

Inventory of Supplemental Information

1. Supplemental Figure S1 and Legend. Related to main text Fig. 1.
2. Supplemental Figure S2 and Legend. Related to main text Fig. 2.

Figure S1. Related to Figure 1.

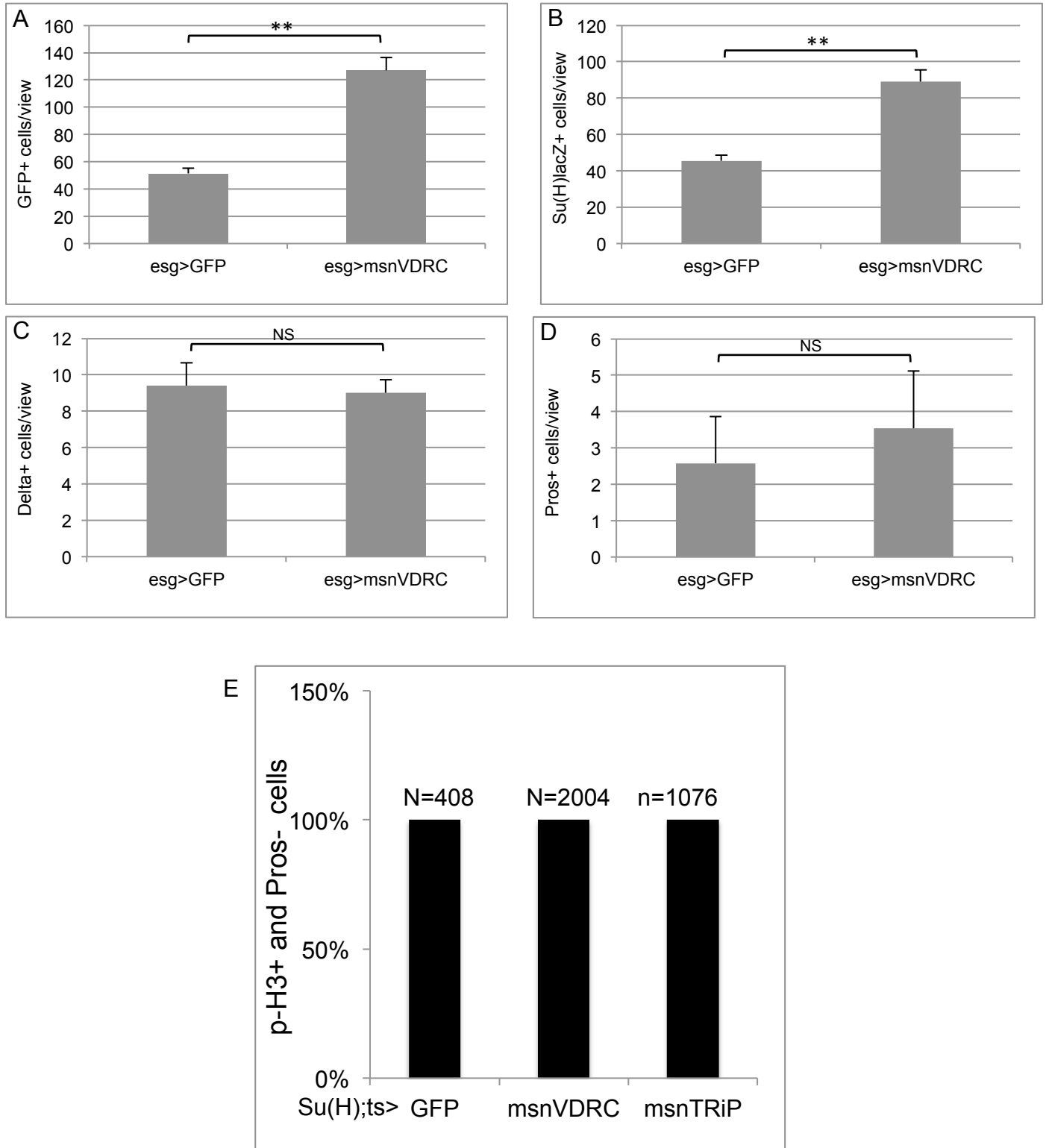


Figure S1. (A-D) Quantification of cell numbers in control and *msn*^{VDRC} midguts. The experiments were from those described in Fig. 1. The temperature shift was for 5 days. The *esg*>GFP+ cells represent the combination of ISCs and EBs. The β -galactosidase protein staining-positive cells expressed by the Su(H)-lacZ reporter represent EBs. The Delta staining-positive cells represent ISCs. The Prospero (Pros) staining-positive cells represent EEs. For each marker, 40X microscopic images were taken from similar regions of posterior midguts and the positively stained cells were counted within those images. The average number per image is plotted as shown. (E) Midguts from flies with indicated genotypes were dissected and co-stained for p-H3 and Pros. The total number (n) of p-H3⁺ staining counted is as indicated and the percentage of double positive was 0.5%, 0.5%, and 0.6% in the control GFP, *msn*^{VDRC} and *msn*^{TRIP} samples, respectively. The plot shows the p-H3⁺ mitotic cells that did not contain Pros staining, which account for over 99%.

Figure S2. Related to Figure 2.

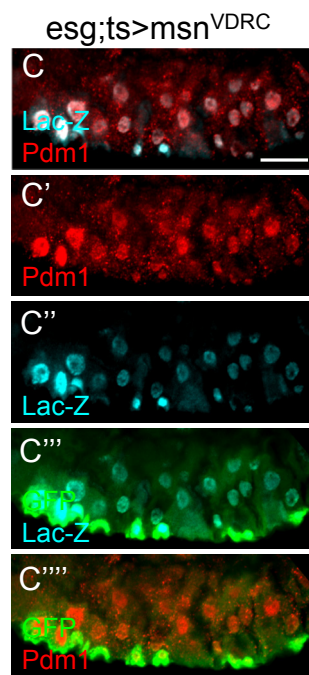
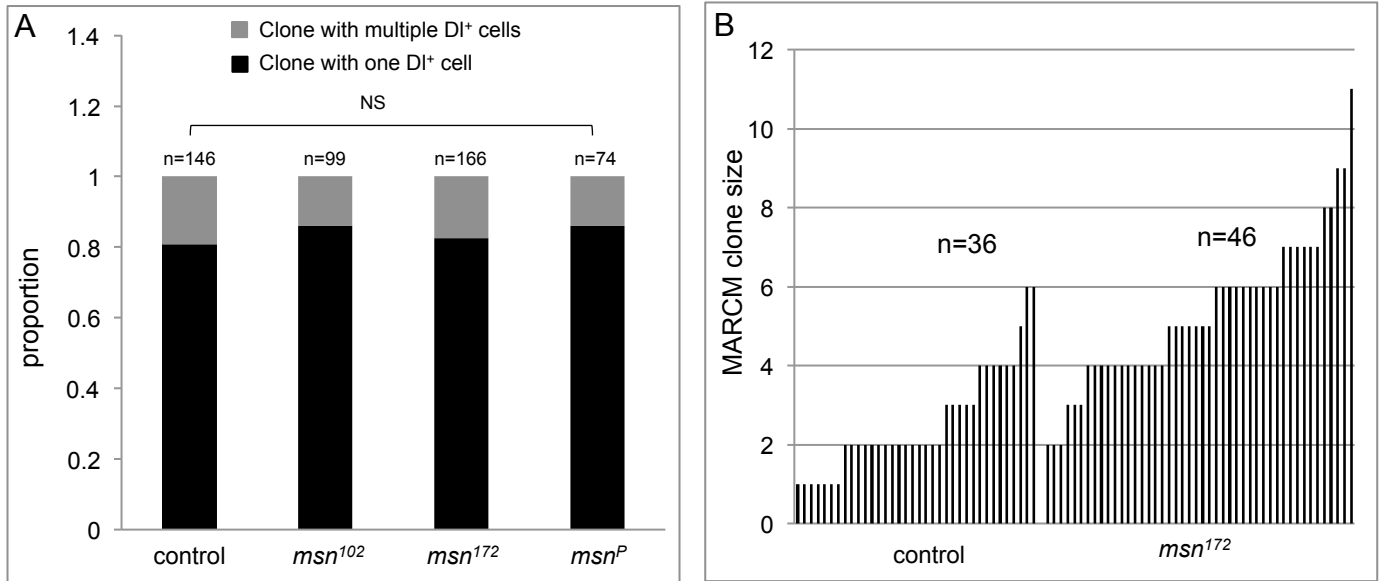


Figure S2. (A) From the same MARCM experiments as in Fig. 2A-D, the GFP⁺ clones with DI⁺ staining were quantified and separated into two groups. One group contained only 1 DI⁺ cell, and the other group contained multiple (2 or more) DI⁺ cells. The proportion of the two groups is plotted as shown. The total number (n) of clones counted for each fly genotype is as indicated, and the percentage for multiple DI⁺ group (grey portion) is control=19.2%, *msn*¹⁰²=13.9%, *msn*¹⁷²=17.4%, *msn*^p=14.3%. (B) The clone size distribution and clones counted (n) are shown for the control and *msn*¹⁷² results described in Fig. 2A-D. (C) Double staining of *msn* RNAi midgut for Pdm1 and β-galactosidase proteins. These flies also contained the Su(H)-lacZ reporter for the β-galactosidase expression. Sagittal views of confocal images are shown.