

Figure 5 – figure supplement 1. **Ablation of D153 disrupts R166 positioning.**

Superimposed crystal structures of P_i -bound WT AP (purple, PDB 3TG0), apo WT AP (grey, PDB 1ED9), and apo D153G AP (magenta). In two independent structures of D153G AP, R166 is rotated from its position in P_i -bound WT AP by $>19^\circ$ (PDB 1AJC) or rotated away from the active site (PDB 1AJD).

