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| No. | Primer name | Sequence | Amplified region (product size in bp) |
|  | **Sequencing of SnHXGPRT** |
| 1 | SnHXG\_-66bpFSnHXG\_+39bpR | 5'-CAGGACGAGGGAATATCTGC-3'5'-CTGGGAGCCAGAATCTTTGA-3' | SnHXGPRT cDNA (804) |
|  | **Construction of SnHXGPRT Knock-out plasmid** |
| 2 | SnHXG\_5'UTR\_KpnI-FSnHXG\_5'UTR\_BamHI-R | 5'-GACTGGTACCGCGAGTAAGCGTGACCAC -3'5'-GACTGGATCCCGCAGCCGCGAGAGGATAC-3' | 5'UTR (3283) |
| 3 | SnHXG\_YFP\_BamHI-FSnHXG\_YFP\_BamHI-R | 5’-GACTGGATCCATGGTGAGCAAGGGCGAG -3’5’-GACTGGATCCTCACCTAGGCTTGTACAG-3’ | YFP (726) |
| 4 | SnHXG\_3'UTR\_BamHI-FSnHXG\_3'UTR\_XbaI-R | 5’-GACTGGATCCTGACAAGGACGCAGAAAG-3’5'-GACTTCTAGAGAATAGACCGAAGCTCGTC -3' | 3'UTR (3395) |
|  | **Screening of Sn∆HXG clones** |
| 5 | SnHXG-F4SnHXG-R1 | 5'-CGATTACACACCCTGTGGC -3'5'-CTTGTAGTGGGAGGGGACAA-3' | HXG (327)  |
| 6 | SnHXG-F2SnHXG-F5SnHXG-R3 | 5'-GGTTTTCCTTCTCCCGTAGG-3'5'-CTGCGCCACCTTATATGG-3'5'-TAAACACAGGCGATTCGACA -3' | HXG-F2/R3 (1366 BP)HXG-F5/R3 ( 427) |
| 7 | SnSAG-1-promoter-FSnSAG-1-promoter-R | 5'-ACTGACAAGCTTAACAGTGAGGCAGATATGGC-3'5'-ACTGACAGATCTGCGAGAATGACAGATGGACAG-3' | SAG-1 promoter (782) |
|  | **Screening for TgHXGPRT complementation**  |
| 8 | pTgDHFR\_F\_.XhoI TgDHFR\_R\_BamHI  | 5'-GATCCTCGAGCAGCACGAAACCTTGCATTC -3'5'-GATCGGATCCGTGTCACTGTAGCCTGCCA -3'  | Dhfr promoter and TgHXG (1911) |
| 9 | TgHXG\_F.AvrIITgHXG\_R. BstBI | 5'-GACTCCTAGGATGGCGTCCAAACCCATTG-3'5'-CGCTTGGTTCGAACTACTTCTCGAACTTTTTGC-3' | TgHXG (690) |

Supplemental Table 1. Primer pairs used to generate *S. neurona* ∆HXG parasites.