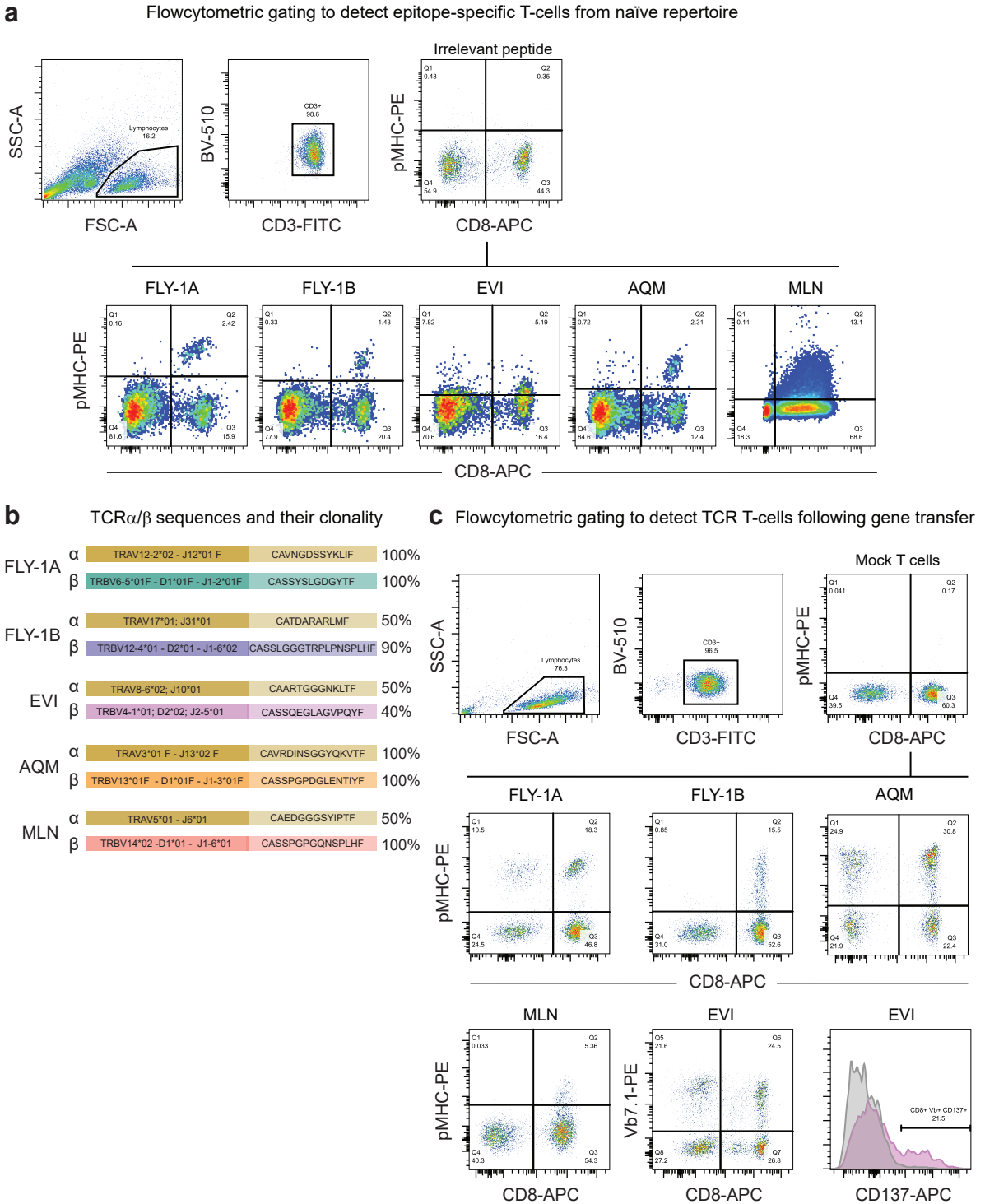


## Supplementary Figure 2.



**Supplementary figure 2. Retrieval of ROPN1/B-specific T-cells and TCR genes. a** Illustration of strategy employed for flow cytometric detection of pMHC<sup>+</sup> T-cells following 4 cycles of co-culture with epitope-loaded antigen presenting cells (i.e., T-cell enrichment for epitope-specific T-cells). Upper plots show gating strategy to define epitope-specific T-cells using as a reference pMHC staining of T-cells enriched with an irrelevant epitope. Lower five plots are representative pMHC stainings of T-cells that were enriched with FLY-1A, FLY-1B, EVI, AQM or MLN epitope, respectively. **b** Sequence identification of TCR V-alpha (TRAV and J according to IMGT nomenclature), V-beta genes (TRBV, D and J; blue) and C genes (with starting and ending amino acids) cloned from T-cells from a; percentage reflects fractions of these sequences among all identified TCR sequences per epitope. **c** Representative flow cytometry plot of pMHC binding of TCRs from b following gene transfer into T-cells (n=2 donors). Note: in case of EVI TCR, the specific pMHC complexes appeared insensitive in detecting TCR T-cells and were replaced by antibodies directed against TCR-V $\beta$ 7.1 and CD137 (the latter following 48h stimulation with cognate epitope-loaded BSM cells, see Methods for details).