitotic defect phenotype



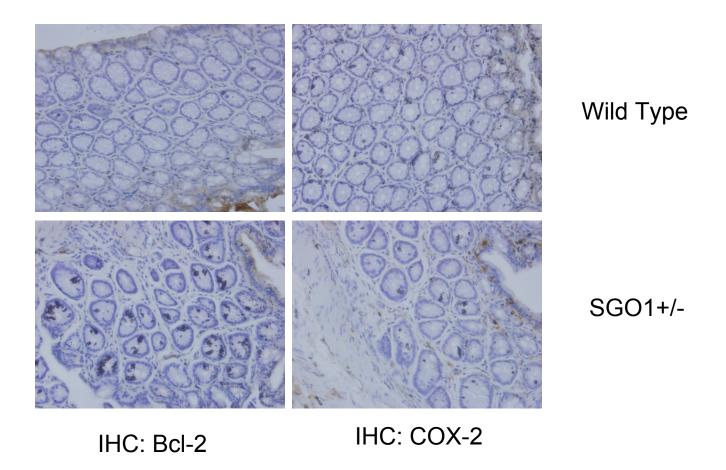
Percentage of indicated phenotype in wild type (SGO1<sup>+/+</sup>) and SGO1<sup>+/-</sup> MEF in immuno fluorescence experiments in Figure 2 (n=40). Mitotic defect phenotype (lagging chromosome, anaphase bridge and polyploidy) are higher in SGO1<sup>+/-</sup> cells.

Supplementary figure S-2 an example of ACF in wild type treated with AOM



Examples of precancerous lesions (ACF) observed after AOM treatments: (i) Normal-looking colonic crypts (control), (ii) ACF with single crypt (upper right) and with two crypts (lower left), (iii) Large ACF with four crypts. iv: ACF in wild type. Morphologically, ACF in wild type and Sgo1 are indistinguishable.

## Supplementary Figure S-3



Additional immunohistochemistry (IHC) figures of Bcl-2 and COX-2 to supplement figure 6B. These figures show localizations of IHC-positive cells and overall crypt morphology. Overall crypt morphologies in wild type and SGO1 mice show no clear difference.