Supplementary Figures.

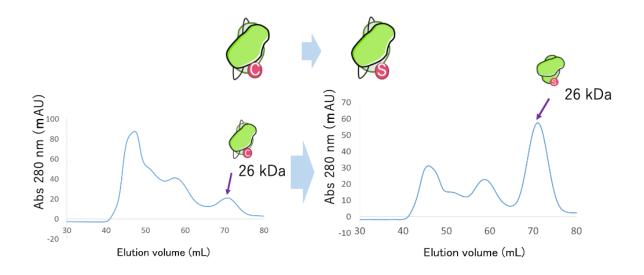


Figure S1. Elution curves of the size exclusion chromatography (SEC) of scFv (A4) with Cys80 (Left) and Cys80Ser (Right).

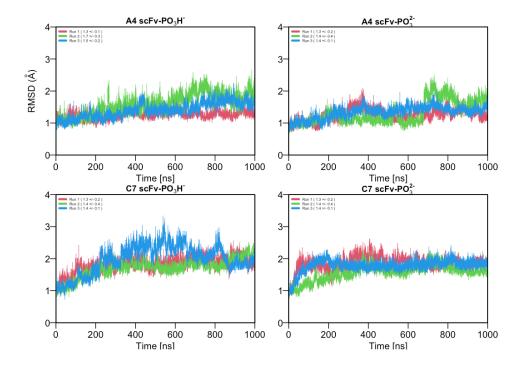
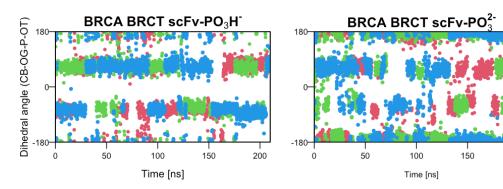
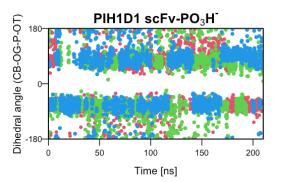
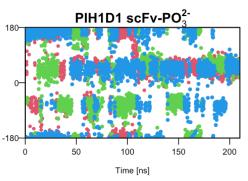
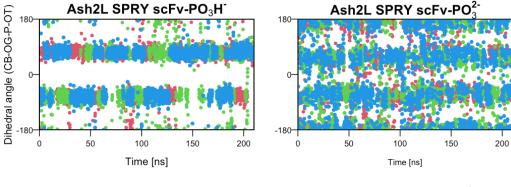


Figure S2. C α -RMSDs of A4 scFv and C7 scFv excluding the GS linkers and the 5 N-terminal and C-terminal residues. Different colors represent different replicates of the simulations.









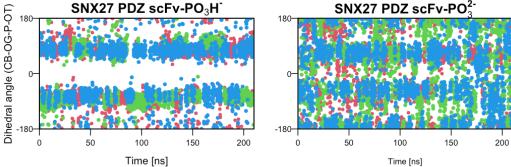


Figure S3. Time evolution of the dihedral angle consisting of CB, OG, P and OT atoms of the phosphate group during the simulations of non-antibody proteins. MD trajectories were taken from a previous study (10). Different colors represent different replicates of the simulations.