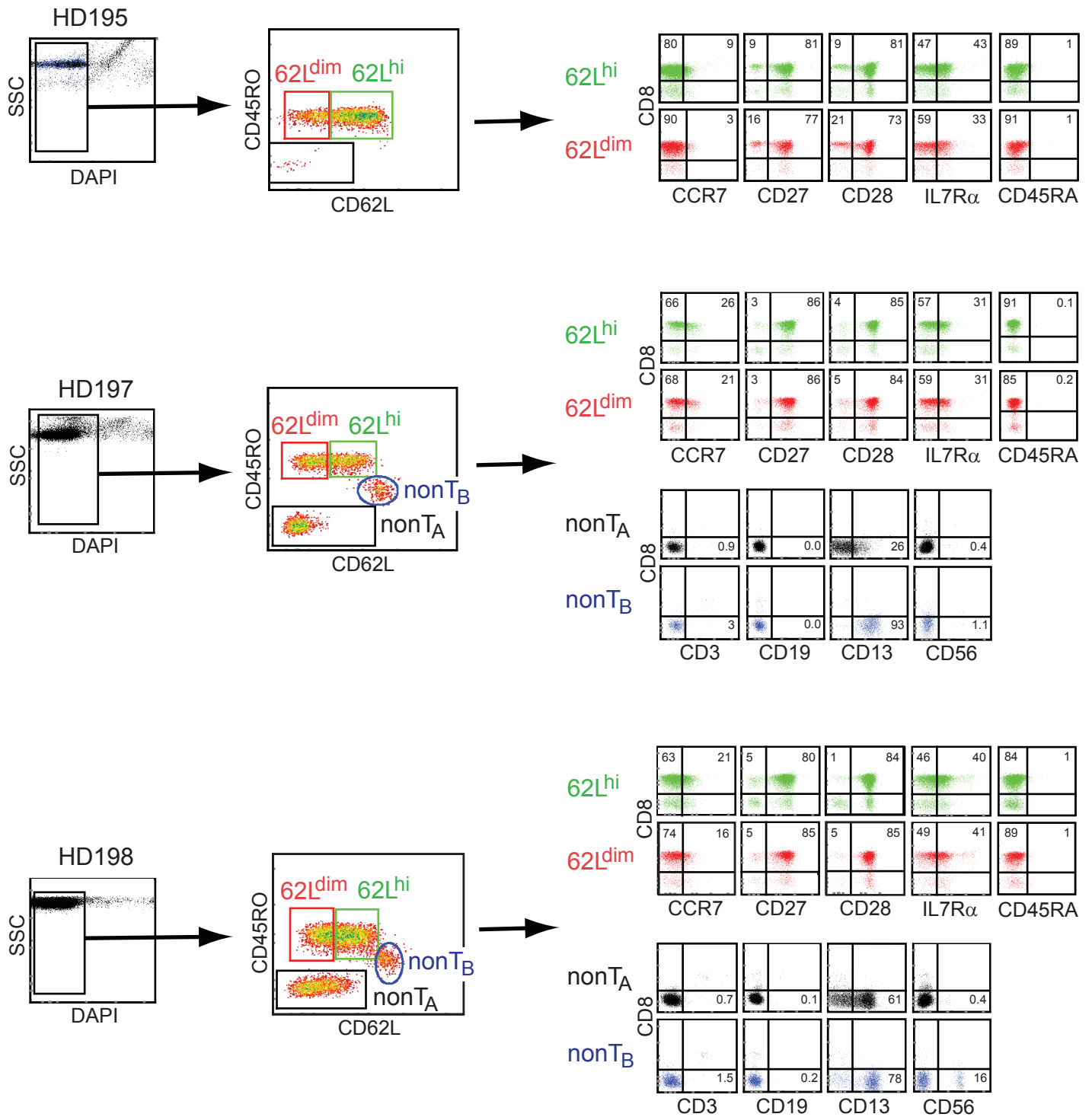
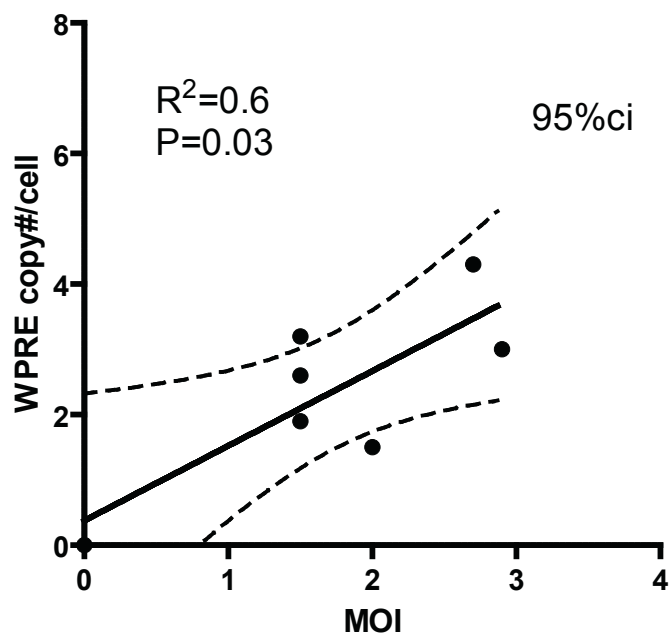


**Figure S1. Competitive binding of PE-conjugated anti-CD62L BD Clones DREG56 and SK11 with increasing amounts of COH DREG56-biotin.** 10e6 fresh healthy donor PBMC were incubated with the indicated amounts (0-10 $\mu\text{g}$ ) of COH-manufactured biotinylated-DREG56 mAb for 30 min in 100 $\mu\text{L}$  at 4 $^{\circ}\text{C}$ . Following 2x wash with PBS, the cells were stained with 5 $\mu\text{L}$  of either PE-conjugated anti-CD62L DREG56 (A) or SK11 (B) mAb. PE-conjugated isotype control staining is depicted as a black line. Data acquisition was performed on a FACScalibur (BD) using FCS Express V3 Software (De Novo Software, Los Angeles, CA).



**Figure S2. Phenotype analysis of CD8+ T<sub>CM</sub>-enriched products.** Following 2-step CliniMACS™ selection of PBMC from three healthy donors (HD195, HD197 and HD198), DAPI-negative cells were further gated for CD45RO and CD62L expression. Both CD45RO+CD62L<sup>hi</sup> (62L<sup>hi</sup>) and CD45RO+CD62L<sup>dim</sup> (62L<sup>dim</sup>) T cells, as well as the CD45RO<sup>neg</sup>CD62L<sup>neg</sup> (nonT<sub>A</sub>) and CD45RO<sup>dim</sup>CD62L<sup>+</sup> (nonT<sub>B</sub>) non-T cell populations were then further analyzed for expression of CD8 vs. either CCR7, CD27, CD28, IL-7R $\alpha$ , CD45RA, CD3, CD19, CD13 or CD56. All fluorochrome-conjugated antibodies were purchased from BD Biosciences, with the exception of anti-CCR7, which was purchased from R&D Systems. Percentages of immunoreactive cells were calculated using quadrants that were drawn based on isotype control staining; data acquisition was performed on a MACSQuant (Miltenyi) and analyzed using FCS Express V3 Software (De Novo Software).



**Figure S3. Correlation between vector copy number and MOI.** Regression analysis was performed with WPRE copy number on MOIs that were used in transduction.