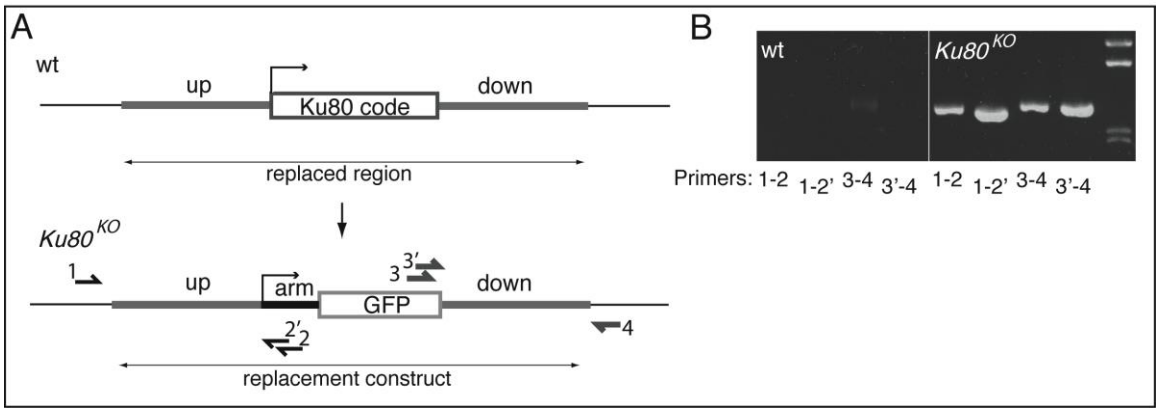

Figure S1 Molecular characterization of Ku80 deletion

A. Schematics of Ku80 region. Top: the wt Ku80 region with upstream (up) and downstream (dn) sequences (~2.5 kb each) that flank the coding region; "replacement region" designates sequences replaced by ends-out targeting. Bottom: the Ku80 region in Ku80Δ mutant; the up and dn flanking fragments were used in ends-out gene targeting, in which the Ku80 coding sequence was replaced by an arm-GFP marker gene; "replacement construct" designates sequences brought in by ends-out targeting. The flanking sequences are unaltered from wt. Half-arrows indicate primers used for the PCRs in B. Note that primer 1 and 4 reside outside the Ku80 region. Primers 2 and 2' reside within armadillo promoter sequences, while primer 3 and 3' are within GFP.

B. PCR products from four test PCRs for wt and Ku80Δ lines. Primer pairs used for each PCR are indicated bellow the image, and their locations are specified within the schematic in A. For exact primer sequences see the Supplemental Methods.