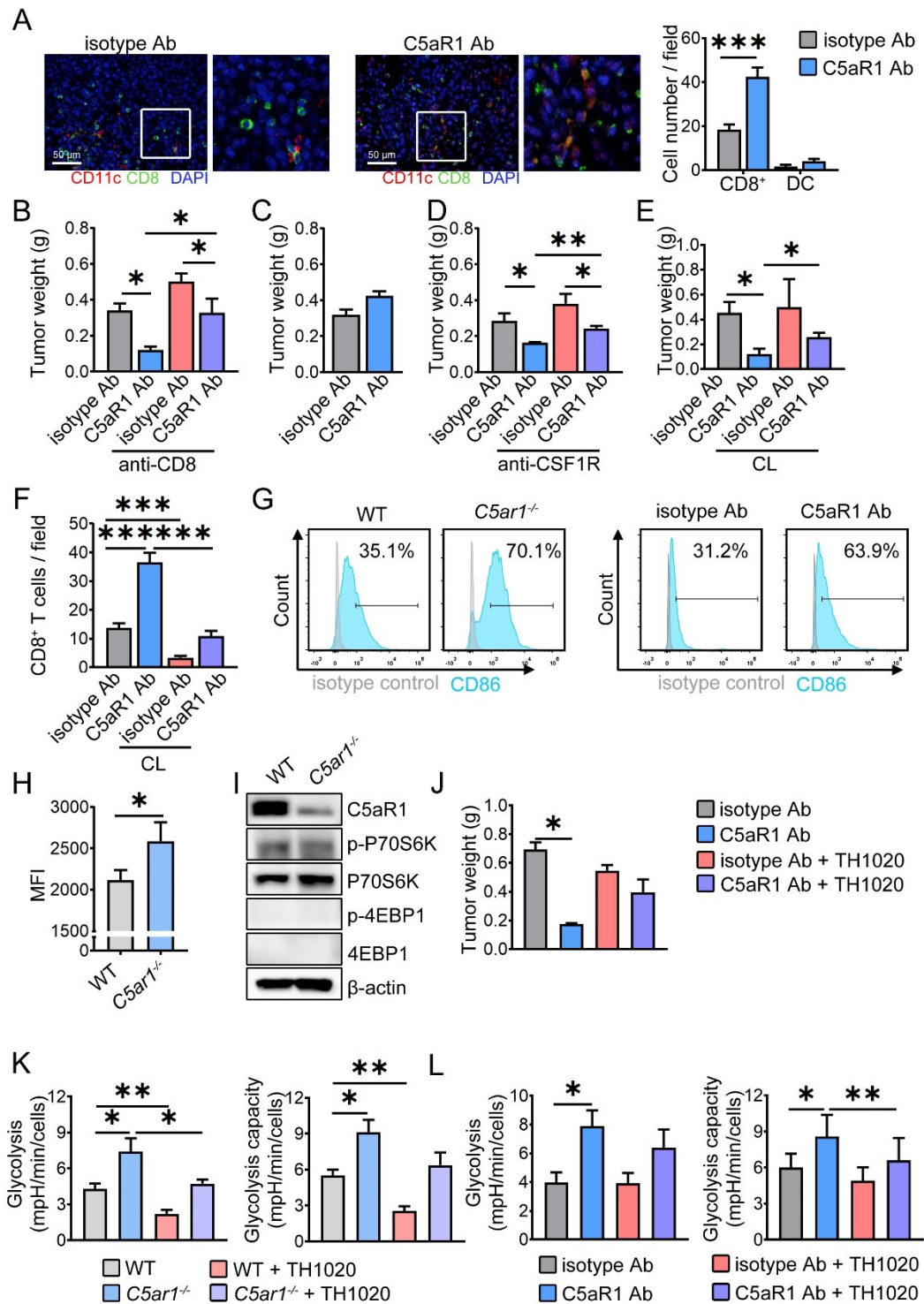
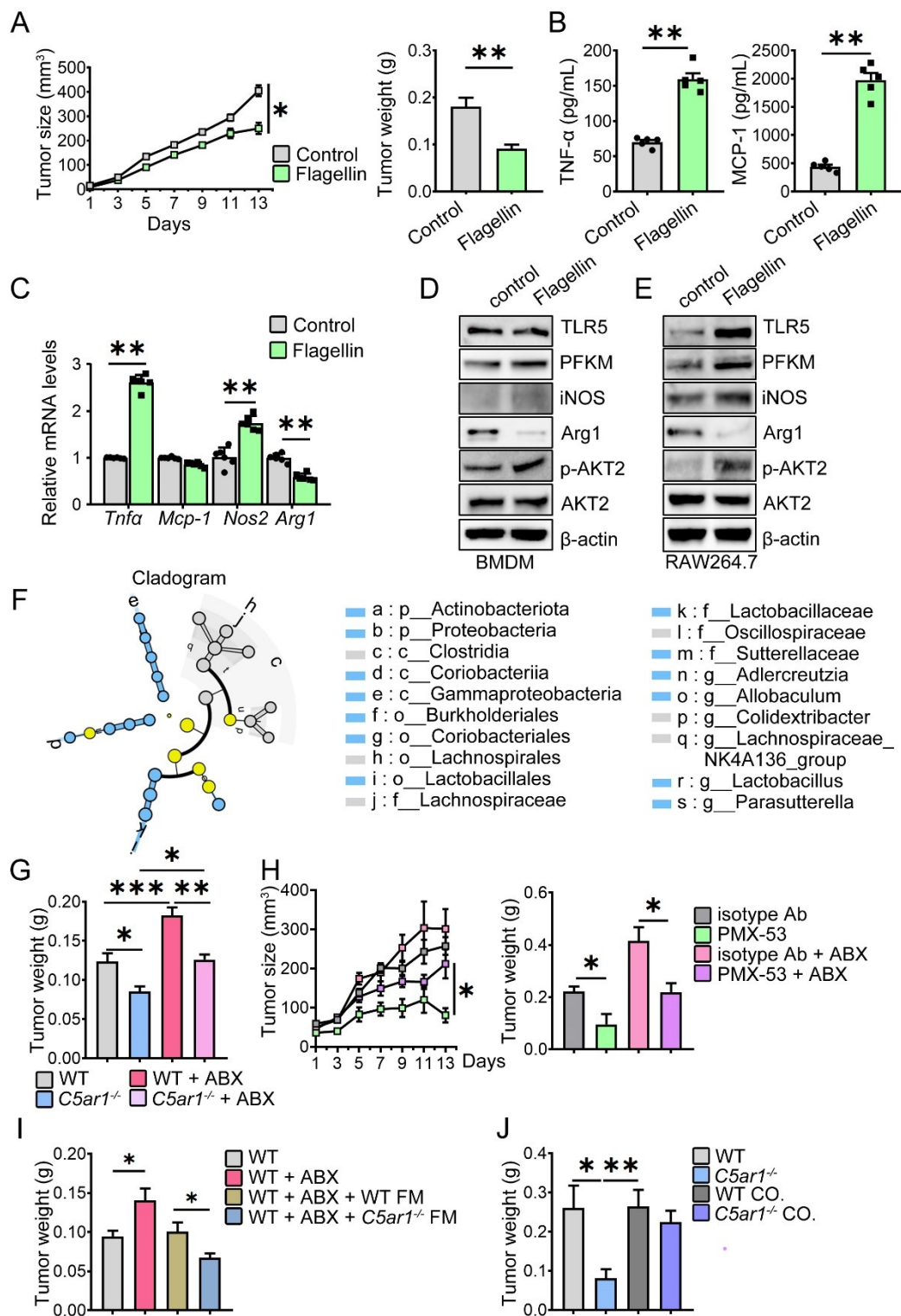


Supplementary Fig.1

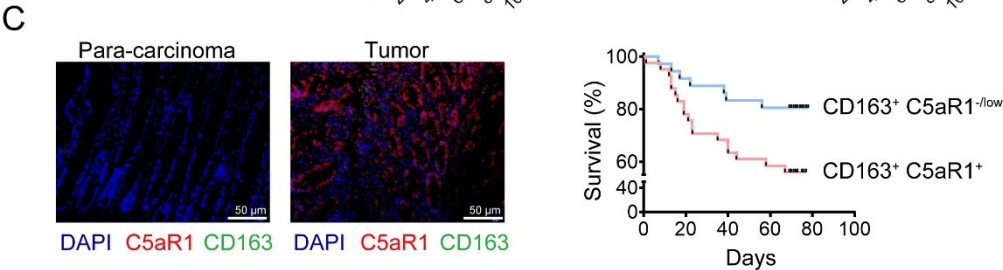
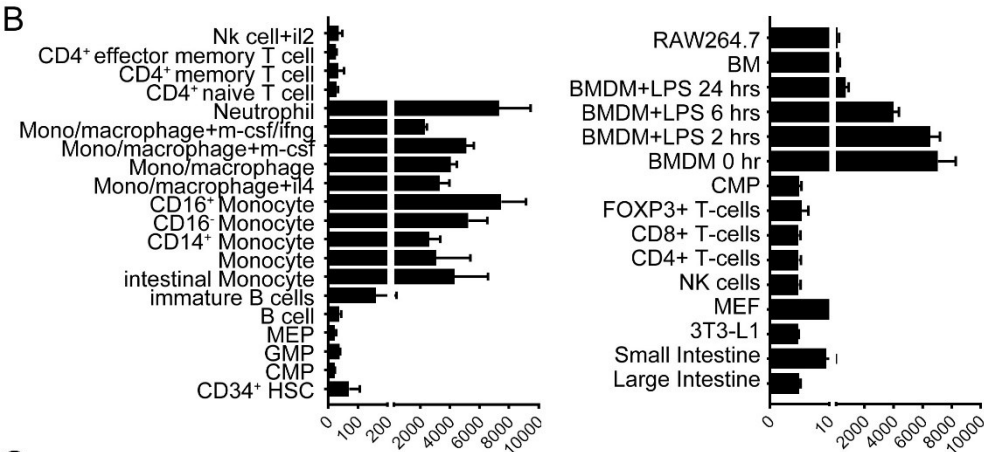
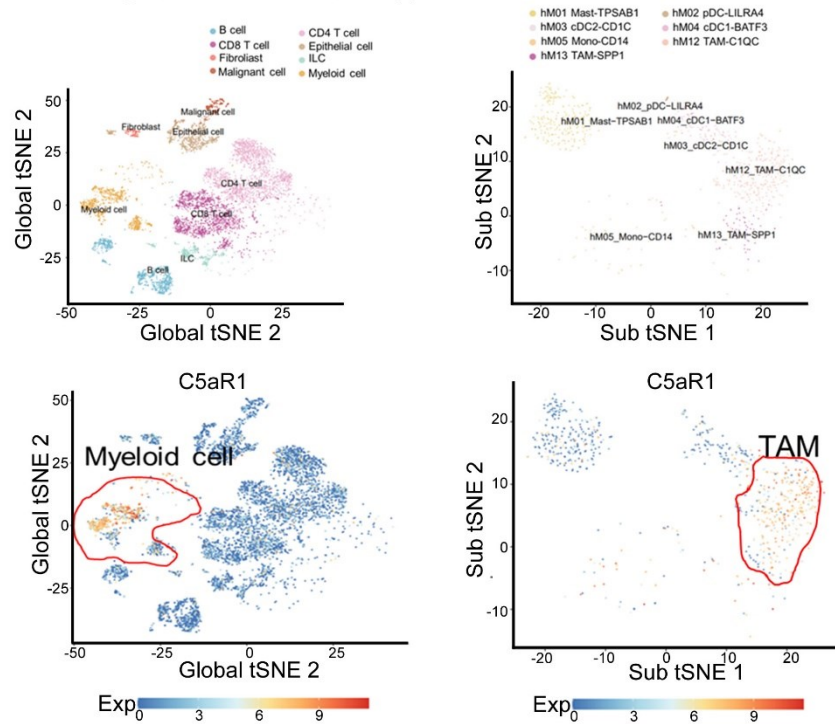


Supplementary Fig.2



Supplementary Fig.3

A Zhang L., et al, Cell. 2020; 181 (2): 442-459.



Supplementary Fig.1 C5aR1 inhibition re-programs TAMs towards M1 phenotype via activation of the TLR5/AKT2 signaling pathway. Related to Fig. 1, 2, and 3.

(A) Immunofluorescence for CD8 (green), CD11c (red), and DAPI (blue) in tumor sections was performed. (B-E) The tumor weights were examined. (F) The number of CD8⁺ T cells was counted in tumor sections by Immunofluorescence staining. (G) The percentages of CD86⁺ macrophages in peritoneal lavage were analyzed by flow cytometry. (H) The phagocytosis of macrophages was assessed by flow cytometry. (I) The indicated protein expression levels were examined by Western blotting analysis (J) The tumor weights were examined. (K-L) The glycolysis and glycolysis capacity were analyzed.

Supplementary Fig.2 Bacterial flagellin is required for C5aR1 inhibition-reset M1 phenotype. Related to Fig. 4.

(A) WT mice bearing MC-38 cells were i.p. injected with PBS or flagellin (10 µg/mouse). The tumor growth was monitored, and tumor weights were examined at the end of the experiment (ctrl, n = 8; flagellin, n = 6). (B) Cell culture supernatant samples were obtained from BMDMs treated with or without flagellin (100 ng/mL) and subjected to analyze the concentration of cytokines (n = 5). (C) Relative mRNA levels of the indicated genes were assessed by real-time RT-PCR (n = 6). (D-E) The indicated protein expression levels were examined by Western blotting analysis. (F) The differences between taxonomic or functional trees in two different groups (n = 5). (G, I and J) The tumor weights were examined. (H) MC-38 tumor growth in WT mice undergoing i.p. PMX-53 (1mg/kg) with or without bacterial cocktail before tumor inoculation (n = 10). *, P < 0.05, **, P < 0.01.

Supplementary Fig.3 Increase of C5aR1 in TAMs predicts a poor prognosis.

(A) The relative expression of C5aR1 on TAMs was analyzed. (B) The distribution of C5aR1 in human and mouse tissue/cells. (C) Immunofluorescence for C5aR1 (red), CD163 (green), and DAPI (blue) in tumor sections were performed (n=77). Kaplan–Meier curves for progression-free survival probability in CRC patients.