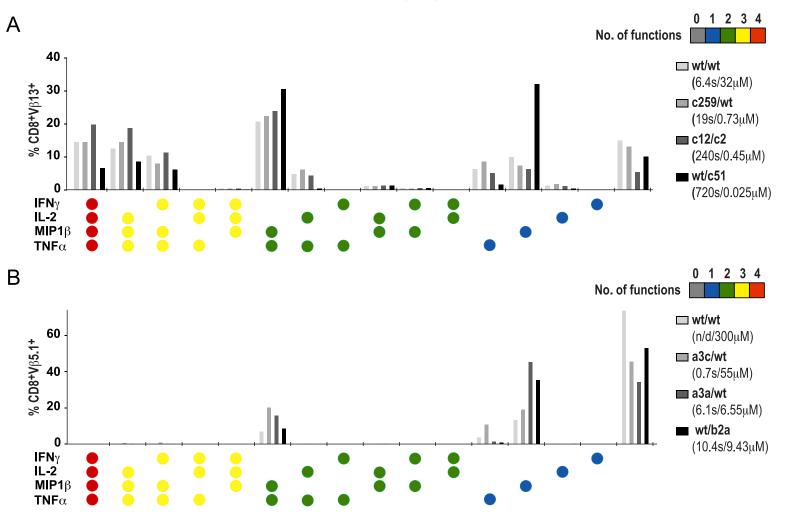


Supplementary Figure 1. The impact of donor origin on the functional profile of TCR-transduced CD8+ T cells. (A) Peripheral blood CD8+ T cells were isolated from three different HLA-A2+ donors (D1, D2 and D3), transduced with a wild-type TCR specific for the HLA-A2-restricted HIV-1 Gag<sub>77-85</sub> epitope and stimulated with peptide-pulsed HLA-A2+ C1R target cells as indicated. Stimulation with an  $\alpha$ CD3 mAb was used for positive control purposes. Four functional read-outs (MIP-1 $\beta$ , TNF $\alpha$ , IFN $\gamma$  and IL-2) were measured by flow cytometry. Pie chart segments represent the fraction of cells expressing the number of functions indicated in the key. UnT, non-transduced.

## Supplementary Figure 2



Supplementary Figure 2. Combinations of functions elicited by stimulation of TCR-transduced CD8<sup>+</sup> T cells with peptide-pulsed target cells. (A) HLA-A2<sup>+</sup> CD8<sup>+</sup> T cells transduced with the indicated NY-ESO-1-specific TCRs were stimulated with HLA-A2<sup>+</sup> CIR target cells pulsed with the cognate SLLMWITQC peptide at a concentration of  $10^{-5}$  M. (B) HLA-A1<sup>+</sup> CD8<sup>+</sup> T cells transduced with the indicated MageA3-specific TCRs were stimulated with HLA-A1<sup>+</sup> 221 target cells pulsed with the cognate EVDPIGHLY peptide at a concentration of  $10^{-4}$  M. Four functional readouts (MIP-1 $\beta$ , TNF $\alpha$ , IFN $\gamma$  and IL-2) were measured by flow cytometry. Data shown are representative of two independent experiments. n/d, not determined.