Supplemental Table 1: Genotyping primers used for PCR

|  |  |  |
| --- | --- | --- |
| Gene/allele | Primers (5’- 3’) | Product length (bp) |
| *GFP qPCR*Figure 1C | S: ACGTAAACGGCCACAAGTTCAS: AAGTCGTGCTGCTTCATGTG | 187 |
| *GAPDH qPCR*Figure 1C | S: CGGGCCACGCTAATCTCATAS: CCTGGAACTCACCCGTTCAC | 87 |
| *E. coli* right boundaryFigure 1D | S: GGCGCGGAACTGCTCTATAAAS: AGACAGGTGACGAGAACAGGA | ~400 |
| Transgene right boundaryFigure 1F, G | TG-S: GGTCACCATCACTCAACTCCWT-S: TGAGGAAACATTACCAAAGGCACCCommon-AS: GCCTGTAATCCCAGTCCTGA | TG: 217WT: 456 |
| Transgene left boundaryFigure 1H | Common-S: CCTTCCAATTCCAGTTTCCATG-AS: GGTCACCATCACTCAACTCCWT-AS: GCCTGTAATCCCAGTCCTGA | TG: ~ 4kbWT: 816 |
| *B6-Nanogtm1Hoch* 1xGFP | S: GAGAATAGGGGGTGGGTAGGAS: CACCCCGGTGAACAGCTC | 500 |
| *Srytm1*presence of Y | S: CTGGAGCTCTACAGTGATGAAS: CAGTTACCAATCAACACATCAC | 350 |
| *Tg(Sry)2Ei*presence of *Sry* | S: AGCCCTACAGCCACATGATAAS: GTCTTGCCTGTATGTGATGG | 420 |