

**Figure S7.** Cloning strategy to construct additional recombination substrates: [pD<sub>1</sub>J<sub>1</sub>; p3'D<sub>1</sub>J<sub>1</sub>; pDβ1; p5'Dβ1; pDv; p3'Dβ1; pVD<sub>1</sub>; pV5'D<sub>1</sub>; pVDv]. Genomic DNA encompassing the Dβ1 to J\u03bb1.2 region was amplified by PCR using primers #216 and #214 (see the primer list in **Table S4**) and subcloned into pGEM-7f using *Eco*RI and *Bam*HI sites, thus yielding substrate pD<sub>1</sub>J<sub>1</sub>. The PCR product resulting from amplification with primers #183 and #214 was subcloned into pGEMT-easy yielding substrate p3'D<sub>1</sub>J<sub>1</sub>. The BglII/BamHI fragment excised from pD<sub>1</sub>J<sub>1</sub> yielded the pDβ1 template. The latter template was mutated in a 2-steps PCR process: (i) 1<sup>st</sup> amplification used primers #181 and #186 or #188 and #182; (ii) 2<sup>nd</sup> amplification (from the resulting PCR product) used most 5' and 3' primers (#181 and #182). The latter product was digested and re-inserted into the AccI/PstI sites of the same vector to produce the p5'Dβ1 substrate. A similar strategy was applied to generate constructs pDv and p3'D\u031B1 [PCR amplifications then used primers pairs #181 and #206 followed by #205 and #182 (pDv); or #181 and #185 followed by #183 and #182 (p3'D\(\beta\)1]. A genomic fragment containing the V<sub>β</sub>14 23RSS was PCR amplified using primers #248 and #217. The resulting product was digested with EcoRI and XbaI and subcloned into pD\u03b31, p5'D\u03b31 or pDv, thus yielding substrates pVD<sub>1</sub>, pV5'D<sub>1</sub> or pVDv, respectively. RI, EcoRI; G, BglII; B, BamHI; S, SacI; X, XbaI; A, AccI; P, PstI.