



Figure S2. The intra-domain rearrangements of VSD segments between Na_vRh and Na_vAb. (A) The pairwise distances between a number of corresponding residues on the S2 and S3 segments remain largely unchanged in Na_vRh and Na_vAb. The distances are shown in the unit Å. (B) The segment containing the C-terminal half of S2 and the N-terminal fragment of S3 exhibits limited conformational changes in Na_vRh and Na_vAb. A stereoview is shown for the structural superimposition of the indicated residues on the S2 and S3 segments. (C) The N-terminal fragment of S3 segment exhibits little conformational shift relative to the CTC. (D) The S1 segment undergoes both rotation and translation relative to the CTC. (E, F) The conformational changes of S4 relative to S3 and S1, respectively. Refer to *Supplementary Movies S2-S4* for animations of the intra-domain rearrangements of VSD segments. The same color scheme, blue for Na_vRh and grey for Na_vAb, is applied to Figs. S2-4.