



Figure 7. Chromosomal targeting of PRC1. (A) Immunostaining of *Drosophila* polytene chromosomes to visualize the distribution of the PC protein. (B) Genomic region encompassing the *Drosophila* PcG gene *Psc* and the *Su(z)2* gene. The genome browser section shows the result of a ChIP-Seq and RNA-Seq analysis of *Drosophila* S2 tissue culture cells. The distributions of PRC1 components (red) and the TRX protein (green) are shown (data from Enderle et al. 2011). (C) In *Drosophila*, the PhoRC is a key player in chromatin targeting of PRC1 and PRC2, but a number of other transcription factors also contribute to target gene specificity. (D) In mouse and human, several different anchoring factors have been proposed. These include the Pho ortholog Ying and Yang 1 (YY1), transcription factors like Jarid 2 and Oct4, long ncRNAs, and the CpG content of the target sequence. (Adapted from Enderle 2011.)