

**Table S2. Alleles used in this study**

<b>Allele</b>	<b>Uses / Features</b>	<b>Identifier (RRID)</b>
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 <sup>IR</sup>	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 <sup>Δ1</sup>	Mutant allele	BDSC_58878
cora <sup>5</sup>	Mutant allele	BDSC_52233
Dcr1 <sup>mn29</sup>	Mutant allele	This study
dlg1 <sup>A</sup>	Mutant allele	BDSC_57086
Drosha <sup>21K11</sup>	Mutant allele	Flybase_FBal0268190
inx2 <sup>G0118</sup>	Mutant allele	BDSC_11826
kune <sup>C309</sup>	Mutant allele	BDSC_16333
mdi1 <sup>242</sup>	Mutant allele	This study
mdi2 <sup>246</sup>	Mutant allele	This study
mdi3 <sup>442</sup>	Mutant allele	This study
mdi4 <sup>51</sup>	Mutant allele	This study
miR-14 <sup>Δ1</sup>	Mutant allele	BDSC_33067
miR-14 <sup>k10213</sup>	Mutant allele	BDSC_10982
nan <sup>GAL4</sup>	Mutant allele	BDSC_68205
NompC <sup>1</sup>	Mutant allele	BDSC_42260
NompC <sup>3</sup>	Mutant allele	BDSC_42258
Nrg <sup>14</sup>	Mutant allele	BDSC_5708
ogre <sup>1</sup>	Mutant allele	Flybase_FBal0013231
pain <sup>1</sup>	Mutant allele	BDSC_27895
piezo <sup>KO</sup>	Mutant allele	BDSC_58770
ppk <sup>ESB</sup>	Mutant allele	BDSC_79622
shg <sup>2</sup>	Mutant allele	BDSC_3085
Tig <sup>A1</sup>	Mutant allele	BDSC_8795
Tig <sup>x</sup>	Mutant allele	BDSC_8796
TrpA1 <sup>1</sup>	Mutant allele	BDSC_26263
UAS-dsRed-miR-14	Overexpression/rescue construct	BDSC_59868
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
Ilk <sup>ZCL3111</sup>	Reporter (muscle adhesion sites; GFP-tagged Ilk)	BDSC_6831

<i>inx2</i> <sup>V5</sup>	Reporter (V5-tagged Inx2)	Flybase_FBal0345156
<i>Mhc::mCherry</i>	Reporter (muscle)	Flybase_FBal0358776
<i>ogre</i> <sup>V5</sup>	Reporter (V5-tagged Ogre)	Flybase_FBal0345155
<i>Nrg167GFP</i>	Reporter (epidermal septate junctions)	BDSC_6844
<i>Nrx-IV-GFP</i>	Reporter (epidermal septate junctions)	BDSC_50798
<i>ppk-CD4-tdGFP</i> <sup>1b</sup>	Reporter (C4da neurons)	BDSC_35842
<i>ppk-CD4-tdTomato</i> <sup>10A</sup>	Reporter (C4da neurons)	BDSC_35845
<i>rhea</i> <sup>MI00296-mCh.0</sup>	Reporter (Apodemes; Cherry-tagged Rhea)	BDSC_39648
<i>shg</i> <sup>mCherry</sup>	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-2xEGFP</i>	Reporter (cytosolic EGFP)	BDSC_60293
<i>UAS-CD4-tdGFP</i>	Reporter (membrane-targeted GFP)	BDSC_35839
<i>UAS-dsRed</i>	Reporter (RFP)	BDSC_6282
<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<sup>δ</sup>-PH-GFP</i>	Reporter (PIP2 reporter)	BDSC_39693
<i>UAS-RedStinger</i> <sup>4</sup>	Reporter (NLS-RFP)	BDSC_8546
<i>UAS-tdTomato</i>	Reporter (RFP)	BDSC_36328