



Figure 6-figure supplement 1. GapR ChIP at centromeres, pericentromeres, and cohesin-bound regions.

- (A) GapR enrichment (top) in glycerol (blue), in raffinose (orange) and after α -factor arrest (green) at CEN3 (left) and CEN11 (right). Supercoiling based on a psoralen tiling array (blue, plotted in reverse). Psoralen peaks above threshold (+1.5) were called as 'negative supercoils' ($-\sigma$, red), and peaks below threshold (-1.5) were called as 'positive supercoils' ($+\sigma$, green). Transcription from the forward (green) and reverse (blue) strands with annotated genes indicated (bottom).
- (B) GapR enrichment over all centromeres in raffinose. Mean enrichment (solid line) with 95% confidence intervals (shaded area). Grey bar represents position of centromeres.
- (C) GapR enrichment at pericentromeres in cells grown in raffinose, after α -factor arrest, and grown in glycerol. Student's t-test p-value is shown.
- (D) GapR (glycerol, top) and cohesin (Scc1 enrichment, bottom) are associated with convergent genes (arrows) that mark the boundaries of pericentromeres (shaded areas).
- (E) GapR and cohesin binding outside of pericentromeres as in (D).
- (F) Heatmap showing GapR (top) and cohesin (bottom) enrichment for the 500 most GapR-enriched genomic regions in raffinose, after α -factor arrest, and in glycerol.