

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Representative false-colour imaging of *snaE<sna<24xMS2-yellow* in *nc14*. Nuclei colour corresponds to GFP fluorescence intensity as in Figure 3C with inactive nuclei

File Name: Supplementary Movie 2

Description: Representative false colour imaging of *snaE<snaTATAlight<24xMS2- yellow* in *nc14*. Nuclei colour corresponds to GFP fluorescence intensity as in Figure 3C with inactive nuclei in grey and highly active nuclei in yellow. Intensity scale is common to Supplementary Movies 1-3.

File Name: Supplementary Movie 3

Description: Representative false colour imaging of *snaE<snaTAMut<24xMS2- yellow* in *nc14*. Nuclei colour corresponds to GFP fluorescence intensity as in Figure 3C with inactive nuclei in grey and highly active nuclei in yellow. Intensity scale is common to Supplementary Movies 1-3.

File Name: Supplementary Movie 4

Description: Live imaging of *snaE<sna+INR<24xMS2-yellow* representative of *NC14* beginning at mitosis. Nuclei are detected using His2Av-mRFP and MS2 using MCP-GFP.

File Name: Supplementary Movie 5

Description: Live imaging of *snaE<kr<24xMS2-yellow* representative of *NC14* beginning at mitosis. Nuclei are detected using His2Av-mRFP and MS2 using MCP-GFP.

File Name: Supplementary Movie 6

Description: Live imaging of *snaE<kr-INR1<24xMS2-yellow* representative of *NC14* beginning at mitosis. Nuclei are detected using His2Av-mRFP and MS2 using MCP-GFP.

File Name: Supplementary Movie 7

Description: Live imaging of *snaE<kr<24xMS2-yellow* in a *nanos:GAL4> UAS:MCP- GFP-His2Av-RFP*, *UAS:white RNAi* background, representative of *nc14* beginning at mitosis. Nuclei are detected using His2Av-mRFP and MS2 using MCP-GFP.

File Name: Supplementary Movie 8

Description: Live imaging of *snaE<kr<24xMS2-yellow* in a *nanos:GAL4> UAS:MCP- GFP-His2Av-RFP*, *UAS:Nelf-A RNAi* background, representative of *nc14* beginning at mitosis. Nuclei are detected using His2Av-mRFP and MS2 using MCP-GFP.