SUPPLEMENTARY DATA

Supplementary Figure S1. Transcriptional enhancer regions used in *GMR27E09-GAL4* and *GMR94G06-GAL4* constructs. A, B. Genomic maps of the regions that contain the fragments that control expression in (A) *GMR27E09-GAL4* and (B) *GMR94G06-GAL4*. Maps, coordinates, genes and transcripts are from the *Drosophila* Genome Browser (www.flybase.org, version R5.57). Orange regions in transcripts represent coding regions, grey regions represent untranslated regions, and lines represent introns.

Supplementary Table S1. GAL4 screen expression summary. Summary of expression data for the *GAL4* drivers screened. Each GAL4 line was crossed with *UAS-Sec61ß::tdTom, UAS-CD4::GFP* except those + for Dlg staining, which were crossed with *UAS-Sec61ß::tdTom.* In the Type column "Neuromodulatory" indicates possible Type II and/or Type III MNs.

Supplementary Movie S1. VNC showing neuronal plasma membrane labeling by *GMR27E09-GAL4*. Confocal 3D projection of plasma membrane marker (CD4::GFP) from the VNC of *UAS-CD4::GFP, UAS-tdTom::Sec61β/+ ; GMR27E09-GAL4/+* larvae. Scale bar, 50 μm.

Supplementary Movie S2. VNC showing neuronal ER labeling by *GMR27E09-GAL4*. Confocal 3D projection of ER marker (tdTom::Sec61 β) from the same VNC as shown in Supplementary movie S1. Scale bar, 50 μ m.

Supplementary Movie S3. VNC showing neuronal plasma membrane labeling by *GMR94G06-GAL4*. Confocal 3D projection of plasma membrane marker (CD4::GFP) from the VNC of *UAS-CD4::GFP*, *UAS-tdTom::Sec61\beta/+*; *GMR94G06-GAL4/+* larvae. Scale bar, 50 μ m.

Supplementary Movie S4. VNC showing neuronal ER labeling by *GMR94G06-GAL4*. Confocal 3D projection of ER marker (tdTom::Sec61 β) from the same VNC as shown in Supplementary movie S3. Scale bar, 50 μ m.