**Supplementary File 5**

Promoter lengths and primer information for promoters used

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| *Pckr-1*  3564bp promoter region of *ckr-1* amplified from genomic DNA  OMF2159 (Forward primer): CTGCAGGATGGAGATTCAATCAGC  OMF2160 (Reverse primer): TGTGTATCTGAAAATTTTTAATTTTAAA |
| *Pckr-2*  8.6 kb promoter region of *ckr-2* amplified from genomic DNA  OMF1067 (Forward primer): GCATGCGGGTGTGATAAGTGCAATGAAGTGG  OMF1068 (Reverse primer): ACGTACCGGTTCCTCCTGATGTACCGTTGACATTGTGG |
| *Plgc-55* 2663bp amplified from plasmid lgc55\_2663-0\_pPD95\_  OMF1019 (Forward primer): ATGTCTGCCCCTATCACCAGTG  OMF1020 (Reverse primer): TTCATTTCGACATCTATTTGCCAATA  (Pirri et al., 2009) |
| *Podr-2(16)*  3.2 kb promoter fragment amplified from genomic DNA  OMF1878 (Forward primer): ATGGGAATGGCGGCAAAT  OMF1879 (Reverse primer): CGGGCATCCCGACAAACTGT  (Chou et al., 2001) |
| *Plad-2*  4.5 kb upstream of *lad-2* ATG amplified from genomic DNA  OMF1876 (Forward primer): ATTTTTTGCTGTGTTCCACTAA  OMF1920 (Reverse primer): TGTTGGAAAAATCCAAAAAAAAAGTCTGC  (Wang et al., 2008) |
| *Pflp-22(∆4)*  1532bp promoter fragment was amplified from genomic DNA*.*  OMF2610 (Forward primer): TGCAGGAAACACCACCTAGTATATAAT  OMF2611 (Reverse primer): TGCAAGCTTAGAGTACAACGGCGA  (Yeon et al., 2018) |
| *Pmyo-3*  Amplified myo-3 promoter(2344bp) from pBB38 (*Pmyo-3::acr-2 cDNA*)  OMF763 (Forward primer): CGGCTATAATAAGTTCTTGAATAA  OMF764 (Reverse primer): CCTGAAAATTAGACGGTAAAAGTG  (Okkema et al., 1993) |
| *Punc17β*  *unc-17β promoter (485bp) amplified from plasmid pRM#621*  OMF1594 (Forward primer): TTGGTTTTCACAATTTTCTGGTTTT  OMF1595 (Reverse primer): TTGAACAAGAGATGCGGAAAATAGAAAGA  (Charlie et al., 2006) |
| *Punc-47 unc-47* promoter(1158bp) amplified from genomic DNA  OMF658 (Forward primer): AGTCGAAAGTCGGTGGCAAG  OMF659 (Reverse primer): GTCGTCTCACAGGAAAGACAGAT  (McIntire et al., 1997) |
| *Podr-2(18)*  2.4 kb promoter fragment amplified from genomic DNA  OMF1015 (Forward primer): GAACAGGGTCTCTCACAGTTTGTCG  OMF1016 (Reverse primer): CCATCAGCCAAATGTAGGCTCGG  (Chou et al., 2001) |
| *Pnpr-9  npr-9* promoter (2305bp) amplified from genomic DNA  OMF1353 (Forward primer): CAATGCAGAAGAAGACTCTTCATCC  OMF1544 (Reverse primer): GACATTTCCCAACGACATTTCCC  (Altun-Gultekin et al., 2001) |
| *Pgcy-28d*  2841 bp promoter for *gcy-28d* amplified from genomic DNA.  OMF1884 (Forward primer): TACAATTGTAGTGAGCTTCG  OMF1885 (Reverse primer): TTCGCACTCATCTCACCATTCC  (Shinkai et al., 2011) |
| *Plim-4*  *lim-4* promoter fragment from -3328 to -2174 upstream of start was amplified from plasmid  [*Plim-4(-3328 to -2174)::NLSwCherry::SL2::GCaMP6s]*  OMF2166 (Forward primer): AAGCTTTGATTTAGAAATTGTAGTTTC  OMF2167 (Reverse primer): ACAAGCCGCTCAGTTTTGATCTAAAAT  (Pirri et al., 2009) |

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| *Posm-6*  2083 bp promoter region from *Posm-6::GFP*  OMF2227 (Forward primer): CTTGCATGTTATGGATACTCTGAAT  OMF2228 (Reverse primer): TTTTCGTCTGAAAATGGAGGCATAG  (Collet et al., 1998) |
| *Ptph-1*  *tph-1* promoter was amplified from *Ptph-1::unc-2*  OMF926 (Forward primer): GGTGGTCTTCCCGCTTGCAATAC  OMF927 (Reverse primer): ATGATTGAAGAGAGCAATGCTAC  (Sze et al., 2000) |
| *Pser-2prom3*  4101 bp promoter region of the *ser-*2 promoter (*ser-2prom3*) was amplified from genomic DNA  OMF3149 Forward primer: GTAAAAGTTTAGTAAATTAACTGCTA  OMF3150 Reverse primer: TATGTGTTGTGATGTCACAAAAATATG  (Tao et al., 2019) |

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