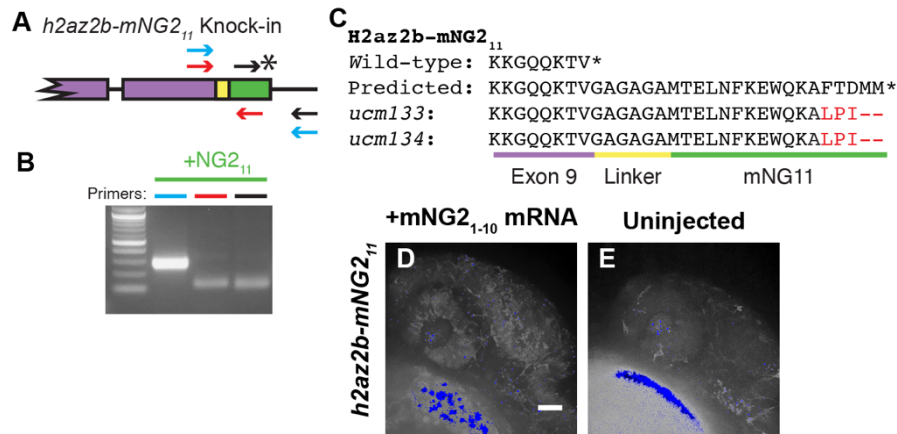


**Supplemental Figure 1. mNG2<sub>1-10</sub> transgenic lines are not fluorescent in the absence of mNG2<sub>11</sub>.** **A–C.** Uninjected transgenic embryos expressing mNG2<sub>1-10</sub> under control of the *fez1* (A–A'), *myl7* (B–B'), or *ubb* (C–C') promoters. Images in A, B, and C have been overexposed to emphasize absence of fluorescent signals other than autofluorescent pigment cells (arrows in A, B). Scale bars in A' and B', 50  $\mu$ m. Scale bar in C', 200  $\mu$ m.



**Supplemental Figure 2. mNG2<sub>11</sub> tagging of *h2az2b*.** **A.** Schematic of mNG2<sub>11</sub> insertion into the *h2az2b* gene. Purple, endogenous exon sequence. Yellow, linker. Green, mNG2<sub>11</sub>. Asterisk, stop codon. Arrows denote primers used in B. **B.** mNG2<sub>11</sub> insertion was assessed by PCR. The primers used correspond to the arrows shown in A. **C.** Amino acid sequences of wild-type, predicted mNG2<sub>11</sub> fusion, and recovered alleles for H2az2b. Mismatches between the predicted and recovered sequences are highlighted in red. Asterisk, stop codon. **D–E.** Representative images of *h2az2b*-mNG2<sub>11</sub> embryos at 24 hours post-fertilization. Embryos injected with mNG2<sub>1-10</sub> show dim nuclear-localized fluorescence (D) compared to uninjected embryos (E). Very bright spots (blue) are likely autofluorescent yolk and debris. Scale bar, 50  $\mu$ m.