



**Figure S4:** Schematic diagram of the recombinants used for Single Nucleotide Polymorphism marker mapping of 27.89. Red lines represent the 27.89 mutant chromosome with the *al* and *dp* markers, *al dp 27.89 sub*<sup>131</sup>. Blue lines represent a chromosome with many differing SNPs as well as a *Mi[GFP]* insertion just to the left of *subito*. The slash marks represent the possible area of crossing over for each recombinant. The locations of the individual SNP markers are indicated by the vertical dashed lines.