



Figure 7-figure supplement 1. GapR ChIP at rDNA, autonomously replicating sequences, and R-loops.

- (A) GapR ChIP with controls in the rDNA locus. GapR-3xFLAG ChIP, GapR-3xFLAG input, GapR ChIP in raffinose (top), GapR-3xFLAG ChIP, GapR-3xFLAG input, GapR ChIP in raffinose + α -factor (bottom).
- (B) GapR enrichment at autonomously replicating sequences (ARS) in cells grown in raffinose, after α -factor arrest, and grown in glycerol. Student's t-test p-value is shown.
- (C) Heatmap showing GapR enrichment (glycerol) at all ARS sorted by GapR enrichment.
- (D) Examples of GapR enrichment near Ty elements (purple). GapR enrichment after α -factor arrest (top), DNA-RNA hybrids by DRIP-seq (dark grey). Transcription from the forward (green) and reverse (blue) strands with annotated genes indicated (bottom).
- (E) Alignment of GapR and DRIP enrichment surrounding all yeast Ty elements. Data indicate mean (solid line) with 95% confidence intervals (shaded area).
- (F) Examples of GapR enrichment near a telomere with (top) or without (bottom) a Y' element, plotted as in (D).
- (G) GapR and DRIP enrichment at all telomeres with (left) and without (right) Y' elements, aligned from the end of the telomeric repeat. Data indicate mean (solid line) with 95% confidence intervals (shaded area). X element represents both the 'core' X element and any X element combinatorial repeats.
- (H) Association of DNA-RNA hybrid (R-loop) forming regions and positive supercoiling.