



## Figure S1. Plasma ADCC antibody activity measured against multiple gp120s, Related to Figure 1

(A) ADCC activity of 2 plasma pools (Hivlg and VA Pool) and 4 infant plasma samples (BK431, BL757, BO862, BR013) measured against multiple envelope antigens (gp120s) from clade A/D (BL035.W6M.Env.C1 (BL035)), clade A (MG505.W0M.Env.H3 (MG505)), clade B (Bal, WITO4160 (WITO), YU2), clade C (CAP210.2.00 (CAP210), DU422.1 (DU422)), and clade C/D (MK184.W0M.Env.G3 (MK184)). Data represent the mean of one experiment run in duplicate. (B) ADCC activity against BL035 vs. ADCC activity against the mean of the 7 other gp120s tested. Spearman rank correlation r = 1, p = 0.017.



## Figure S2. Decay of passively acquired ADCC activity in HIV-uninfected infants, Related to Figure 1

(A) ADCC activity measured in longitudinal plasma samples from nine HIV-uninfected infants, with each infant shown as a line with the indicated symbol at the right. Data represent the mean  $\pm$ SD of two independent experiments run in duplicate. (B) Passively acquired infant ADCC responses are shown in relation to infection outcome for a subset of infected infants that were first detected as HIV-infected by 6 weeks of age (during which time passively acquired antibodies have their highest activity). Results are normalized to a positive control (HivIg) and data are represented as mean  $\pm$  SEM. Figure S3



Figure S3. Neutralizing Antibody Responses and Total HIV-specific Binding Titers in Infants, Related to Figure 1 Infant plasma-mediated neutralizing antibody breadth (A), neutralizing antibody potency (B) and HIV-specific IgG  $\log_2$ EPT (E) in relation to infant infection status. Data are represented as mean ± SEM. Correlation between infant ADCC antibody activity and neutralizing antibody breadth (C), neutralizing antibody potency (D) and HIV-specific  $\log_2$ EPT (F).