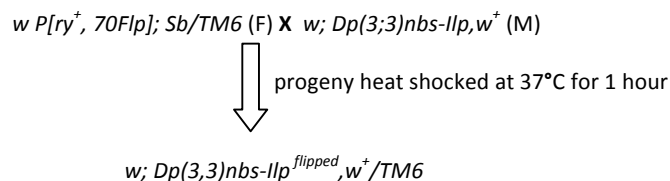


File S2
Crossing schemes for induced reduction

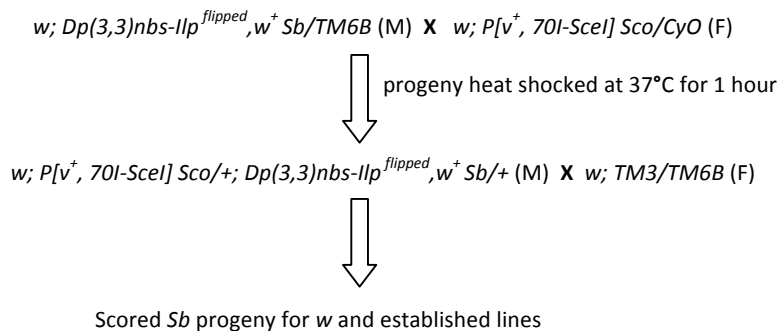
I. Reduction by IScel

1. FLP-mediated excision of vector sequences

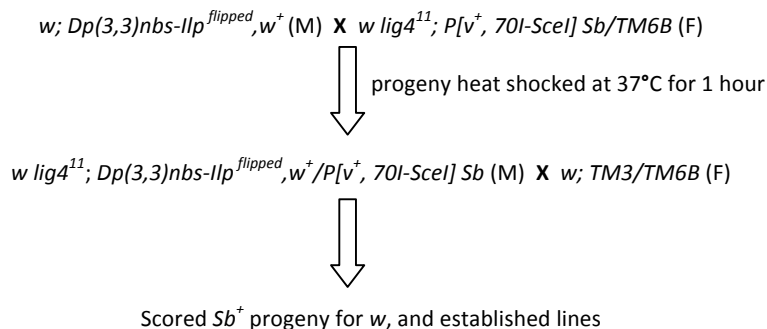


2. Reduction by I-SceI cutting

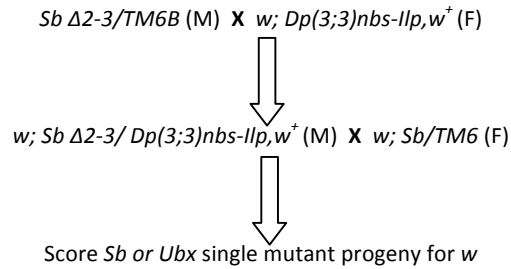
2.1. *I-SceI* on chromosome 2



2.2. *I-SceI* on chromosome 3 (with *ligase 4* mutation)



II. Reduction by P transposase



Legend:

M and F stand for male and female respectively. A heat shock treatment to the progeny was administered on day 3 after the cross had been set up. *Dp(3,3)nbs-llp, w⁺* indicates the 82kb duplication (*Dp*) of the *nbs-llp* region marked with *white⁺*. *Dp(3,3)nbs-llp^{flipped}, w⁺* denotes the same duplication but with vector sequences excised by FLP recombinase. We did not verify the excision of the vector nor established an “excised” stock as FLP has been shown to function at virtually 100% efficiency under these conditions (GOLIC and LINDQUIST 1989, WEI and RONG 2007). *pP[ry⁺, 70FLP]* is a *hsp70* promoter-driven *FLP* transgene on the X chromosome (GOLIC and LINDQUIST 1989). *pP[v⁺, 70I-SceI]* is a *hsp70* promoter-driven *I-SceI* transgene (RONG and GOLIC 2003). We used one insertion on chromosome 2 marked with *Sco* and one on chromosome 3 marked with *Sb*. The *lig4¹¹* mutation was previously described (WEI and RONG 2007). A P transposase source is denoted as $\Delta 2-3$.

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