



Supplementary Figure 3 NBD residues mutated in this study. The NBD dimer (subunits in cyan and pink) and one DNA molecule (gray with the T-tract in the minor groove shown in yellow) are shown as cartoon models. The residues that were mutated in the context of the MBP-RAG1 core are shown as stick models. Red indicates strong phenotype in binding and/or cleavage assays when mutated; blue indicates little or no phenotype when mutated; orange indicates strong phenotype only when both residues are mutated simultaneously. See **Figure 5** for DNA binding and cleavage analyses of the mutant RAG1 core proteins.