Supplemental Information

Supplemental Data

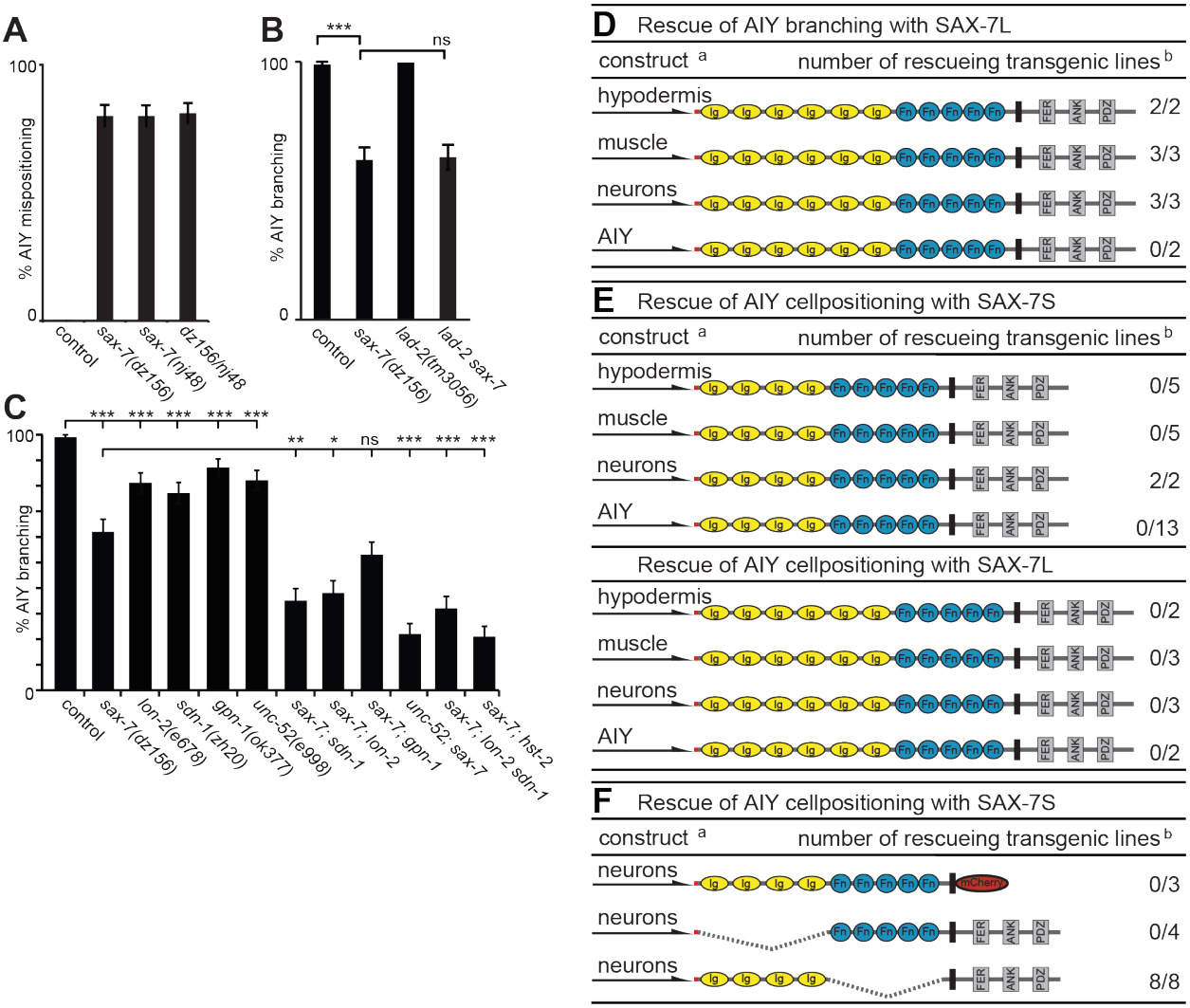

Figure S1. Genetic analyses of AIY branching and cell positioning defects, Related to Figure 1.

A Quantification of cell positioning defects of AIY interneurons in the genetic backgrounds indicated. N = 100 in all assays. See Dataset S1 for full primary data.

B – **C** Quantification of *kal-1/anosmin-1*-dependent branching in AIY interneurons in the genotypes indicated. Data for *sdn-1(zh20)*, *gpn-1(ok377)*, *lon-2(e678)* and *unc-52(e998)* are from (Díaz-Balzac et al., 2014) and shown for comparison only. N=100 in all cases.

Statistical significance in panels B and C is indicated as: ns: not significant, ***: P < 0.0005. See Dataset S1 for full primary data.

D Transgenic rescue of suppression of *kal-1/anosmin-1*-dependent branching in AIY interneurons. Shown are SAX-7L constructs as indicated under control of different heterologous promoters (*Pdpy-7*: hypodermal (Gilleard et al., 1997), *Pmyo-3*: muscle (Okkema et al., 1993), *Punc-14*: pan-neuronal (Ogura et al., 1997), *Pttx-3*: AIY specific (Altun-Gultekin et al., 2001)) and the number of rescuing lines out of the total number of lines. Note that the *unc-14* promoter may display some additional hypodermal expression (Díaz-Balzac & Bülow, unpublished). [a] Color coding and abbreviations in B-D as in Fig. 3. [b] Rescue in all panels was defined as transgenic animals being statistically significant (P<0.05) when compared to nontransgenic siblings. See Dataset S2 for full primary data.

E Transgenic rescue of AIY interneuron positioning defects. Shown are different SAX-7/L1CAM constructs under control of different heterologous promoters (*Pdpy-7*: hypodermal (Gilleard et al., 1997), *Pmyo-3*: muscle (Okkema et al., 1993), *Punc-14*: pan-neuronal (Ogura et al., 1997), *Pttx-3*: AIY specific (Altun-Gultekin et al., 2001)) with the number of rescuing lines out of the total number of lines indicated. See Dataset S2 for full primary data.

F Transgenic rescue of AIY interneuron cell positioning defects. Shown are different SAX-7S deletion constructs under control the pan-neuronal *Punc-14* promoter (Ogura et al., 1997). Note, that some hypodermal expression for the *Punc-14* promoter has been reported. Extent of deletions is indicated by dashed lines. See Dataset S2 for full primary data.

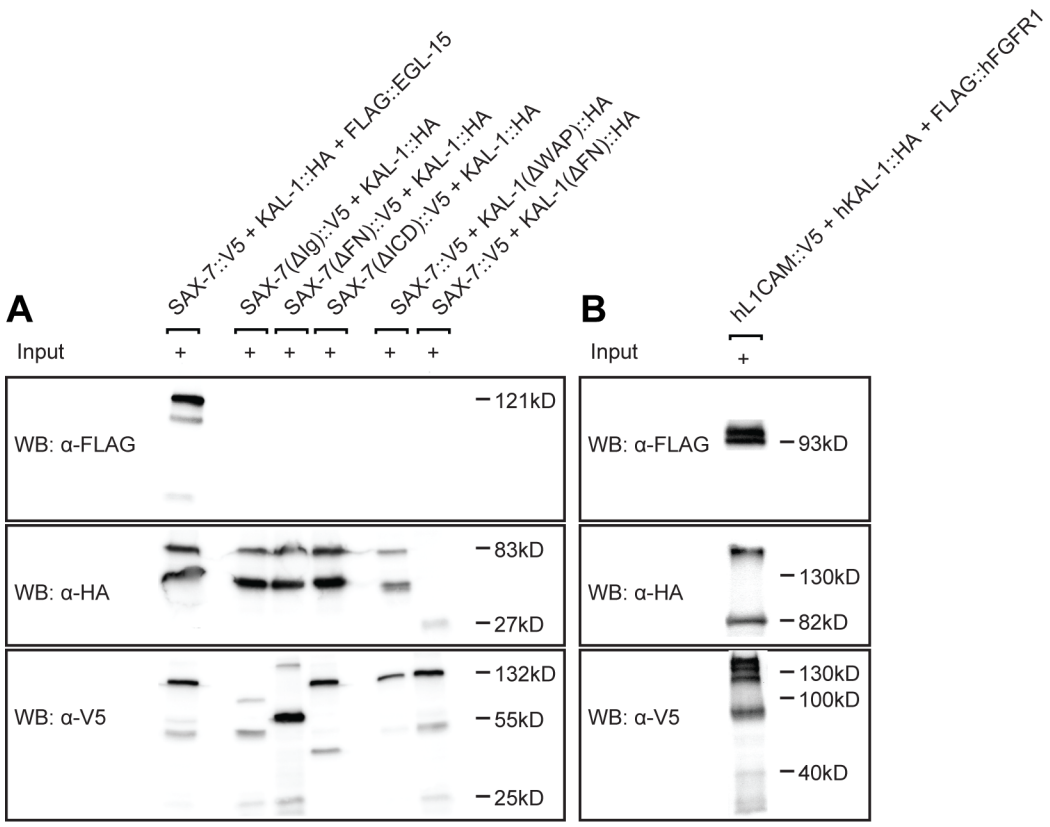

Figure S2. Western Blots of lysates after transient transfection, Related to Figure 4.

A Western Blots (WB) with the antibodies indicated on the left of lysates transiently expressing the different SAX-7S::V5, HA::KAL-1 and FLAG::EGL-15A constructs as well as deletion derivatives as indicated in Figure 4. Lanes (1), (2-4) and (5-6) are the input control blots for Figure 4B,E and F, respectively. Note that EGL-15A and SAX-7S run always as a triplet as previously described (Pocock et al., 2008) whereas KAL-1/anosmin-1 runs as a doublet possibly due to proteolytic cleavage.

B Western Blots (WB) with the antibodies indicated on the left of lysates transiently expressing the different hL1CAM::V5, KAL-1::HA and FLAG::hFGFR1 constructs as indicated in Figure 4D. Note that hFGFR1 runs always as a doublet whereas L1CAM runs as a triplet, similar to the *C. elegans* ortholog SAX-7. For human hKAL1 we observe a higher molecular band, possibly due to dimerization.

Dataset S1. Excel spreadsheet containing complete quantification data and statistical analysis for genetic experiments, Related to Figures 1 and 2.
Worksheets are color coded as follows. Red: data for *kal-1/anosmin-1*-dependent branching in AIY neurons. Green: data for AIY cell positioning defects. Blue: data for HSN branching defects.

Dataset S2. Excel spreadsheet containing complete quantification data and statistical analysis for transgenic rescue experiments of AIY branching, AIY cell positioning and HSN branching phenotypes, Related to Figure 3.
Worksheets are color coded as follows. Red: data for *kal-1/anosmin-1*-dependent branching in AIY neurons (AIY bra.). Green: data for AIY cell positioning defects (AIY cp.). Blue: data for HSN branching defects (HSN).

Supplemental Experimental Procedures

Strain list

Fluorescent reporter strains

AIY: *mgIs18* [*Pttx-3*::GFP]IV (Altun-Gultekin et al., 2001).

HSN: *zdIs13* [*Ptph-1*::GFP]IV (Clark and Chiu, 2003).

Strains related to kal-1/anosmin-1-dependent branching in AIY neurons.

OH124: *mgIs18IV; otIs35X*

EB615: *mgIs32II; otIs35X*

OH912: *otIs76mgIs18IV*

EB945: *sax-7(dz156) otIs76 mgIs18IV*

EB1023: *sax-7(nj48) otIs76 mgIs18IV*

EB981: *mgIs32III; sax-7(nj48)IV; otIs35X*

EB983: *mgIs32III; sax-7(nj13)IV; otIs35X*

EB985: *mgIs32III; sax-7(nj52)IV; otIs35X*

EB2361: *sax-7(eq1) otIs76mgIs18IV*

EB2362: *sax-7(nj53) otIs76mgIs18IV*

EB2363: *lad-2(tm3056) otIs76mgIs18IV*

EB2364: *otIs76 mgIs18 sax-7(dz156) lad-2(tm3056)IV*

EB614: *otIs76 mgIs18IV; sdn-1(zh20)X*

EB622: *unc-52(e998)II; otIs76 mgIs18IV*

OH3185: *otIs76 mgIs18IV; gpn-1(ok377)X*

EB613: *otIs76 mgIs18IV; lon-2(e678)X*

OH1945: *otIs76 mgIs18IV; hst-2(ok595)X*

EB1042: *otIs76 mgIs18IV; lon-2(e678) sdn-1(zh20)X*

EB1435: *otIs76 mgIs18sax-7(dz156)IV; sdn-1(zh20)X*

EB2356: *unc-52(E998)II; otIs76 mgIs18 sax-7(dz156)IV*

EB2357: *otIs76 mgIs18 sax-7(dz156)IV; gpn-1(ok377)X*

EB2358: *otIs76 mgIs18 sax-7(dz156)IV; lon-2(e678)X*

EB2359: *otIs76 mgIs18 sax-7(dz156)IV; hst-2(ok595)X*

EB2360: *otIs76 mgIs18 sax-7(dz156)IV; lon-2(e678) sdn-1(zh20)X*

Strains related to branching in HSN neurons.

EB2350: *sax-7(dz156)zdIs13IV*

EB9: *zdIs13IV; kal-1(gb503)I*

EB2351: *zdIs13IV; egl-15(n484)X*

EB2496: *zdIs13IV; egl-17(n1377)X*

EB2505: *zdIs13IV; hst-6(ok273)X*

EB2352: *kal-1(gb503)I; sax-7(dz156)zdIs13IV*

EB2353: *sax-7(dz156) zdIs13IV; egl-15(n484)X*

EB2354: *kal-1(gb503)I; zdIs13IV; egl-15(n484)X*

EB2355: *kal-1(gb503)I; sax-7(dz156) zdIs13IV; egl-15(n484)X*

EB1762: *kal-1(gb503)I; zdIs13IV; hst-6(ok273)X*

EB2500: *kal-1(gb503)I; zdIs13IV; egl-17(n1377)X*

EB2501: *sax-7(dz156) zdIs13IV; egl-17(n1377)X*

EB2502: *sax-7(dz156) zdIs13IV; hst-6(ok273)X*

EB2503: *kal-1(gb503)I; sax-7(dz156) zdIs13IV; egl-17(n1377)X*

Transgenic strains

A complete list of all transgenic strains created for this study is shown in Table S3.

Heterologous rescue of kal-1/anosmin-1-dependent branching and cell positioning defects of AIY

The *sax-7S* or *sax-7L* (and variants) cDNAs were cloned under control of heterologous promoters (*Pdpy-7*: hypodermal (Gilleard et al., 1997), *Pmyo-3*: muscle (Okkema et al., 1993), *Punc-14*: pan-neuronal (Ogura et al., 1997), *Pttx-3*: AIY specific (Altun-Gultekin et al., 2001))(Table S1) and injected at 5 ng/µl, together with the *Pmyo-3::mCherry* marker at 50 ng/µl and *pBluescript* at 50 ng/µl injected into *sax-7(nj48) otIs76 mgIs18IV.*

Heterologous rescue of HSN branching defects

The *sax-7S*, *kal-1*, *egl-15A*, or *egl-17* (and variants) cDNAs were cloned under control of heterologous promoters to drive the expression in HSN (*Punc-86*) (Shen and Bargmann, 2003) or the vulval epithelium (*Pegl-17*) (Burdine et al., 1998)(Table S1) and were injected at 5 ng/µl, together with the *Pmyo-3::mCherry* or *Punc-122::mCherry* marker at 50 ng/µl and *pBluescript* at 50 ng/µl injected into the respective mutant strains.

List of plasmids

Plasmids for transgenesis	Source
Punc-14::sax-7S	Gift of O. Hobert
Punc-14::sax-7L	Gift of O. Hobert
Pdpy-7::sax-7S	Gift of O. Hobert
Pdpy-7::sax-7L	Gift of O. Hobert
Pmyo-3::sax-7S	Gift of O. Hobert
Pmyo-3::sax-7L	Gift of O. Hobert
Punc-86::mCherry	Gift of K. Shen
Pegl-17::syg-2	Gift of K. Shen
Pttx-3::sax-7S	PCR the *sax-7S* cDNA with *Kpn*I/*Xba*I cloning sites attached and cloned into *Pttx-3::hst-2*. AAAGGTACCATGAGGAGCTTCATATTCCTC and AAAAAATCTAGACTAGACAAACGTCGACGTTG
Pttx-3::sax-7L	PCR the *sax-7L* cDNA with *Kpn*I/*Xba*I cloning sites attached and cloned into *Pttx-3::hst-2*.
Punc-14::sax-7S(ΔIgs)	site directed mutagenesis of *Pttx-3::sax-7S* and then cloning the *Punc-14* with *Hind*III/*Bam*HI. AACAGCCACAGGAACATCTGGAGGCATTTGTTGCA and TGCAACAAATGCCTCCAGATGTTCCTGTGGCTGTT
Punc-14::sax-7S(ΔFNIIIs)	site directed mutagenesis of *Pttx-3::sax-7S* as described in Pocock *et al.,* (2008) and then cloning the *Punc-14* with *Hind*III/*Bam*HI.
Punc-14::sax-7S (ΔIntra::mCherry)	made by PCR fusion as described in Pocock *et al.,* (2008) and then cloning the *Punc-14* with *Hind*III/*BamH*I.
Punc-86::sax-7S	The *Punc-86* from *unc-86::mCherry* was cloned into *Pttx-3::sax-7S* with *Xma*I/*Apa*I.
Punc-86::kal-1	The *Punc-86* from *Punc-86::mCherry* was cloned into *Pttx-3::kal-1* with *Xma*I/*Apa*I.
Punc-86::egl-15A	The *Punc-86* from *Punc-86::mCherry* was cloned into *Pttx-3::egl-15A* with *Xma*I/*Apa*I.
Punc-86::egl-17	The *Punc-86* from *Punc-86::mCherry* was cloned into *Pttx-3::egl-17* with *Xma*I/*Apa*I.
Punc-86::sax-7S(ΔIntra::mCherry)	The *Punc-86* from *Punc-86::mCherry* was cloned into *Punc-14::sax-7S(ΔIntra::mCherry)* with *Xma*I/*Apa*I.
Punc-86::egl-15A(ΔIntra::mCherry)	The *Punc-86* from *Punc-86::mCherry* was cloned into *Punc-14::egl-17A(ΔIntra::mCherry)* with *Xma*I/*Apa*I.
Pegl-17::sax-7S	The *Pegl-17* from *Pegl-17::syg-2* was cloned into *Pttx-3::sax-7S* with *Xma*I/*Apa*I.
Pegl-17::kal-1	The *Pegl-17* from *Pegl-17::syg-2* was cloned into *Pttx-3::kal-1* with *Xma*I/*Apa*I.
Pegl-17::egl-15A	The *Pegl-17* from *Pegl-17::syg-2* was cloned into *Pttx-3::egl-15A* with *Xma*I/*Apa*I.
Pegl-17::egl-17	The *Pegl-17* from *Pegl-17::syg-2* was cloned into *Pttx-3::egl-17* with *Xma*I/*Apa*I.

Plasmids for cell culture	Source
pcDNA3.1::sax-7S::V5	PCR amplification of the *sax-7S*-V5 cDNA fragment from RP17 (Pocock et al., 2008) with *Kpn*I/*Sac*I cloning sites attached and cloned it into *pPD49.26*. Then a *Bgl*II/*Spe*I piece was cloned into *Pttx-3*::sax-7S, creating *Pttx-3:sax-7S::V5* plasmid. Then a *Kpn*I/*Age*I piece from *Pttx-3:sax-7S::V5* was cloned into *pcDNA-V5-HisA*, creating the *pcDNA3.1::sax-7S::V5*.
pcDNA3.1::sax-7S(ΔIgs)::V5	Made by cloning the *Kpn*I/*Age*I piece from *Pttx-3::sax-7SΔIg::V5* into *pcDNA3.1::sax-7S::V5. Pttx-3::sax-7SΔIg::V5* was constructed by cloning the *Kpn*I/*Bgl*II piece of *Pttx-3::sax-7SΔIg into Pttx-3::sax-7S::V5*.
pcDNA3.1::sax-7S(ΔFNIII)::V5	made by cloning the *Kpn*I/*Sal*I piece of *Pttx-3::sax-7SΔFNIII* into *pcDNA3.1::sax-7S::V5.*
pcDNA3.1::sax-7S(ΔIntra)::V5	Made by cloning the *Kpn*I/*Age*I piece from *Pttx-3::sax-7SΔintra::V5* into *pcDNA3.1::sax-7S::V5. Pttx-3::sax-7SΔintra::V5* was made by site directed mutagenesis of *Pttx-3:sax-7S::V5* using the following primers: cagaattgtcttgacccttgcagacaacacagcagatg and catctgctgtgttgtctgcaagggtcaagacaattctg.
pCMV8::3xFLAG::egl-15A	PCR amplification of the *egl-15(A)* cDNA without the start ATG with *Not*I/*Xba*I cloning sites attached and cloned into *pCMV8::3xFLAG::eva-1* (gift from J. Culotti) using the following primers: aaaaaagcggccgcgagttatttccttgcatcctgcct and aaaaaatctagatcaaaattcgggtttgctcatgc. The endogenous signal peptide of *egl-15A* was deleted from the construct by site-directed mutagenesis using the following plasmids: ggtcaatccttgaagcgcggccgcaagctt and aagcttgcggccgcgcttcaaggattgacc.
pcDNA3.1::3xHA::kal-1	Made by cloning the *KpnI/XbaI* piece from *Pttx-3::3xHA::KAL-1* (Bülow *et al.* 2002) into *pcDNA3.1(+).*
pCMV8::3xFLAG::hFGFR1	PCR amplification of the FGFR1 cDNA without the start ATG and signal sequence with *Hind*III/*Xba*I cloning sites attached and cloned into *pCMV8::3xFLAG::eva-1* (gift from J. Culotti) using the following primers: aaaaaaaagcttccgtccccgaccttgcctgaacaagccc and aaaaaatctagatcagcggcgtttgagtccgccattggc.
pcDNA3.1::hKAL1::3xHA	PCR amplification of the KAL1 cDNA fragment from NIH_MGC_311 without the STOP codon and with *BamH*I/*Xba*I cloning sites attached and cloned it into *pcDNA-3xHA-His*, creating the *pcDNA3.1::hKAL1::3xHA*. The following primers were used: aaaaaaggatccatggtgcccggggtgcccggcgcgg and aaaaaatctagattgtatctttctggagaaggcttg.
pcDNA3.1::hL1CAM::V5	PCR amplification of the L1CAM cDNA fragment from NIH_MGC_364 without the STOP codon and with *Hind*III/*Xba*I cloning sites attached and cloned it into *pcDNA-V5-HisA*, creating the *pcDNA3.1::hL1CAM::V5*. The following primers were used: aaaaaaaagcttatggtcgtggcgctgcggtacgtgtggcc and aaaaaatctagattctagggccacggcagggttgatggggg .

List of transgenic strains

Strain name	Constructs	Genotype	Line[a]
EB1686	*Punc-14::sax-7S* and *Pmyo-3::mCherry*	*dzEx813; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1687	*Punc-14::sax-7S* and *Pmyo-3::mCherry*	*dzEx814; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1463	*Punc-14::sax-7L* and *Pmyo-3::mCherry*	*dzEx663; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1552	*Punc-14::sax-7L* and *Pmyo-3::mCherry*	*dzEx732; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1553	*Punc-14::sax-7L* and *Pmyo-3::mCherry*	*dzEx733; sax-7(nj48) otIs76mgIs18IV*	*3*
EB1464	*Pdpy-7::sax-7S* and *Pmyo-3::mCherry*	*dzEx664; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1465	*Pdpy-7::sax-7S* and *Pmyo-3::mCherry*	*dzEx665; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1554	*Pdpy-7::sax-7S* and *Pmyo-3::mCherry*	*dzEx734; sax-7(nj48) otIs76mgIs18IV*	*5*
EB1556	*Pdpy-7::sax-7S* and *Pmyo-3::mCherry*	*dzEx736; sax-7(nj48) otIs76mgIs18IV*	*4*
EB1563	*Pdpy-7::sax-7S* and *Pmyo-3::mCherry*	*dzEx741; sax-7(nj48) otIs76mgIs18IV*	*3*
EB1690	*Pdpy-7::sax-7L* and *Pmyo-3::mCherry*	*dzEx817; sax-7(nj48) otIs76mgIs18IV*	*1*
EB2334	*Pdpy-7::sax-7L* and *Pmyo-3::mCherry*	*dzEx1305; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1462	*Pmyo-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx662; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1656	*Pmyo-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx799; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1657	*Pmyo-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx800; sax-7(nj48) otIs76mgIs18IV*	*3*
EB1658	*Pmyo-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx801; sax-7(nj48) otIs76mgIs18IV*	*4*
EB1659	*Pmyo-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx802; sax-7(nj48) otIs76mgIs18IV*	*5*
EB1466	*Pmyo-3::sax-7L* and *Pmyo-3::mCherry*	*dzEx666; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1688	*Pmyo-3::sax-7L* and *Pmyo-3::mCherry*	*dzEx815; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1689	*Pmyo-3::sax-7L* and *Pmyo-3::mCherry*	*dzEx816; sax-7(nj48) otIs76mgIs18IV*	*3*
EB1635	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx789; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1636	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx790; sax-7(nj48) otIs76mgIs18IV*	*2*
EB1637	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx791; sax-7(nj48) otIs76mgIs18IV*	*3*
EB1638	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx792; sax-7(nj48) otIs76mgIs18IV*	*4*
EB1639	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx793; sax-7(nj48) otIs76mgIs18IV*	*5*
EB1640	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx794; sax-7(nj48) otIs76mgIs18IV*	*6*
EB1660	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx803; sax-7(nj48) otIs76mgIs18IV*	*9*
EB1661	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx804; sax-7(nj48) otIs76mgIs18IV*	*10*
EB1662	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx805; sax-7(nj48) otIs76mgIs18IV*	*11*
EB1668	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx807; sax-7(nj48) otIs76mgIs18IV*	*12*
EB1669	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx808; sax-7(nj48) otIs76mgIs18IV*	*13*
EB1681	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx812; sax-7(nj48) otIs76mgIs18IV*	*8*
EB1703	*Pttx-3::sax-7S* and *Pmyo-3::mCherry*	*dzEx830; sax-7(nj48) otIs76mgIs18IV*	*7*
EB1641	*Pttx-3::sax-7L* and *Pmyo-3::mCherry*	*dzEx795; sax-7(nj48) otIs76mgIs18IV*	*1*
EB1642	*Pttx-3::sax-7L* and *Pmyo-3::mCherry*	*dzEx796; sax-7(nj48) otIs76mgIs18IV*	*2*
EB2335	*Punc-14::sax-7S(ΔIgs)* and *Pmyo-3::mCherry*	*dzEx1306; sax-7(nj48) otIs76mgIs18IV*	*1*
EB2336	*Punc-14::sax-7S(ΔIgs)* and *Pmyo-3::mCherry*	*dzEx1307; sax-7(nj48) otIs76mgIs18IV*	*2*
EB2337	*Punc-14::sax-7S(ΔIgs)* and *Pmyo-3::mCherry*	*dzEx1308; sax-7(nj48) otIs76mgIs18IV*	*3*
EB2338	*Punc-14::sax-7S(ΔIgs)* and *Pmyo-3::mCherry*	*dzEx1309; sax-7(nj48) otIs76mgIs18IV*	*4*
EB2339	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1310; sax-7(nj48) otIs76mgIs18IV*	*1*

EB2340	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1311; sax-7(nj48) otIs76mgIs18IV*	*2*
EB2341	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1312; sax-7(nj48) otIs76mgIs18IV*	*3*
EB2342	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1313; sax-7(nj48) otIs76mgIs18IV*	*4*
EB2343	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1314; sax-7(nj48) otIs76mgIs18IV*	*5*
EB2344	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1315; sax-7(nj48) otIs76mgIs18IV*	*6*
EB2345	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1316; sax-7(nj48) otIs76mgIs18IV*	*7*
EB2346	*Punc-14::sax-7S(ΔFNIIIs)* and *Pmyo-3::mCherry*	*dzEx1317; sax-7(nj48) otIs76mgIs18IV*	*8*
EB2347	*Punc-14::sax-7S(ΔIntra::mCherry)* and *Pmyo-3::mCherry*	*dzEx1318; sax-7(nj48) otIs76mgIs18IV*	*1*
EB2348	*Punc-14::sax-7S(ΔIntra::mCherry)* and *Pmyo-3::mCherry*	*dzEx1319; sax-7(nj48) otIs76mgIs18IV*	*2*
EB2349	*Punc-14::sax-7S(ΔIntra::mCherry)* and *Pmyo-3::mCherry*	*dzEx1320; sax-7(nj48) otIs76mgIs18IV*	*3*
EB2478	*Punc-86::sax-7S* and *Pmyo-3::mCherry*	*dzEX1398; sax-7(nj48) zdIs13IV*	*1*
EB2479	*Punc-86::sax-7S(ΔIntra::mCherry)* and *Punc-122::mCherry*	*dzEX1399; sax-7(nj48) zdIs13IV*	*1*
EB2480	*Punc-86::sax-7S(ΔIntra::mCherry)* and *Punc-122::mCherry*	*dzEX1400; sax-7(nj48) zdIs13IV*	*2*
EB2481	*Punc-86::sax-7S(ΔIntra::mCherry)* and *Punc-122::mCherry*	*dzEX1401; sax-7(nj48) zdIs13IV*	*3*
EB2482	*Punc-86::sax-7S(ΔIntra::mCherry)* and *Punc-122::mCherry*	*dzEX1402; sax-7(nj48) zdIs13IV*	*4*
EB2483	*Pegl-17::sax-7S* and *Pmyo-3::mCherry*	*dzEX1403; sax-7(nj48) zdIs13IV*	*1*
EB2484	*Pegl-17::sax-7S* and *Pmyo-3::mCherry*	*dzEX1404; sax-7(nj48) zdIs13IV*	*2*
EB2485	*Punc-86::egl-15A* and *Pmyo-3::mCherry*	*dzEX1405; zdIs13IV; egl-15(n484)X*	*1*
EB2486	*Punc-86::egl-15A* and *Pmyo-3::mCherry*	*dzEX1406; zdIs13IV; egl-15(n484)X*	*2*
EB2487	*Punc-86::egl-15A(ΔIntra::mCherry)* and *Punc-122::mCherry*	*dzEX1407; zdIs13IV; egl-15(n484)X*	*1*
EB2521	*Punc-86::egl-15A(ΔIntra::mCherry)* and	*dzEX1420; zdIs13IV; egl-15(n484)X*	*2*
EB2522	*Punc-122::mCherry*	*dzEX1421; zdIs13IV; egl-15(n484)X*	*3*
EB2523	*Punc-86::egl-15A(ΔIntra::mCherry)* and	*dzEX1422; zdIs13IV; egl-15(n484)X*	*4*
EB2524	*Punc-122::mCherry*	*dzEX1423; zdIs13IV; egl-15(n484)X*	*5*
EB2525	*Punc-86::egl-15A(ΔIntra::mCherry)* and	*dzEX1424; zdIs13IV; egl-15(n484)X*	*6*
EB2526	*Punc-122::mCherry*	*dzEX1425; zdIs13IV; egl-15(n484)X*	*7*
EB2527	*Punc-86::egl-15A(ΔIntra::mCherry)* and	*dzEX1426; zdIs13IV; egl-15(n484)X*	*8*
EB2488	*Pegl-17::egl-15A* and *Pmyo-3::mCherry*	*dzEX1408; zdIs13IV; egl-15(n484)X*	*1*
EB2489	*Pegl-17::egl-15A* and	*dzEX1409; zdIs13IV; egl-15(n484)X*	*2*

	Pmyo-3::mCherry		
EB2490	*Pegl-17::egl-15A* and *Pmyo-3::mCherry*	*dzEX1410; zdIs13IV; egl-15(n484)X*	*3*
EB2491	*Punc-86::kal-1* and *Pmyo-3::mCherry*	*dzEX1411; kal-1(gb503)I; zdIs13IV*	*1*
EB2492	*Punc-86::kal-1* and *Pmyo-3::mCherry*	*dzEX1412; kal-1(gb503)I; zdIs13IV*	*2*
EB2493	*Punc-86::kal-1* and *Pmyo-3::mCherry*	*dzEX1413; kal-1(gb503)I; zdIs13IV*	*3*
EB2494	*Pegl-17::kal-1* and *Pmyo-3::mCherry*	*dzEX1414; kal-1(gb503)I; zdIs13IV*	*1*
EB2495	*Pegl-17::kal-1* and *Pmyo-3::mCherry*	*dzEX1415; kal-1(gb503)I; zdIs13IV*	*2*
EB2497	*Punc-86::egl-17* and *Pmyo-3::mCherry*	*dzEX1416; zdIs13IV; egl-17(n1377)X*	*1*
EB2498	*Punc-86::egl-17* and *Pmyo-3::mCherry*	*dzEX1417; zdIs13IV; egl-17(n1377)X*	*2*
EB2499	*Pegl-17::egl-17* and *Pmyo-3::mCherry*	*dzEX1418; zdIs13IV; egl-17(n1377)X*	*1*

[a] line refers to the respective numbering of extrachromosomal transgenic lines used in supplemental Dataset 2.

Supplemental References

Clark, S.G., and Chiu, C. (2003). C. elegans ZAG-1, a Zn-finger-homeodomain protein, regulates axonal development and neuronal differentiation. Development *130*, 3781-3794.