Extended Data Fig. 4. The mIgG2c-G400R knock-in mice, manipulated by CRISPR-Cas9 system, have significantly ameliorated colon tumorigenesis

(A) Alignment of the IGHG1 DNA sequence from NCBI database with the sequencing data of the mIgG2c-G400R knock-in mouse. Annotated are the sgRNA target sequences, mIgG2c-tail and mIgG2c-G400R variant site. (B) Basal levels of natural IgG, IgG1, IgG2b, IgG2c and IgG3 antibodies in the serum samples of untreated 6-week-old WT (n=6) and mIgG2c-G400R (n=6) mice. (C) A schematic overview of the AOM-DSS induced CAC model. (D) Body weights of AOM-DSS induced mice during three rounds of DSS treatment. (E) Bioluminescent images obtained at week 6 after AOM-DSS treatment following intraperitoneal injection of L-012 solution. (F) RT-qPCR analyses of intratumoral cytokine mRNAs from colon tumors and matched normal colons of CAC-induced WT mice and mIgG2c-G400R mice. (G) Representative longitudinal images of tumor burden in the colon specimens from CAC induced mice. Tumors indicated by white arrows. (H) Representative images of H&E-stained colon cross-sections from CAC induced WT mice (n=5) and mIgG2c-G400R mice (n=5). Scale bar, 1000 μm. One of three representative experiments is shown (B, E, F). Statistical significance was determined using an unpaired two-tailed t-test (B, E, F) and two-way ANOVA (D). Mean± SEM. NS, not significant.