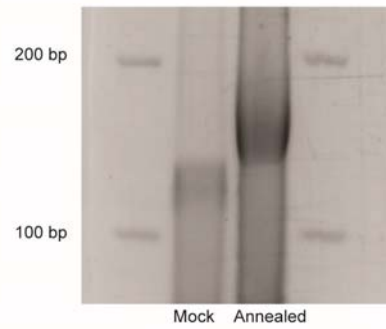


A



B

| <i>nhr-23::2xFLAG</i> oligo | Viable injected P0 | Rescued F1 | P0 with rescued F1 | PCR hits | Precise Knockins | % Knockins/rescued F1 | % Knockins/P0 |
|--------------------------------------|--------------------|------------|--------------------|----------|------------------|-----------------------|---------------|
| sense 200mer | 102 | 27 | n/a | 10 | 7 | 25.9 | 6.9 |
| sense 200mer mock annealed | 20 | 5 | 2 | 3 | 1 | 20.0 | 5.0 |
| sense+antisense 200mer mock annealed | 32 | 9 | 2 | 1 | 1 | 11.1 | 3.1 |
| sense+antisense 200mer annealed | 24 | 4 | 4 | 0 | 0 | 0.0 | 0.0 |

Figure S4 dsDNA is not a more effective template than ssDNA for introduction of a 2xFLAG epitope at the 3' end of *nhr-23*. (A) 50 ng/ μ l of sense of and antisense *nhr-23::2xFLAG* oligos in annealing buffer (TE buffer with 50 mM NaCl) were either annealed by heating to 95°C for two minutes and then slowly cooling to 25°C over 30 minutes in a thermocycler, or mock annealed (kept at 25°C). Annealing was confirmed by resolving the annealed and mock annealed oligos on a 4% TAE-agarose gel and staining with GelRed. The 1KB+ (Invitrogen) size standard is provided. (B) Table comparing the knock-in efficiencies of sense oligos, and either mock annealed or annealed sense+antisense *nhr-23::2xFLAG* 200mers. The sense 200mer data is pooled from all experiments using *pha-1(ts)* sense oligos and *nhr-23::2xFLAG* sense 200mers (Figures 1 and 3). A control where the sense oligo was injected in annealing buffer was performed to ensure that the buffer did not affect knock-in efficiency.