**Movie EV4. Morph of the coordinated helix 3-4’ movement in different nucleotide states.**

Structural rearrangement of helix 3 and 4’ upon nucleotide hydrolysis are displayed and the salt bridge between D199 and K234 is shown. PDB accession codes: apo (1dg3), GMP (2d4h), GMP•AlFx (2b8w), GDP•AlFx (2b92), GMPPNP (2bc9).