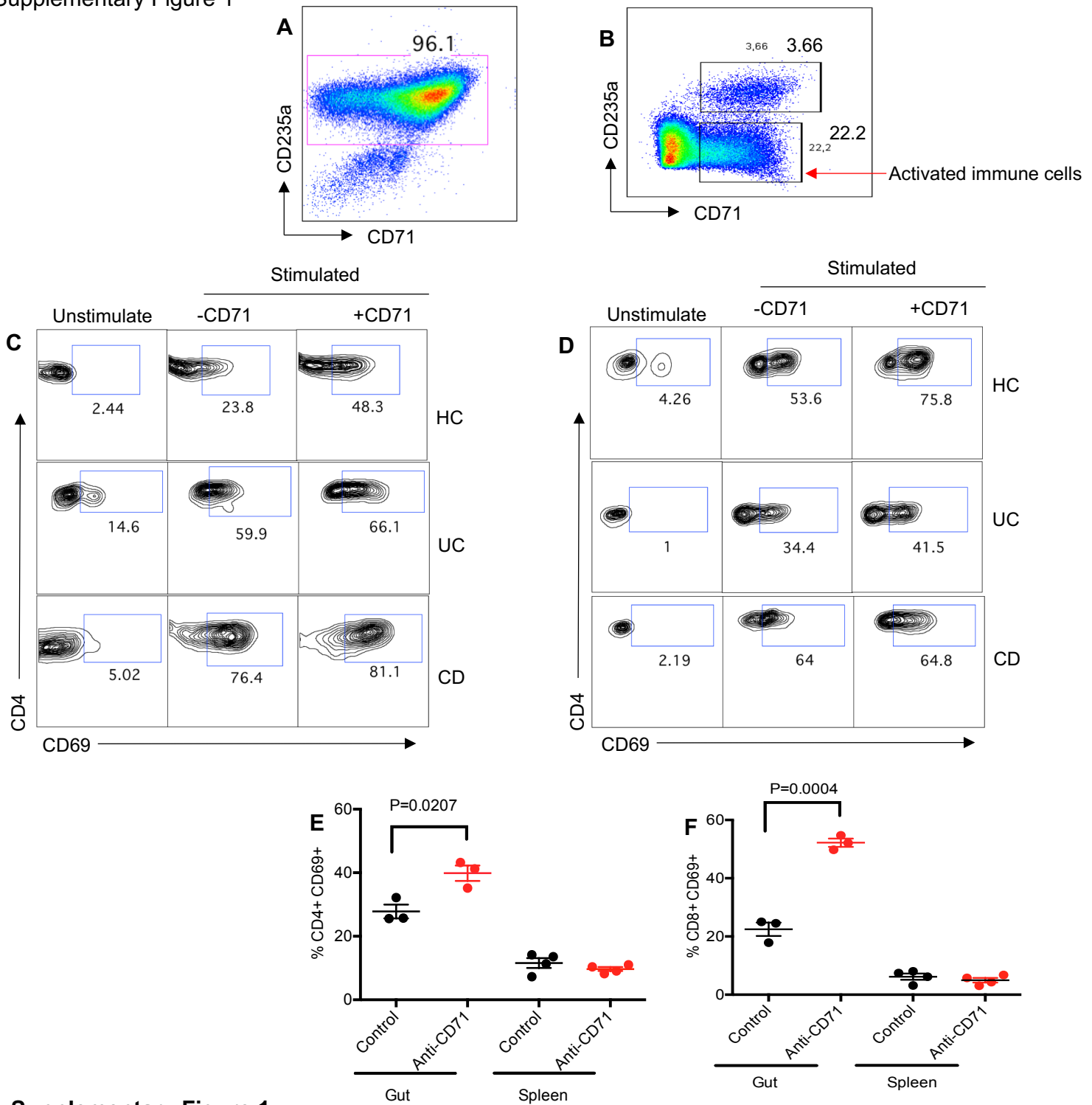


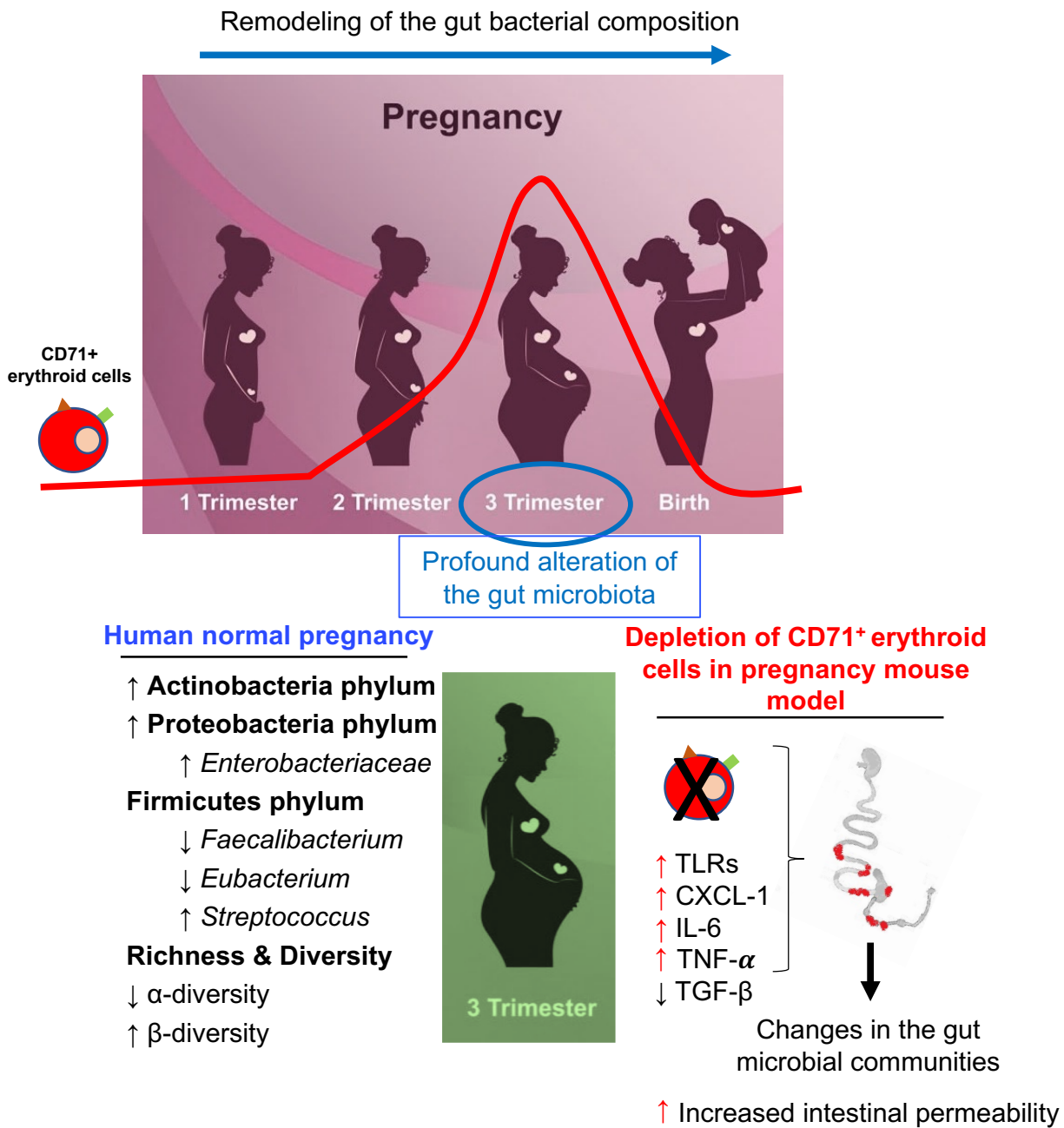
Supplementary Figure 1



Supplementary Figure 1

[A] Representative dot plots illustrating purity of CD71⁺ erythroid cells. [B] Representative dot plot showing percent CD71⁺ erythroid cells in cord blood of an infant born to a CD mother following an emergency C-section, also showing % activated immune cells (CD71⁺CD235a⁻ cells). [C] Representative zebra plots showing % CD69 expression on CD4 T cells among placenta cells from HC versus UC and CD patients. [D] Representative zebra plots showing % CD69 expression on CD4 T cells among CBMCs of infants born to HC versus UC and CD mothers. [E, F] Data showing percentages of CD4 and CD8 T cells in gut tissues and spleen in control versus treated mice with anti-CD71 antibody, respectively.

Supplementary Figure 2



Supplementary Figure 2

CD71⁺ erythroid cells expand in the 2nd and 3rd trimesters of pregnancy. Profound changes of gut microbiota take place at the 3rd trimesters which coincides with the expansion of CD71⁺ erythroid cells. Depletion of CD71⁺ erythroid cells in a mouse model of pregnancy which mimics lower frequency of CD71⁺ erythroid cells in IBD patients was associated with pro-inflammatory response as illustrated by upregulation of TLRs, IL-6, TNF- α and CXCL-1 expression and downregulation of TGF- β in the gut tissues.

Supplementary Table 2. Primers used for microbiota analysis.

Target bacterial group	Primers sequence (5'→3')	Tm (°C)	Amplicon size (bp)	Reference
Total bacteria	F: CGGYCCAGACTCCTACGGG	63	200	120
	R: TTACCGCGGCTGCTGGCAC			
Bacteroides group	F: GGTGTCGGCTTAAGTGCCAT	60	140	20
	R: CGGAYGTAAGGGCCGTGC			
Lactobacillus group	F: AGCAGTAGGGAATCTTCCA	63	341	20
	R: CACCGCTACACATGGAG			
Enterobacteriaceae family	F: CATTGACGTTACCCGCAGAAGAAGC	63	195	20
	R: CTCTACGAGACTCAAGCTTGC			
Clostridium cluster I	F: GTGAAATGCGTAGAGATTAGGAA	58	665	20
	R: GATYYGCGATTACTAGYAACTC			
Clostridium cluster IV	F: GCACAAGCAGTGGAGT	60	239	20
	R: CTTCTCCGTTTTGTCAA			
Clostridium cluster XIVa	F: AAATGACGGTACCTGACTAA	58	438-441	20
	R: CTTTGAGTTTCATTCTTGCAGAA			