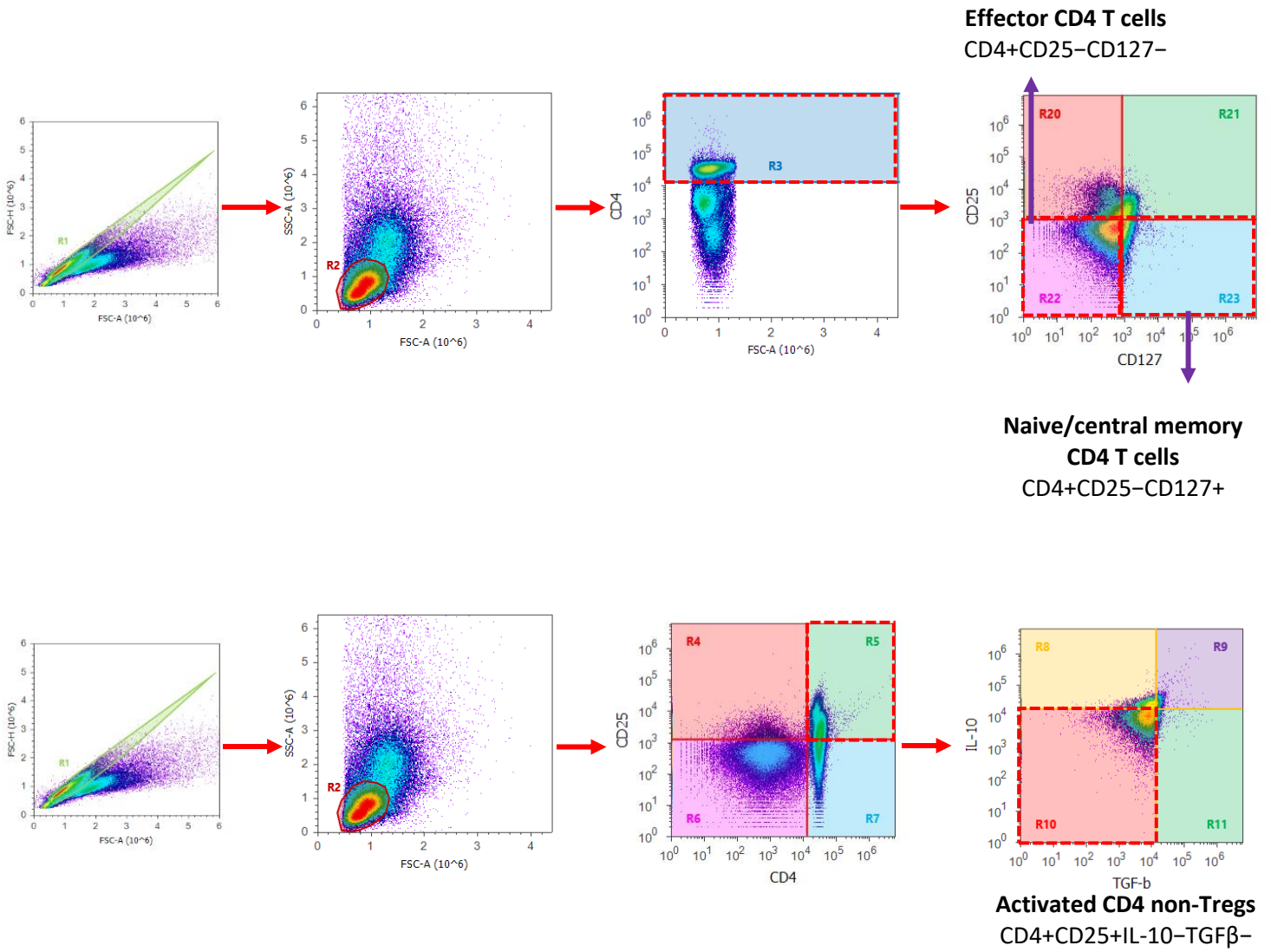


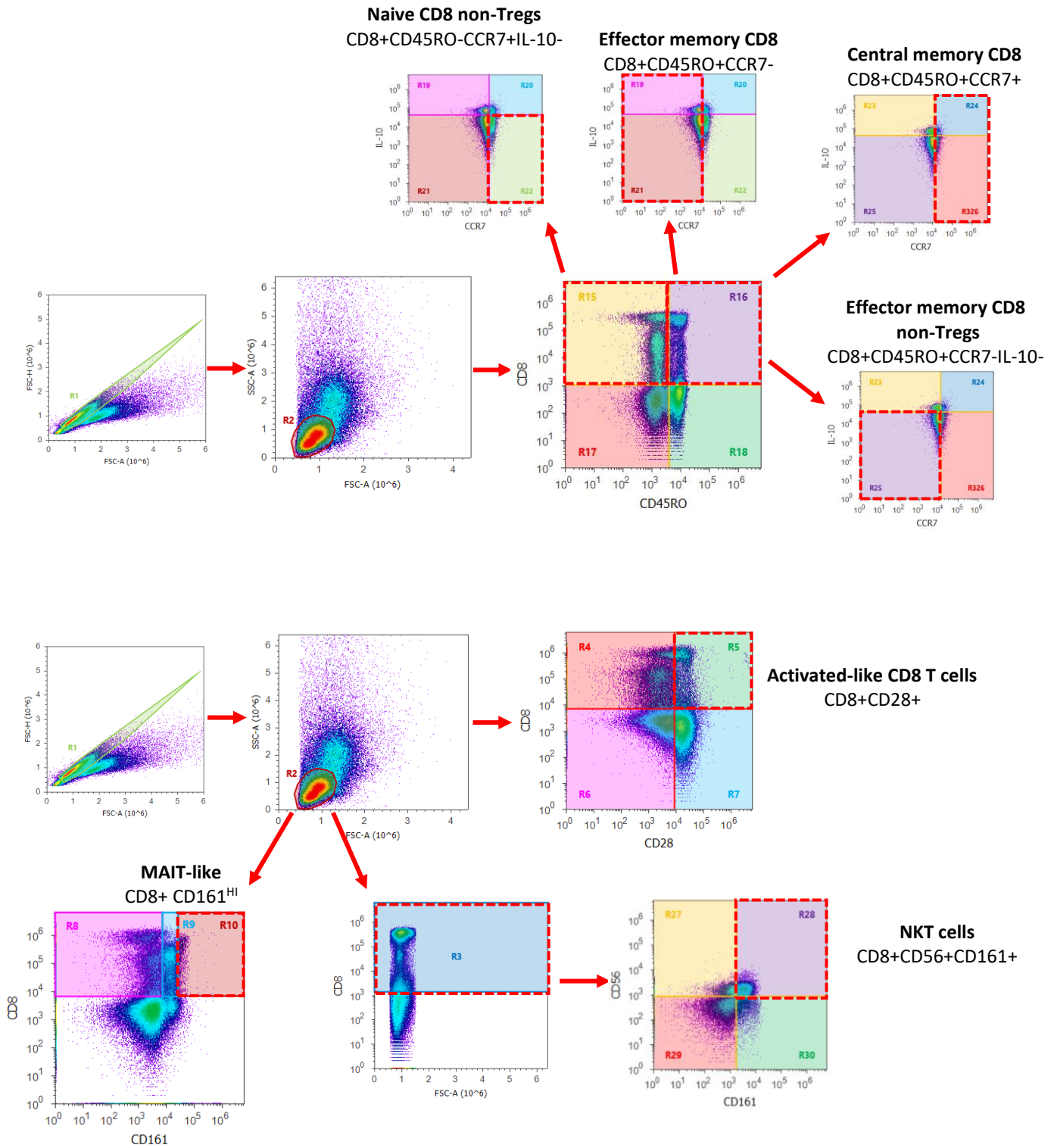
Supplementary Figure 1. Analysis strategy for CD4, CD8, and CD19 cells. In all cases, a singlet region, named as R1, was selected. Starting from this region, a forward vs scatter dot plot was created, defining a new region for the targeted cells (lymphocytes or plasma cells) which was named as R2. **A. CD4 T cells.** starting from R2, a new CD4⁺ window was created and named as R3. From R3, a new CD25 vs. CD127 window was created; CD4⁺CD25⁻CD127⁻ cells were defined as effector CD4 T cells, while CD4⁺CD25⁻CD127⁺ cells were defined as naïve/central memory CD4 T cells. In another sample tube, starting from R2, a CD4 vs. CD25 window was created; from the double-positive region, a new IL-10 vs. TGF- β window was created; CD4⁺CD25⁺IL-10⁻TGF- β ⁻ cells were defined as activated CD4 non-Tregs. **B. CD8 T cells.** Starting from R2, a new CD8 vs. CD45RO window was created; from CD8⁺CD45RO⁻, a new IL-10 vs. CCR7 window was created; CD8⁺CD45RO⁻CCR7⁺IL-10⁻ cells were defined as naïve CD8 non-Tregs. From the CD8⁺CD45RO⁺ cells, three windows of CCR7 vs. IL-10 were generated; CD8⁺ CD45RO⁺ CCR7⁻ cells were defined as effector memory CD8; CD8⁺CD45RO⁺CCR7⁺ cells were defined as central memory CD8, while CD8⁺ CD45RO⁺CCR7⁻IL-10⁻ cells were defined as effector memory CD8 non-Tregs. In another sample tube, starting from R2, a new CD8 vs. CD28 window was created; double-positive cells were defined as like-activated CD8 T cells. From R2, a new CD8 vs. CD161 window was created; CD8⁺CD161^{HI} cells were defined as invariant, mucosa-associated-like cells (MAIT-like). From R2, a new CD8⁺ window was created and named as R3. From R3, a new CD56 vs. CD161 window was created; CD8⁺CD56⁺CD161⁺ cells were defined as NKT cells. **C. CD8 T cytotoxic cells.** The analysis of Tc cells was made in different tubes (one tube for each population). In all three cases, the gating strategy followed the same pattern. Starting from R2, a new CD8⁺ window was created and named as R3. From R3, a new window considering transcription factor vs. the corresponding cytokine was created; the following phenotypes were defined with this strategy: Tc1 (CD8⁺TBET⁺IFN- γ ⁺ or CD8⁺TBET⁺TNF- α ⁺), Tc2 (CD8⁺GATA-3⁺IL-13⁺ or CD8⁺GATA-3⁺IL-4⁺), and Tc17 (CD8⁺ROR- γ ⁺IL-17⁺). **D. B cells.** Starting from R2, a new CD19⁻ region was generated and named as R4. Starting from R4, a new CD138 vs. CD38 window was generated; CD19⁻CD138⁺ CD38⁺ cells were defined as plasma cells. From R2, a new CD19 vs. CD138 window was generated; CD138⁺ cells were selected, and the expression of IL-10 was measured in this region;

CD138+IL-10+ were defined as L-10+ plasma cells. Also, from R2, a new CD19 vs. CD38 window was created; double-positive cells were defined as activated B cells. In a different sample tube, starting from R2, a new CD19 vs. CD1d window was generated; CD19+CD1d+ cells were defined as lipid-antigen presenting (Lip-AP) B cells.

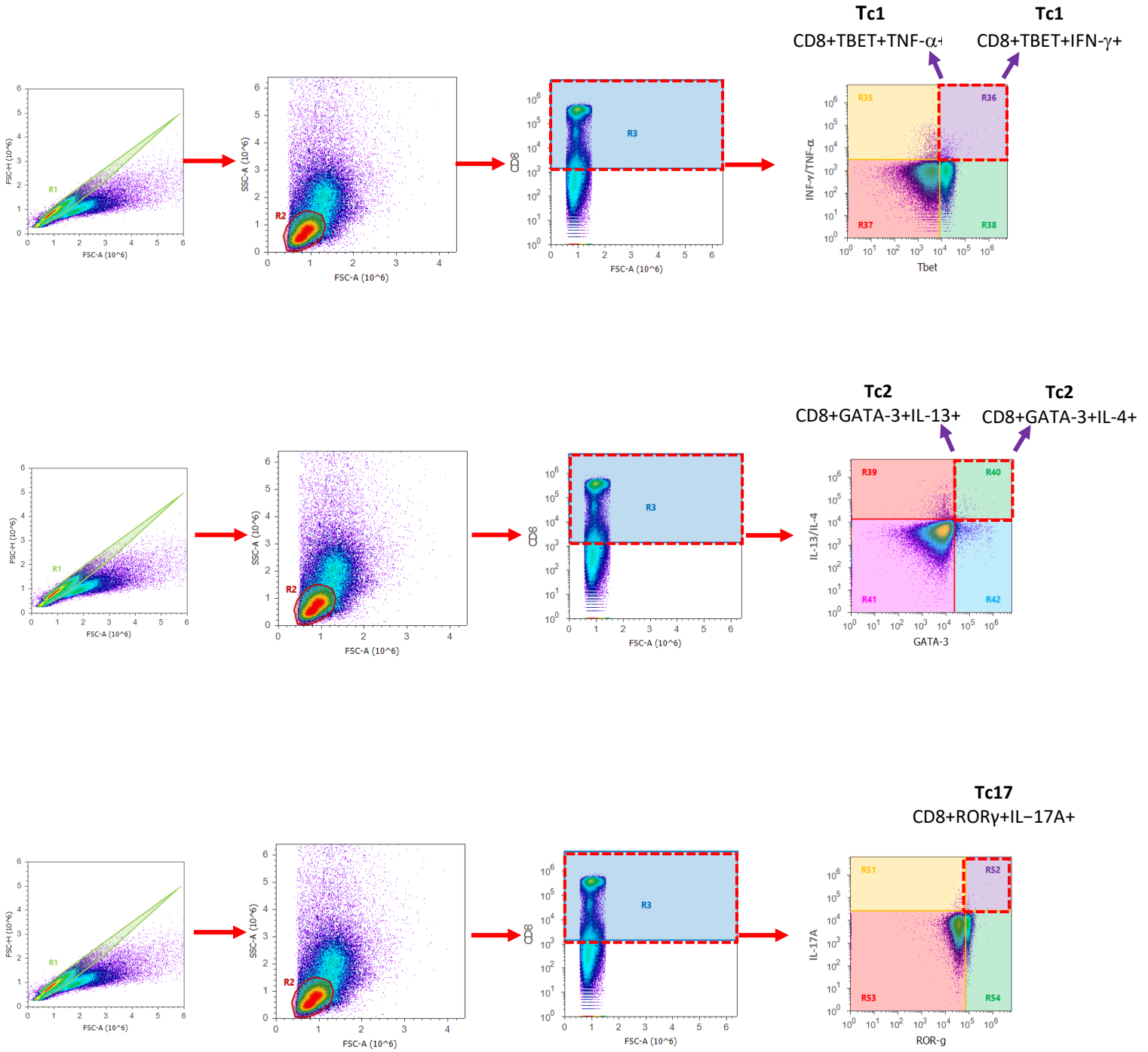
A. CD4 T cells



B. CD8 T cells



C. CD8 T cytotoxic cells



D. B cells

