



Figure 3-figure supplement 3: Cch2 helicase activity requires ATP, the AAGTG iteron sequence in the substrate oligo, and catalytic Lys252. a) Dependence of Cch2 (3μM) helicase activity on various nucleotide cofactors in the presence of a dsDNA substrate with a 3' overhang (HELA-5F/HELA-6R; Supplementary Table 2). (+) control denotes a sample with no protein added that was subjected to 95 °C heat treatment. (-) control denotes no-protein sample. b) Dependence of Cch2 (1-3μM) helicase activity on the presence of the iteron sequence AAGTG within the dsDNA substrate containing a 3' overhang. The AAGTG sequence in the right panel was replaced with unrelated sequence, while the surrounding basepairs remained unchanged (see Supplementary Table 2). (+) denotes a positive control sample subjected to 95 °C heat treatment. c) Cch2 helicase activity assay with wild-type (WT) and mutant (K252E) Cch2 (2-3μM each) in the presence of a dsDNA substrate with a 3' overhang (HELA-5F/HELA-6R; Supplementary Table 2). (+) control denotes a sample with no protein added that was subjected to 95 °C heat treatment. (-) control denotes no-protein sample.