

SUPPLEMENTARY INFORMATION

Figure S1

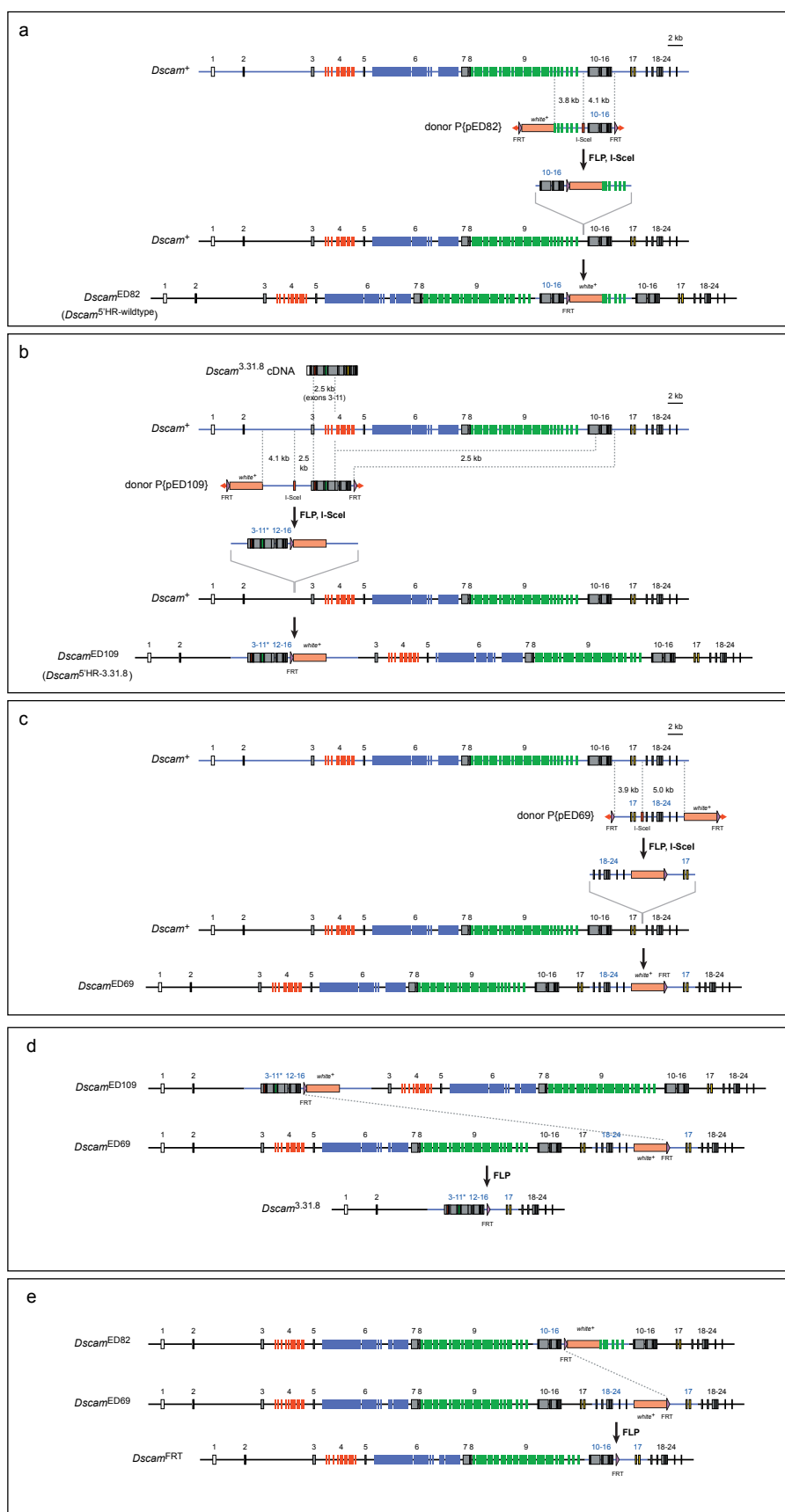


Figure S1: Generation of *Dscam* single ectodomain alleles. Outline of the strategy used to isolate *Dscam*^{single} and *Dscam*^{FRT} alleles. Intermediate alleles consisting of a tandem duplication with intervening *white*⁺ marker and FRT site (**a-c**) were recombined by FLP recombinase to generate the final alleles, selected by loss of the *white*⁺ marker (**d, e**). P-element based donor elements were constructed as shown in (**a-c**), and cloning PCR fragments obtained from the corresponding genomic or cDNA regions are indicated by the blue line and blue

exon numbers. The donor P{pED109} was prepared from a *Dscam*^{3.31.8} cDNA, as illustrated. Similarly, P{pED113} and P{pED114} donors were prepared from *Dscam*^{10.27.25} and *Dscam*^{6.5.9}, respectively. Asterisk in (**b**) indicates exons 3–11 derived from the cDNA. FRT, I-SceI, and P-element ends (red arrows) are not drawn to scale. The precise regions of the targeted alleles that derive from the donor element are not known. *Dscam*^{5HR} alleles used for intragenic MARCM (Fig. 4a) are depicted in (**a**) and (**b**).