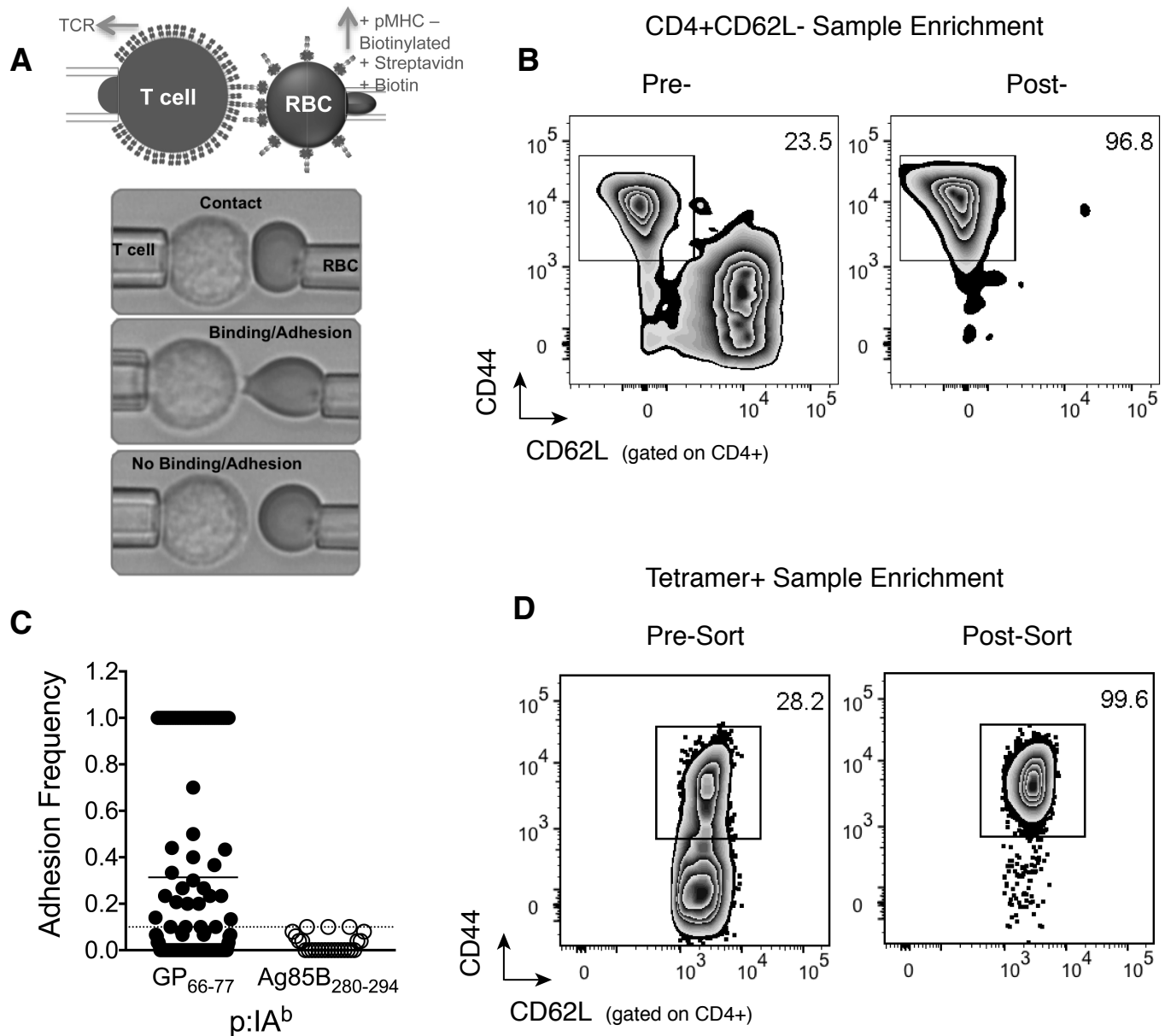
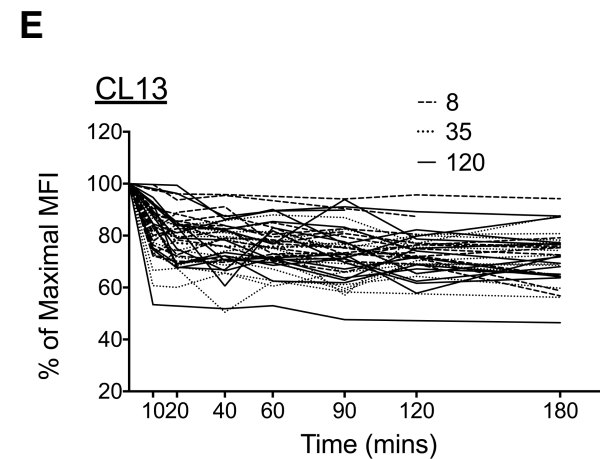
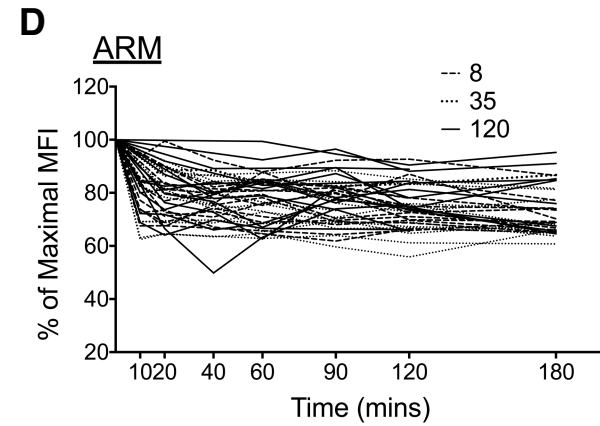
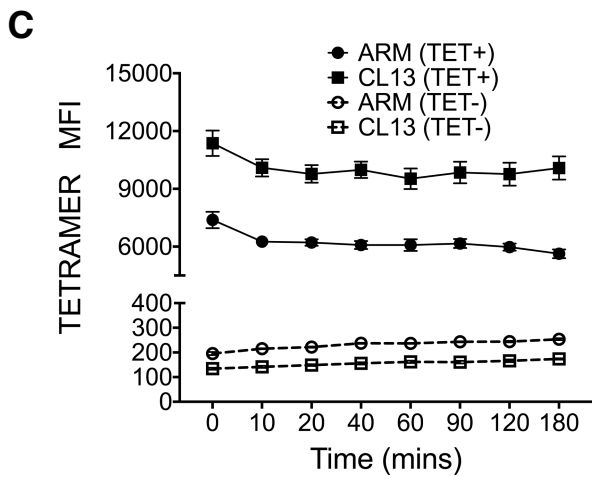
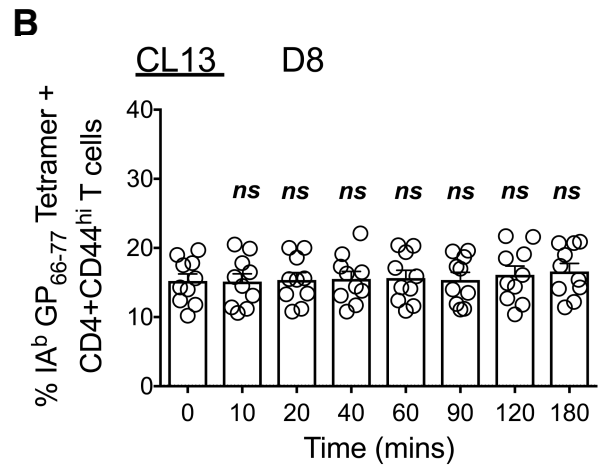
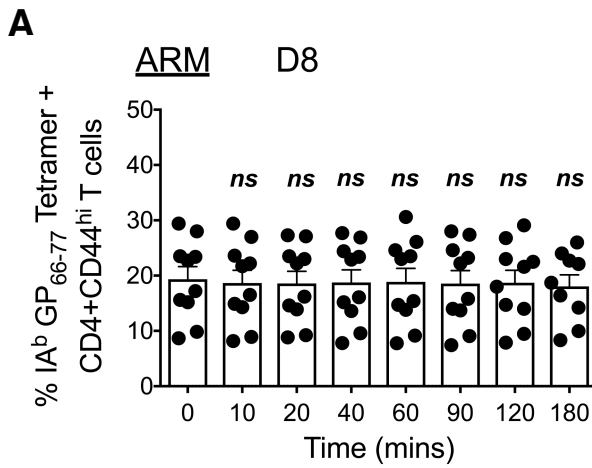


**Supplemental Figure 1. Decreased polyfunctionality in chronic infection.** Representative flow plots with the frequency of (A) IFN $\gamma$  and TNF $\alpha$  (B) IFN $\gamma$  and IL-2 co-expressing cells in ARM and CL13 at the indicated dpi gated on CD4+CD44<sup>hi</sup> splenocytes. (C) Frequency of TNF $\alpha$  (top), IL-2 (middle) and triple cytokine (bottom) producing cells at the time points and infections represented in the flow plots. Cumulative data with 3-5 independent experiments and a total n=6-17 mice/group at n=2-5 mice/experiment/group. Bar graphs with Mean  $\pm$  SEM. Statistical significance, ns = no significance, \* P > 0.05, \*\* P > 0.01, \*\*\* P > 0.001, \*\*\*\* P > 0.0001, Student t-test (ARM vs CL13), Ordinary one-way ANOVA Tukey's multiple comparison test (between dpi - individual infections).



**Supplemental Figure 2. 2D micropipette adhesion frequency assay and T cell sample enrichment.** (A) Top, drawing of micropipette held T cell with surface TCR in contact with pMHC coated on human RBC through streptavidin – biotin interaction, and below, (first) a microscope bright-field image at 100x magnification showing the two cells held in contact, (second) a binding event when TCR is specific for the coated pMHC evidenced in the stretching of the RBC membrane as the T cell is retracted away from the RBC, (last) the lack of RBC shape change in the absence of specific binding between TCR and pMHC. (B) Representative flow plot of splenocyte enrichment for CD4+CD62L- cells with staining for CD44 and CD62L shown before and after enrichment (shown for day 8 ARM infection). (C) ARM d8 sample tested against the LCMV monomer IA<sup>b</sup> GP<sub>66-77</sub> and the control non-LCMV monomer IA<sup>b</sup> Ag85B<sub>280-294</sub> from MTB. Individual points represent a single CD4+CD62L- T cell with cells showing adhesion frequencies between 10-100% (0.1-1.0 y-axis) considered specific to the test antigen. (D) Representative flow plot showing IA<sup>b</sup> GP<sub>66-77</sub> tetramer staining of CD4+CD62L- enriched splenocytes from d7 ARM infection before and after sorting (FACS) on tetramer+ cells.



**Supplemental Figure 3. Frequency of tetramer+ cells during tetramer decay assay remains unchanged.** Frequency of tetramer+ cells at time 0 compared to other decay time points for (A) ARM and (B) CL13 d8 samples and (C) the associated decay in tetramer MFI for tetramer+/- cells in the samples. Data representative of one of three replicates. Tetramer MFI at designated time points was normalized to time 0 MFI and the % MFI plotted for individual mice at the different dpi with (D) ARM and (E) CL13 infection. Representative of n=13-14 mice, 3-5 independent experiments at n= 4-5 mice/experiment/group. Statistical significance, ns = no significance, Sidak's multiple comparison test (A,B).