Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Comprehensive overview of all ChIP-seq, FLASH and RNA-seq datasets

generated in this study.

File Name: Supplementary Data 2

Description: a) Complete list of Drosophila MSL2tg-bound genes (MACS peak within 200 bp of a TSS excluding HAS peaks) b) Same analysis, but only a single gene overlap allowed c)-e)

Genelist of TSS peaks associated with Cluster 1, 2 and 3 (Figure 2).

File Name: Supplementary Data 3

Description: DEseq output of differentially expressed genes in Msl2∆ mESCs in Serum

condition (FDR < 0.05).

File Name: Supplementary Data 4

Description: DEseq output of differentially expressed genes in Msl2Δ mESCs in 2i condition

(FDR < 0.05).

File Name: Supplementary Data 5

Description: Individual datapoints of barplots presented in this study.