



**Figure S1** Low Levels of tetra-acetylated H4 are Observed at CEN VI. Chromatin immunoprecipitation (ChIP) experiments were performed with asynchronously grown wild type strains expressing Myc-Cse4p (YMB6955). (A) Diagram of CEN (C1-2) on chromosome VI analyzed by ChIP. Solid square represents the CEN VI sequence and each vertical line from chromosomal coordinate 147,500 to 149,500 denotes 500bp increments. Grey arrows represent *DEG1* and *LOC1* genes upstream and downstream of CEN VI, respectively. (B) ChIP with antibodies to acetylated histone H4 (tAcH4) to measure the levels of H4 acetylation. HML (-CTL) serves as a hypoacetylated H4 control and *SNR189* (+CTL) (Chr III: 178729-178589) is a hyperacetylated H4 control. ChIP for total H4 was performed with antibodies to pan H4 (H4P) that recognize modified and unmodified forms. Bar graphs show mean fold enrichment for tAcH4 normalized to total H4 from three biological replicates, with error bars showing standard error of the mean.