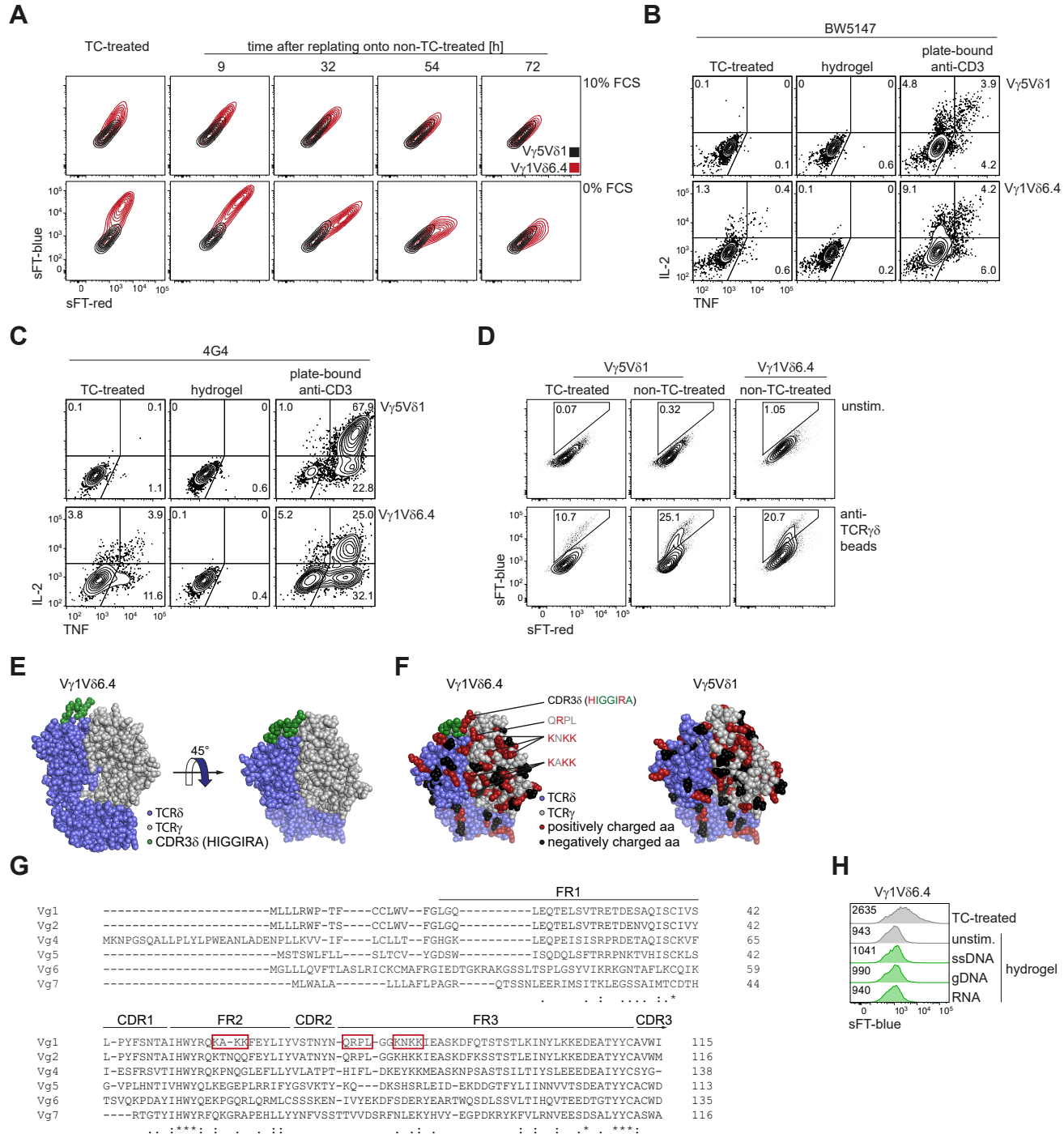


Dunst et al., Supplementary Figure 1



Supplementary figure 1. Recognition of synthetic polyanionic ligands underlies 'spontaneous' reactivity of Vγ1 γδTCRs.

(A) Flow cytometric analysis of sFT-blue and sFT-red expression by Vγ5Vδ1- and Vγ1Vδ6.4-expressing reporter cells after overnight culture on TC-treated culture surface and replating onto non-stimulating (non-TC-treated) surface at indicated time points; cells were cultured in complete medium (10% FCS) or under serum starvation (0% FCS). (B-C) Analysis of intracellular cytokines IL-2 and TNF in Vγ5Vδ1- and Vγ1Vδ6.4-expressing BW5147 (B) and 4G4 cells (C) after 8h of culture on the indicated culture surfaces in the presence of BrefeldinA. (D) Flow cytometric analysis of sFT-blue and sFT-red expression by the reporter cells transduced with indicated TCRs upon stimulation with anti-TCRγδ-coated beads or non-coated beads (unstimulated) on negatively charged (TC-treated) or non-charged (non-TC-treated) cell culture surfaces. (E) Visualization of Vγ1Vδ6.4 structure modeled by SWISS model in two indicated projections. (F) Visualization of the distribution of positively and negatively charged amino acids on models of Vγ1Vδ6.4 (left) and Vγ5Vδ1 (right) TCRs. (G) Alignment of all functional murine Vγ segments, framework regions (FR) and complementarity determining regions (CDR) are indicated and clusters of positively charged amino acids within Vγ1 are highlighted (boxes). (H) Flow cytometric analysis of sFT-blue signal in Vγ1Vδ6.4-expressing reporter cells upon stimulation with ssDNA (15μM), genomic DNA (gDNA, 15μg/ml), or RNA (15μg/ml).