

Supplementary Figure S5. phiC31 integrase mediated RMCE using antIs30 in C. elegans. (A) Schematic of single copy sur-5p::GFP integration via RMCE into the antIs30 docking site. Strain BRC0546 (antIs30; unc-119(ed9)) is wild-type and upon injection with plasmid pBRC_double_attB_GFP will produce Unc individuals after successful RMCE. PCR assays are shown by inward facing arrows, connected by dotted or dashed lines, and a number above it. Orange is the PCR assay for the presence of phiC31 integrase; green are the PCR assays for proper recombination junctions and orientation; and blue is the long PCR assay across the entire insert and demonstrate single copy insertion. Integrants can also be in the reverse orientation, and those PCR assays are not shown. (B-E) Validation of proper integrations with PCR assays indicated in A. Open arrows next to the gels indicate the correct long PCR product; diamond headed arrow are PCR artifacts caused by probable intramolecular annealing of the attR sites; simple arrows are other expected PCR products.