



**Supplementary information, Figure S5** Hh affects Su(fu) level in S2 cells. **(A)** The expression of *hh*, *ci*, *hib*, *crn* and *su(fu)* in S2 cells were shown by RT-PCR assay. Obviously, *ci* expression is relatively limited in S2 cells. The RT-PCR product from *ci* mRNA corresponds to the region from 1500 to 3513bp of its cDNA, RT-PCR products from other genes' mRNAs correspond to their full-length cDNAs. **(B-C)** *hib* expression was measured in S2 cells through Q-PCR analysis. Stimulation with Hh conditioned medium and simultaneous overexpression of *UAS-Ci* or overexpression of *UAS-Ci* alone increased *hib* expression (B) whereas knockdown of *hh* reduced *hib* expression (C). **(D)** *ci* expression was compared between S2 cells and wing discs through Q-PCR analysis. The mRNA level of *ci* in wing discs is much higher than that of S2 cells. **(E-F''')** HA-Crn was localized in the nucleus when co-expressed with *UAS-Hh* in wing discs (E-E'''); however, treatment with MG132, HA-Crn was mainly localized in cytoplasm (F-F'''). The nuclei were stained with DAPI (blue) and the membrane was stained with TRITC-labeled phalloidin (red). **(G-H''')** HA-Crn localization with Hh treatment wasn't dramatically changed with or without MG132 treatment in S2 cells. HA-Crn was mainly located in the cytoplasm and barely in the nucleus. **(I)** Treatment with Hh conditioned medium doesn't dramatically affect endogenous Su(fu) level in S2 cells. Actin serves as a loading control. **(J)** Knockdown of *hh* by its dsRNA upregulated Su(fu) protein level. The effect of *hh* RNAi was assessed by RT-PCR. **(K)** Quantification of the western blot analysis of endogenous Su(fu) protein level (J) as determined by ImageJ. **(L)** *hh* knockdown didn't change *su(fu)* mRNA level in S2 cells by Q-PCR.