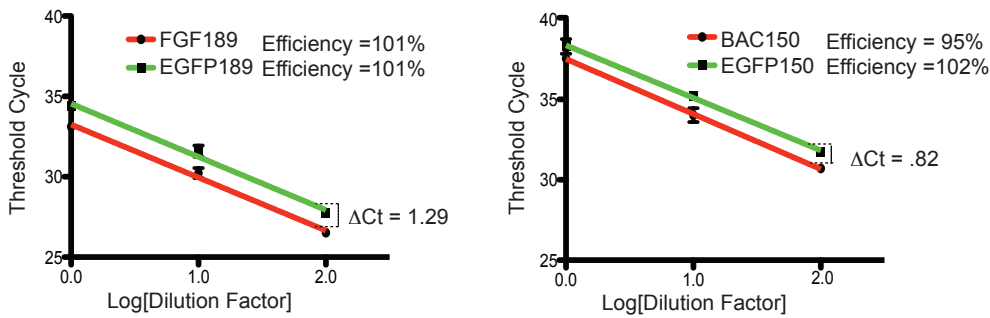


A**B**

EGFP, fin clip, 9 months, 15 of 15 Sequences Mutant

```

ATGGTGAGCAAGGGCGAGGAGCTGTTACCGGGGTGGTGCCCATCTGGTTCGAGCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  EGFP  X 0

ATGGTGAGCAAGGGCGAGGAGCTGT-----AAA  (-65)  X 8
ATGGTGAGCAAGGGCGAGGAGCTGTTTAC-----GGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-27)
ATGGTGAGCAAGGGCGAGGAGCTGTTTAC-----TGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-26)
ATGGTGAGCAAGGGCGAGGAGCTGTTTACCGGGGTGGTGCC-----GCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-12)
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ATGGTGAGCAAGGGCGAGGAGCTGTTTACCGGGGTGGTGCCCAAC-----AGCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (+2, -9)
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EGFP, fin clip, 9 months, 18 of 18 Sequences Mutant

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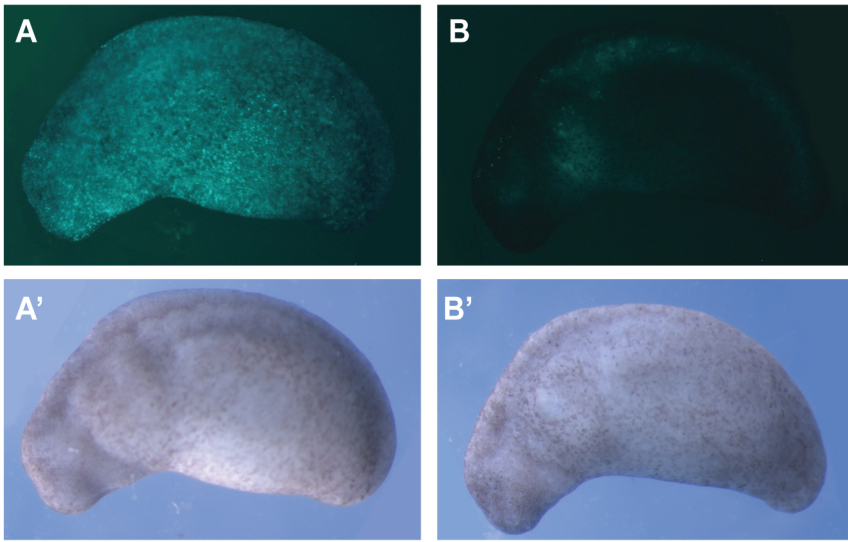
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ATGGTGAGCAAGGGCGAGGAGGCTG-----AAACGGCCACAAGTTCAGCGTGAAA  (-43)  X 2
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ATGGTGAGCAAGGGCGAGGAGCTGTTTAC-----GTCGAGCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-19)  X 2
ATGGTGAGCAAGGGCGAGGAGCTGTTTACCGGGGTGGTGCCCATCTGGT-----GACGTAAACGGCCACAAGTTCAGCGTGAAA  (-13)
ATGGTGAGCAAGGGCGAGGAGCTGTTTACCGGGGTGGTGCCCAT-----GACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-13)  X 3
ATGGTGAGCAAGGGCGAGGAGCTGTTTACCGGGGTGGTGCCCA-----GCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGAAA  (-10)  X 7

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C

Supplementary Figure 1. (A). Two standard curves created from Real-Time PCR of EGFP transgene and size-matched control genomic DNA sequences from Tg(CAGG:EGFP) transgenic animal indicate that this line contains a single copy of the transgene. Under amplification conditions of near 100% efficiency, signal from EGFP reaches the threshold (Ct) one cycle behind sized-match control regions. (B) Sequencing of PCR products from animals depicted in Figure 1D and 1E reveal multiple indel events at targeted site in EGFP transgene. (C) At 9 months, animals depicted in Figure 1D and E (middle and right, respectively) next to an uninjected EGFP-positive (left) sibling.



Supplementary Figure 3. At 5 days post fertilization, variability in RGN-induced mutagenesis, corresponds to variability in expression of coinjected *nls-EGFP* mRNA. Embryos coinjected with *nls-EGFP* and *bambi*-directed RGN display uniform expression of EGFP (A), others display very low-level mosaic EGFP expression (B).