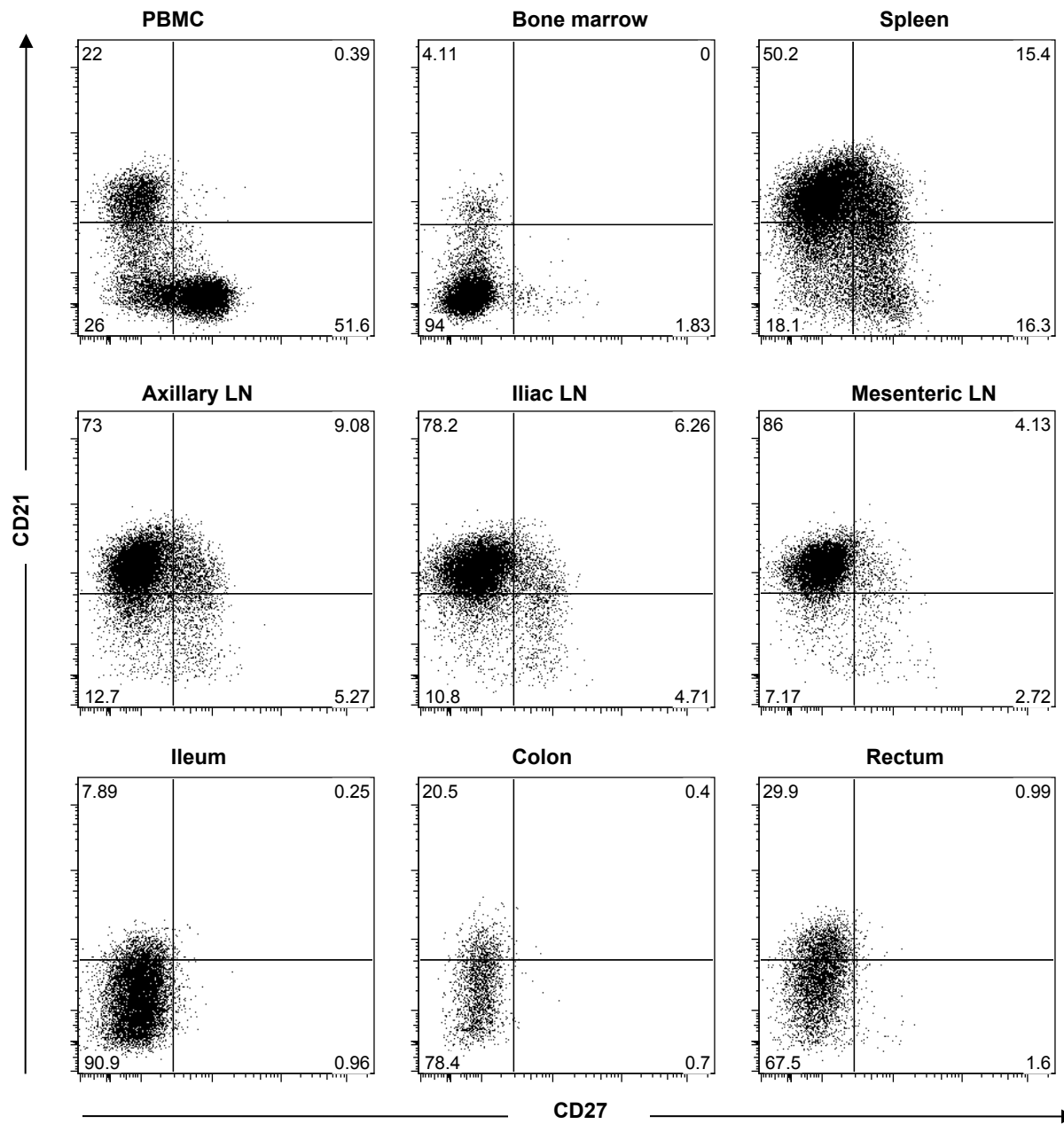
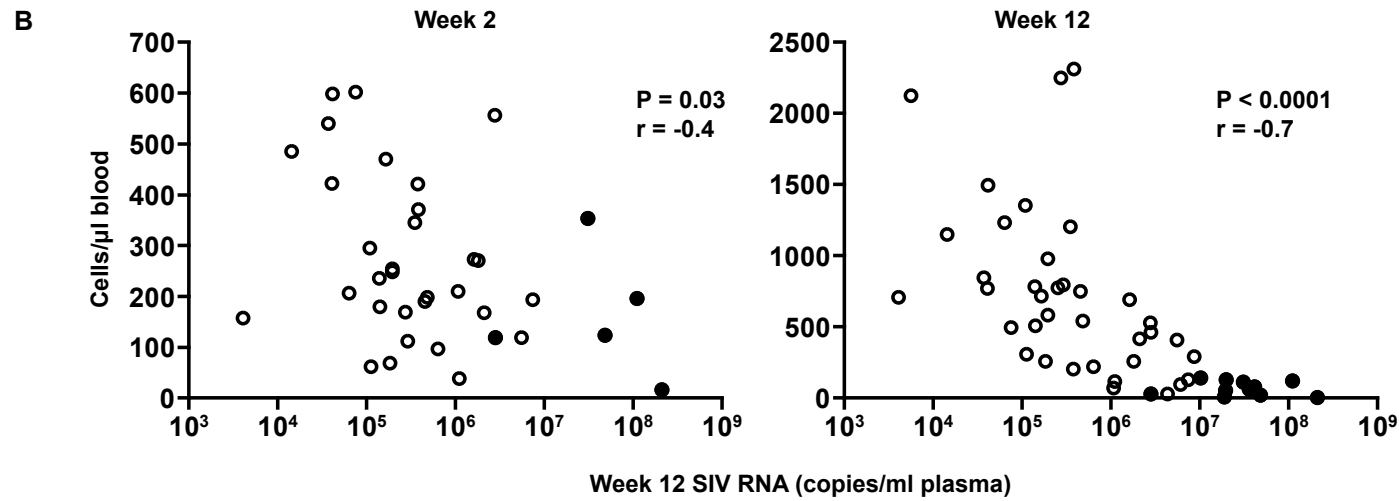
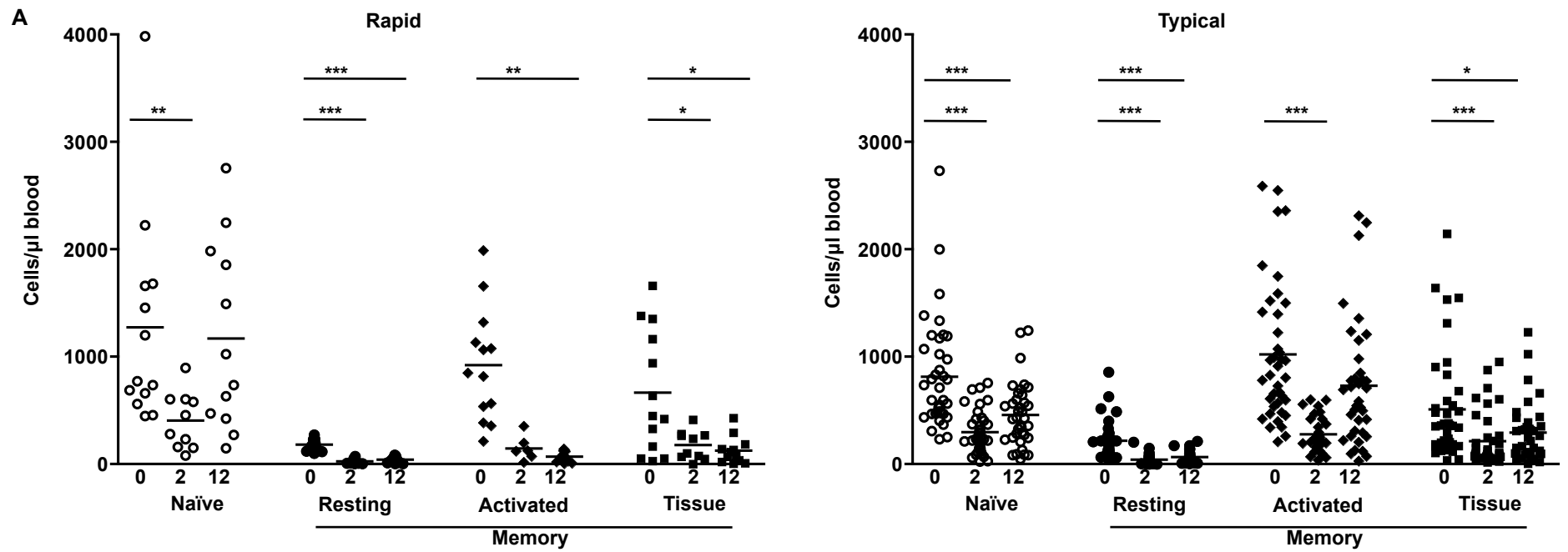
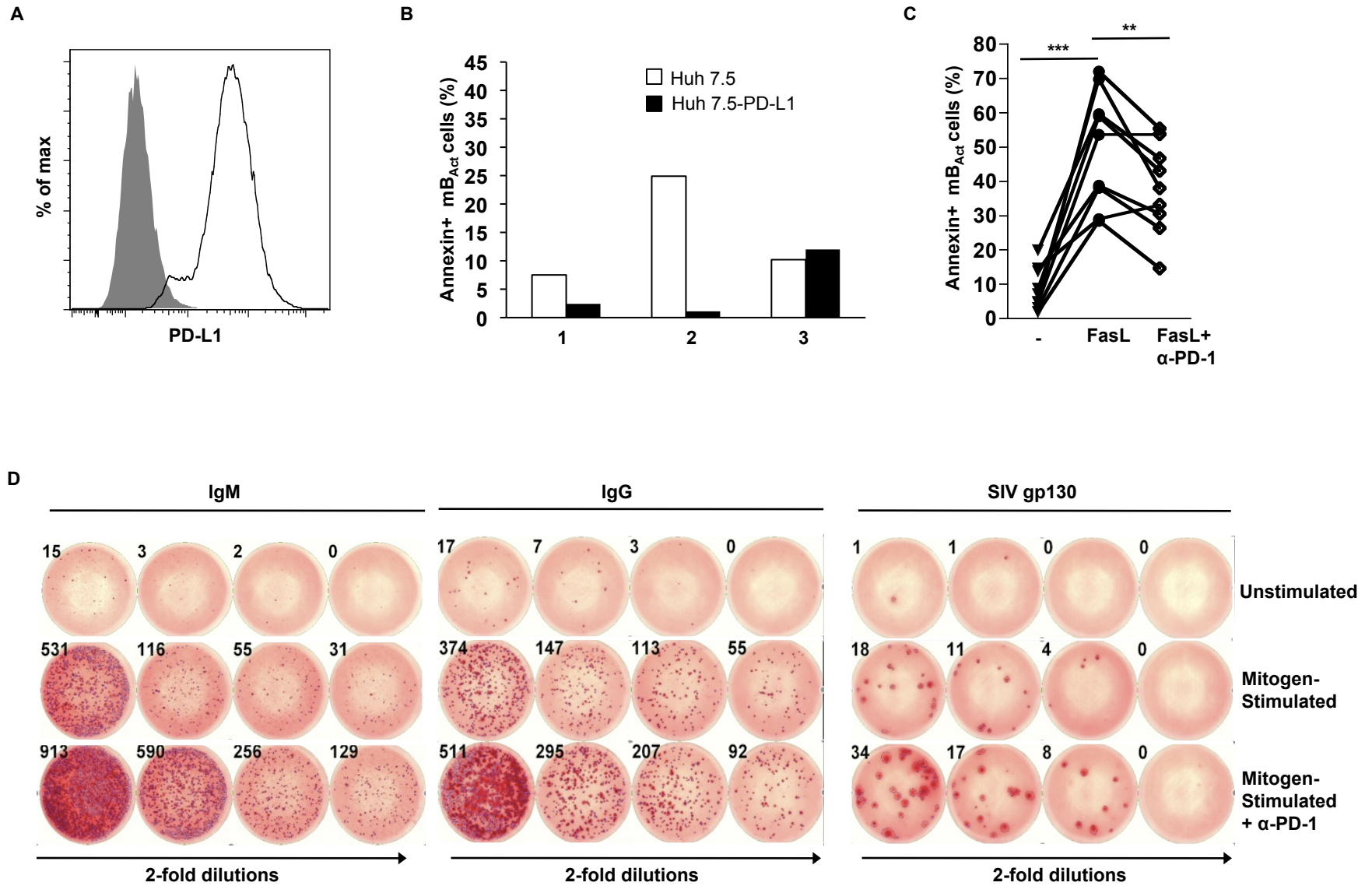


Supplementary Figure 1







Supplementary Figure 1. Representative flow cytometric dot plots showing distribution of B cell subsets in tissues of an uninfected rhesus macaque. Cells were gated on CD20⁺ cells. Numbers represent proportion of each subset as a percentage of CD20⁺ cells.

Supplementary Figure 2. (A). Absolute counts of B cell subsets in rapid progressors (n=13) and typical progressors (n = 39) pre- (Week 0) and post- (Weeks 2 and 12) SIV infection. Each data point represents an individual animal, and horizontal lines represent medians. **(B)** Correlations between set-point viral load and absolute numbers of mB_{Act} cells at 2 or 12 weeks post SIV infection; filled and open symbols represent rapid and typical progressors, respectively. *, P < 0.05; **, P < 0.01; ***, P < 0.001.

Supplementary Figure 3. (A) Representative FACS histogram plots demonstrating the expression of PD-L1 on Huh-7.5 (closed) and Huh-7.5.PD-L1 (open) cells. **(B)** Summary of Annexin-V expression on mB_{Act} cells of SIV⁻ rhesus macaques (n = 3) following culture with Huh 7.5 or Huh 7.5-PD-L1 cells. **(C)** PBMC were purified from 9 SIV-infected animals and cultured for 24hrs in medium only, in the presence of rFasL or in the presence of rFasL + anti-PD-1 blocking Ab. Following culture, cells were stained for Annexin-V on different B cell subsets. **(D)** Representative ELISpots for total IgM, total IgG and SIV Env gp130-specific IgG under 3 conditions: unstimulated (medium only), stimulated (mitogens only) and stimulated + anti-PD-1 blocking Ab. Each spot represents an individual Ab-secreting cell. *, P < 0.05; **, P < 0.01; ***, P < 0.001.

Supplementary Table 1. Rapid progressor non-SIV infections

Animal ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
RP 1	1		3		6	6
RP 2					1, 4	1, 4, 13
RP 3	2	1, 2			1, 6	6, 13
RP 4		6	6, 13	1, 11		
RP 5						
RP 6					6	6
RP 7				1, 4, 6	8	
RP 8			1, 3, 6			
RP 9			1, 5	5, 6	6	6
RP 10			3,4	1		
RP 11				2	6	6
RP 12			1, 5	1	5	5, 6
RP 13			1, 6, 12	1, 6, 12		

Campylobacter spp-1, *Shigella*-2, *Trichomonas*-3, whipworms-4, enteropathogenic *E.coli*-5, diarrhea-6, trauma-7, abscess-8, eye problems-9, *Candida*-10, pain-11, *Giardia*-12, anemia-13, unknown-14

Supplementary Table 2. Typical progressor non-SIV infections

Animal ID	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
TP 1						
TP 2				1		
TP 3						
TP 4						
TP 5						
TP 6						
TP 7						
TP 8						
TP 9						
TP 10						
TP 11		3				
TP 12		3		6	6	6
TP 13				3	3, 6	4
TP 14						
TP 15						
TP 16	6					
IP 17						
TP 18					7	
TP 19	1					
TP 20						
TP 21			1			
TP 22				2, 3		
TP 23						
TP 24			3	3		2
TP 25				5, 6	6	1, 6, 10, 11
TP 26					7, 11	7, 11
TP 27						
TP 28			12			
TP 29						
TP 30					2, 3	2, 3
TP 31						
TP 32						
TP 33				6	5, 6	6
TP 34						
TP 35				6	6	
TP 36						1
TP 37						
TP 38	2				6	1
TP 39						

Campylobacter spp-1, *Shigella*-2, *Trichomonas*-3, whipworms-4, enteropathogenic *E.coli*-5, diarrhea-6, trauma-7, abscess-8, eye problems-9, *Candida*-10, pain-11, *Giardia*-12, anemia-13, unknown-14

Supplementary Table 3. Statistical tests

Figure	Statistical test used
1B	t-test
2C	Wilcoxon signed rank test
2D	Paired t-test
3A	t-test
3B	Pearson's product moment correlation
3C (box plots)	t-test (Wk2) and Wilcoxon rank sum test (Wk12)
3D (box plots)	Wilcoxon rank sum test
3E (box plots)	t-test (Wk2) and Wilcoxon rank sum test (Wk12)
3C, D and E (Correlations)	Pearson's product moment correlation
4C	Wilcoxon signed rank test
5C	Paired t-test
6B	Paired t-test
6D	t-test (IgM) and Wilcoxon rank-sum test (IgG)
Supplementary Figure 2A	Paired t-test
Supplementary Figure 2B	Pearson's product moment correlation
Supplementary Figure 3C	Paired t-test