



**Supplementary information, Figure S2** SdBP evenly expressed in drosophila imaginal discs.

(A-A'') SdBP antibody recognized endogenous SdBP *in vivo*. SdBP protein level decreased in the posterior compartment of the wing disc when SdBP RNAi transgenes were expressed under the control of *hhGal4* (A') compared to *hhGal4* control (A), real-time PCR showed SdBP RNAi efficiency in wing discs (A''). (B-C') Endogenous SdBP distributed evenly in the eye discs and wing discs. Wild-type eye discs (B-B') and wing discs (C-C') were staining for SdBP (green)

and DAPI (blue). (D-E') *In situ* assay with anti-sense probe (D', E') and sense probe (D, E) was applied to test endogenous SdBP distribution in the eye discs (D-D') and wing discs (E-E'). (F) SdBP did not dramatically affect Wnt pathway activity in Luciferase assay. Indicated plasmids were co-transfected with TCF reporter gene and the results were measured by standard dual-luciferase protocols. Data are presented as mean  $\pm$  s.d. ( $n = 3$ ). (G) SdBP did not dramatically affect Hedgehog pathway activity in Luciferase assay. Indicated plasmids were co-transfected with PTC reporter gene and the results were measured by standard dual-luciferase protocols. Data are presented as mean  $\pm$  s.d. ( $n = 3$ ).