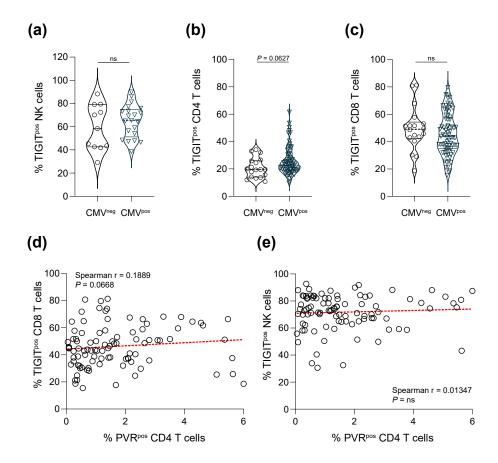
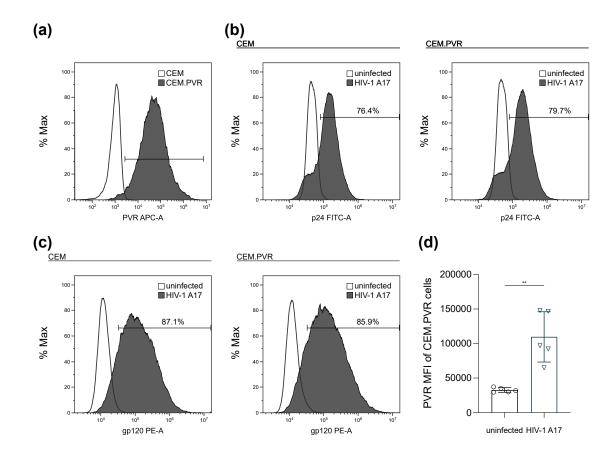
## **Supplementary Figure 1**



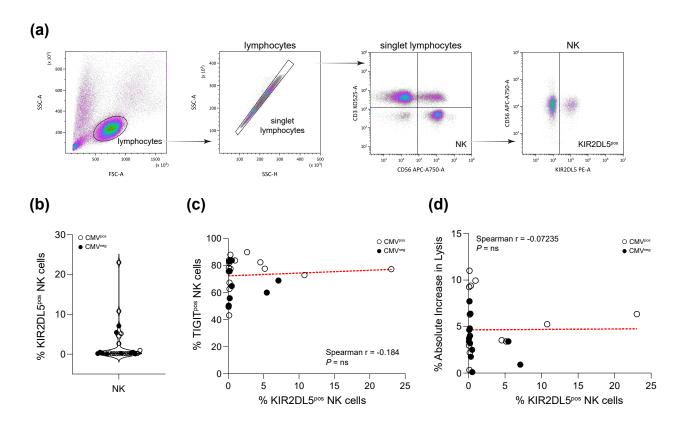
Supplementary Figure 1 | TIGIT expression on lymphocytes from CMV-seronegative and CMV-seropositive participants. (a) Six additional CMV-seronegative individuals were included for more robust comparison of TIGIT expression on NK cells from CMV-seronegative (n = 11) and CMV-seropositive (n = 21) HIV-seronegative individuals. CMV-seronegative individuals were 64% male with mean age of 49.3 years, whereas CMV-seropositive individuals were 73% male with mean age of 52.0 years. Student's t-test ns. The CMV serostatus of PLWH was determined and (b) CD4<sup>+</sup> T cell or (c) CD8<sup>+</sup> T cell TIGIT expression for those who were CMV-seronegative (n = 18) was compared to those who were CMV-seropositive (n = 77). Mann-Whitney U-test P = 0.0627; Student's t-test ns. Correlation between CD4<sup>+</sup> T cell PVR and percentage of (d) CD8<sup>+</sup> T cell and (e) NK cell TIGIT expression is depicted. Horizontal lines bisecting groups in (a - c) represent median with IQR.

## **Supplementary Figure 2**



Supplementary Figure 2 | PVR and HIV-1 antigen expression on CEM.NKR-CCR5 cells. Representative histograms from five independent experiments demonstrate (a) expression of PVR [median (IQR) 92.3% (5.1%)] on CEM.NKR-CCR5 PVR $^+$  (CEM.PVR) cells and relative levels of HIV-1 (b) p24 and (c) gp120 on CEM.NKR-CCR5 (CEM) and CEM.PVR cells 96 h after HIV-1 A17 infection. The impact of active HIV-1 infection on PVR expression was measured and (d) summarized based on MFI of PVR expression (n = 5) on uninfected CEM.PVR cells compared to CEM.PVR cells infected with HIV-1 A17 for 96 h. Student's t-test \*\*P = 0.0015. Error bars in (d) represent SD.

## **Supplementary Figure 3**



Supplementary Figure 3 | Expression of NK cell KIR2DL5 within the functionally studied PLWH cohort. (a) NK cells were defined as  $CD3^{-}CD56^{+}$  singlet lymphocytes and KIR2DL5<sup>+</sup> NK cells identified. (b) Summary data of NK cell KIR2DL5 expression for PLWH within the functionally studied cohort. Correlations between the percentage of NK cells expressing KIR2DL5 and (c) TIGIT or (d) absolute increase in % specific lysis (raw data from Figure 4c) in the presence of anti-TIGIT mAb vs  $IgG_1$  are depicted. For all graphs, filled symbols represent CMV-seronegative (n = 10) participants while open symbols depict CMV-seropositive participants (n = 16). Horizontal lines bisecting groups in (b) represent median with IQR.