

Supplementary Figures

Identification of methotrexate as a heterochromatin-promoting drug

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Running title: Methotrexate promotes heterochromatin formation

Keywords: Methotrexate, heterochromatin, *Drosophila*, JAK/STAT, drug screen, position-effect variegation

Figure S1

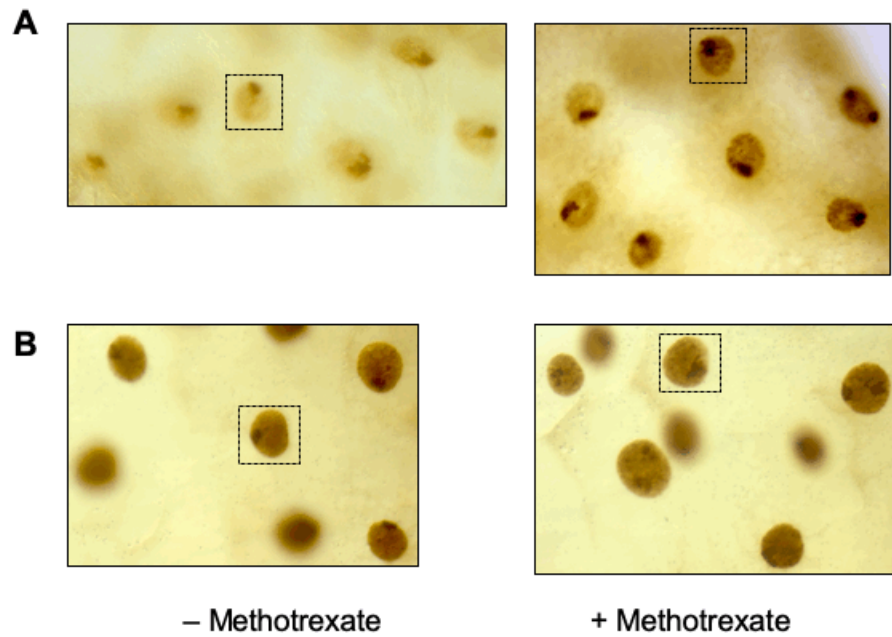


Figure S1. Effects of methotrexate on salivary gland heterochromatin

Flies were raised on food with (lower panel) or without (upper panel) methotrexate at 10 μ M in 33%DMSO. Salivary glands from 3rd instar larvae were immunostained with anti-H3K9me3 (A) or anti-HP1 (B), and were photographed with a compound microscope. Heterochromatin levels were quantified as the ratio of H3K9me3-positive or HP1-positive area to the area of the nucleus. Representative images with approximately six nuclei of each type are shown.

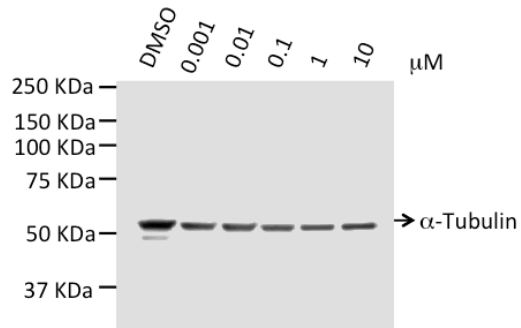
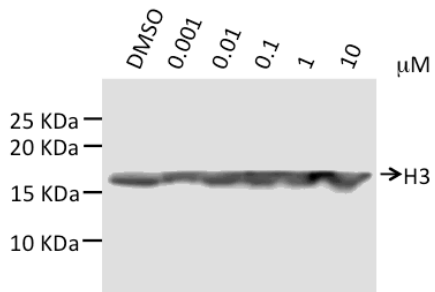
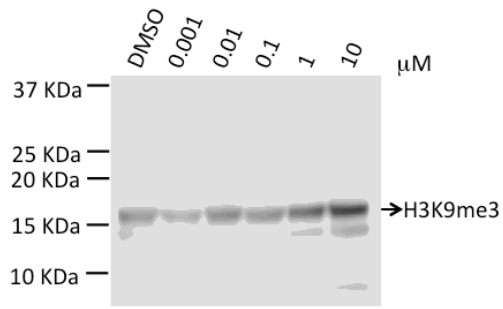


Figure S2. Full-length protein gels

Full-length protein gels for the cropped version shown in Figure 3G.