



**Supplemental Fig. 1.** Key pathogenic features of SIVsab infection in RMs. (a) Plasma viral load quantification showed high levels of viral replication during acute infection followed by complete control of viremia, with undetectable plasma viral loads, starting from 72 days postinfection (dpi) on. The overall pattern of SIVsab replication in the intestine mirrored that of plasma viral load, but control of viral replication was achieved at later time points (90 dpi). The detection limit of the assay was  $10^2$  copies/ml of plasma and 10 copies per  $10^6$  cells. (b) Changes in CD4<sup>+</sup> T cells in SIVsab-infected RMs. Acute viral replication resulted in a significant depletion of CD4<sup>+</sup> T cells in blood and intestine, which was massive at mucosal sites. With the control of viral replication, a trend to complete recovery of CD4<sup>+</sup> T cell was observed. Dynamics of peripheral T cell activation, as assessed by changes in HLA-DR (c) and Ki-67 (d) expression on CD4<sup>+</sup> and CD8<sup>+</sup> T cells in SIVsab-infected RMs. SIVsab infection induced transient levels of activation and proliferation of both CD4<sup>+</sup> and CD8<sup>+</sup> T cells. T cell immune activation and proliferation levels returned to preinfection levels by 200 dpi.