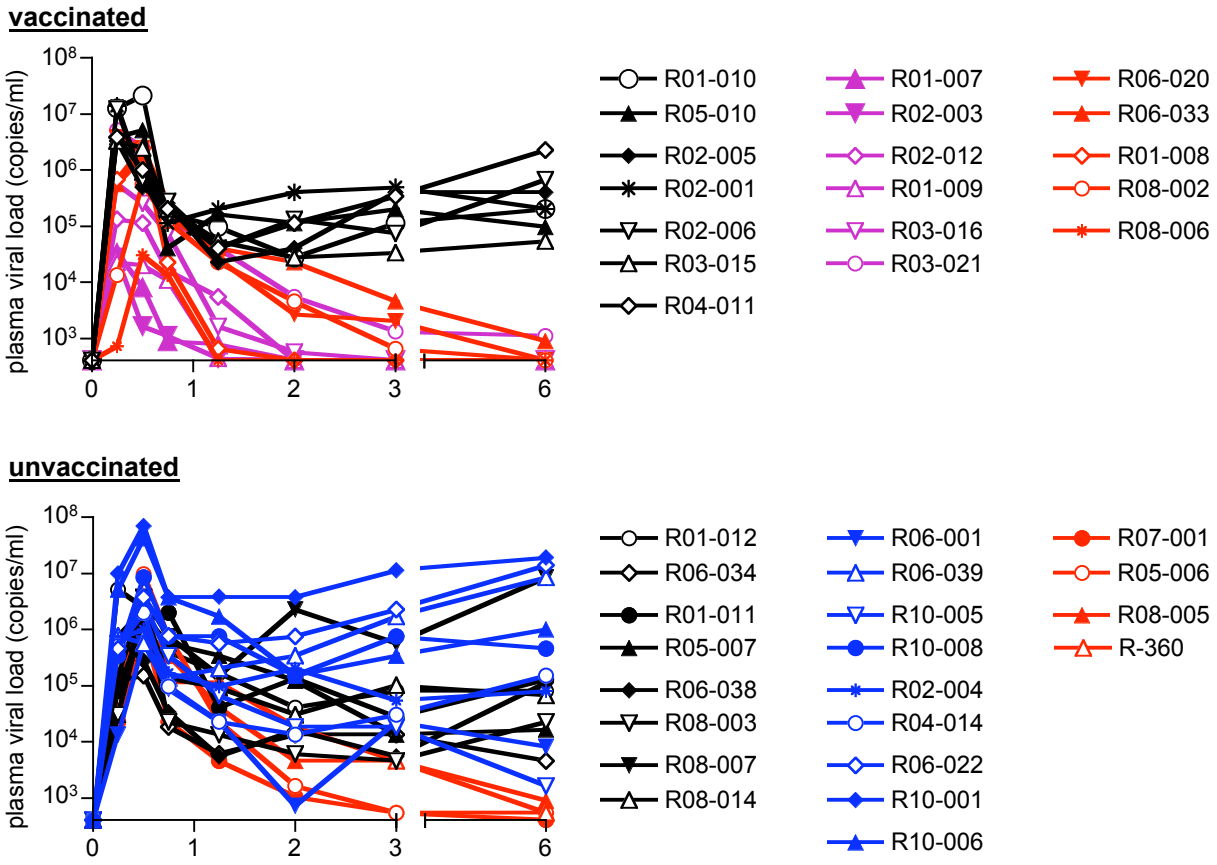

Fig. S1. List of macaques whose samples were analyzed in this study.
Plasma viral loads (SIV *gag* RNA copies/ml plasma) in these animals after SIV challenge which include the data reported previously in the following articles are shown. The lower limit of detection is 4 x 10^2 copies/ml. Animals that controlled setpoint viremia are indicated by purple or red.

Kawada M, Tsukamoto T, Yamamoto H, Takeda A, Igarashi H, Watkins DI, Matano T. 2007. Long-term control of simian immunodeficiency virus replication with central memory CD4$^+$ T-cell preservation after non-sterile protection by a cytotoxic T lymphocyte-based vaccine. J. Virol. **81:** 5202-5211.

Nomura T, Yamamoto H, Shiino T, Takahashi N, Nakane T, Iwamoto N, Ishii H, Tsukamoto T, Kawada M, Matsuoka S, Takeda A, Terahara K, Tsunetsugu-Yokota Y, Iwata-Yoshikawa N, Hasegawa H, Sata T, Naruse TK, Kimura A, Matano T. 2012. Association of major histocompatibility complex class I haplotypes with disease progression after simian immunodeficiency virus challenge in burmese rhesus macaques. J. Virol. **86**: 6481–6490.

Takahashi N, Nomura T, Takahara Y, Yamamoto H, Shiino T, Takeda A, Inoue M, Iida A, Hara H, Shu T, Hasegawa M, Sakawaki H, Miura T, Igarashi T, Koyanagi Y, Naruse TK, Kimura A, Matano T. 2013. A novel protective MHC-I haplotype not associated with dominant Gag-specific CD8+ T-cell responses in SIVmac239 infection of Burmese rhesus macaques. PLoS ONE **8:** e54300.

Nakane T, Nomura T, Shi S, Nakamura M, Naruse TK, Kimura A, Matano T, Yamamoto H. 2013. Limited impact of passive non-neutralizing antibody immunization in acute SIV infection on viremia control in rhesus macaques. PLoS ONE **8:** e73453.

Iwamoto N, Takahashi N, Seki S, Nomura T, Yamamoto H, Inoue M, Shu T, Naruse TK, Kimura A, Matano T. 2014. Control of SIV replication by vaccine-induced Gag- and Vif-specific CD8$^+$ T cells. J. Virol. **88:** 425-433.

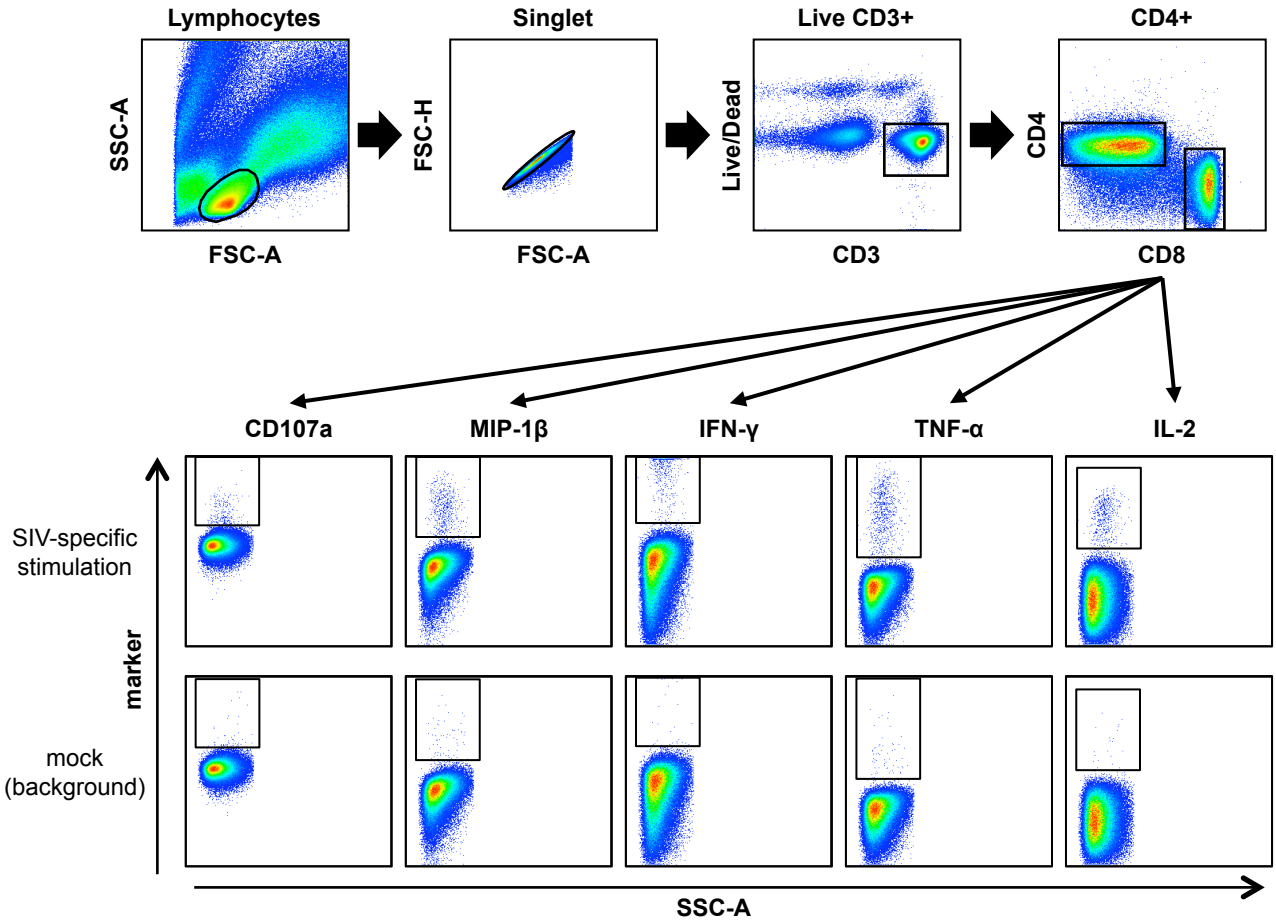

Fig. S2. A representative gating schema for flow cytometric analysis.

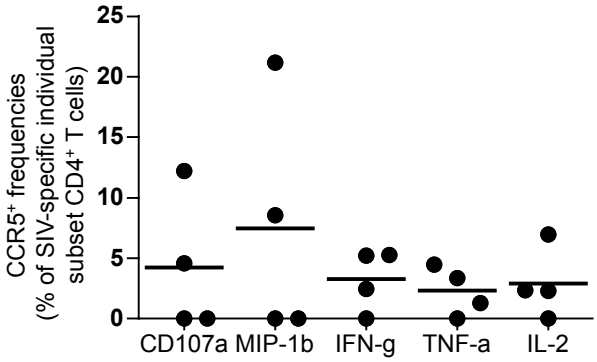

Fig. S3. CCR5$^+$ cell frequencies in SIV-specific CD4$^+$ T cells.
CCR5$^+$ cell frequencies in SIV-specific CD107a$^+$, MIP-1β$^+$, IFN-γ$^+$, TNF-α$^+$, and IL-2$^+$ CD4$^+$ T cells are shown. PBMC samples obtained from four vaccinated controllers (R03-016, R03-021, R06-020, and R06-033) in the chronic phase were used.