Supplemental Figures

Figure S1 Misexpression of $CtBP^{Mono}$ leads to a significant enhancement in the expression of *Dll-lacZ* reporter levels. (**A-C**) Scheme of quantification of the *Dll-lacZ* reporter expression in the anterior and posterior regions at the D/V boundary. A region of interest was selected (ovals) close to A/P boundary (arrow) in wing discs with (**A**) no ectopic CtBP (+) or (**B**) $CtBP^{WT}$ and (**C**) $CtBP^{Mono}$ ectopically expressed in the posterior region of the disc using EnGal4. **(D)** Levels of Dll-lacZ were significantly enhanced upon expression of $CtBP^{WT}$ and $CtBP^{Mono}$ in the posterior region of the discs. Each bar represents a mean pixel intensity from the region of interest in the wing imaginal discs (n = 5) ($\pm$S.E.) (* $P<0.0005$, Student's t-test).

Figure S2 *nkd* WREs are repressed by *CtBP* in the absence of signaling. **(A)** Reporter assay showing derepression of WREs *nkd-UpE1* and *nkd-UpE2*, derived from the region upstream of the *nkd* transcription start site. In the absence of signaling knockdown of *CtBP* leads to a much higher derepression of *UpE1* compared to *UpE2* and knockdown of *TCF* leads to derepression of *UpE1* but not *UpE2*. **(B)** Reporter assay showing that a WRE from the first intron of the *nkd* gene (*nkd-IntE*) is derepressed to a much smaller degree upon knockdown of *CtBP* or *TCF* when compared to *nkd-UpE1*. Each bar represents a mean of luciferase values from cultures transfected in duplicate ($\pm$S.E.) with the result representative of at least three independent experiments.

Figure S3 CtBP is recruited to the *nkd-UpE1 WRE* in the absence of signaling. CtBP binding to chromatin was assayed by ChIP with an antibody against endogenous CtBP. CtBP is enriched at *UpE1* compared to the coding region (ORF) of the *nkd* gene. Each bar represents a mean of quantitative PCR values in duplicate, from cultures transfected in duplicate ($\pm$S.E.). The result shown here is representative of two independent experiments.

Figure S4 $CtBP^{Acidic}$ and $CtBP^{Basic}$ efficiently form heterooligomers. (Top panel) When coexpressed, Flagged tagged $CtBP^{Basic}$ can immunoprecipitate HA-tagged $CtBP^{Acidic}$ at comparable levels (lane 4) as similarly tagged versions of $CtBP^{WT}$ (lane 2). (Bottom panel) Flag-tagged $CtBP^{WT}$ and $CtBP^{Basic}$ were pulled down at similar levels (compare lanes 2 and 4). Inputs (10% of total) for each co-IP are shown in lanes 1 and 3 of each panel.

Figure S5 Misexpression of CtBP trangenes does not affect Wg expression in the wing primordium. (**A-R**) Confocal images of third instar larval wing imaginal discs showing Wg expression (red) at the D/V boundary of the presumptive wing blade (A, D, G, J, M and P). *Dpp-Gal4* driven expression of $CtBP^{WT}$ (n=21), $CtBP^{Acidic1/Basic1}$ (n=7), $CtBP^{Acidic2/Basic2}$ (n=12), $CtBP^{Acidic1/Acidic2}$ (n=12), $CtBP^{Basic1/Basic2}$ (n=14) and $CtBP^{Mono}$ (n=11) transgenes (green) at the A/P boundary (B, E, H, K, N and Q). Note that $CtBP^{Acidic2/Basic2}$ and $CtBP^{Basic1/Basic2}$ were expressed at lower levels compared to other transgenic combinations (compare H and N to B, E, K and Q) but no combinations affect Wg expression.

Figure S6 Wg signaling does not detectably influence the oligomerization of CtBP. (A) The top panel shows an immunoblot showing co-IP of $CtBP^{WT}$-HA with $CtBP^{WT}$-Flag without (lane 2) or with (lane 4) expression of Arm*. Arm* had no detectable change in the degree of co-IP observed. The bottom panel displays the degree of IP of the $CtBP^{WT}$-Flag protein. Inputs are in lanes 1 and 3. (B) Immunoblots showing the co-IP of $CtBP^{WT}$-V5 (middle Panel) with $CtBP^{WT}$-Flag (bottom panel). No signal was observed if $CtBP^{WT}$-V5 was left out of the transfection (middle panel, lane 1). There is no change detected in the amount of $CtBP^{WT}$-V5 co-IPed in the absence (middle panel, lane2) or presence (middle panel, lane 3) of Arm*. $CtBP^{WT}$-V5 is expressed at similar levels in the absence (top panel, lane 2) or presence (top panel, lane 3) of Arm*.

Figure S1.
Bhambhani et al.

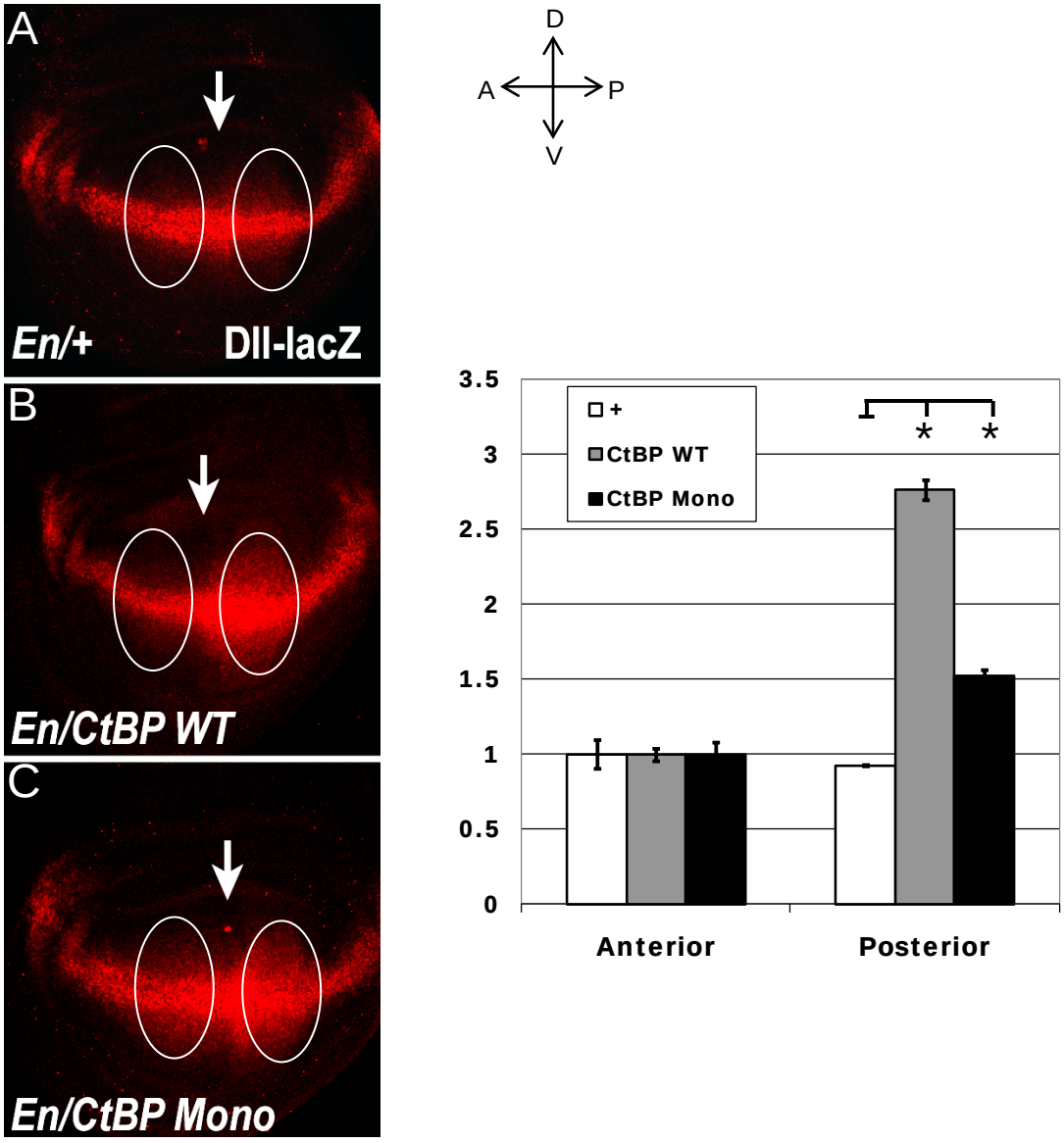

Figure S2.
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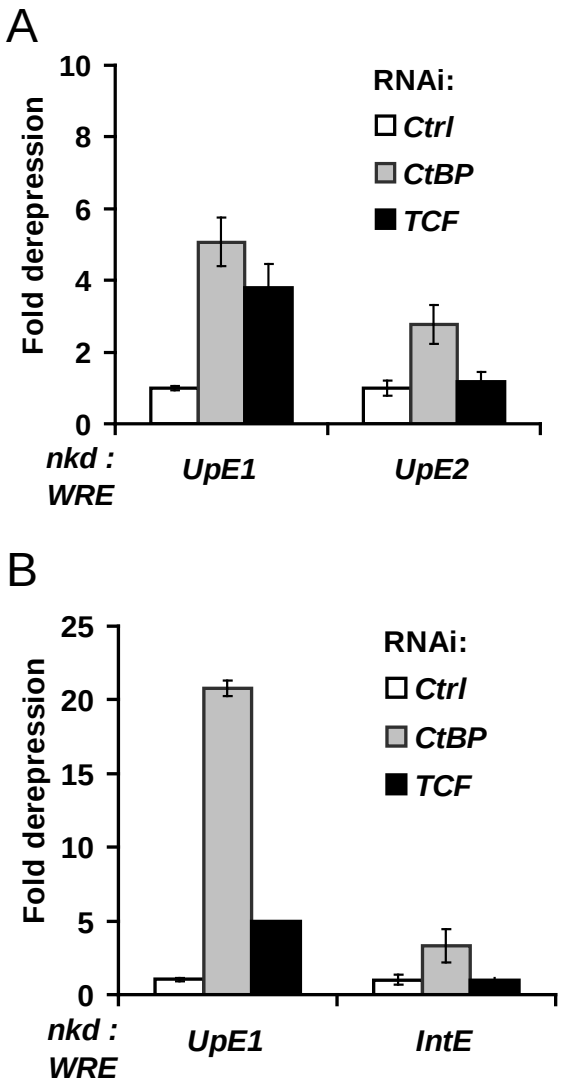

Figure S3.
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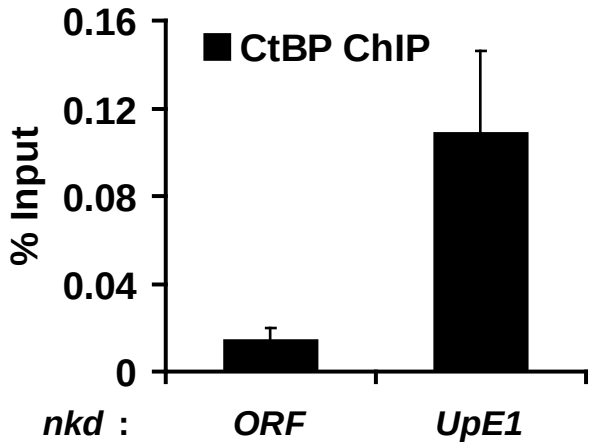

Figure S4.
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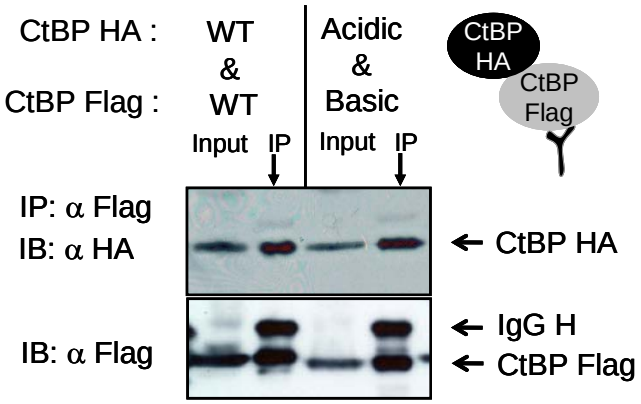

Figure S5.
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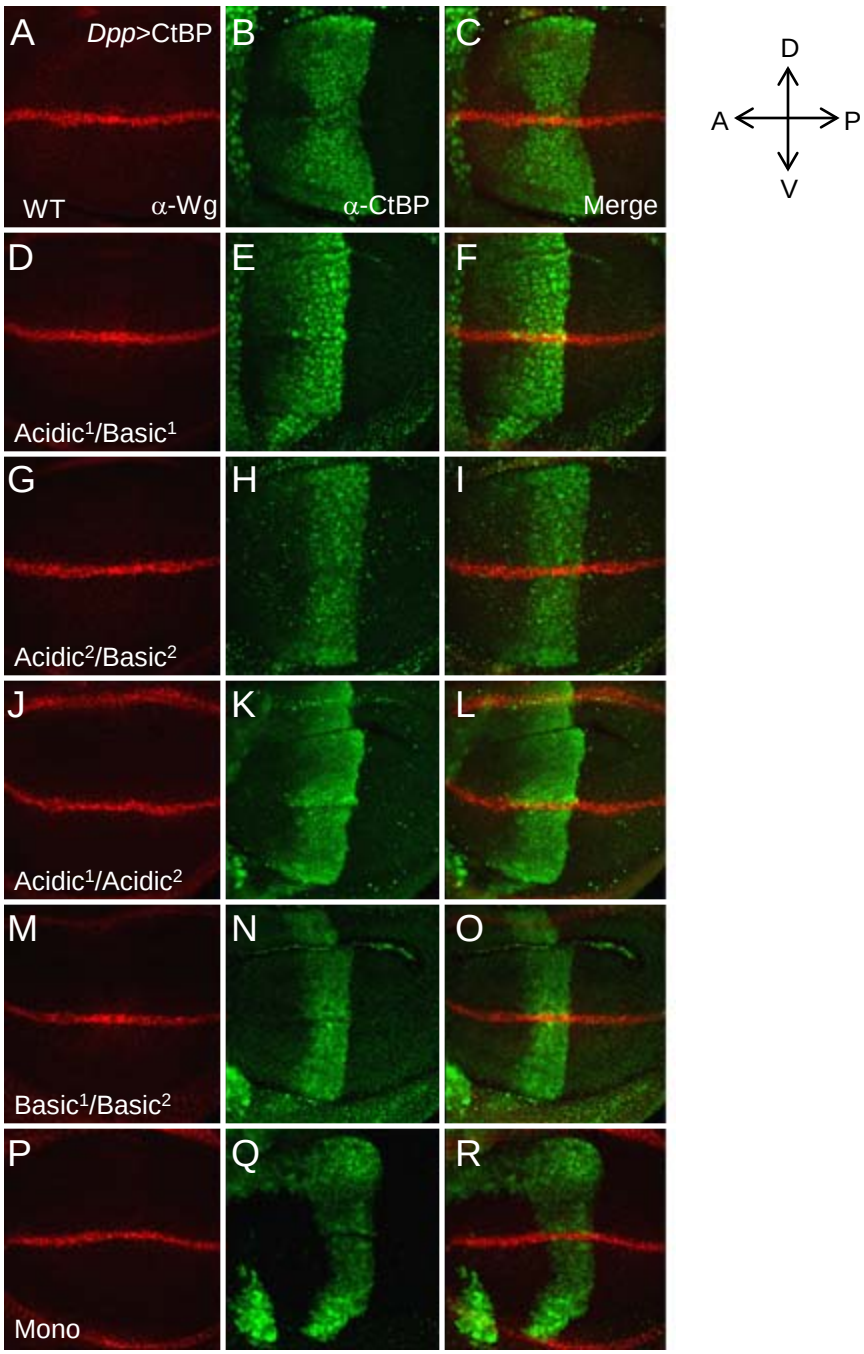

Figure S6.
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