**Supplemental Material. González-Aguilera C. et al.**

**Plasmids**

Plasmid **pBN65** (P<sub>hsp-16.41</sub>: hsp16.41p::dam::myc::lmm-1) was made inserting a lmm-1 NgoMIV/XmaI fragment amplified from genomic DNA with primers 5’ CGC GCG CCG GCT CAT CTC GTA AAG GTA CT 3’ + 5’ CGC GCC CCC GGT TAC ATG ATG GAA CAA CGA TC 3’ into NgoMIV of pBN61. Plasmid **pBN61** (P<sub>hsp-16.41</sub>: dam::myc<sub>_w/o STOP</sub>) contains a XhoI/NgoMIV fragment amplified from pNDamMYC with primers 5’ CGC GCA GAT CTG ACG TCT GGC GCC CCC GGT TAC ATG ATG GAA CAA CGA TC 3’ and 5’ CGC GCG CCG GCA ATA TCA GTC CTC CTC GCC CCC GGT TAC ATG ATG GAA CAA CGA TC 3’. Further contains the engineered BsrGI site immediately before the stop codon.

Similarly, plasmid **pBN103** contain the emr-1 gene with 1.6kb upstream and 0.3kb downstream sequences as well as GFP inserted into an engineered BsrGI site immediately before the stop codon. Further details are available upon request.

**Strains**

**BN19** (lem-2(tm1582) II) and **BN20** (emr-1(gk119) I) were generated by outcrossing original deletion strains **tm1582** from the National Bioresource Project and VC237 from the International *C. elegans* Gene Knockout Consortium, respectively, with the *C. elegans* Bristol wild type strain N2 seven times. Strain **BN24** (emr-1(gk119))
I/hT2(I;III); lem-2(tm1582) II) was obtained by crossing BN19 with outcrossed hT2/+(VC699 crossed twice with N2) followed by mating with BN20.

Strains **BN195** (bqSi195[pBN65(unc-119(+)) P_{hsp-16.41}::dam::myc::lmm-1]) II), **BN196** (bqSi196[pBN67(unc-119(+)) P_{hsp-16.41}::gfp::myc::dam]) II), **BN218** (bqSi218[pBN79(unc-119(+)) P_{hsp-16.41}::dam::myc::emr-1]) II), and **BN235** (bqSi235[pBN103(unc-119(+)) P_{emr-1}::emr-1::GFP]) II) were constructed injecting the plasmids pBN65, pBN67, pBN79, and pBN103, respectively, together with transposase and transformation markers (pJL43.1, pCFJ90, pCFJ104 and pBN1) into strain **EG4322** (ttTi5605 II; unc-119(ed3) III) (Frokjaer-Jensen et al. 2008). Strain **BN242** (bqSi242[pBN37(unc-119(+)) P_{lem-2}::lem-2::mCherry]) IV) was constructed injecting the plasmid pBN37 together with transposase and transformation markers (pJL43.1, pBN40, pBN41 and pBN2) into strain **EG5003** (unc-119(ed3) III; cxTi10882 IV.) (Frokjaer-Jensen et al. 2008). Strains carrying the integrations were outcrossed twice with N2. Single insertions of DamID constructs at the correct location were verified by Southern blot and PCR analyses.

Strains **BN198** (lem-2(tm1582) bqSi196[pBN67(unc-119(+)) P_{hsp-16.41}::gfp::myc::dam]) II) and **BN202** (emr-1(gk119) I; bqSi196[pBN67(unc-119(+)) P_{hsp-16.41}::gfp::myc::dam]) II) were constructed crossing BN196 with BN19 and BN20, respectively. Strains **BN199** (lem-2(tm1582) bqSi195[pBN65(unc-119(+)) P_{hsp-16.41}::dam::myc::lmm-1]) II) and **BN203** (emr-1(gk119) I; bqSi195[pBN65(unc-119(+)) P_{hsp-16.41}::dam::myc::lmm-1]) II) were constructed crossing BN195 with BN19 and BN20, respectively. Strain **BN243** (P_{emr-1}::emr-1::GFP II; P_{lem-2}::lem-2::mCherry IV) was constructed crossing pBN235 with pBN242.

References


