

## Figure S6. The binding of MSL2<sup>vir</sup> to DNA is tighter in presence of roX2.

- (A) Representative ChIP profiles (MSL3 and H4K16ac) of female *D. melanogaster* cells expressing MSL2<sup>vir</sup>-GFP -/+ roX2 illustrating two regions of the X chromosome (top panels) with HAS constitutively bound by MSL2<sup>vir</sup> (left panel) or just bound in presence of roX2 (right panel) and two regions of the 2L chromosome (bottom panels). The MSL2<sup>mel</sup> in vivo binding sites (HAS) are indicated at the bottom.
- (B) Average signal changes measured in 4 independent H4K16ac ChIP experiments from *D. melanogaste*r female cells expressing MSL2<sup>vir</sup>-GFP -/+ roX2 at HAS non-bound (new, 115) or bound (old, 48) without roX.
- (C) Western-blot analyses of pull-down experiments using the recombinant MSL2<sup>vir</sup>-FLAG (VIR) construct as bait in presence of extracts from male *D. melanogaster* cells untreated or treated with Benzonase.
- (D) Examples of FRAP experiments. After pre-bleach scanning, a small portion of the MSL2<sup>vir</sup>-GFP (VIR) signal -/+ roX2 was photobleached and followed by repeated scans at the indicated time. The bleached area is outlined by a white rectangle. Dotted circles indicate nuclei. Scale bar, 3μm.