Title: CD11b deficiency suppresses intestinal tumor growth by reducing myeloid cell recruitment

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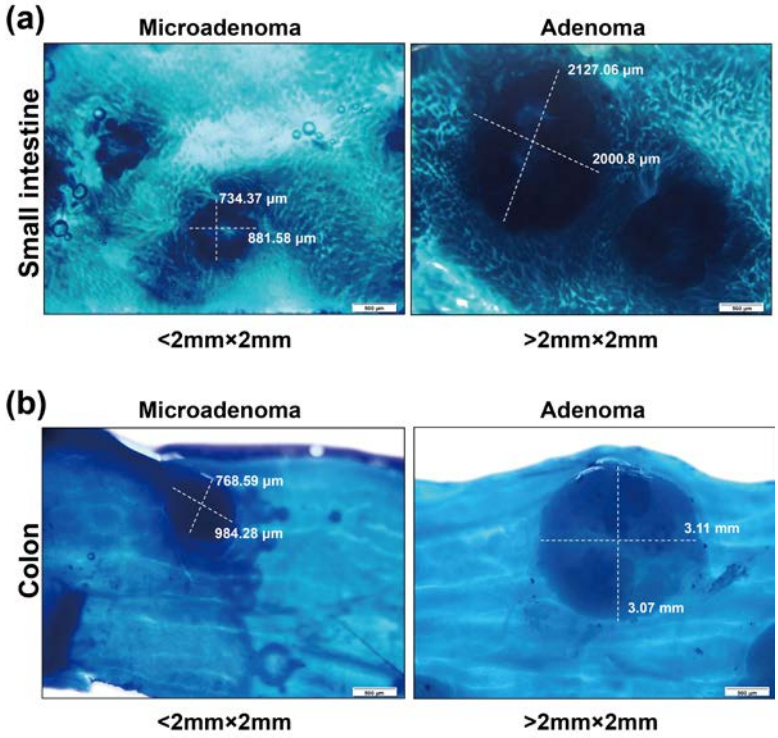
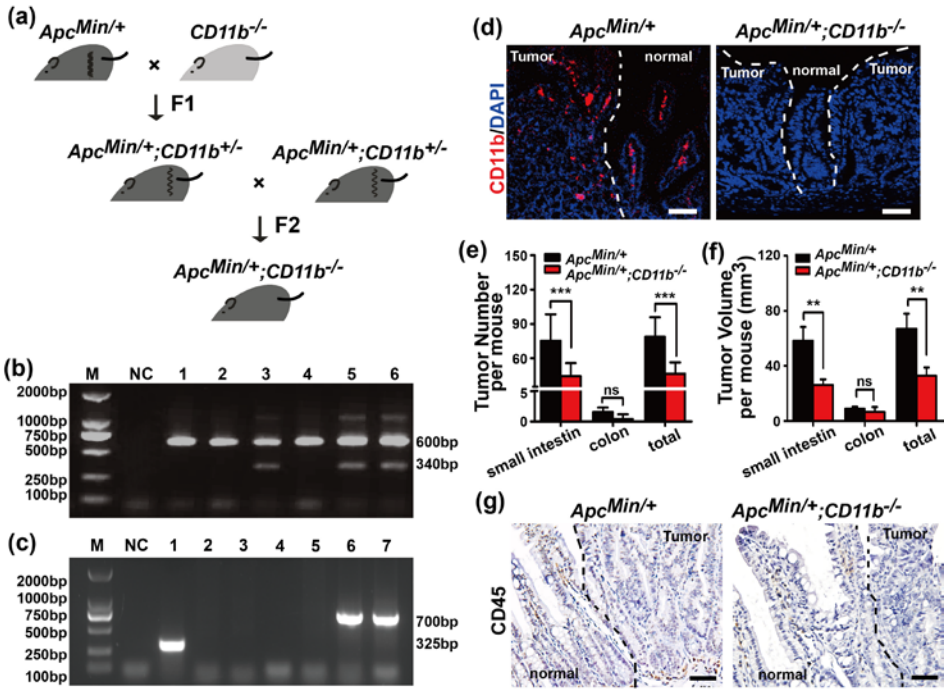
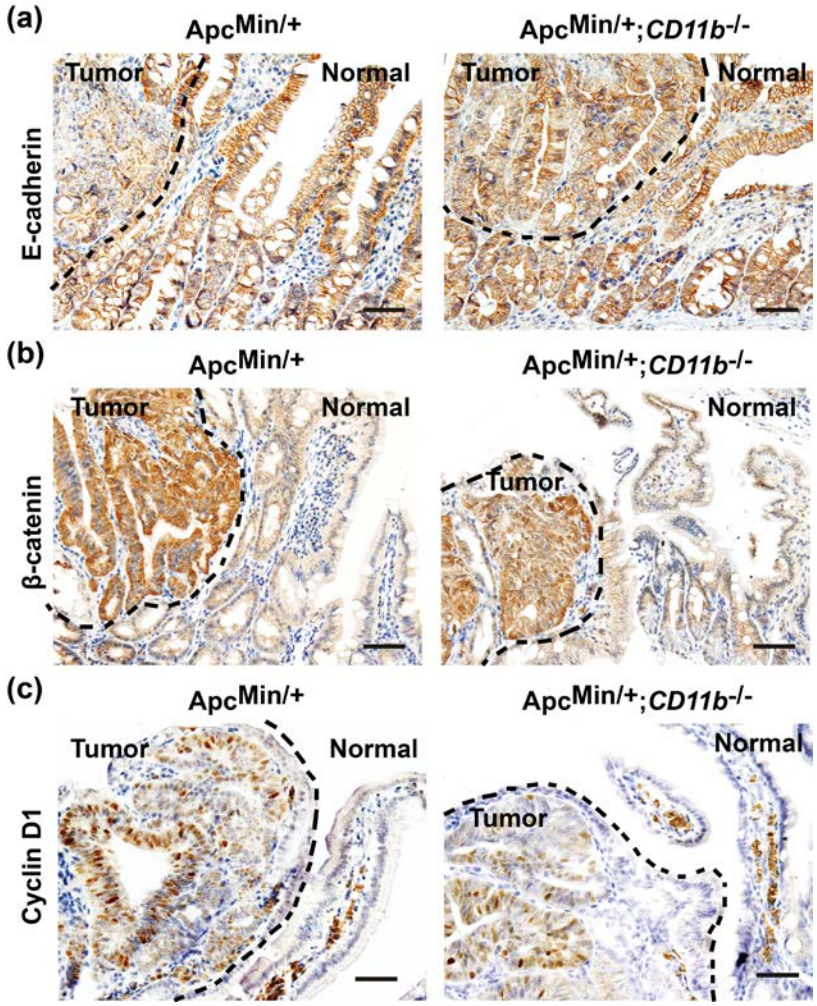


Supplementary Figure 1. Classification of intestinal tumor. The intestinal (**A**) and colonic (**B**) tumors were classified into 2 types: microadenomas and adenomas. Microadenomas were defined as on greater than 2 mm × 2 mm in size, and the adenomas were greater than 2 mm × 2 mm in size detected under microscope.

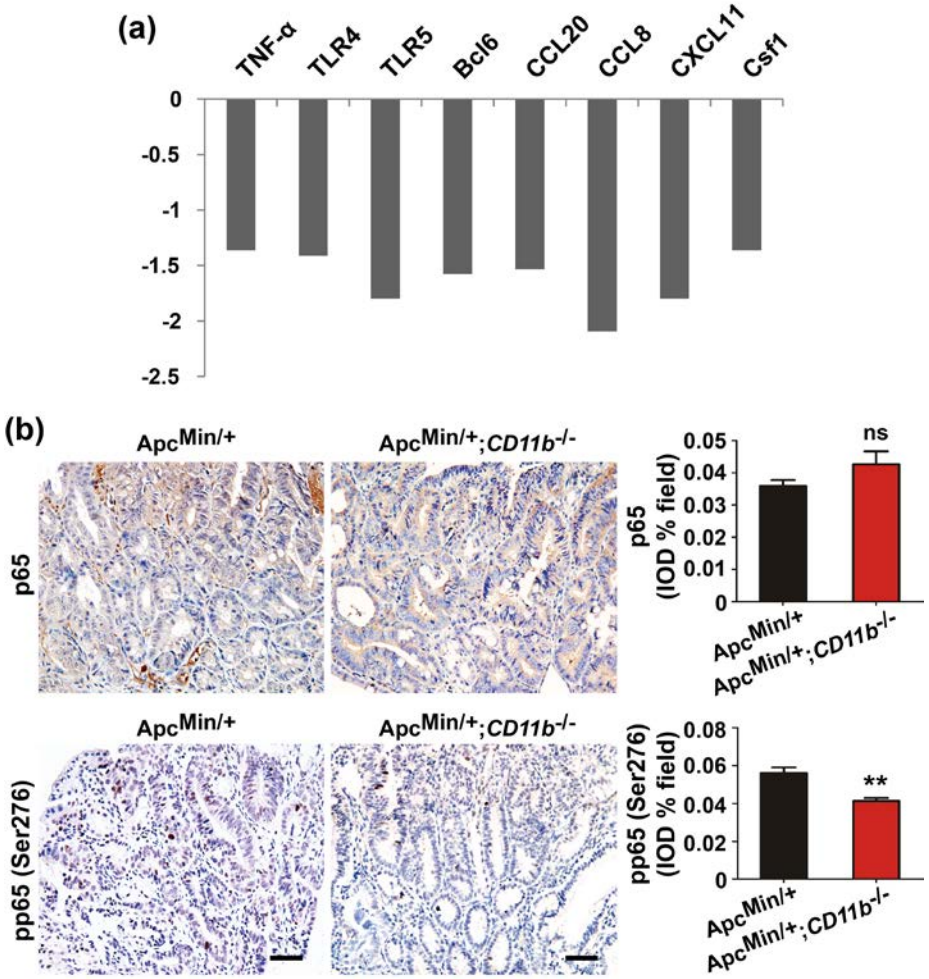


Supplementary Figure 2. Construction of Slit2-overexpressing mice. A schematic diagram of generating *Apc*$^{Min/+}$;*CD11b*$^{-/-}$ experimental mice carrying both the *CD11b* gene deficiency and Apc mutant allele is shown in panel **A**. PCR screening of *Apc*$^{Min/+}$;*CD11b*$^{-/-}$ mice using primers that detect both wild-type and mutant alleles of *Apc* (**B,** *Apc* wild-type and mutant alleles, 619 bp and 331 bp; *Apc* wild-type allele, 619 bp), and both wild-type and deficiency alleles of *CD11b* (**C**, *CD11b* wild-type allele, 325 bp; *CD11b* deficiency allele, 700 bp). M: molecular weight marker D2000; NC: negative control. The CD11b+ myeloid cells infiltrating was detected by IF in the tumor tissues and adjacent normal tissues of the *Apc*$^{Min/+}$ mice and *Apc*$^{Min/+}$;*CD11b*$^{-/-}$ mice (**D**). CD11b deficiency significantly inhibited the number (**E**) and size (**F**) of the tumors in small intestine but not colon in the *Apc*$^{Min/+}$ mice. The CD45+ leukocytes infiltration were suppressed in the tumor sites, but were not inhibited in the adjacent normal tissues from the *Apc*$^{Min/+}$;*CD11b*$^{-/-}$ mice compared with the *Apc*$^{Min/+}$ mice (**G**). Scale bars: 100 μm. All the drawings in figure (a) were drawn by Q.Q.Z. using

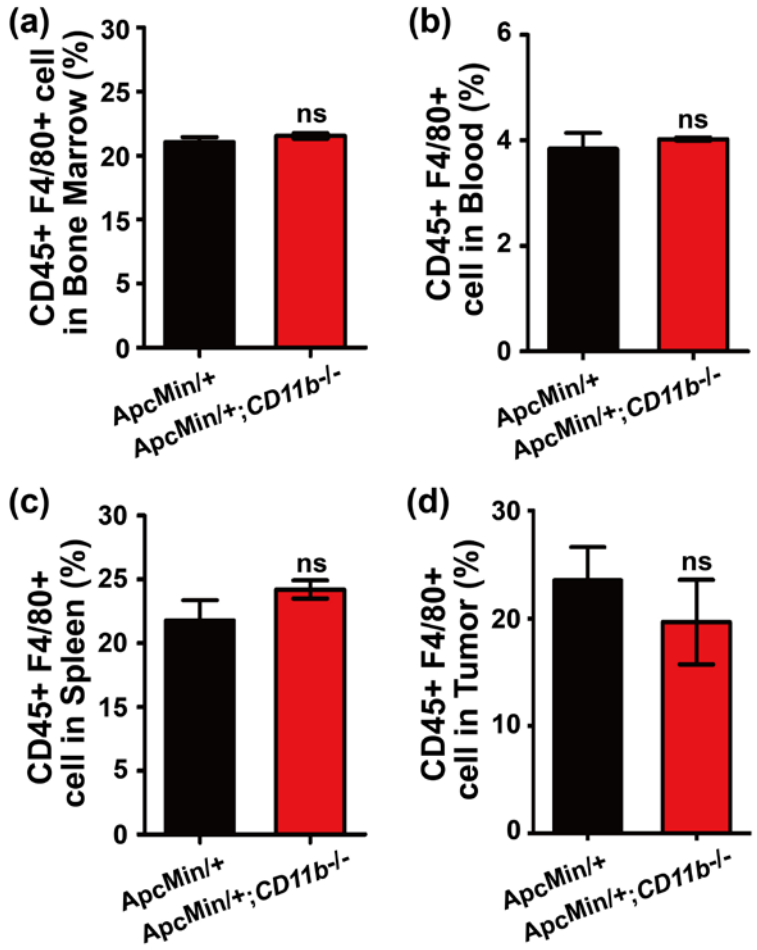
CorelDRAW.



Supplementary Figure 3. CD11b deficiency inactivated the Wnt/β-catenin pathway in tumor tissues. The expression of E-cadherin (**A**), β-catenin (**B**) and cyclin D1 (**C**) was examined in the tumor tissues and adjacent normal tissues of the *Apc*$^{Min/+}$ mice and *Apc*$^{Min/+}$*;CD11b*$^{-/-}$ mice by IHC. Scale bars: 100 μm.



Supplementary Figure 4. The differential expression cytokines and NF-κB signaling may affected by CD11b+ myeloid cells. Total RNA was extracted from spleen, and cytokines that were potentially regulated by CD11b+ myeloid cells were identified by qRT-PCR array. The histogram shows the cytokines with more than two-fold change in spleen (**A**). The expression of p65 and pp65 (Ser276) in tumor tissues of the *Apc*$^{Min/+}$ mice and *Apc*$^{Min/+}$*;CD11b*$^{-/-}$ mice was detected by IHC (**B**). The results of are representative of 11 independent mice (all mice were 16 –weeks -old). The statistical data are expressed as the mean ± S.D.. ns: $P > 0.05$, **: $P < 0.01$. Scale bars: 50 μm.



Supplementary Figure 5. CD11b deficiency did not affect macrophage recruitment in the tumor environment. The number of the macrophage (gated on $CD45^+$ cells) in the bone marrow (**A**), blood (**B**), spleen (**C**) and tumor tissues (**D**) of the $Apc^{Min/+}$ mice and $Apc^{Min/+};CD11b^{-/-}$ mice was measured by FACS. The results represent of 11 independent mice (all mice were 16 –weeks -old). The statistical data are expressed as the means ± S.D.. ns: $P > 0.05$.