



Supplementary information, Figure S1 SdBP bound and co-localized with Sd in the nucleus.

(A) Yeast two-hybrid identified SdBP protein as an Sd binding partner. SdBP protein and Sd-C

showed strong binding in yeast two-hybrid screening. (B) GST pull-down between SdBP and Sd. His-SdBP was incubated with GST or GST-Sd respectively. The results were analyzed by Western blot with His antibody. (C-E''') SdBP is a nuclear protein and co-localized with Sd in the nucleus. Wing discs expressing SdBP (C, C'), Sd (D, D'), Sd plus SdBP (E-E''') by *MS1096* driver. Sd was detected with HA antibody and SdBP was detected with SdBP antibody. The nuclei were labeled by DAPI. (F-F''') Two isoforms of SdBP showed similar overexpression phenotype *in vivo*. Adult wings overexpressing SdBP-RA (F') or SdBP-RB (F'') by *MS1096* driver. Quantification of relative adult wing sizes (fold change) indicated in F-F'' (F'''). (G-G')

Both SdBP-RA and SdBP-RB are located in the nucleus. Flag-SdBP-RA and Flag-SdBP-RB were transfected into S2 cells. SdBP was detected with Flag antibody and the nuclei were labeled by DAPI.