Supplemental Figure Legends

Supplemental Figure 1. **In vivo** CD4+ T cell depletion in SIV uninfected SMs. The longitudinal assessment of the percent of CD4+ T cells (top) and the absolute number of CD4+ T cells (bottom) is compared here in SIV+ vs. SIV- animals. Orange and purple lines represent SIV- animals, while black line represents the average of 6 SIV+ SMs (+/- SD). Dotted lines represent period of CD4 depleting treatment.

Supplemental Figure 2. CD4 depletion in SIV uninfected SMs results in an increase in activation of CD4+ T cells. Longitudinal assessment of the percent of CD4+Ki67+ T-cells in both individual SIV- animals (purple and orange lines), compared to the average of all SIV+ animals (black line) through 240 days post-depletion.

Supplemental Figure 3. The absolute number of CD4+CCR5+ T cells increases transiently after CD4 depletion but does not correlate with viral load. Longitudinal assessment of the number of CD4+CCR5+ T cells in individual SIV-infected sooty mangabeys as measured by flow cytometry. Surface staining of CD4+CCR5+ T cells does not correlate with viral load. Dotted lines represent period of CD4 depleting treatment.
Supplemental Figures

Supplemental Figure 1

% CD4+ T Cells

Days

CD4+ T Cells/mm³

Days
Supplemental Figure 3

Absolute CD4+CCR5+ T Cells

Time (days)

CD4+CCR5+ T Cells/mm³

FBs
FGn
FYr
FDu
FHs
FYs