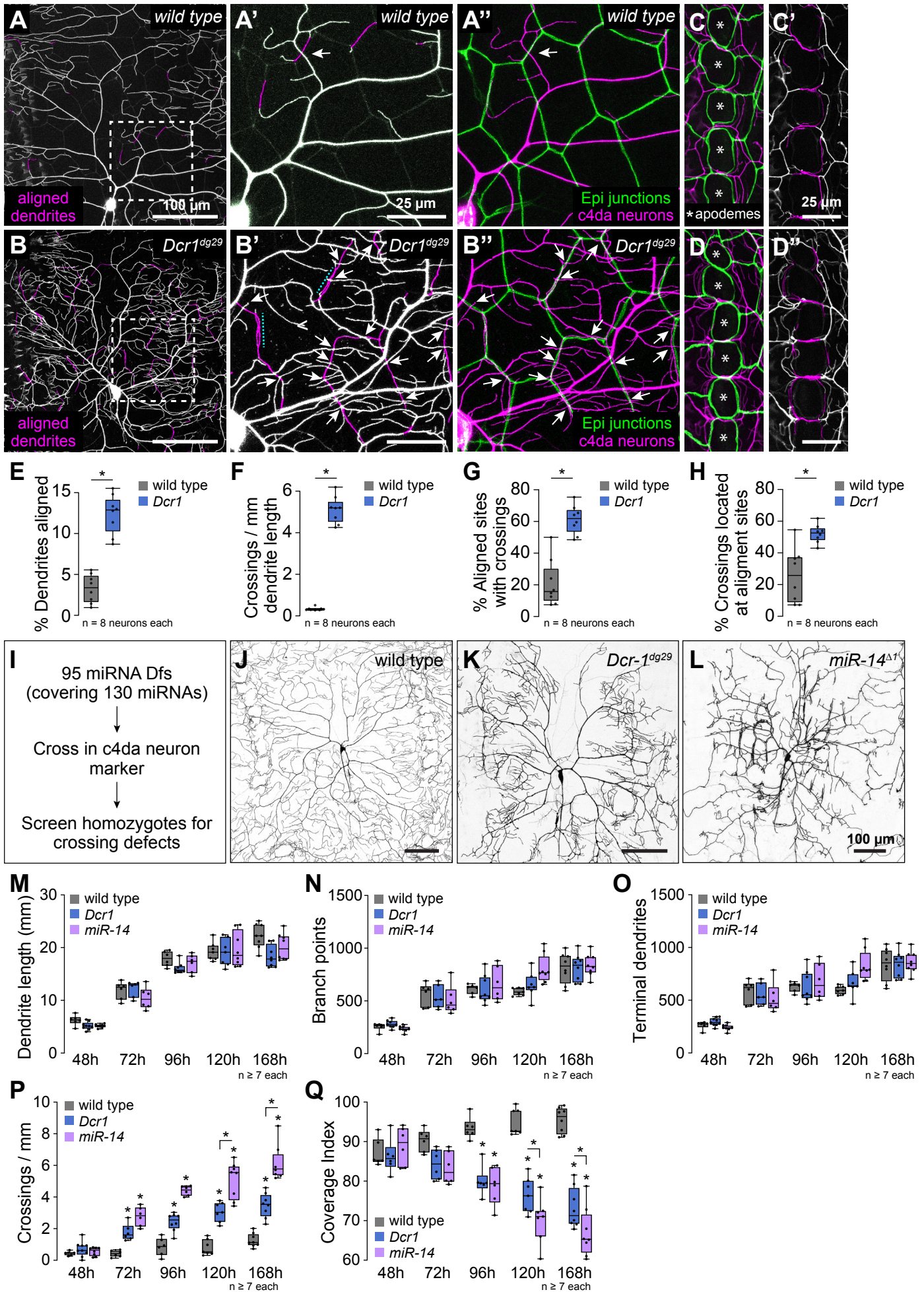
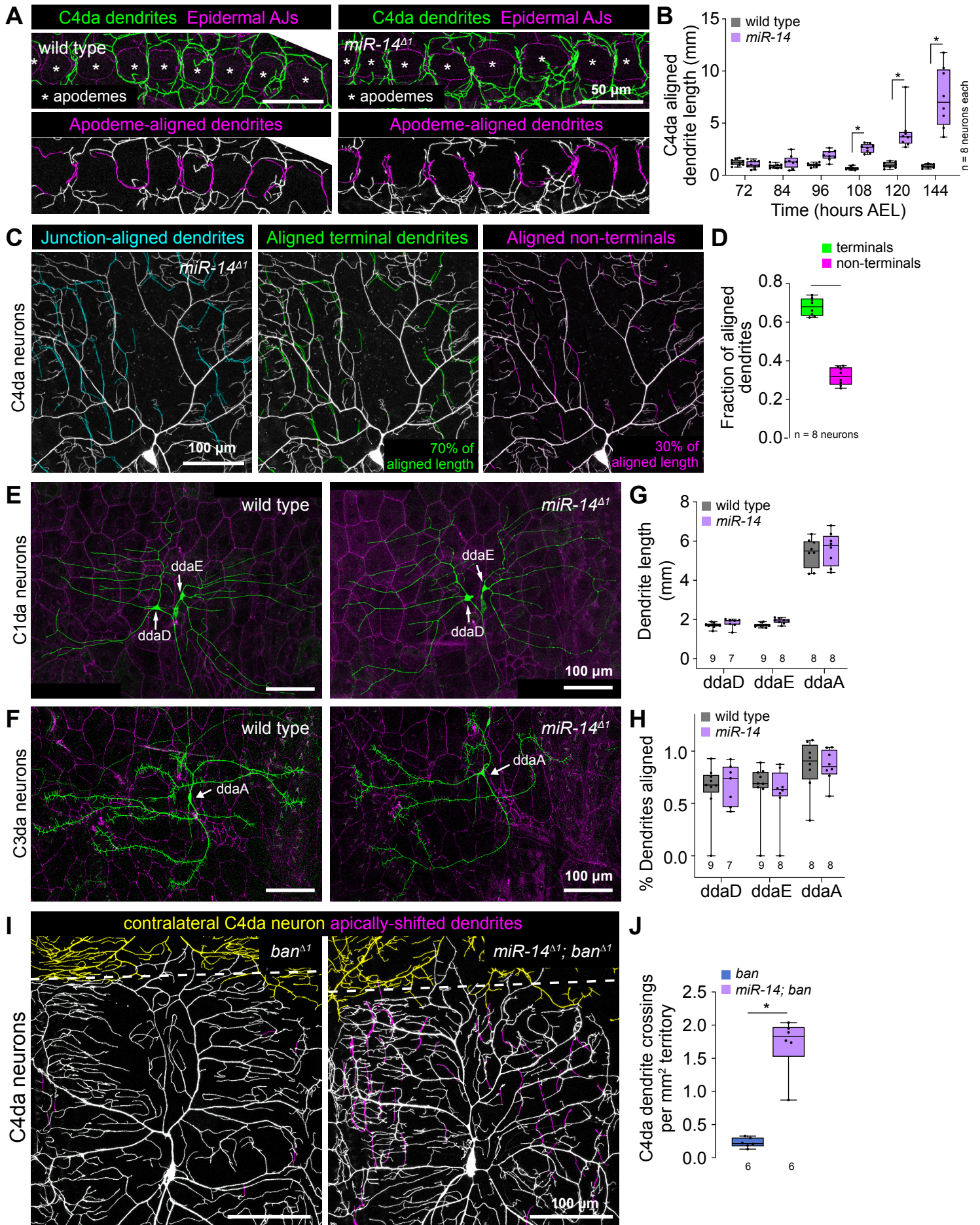


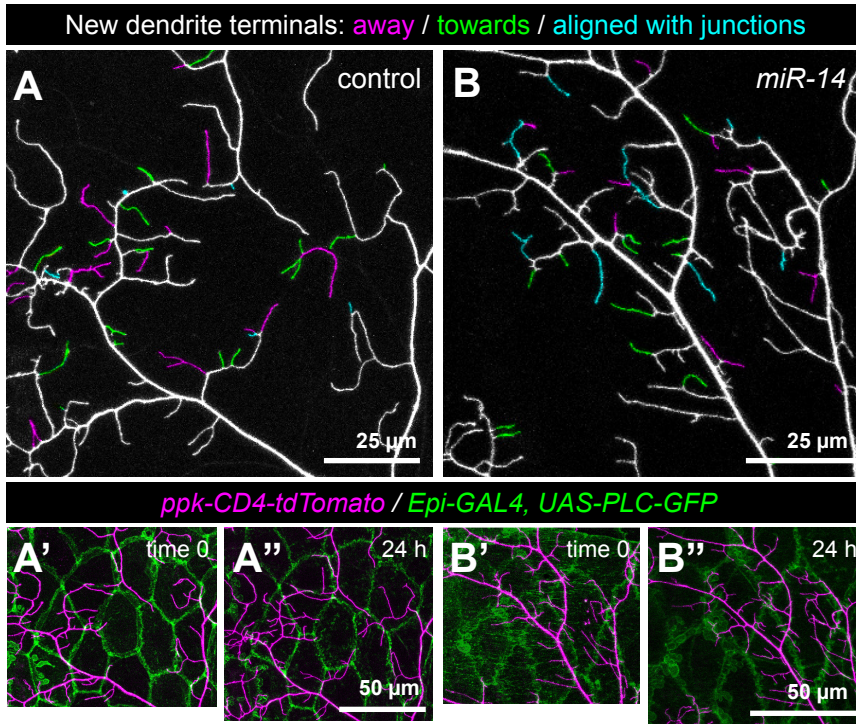
Luedke et al, Figure 1 - figure supplement 1



Luedke et al, Figure 1 - figure supplement 2

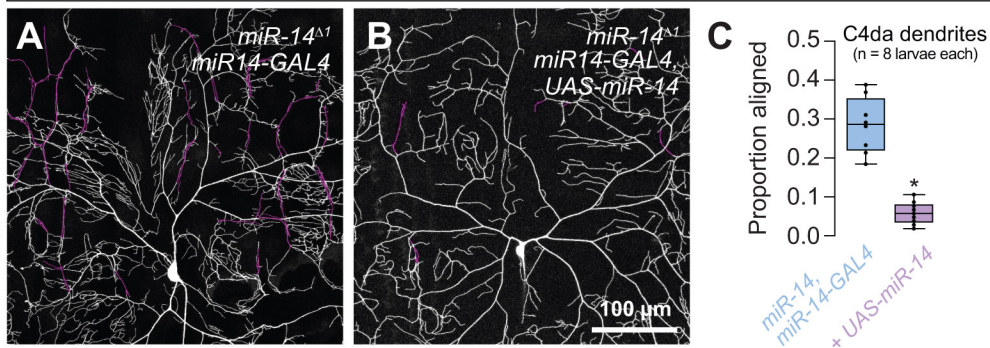


Luedke et al, Figure 2 - figure supplement 1

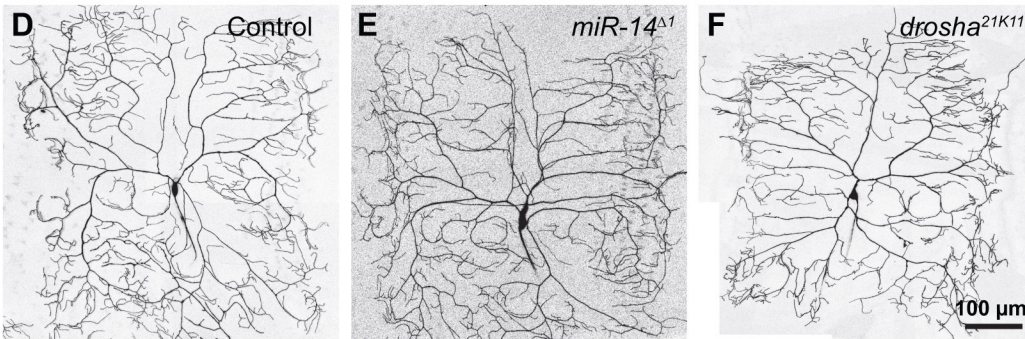


Luedke et al, Figure 4 - figure supplement 1

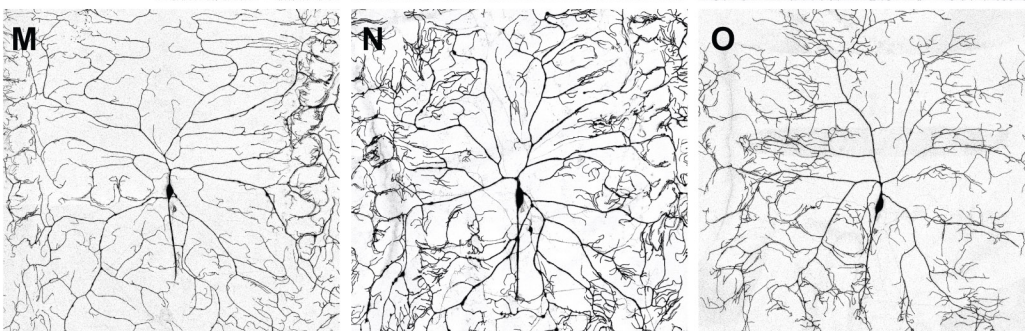
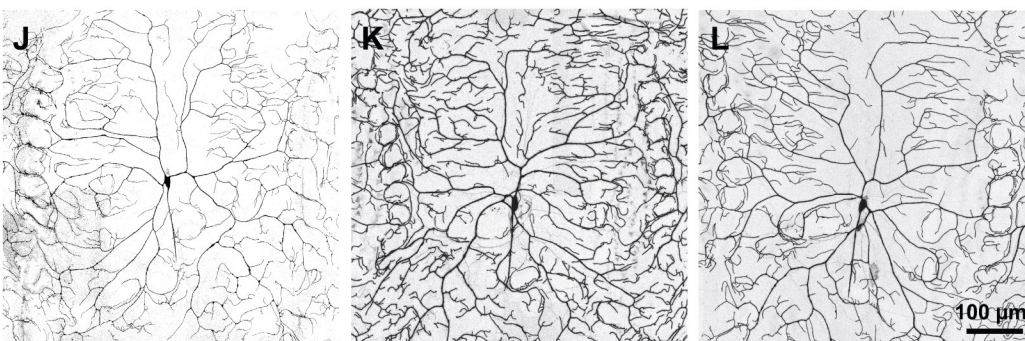
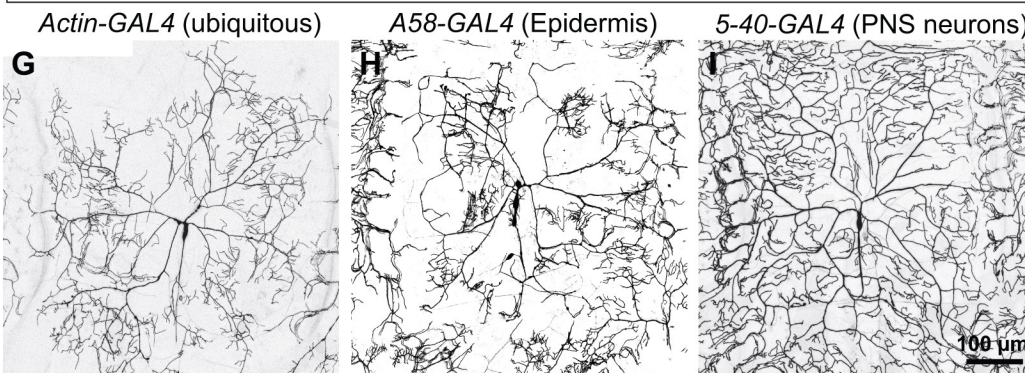
miR-14-GAL4 rescue activity



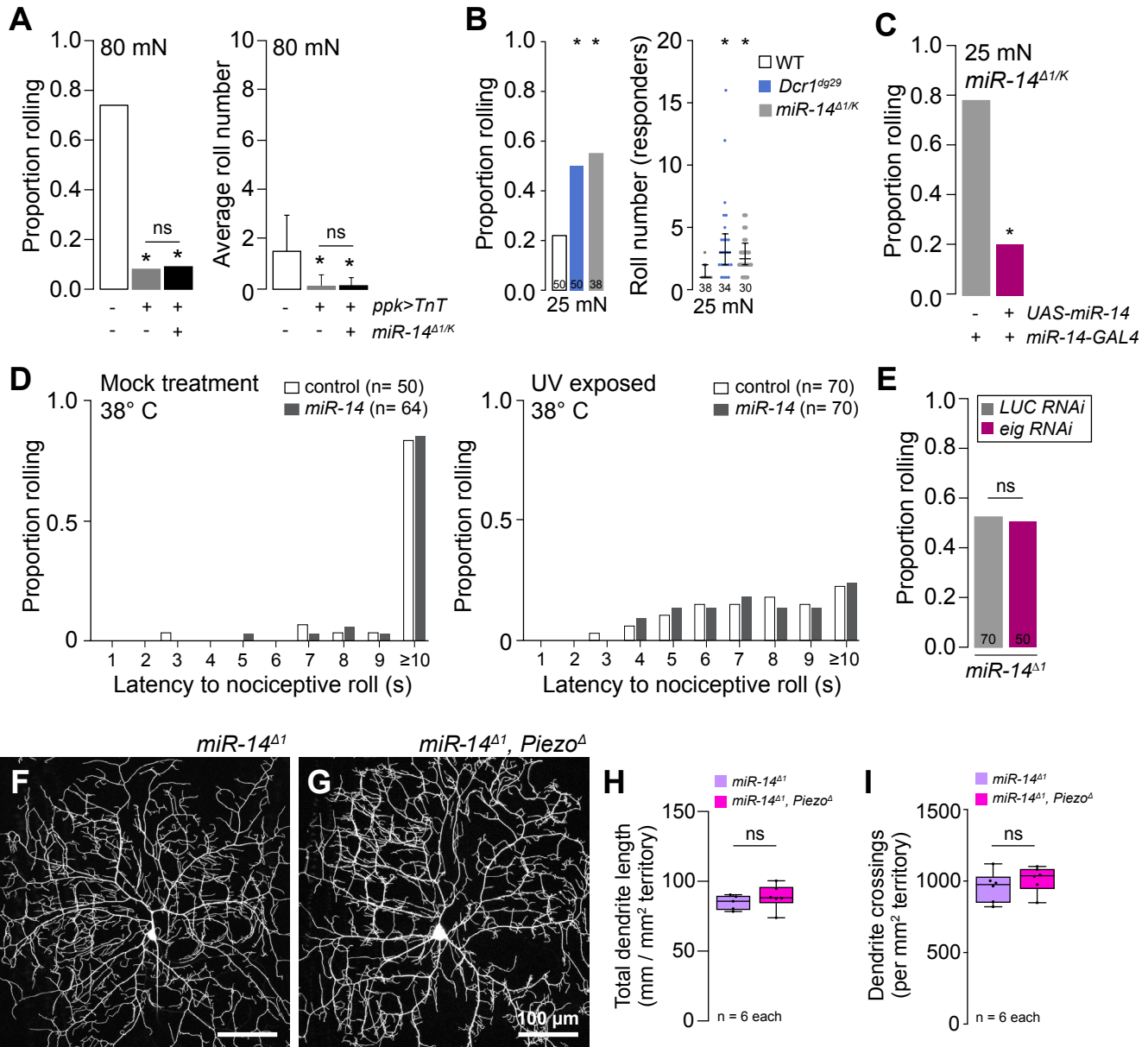
Mosaic analysis: C4da MARCM clones



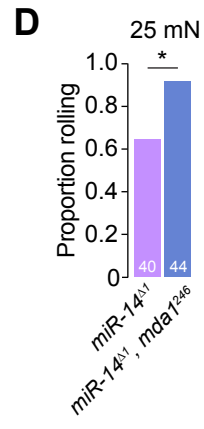
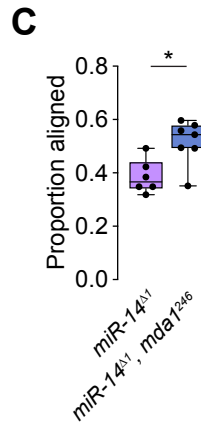
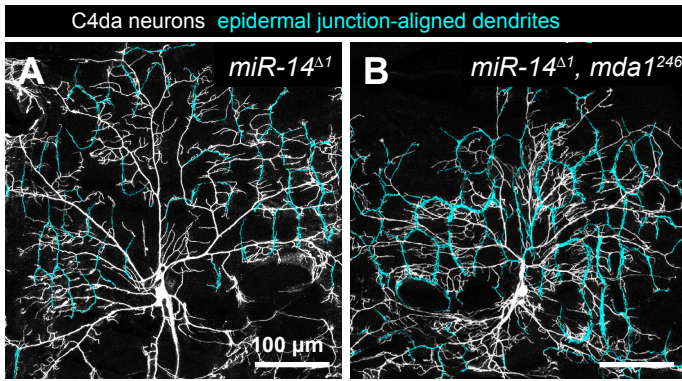
Mosaic analysis: knockdown and rescue assays



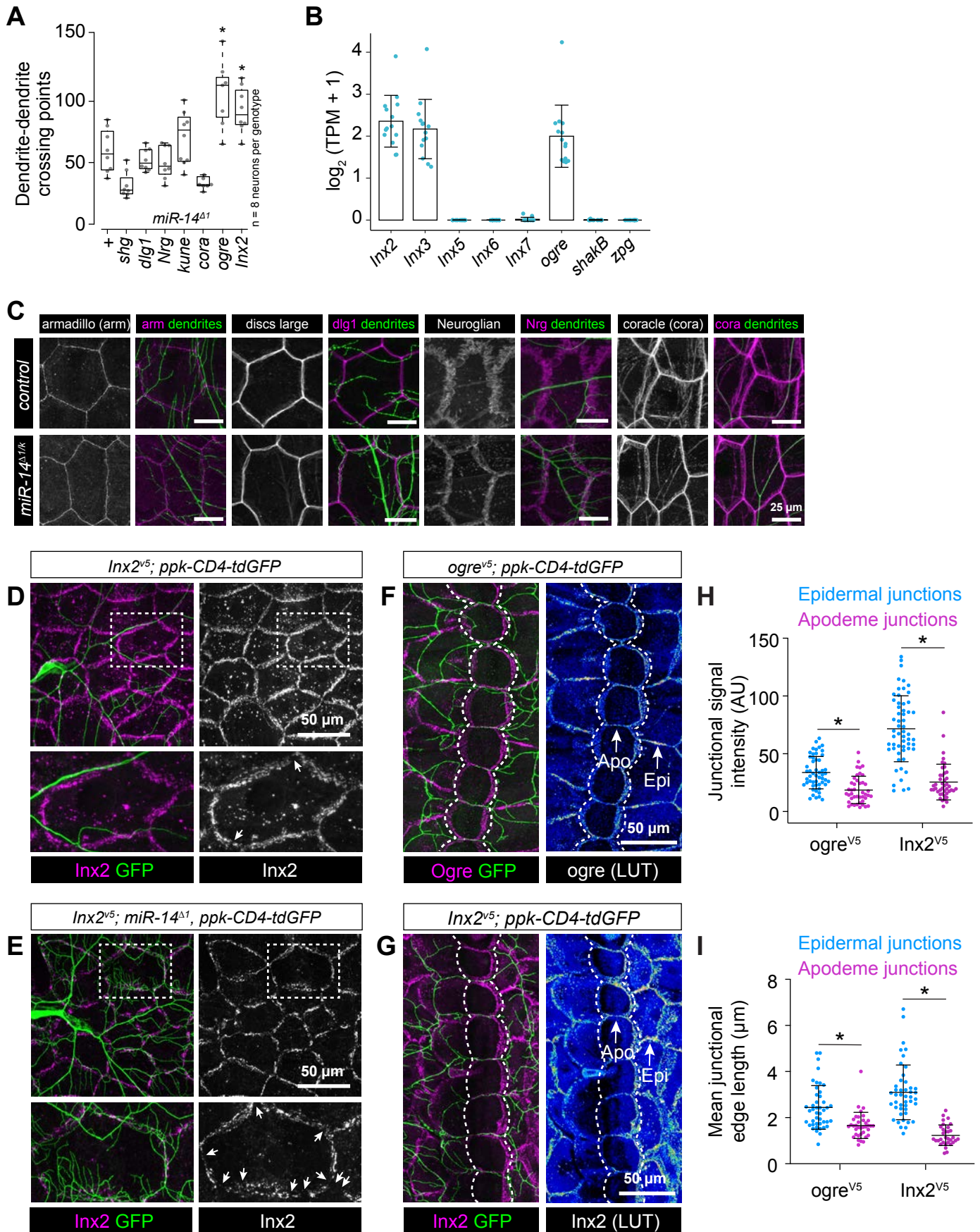
Luedke et al, Figure 5 - figure supplement 1



Luedke et al, Figure 6 - figure supplement 1



Luedke et al, Figure 7 - figure supplement 1



Luedke et al, Figure 7 - figure supplement 2

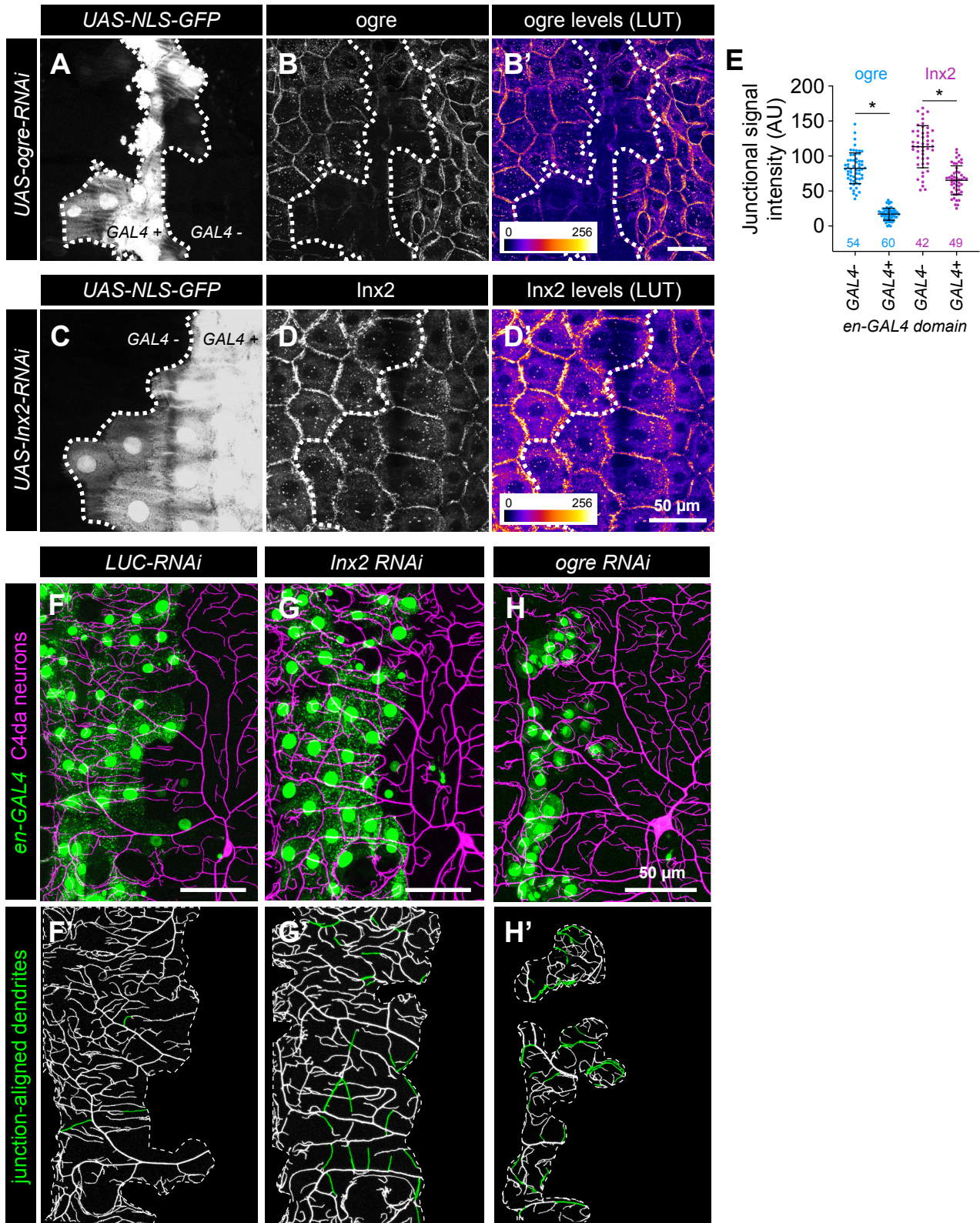


Table S1. Alleles used in this study

Allele	Uses / Features	Identifier (RRID)
5-40-GAL4	GAL4 driver (PNS neurons)	Flybase_FBal0221791
98b-GAL4	GAL4 driver (C1da neurons)	Flybase_FBal0305321
Act5C-GAL4	GAL4 driver (ubiquitous)	BDSC_3954
A58-GAL4	GAL4 driver (epidermis)	Flybase_FBal0181674
en2.4-GAL4	GAL4 driver (epidermis)	BDSC_30564
miR-14-GAL4	GAL4 driver (<i>miR-14</i> expression domain)	This study
NompC-GAL4	GAL4 driver (C3da neurons)	BDSC_36361
ppk-GAL4	GAL4 driver (C4da neurons)	BDSC_32079
R38F11-GAL4	GAL4 driver (epidermis)	BDSC_50014
sr-GAL4	GAL4 driver (apodemes)	BDSC_26663
ppk-LexA	LexA driver (C4da neurons)	Flybase_FBal0336342
UAS-mCherry.scramble.sponge	Knockdown (control miRNA sponge)	BDSC_61501
UAS-mCherry.miR-14.sponge	Knockdown (<i>miR-14</i> sponge)	BDSC_61382
UAS-eiger ^{IR}	Knockdown (<i>eiger</i> RNAi line)	BDSC_58993
UAS-Inx2RNAi	Knockdown (<i>Inx2</i> RNAi line)	BDSC_42645
UAS-LUC	Knockdown (<i>Luciferase</i> RNAi line)	BDSC_31603
UAS-ogreRNAi	Knockdown (<i>ogre</i> RNAi line)	BDSC_44048
FRT42D	MARCM reagent	BDSC_1802
SOP-FLP	MARCM reagent	Flybase_FBal0278148
Tub-GAL80	MARCM reagent	BDSC_9917
ban ^{Δ1}	Mutant allele	BDSC_58878
cora ⁵	Mutant allele	BDSC_52233
Dcr1 ^{mn29}	Mutant allele	This study
dlg1 ^A	Mutant allele	BDSC_57086
Drosha ^{21K11}	Mutant allele	Flybase_FBal0268190
inx2 ^{G0118}	Mutant allele	BDSC_11826
kune ^{C309}	Mutant allele	BDSC_16333
mdi1 ²⁴²	Mutant allele	This study
mdi2 ²⁴⁶	Mutant allele	This study
mdi3 ⁴⁴²	Mutant allele	This study
mdi4 ⁵¹	Mutant allele	This study
miR-14 ^{Δ1}	Mutant allele	BDSC_33067
miR-14 ^{k10213}	Mutant allele	BDSC_10982
nan ^{GAL4}	Mutant allele	BDSC_68205
NompC ¹	Mutant allele	BDSC_42260
NompC ³	Mutant allele	BDSC_42258
Nrg ¹⁴	Mutant allele	BDSC_5708
ogre ¹	Mutant allele	Flybase_FBal0013231
pain ¹	Mutant allele	BDSC_27895
piezo ^{KO}	Mutant allele	BDSC_58770
ppk ^{ESB}	Mutant allele	BDSC_79622
shg ²	Mutant allele	BDSC_3085
Tig ^{A1}	Mutant allele	BDSC_8795
Tig ^x	Mutant allele	BDSC_8796
TrpA1 ¹	Mutant allele	BDSC_26263
UAS-if	Overexpression/rescue construct	Flybase_FBal0062798
UAS-Inx2.Sb	Overexpression/rescue construct	Flybase_FBal0338197
UAS-LUC-miR-14.T	Overexpression/rescue construct	BDSC_41178
UAS-mew	Overexpression/rescue construct	Flybase_FBal0062567
UAS-ogre.S	Overexpression/rescue construct	Flybase_FBal0338192
UAS-TNT	Overexpression/rescue construct	BDSC_28997
inx2 ^{V5}	Reporter (V5-tagged Inx2)	Flybase_FBal0345156
ogre ^{V5}	Reporter (V5-tagged Ogre)	Flybase_FBal0345155
Nrg167GFP	Reporter (epidermal septate junctions)	BDSC_6844

<i>Nrx-IV-GFP</i>	Reporter (epidermal septate junctions)	BDSC_50798
<i>ppk-CD4-tdGFP^{1b}</i>	Reporter (C4da neurons)	BDSC_35842
<i>ppk-CD4-tdTomato^{10A}</i>	Reporter (C4da neurons)	BDSC_35845
<i>shg^{mCherry}</i>	Reporter (epidermal adherens junctions)	BDSC_59014
<i>trol-GFP</i>	Reporter (epidermal BM)	Flybase_FBal0243610
<i>Tub-GFP</i>	Reporter (control miRNA sensor)	FBtp0017439
<i>Tub-GFP.mir-14</i>	Reporter (<i>mir-14</i> sensor)	FBtp0056974
<i>UAS-CD4-tdGFP</i>	Reporter (membrane-targeted GFP)	BDSC_35839
<i>UAS-GCaMP6s</i>	Reporter (calcium imaging)	BDSC_42749
<i>AOP-GCaMP6s</i>	Reporter (calcium imaging)	BDSC_44273
<i>UAS-Gerry</i>	Reporter (ratiometric calcium imaging)	BDSC_80141
<i>UAS-mCD8-GFP</i>	Reporter (membrane-targeted GFP)	BDSC_5137
<i>UAS-NLS-GFP</i>	Reporter (nuclear-targeted GFP)	BDSC_4776
<i>UAS-PLC^δ-PH-GFP</i>	Reporter (PIP2 reporter)	BDSC_39693
<i>UAS-RedStinger⁴</i>	Reporter (NLS-RFP)	BDSC_8546
<i>UAS-tdTomato</i>	Reporter (RFP)	BDSC_36328