Table S1. Epistasis of *dachs* to *fat* for clone shape and size

	***fat* (*n*=18)**		***dachs* (*n*=16)**		***fat dachs* (*n*=19)**	
	Mutant	Twin	Mutant	Twin	Mutant	Twin
Circularity	0.57±0.12	0.25±0.07	0.20±0.07	0.23±0.07	0.21±0.09	0.25±0.10
Size ratio	1.73±0.57		0.88±0.39		0.79±0.62	

A comparison of the average circularity of clones of cells mutant for fat^s, d^l or fat^s d^l, together with their wild-type twins from the same discs. Images of clones were exported to NIH Image J, manually traced, and their areas (A) and perimeters (P) calculated. Circularity was measured using the formula $4\pi A/P^2$, rounder clones yield values closer to 1 (Lawrence et al., 1999; Liu et al., 2000). The size ratio is the average size of mutant clones divided by the average size of their wild-type twins. Each value is given plus or minus the standard deviation.

Additional references

Lawrence, P. A., Casal, J. and Struhl, G. (1999). The hedgehog morphogen and gradients of cell affinity in the abdomen of Drosophila. *Development* **126**, 2441-2449.

Liu, X., Grammont, M. and Irvine, K. D. (2000). Roles for scalloped and vestigial in regulating cell affinity and interactions between the wing blade and the wing hinge. *Dev. Biol.* **228**, 287-303.