

Figure S1. Experimental design of the dexamethasone and IL-15 effect on the CD45RA- memory T cells from PBMCs O/N and after 72 hours. For CFSE proliferation assay the cells were stained with CFSE before incubation for 72 h with dexamethasone.



Figure S2. Representative figure of the expression of IFN-γ by flow cytometry in a convalescent and healthy **donor** within the CD45RA⁻ subpopulation after co-culturing PBMCs with the mixture of the three SARS-CoV-2 peptides (M, N, S). 1,2,3,4,5, correspond to the different time points.



Figure S3. Detection of SARS-CoV-2 specific T cells within the CD45RA⁻ memory T cell subsets CD4⁺T_{CM}, CD4⁺ T_{EM}, CD8⁺T_{EM}, CD8⁺T_{EM} in recovered and naïve individuals. IFN-γ was measured by flow cytometry after exposure to the single SARS-CoV-2 peptides (M, N, and S) and the peptide pools (PepX3). 1,2,3,4, and 5 correspond to the different time points described in Figure 1. Independent data for each naïve control is shown by the blue dots and independent data for each recovered donor is shown by the red dots. Mean and SEM. ns





Figure S4. Changes in the expression of the activation markers HLA-DR, CD69 and CD25^{high} with and without an O/N incubation with IL-15 and, after A) O/N incubation with dexamethasone and B) 72 h incubation with dexamethasone in the CD45RA⁻ memory T cell population from PBMCs. N=4-5. Mean and ±SEM. ns.



Figure S5. Changes in the expression of the exhaustion markers NKG2A and PD1, and the homing marker CD103 with and without an O/N incubation with IL-15 and, after A) O/N incubation with dexamethasone and B) 72 h incubation with dexamethasone in the CD45RA⁻ memory T cell population from PBMCs. N=4-5. Mean and ±SEM. ns



Figure S6. Changes in the expression of the homing marker CCR7 with and without an O/N incubation with IL-15 after A) O/N incubation with dexamethasone and B) 72 h incubation with dexamethasone in the CD45RA⁻ memory T cell population from PBMCs. N=4-5. Mean and ±SEM. ns

DEX
10⁻⁷ M

10⁻⁶ M

10-5 M