**SUPPLEMENTARY FIGURE LEGENDS**

**Figure S1. *GR1-GAL4* expression pattern.** A) *GR1-GAL4* drives transgene expression ubiquitously in the FCs during stages 4-9. UAS-GFP transgene is shown in green. DNA is blue. Actin is red. A’) UAS-GFP expression is not seen before stage 4 (asterisk). A, A’) *GR1-GAL4* does not produce transgene expression in the muscle sheath (arrowheads). Scale bar represents 50 μm.

**Figure S2: Organization of the *Sema1b* and *AdamTS-A* genomic loci.** Exons are shown in gold and UTRs in grey. A) The region depicted is 10.7 kb. The locations of the *Sema1b-GAL4NP1166* enhancer trap (magenta) and *Sema1b-VenusCPTI003971* protein trap (green) insertions are indicated. The location of the Sema domain (blue), the region removed in the *Sema1bKO* allele (the region labeled “dsRed”; shown in red), and the region targeted by the *Sema1b* RNAi knockdown lines (black) are also indicated. B) The region shown above is 34 kb. Locations of the *AdamTS-Arnwy1* (magenta) and *AdamTS-AMI14156* (light blue) transgenic insertion sites, and the region of the protein targeted by the two *AdamTS-A* RNAi lines (black) are indicated. Asterisks mark reported Stat92e-eGFP binding sites in the 0-12 hour *Drosophila* embryo (Kudron *et al.* 2018; epic.gs.washington.edu/modERN/).

**Figure S3. *Sema1b* RNAi causes Kinesin-β-gal mislocalization.** A) In control (*GAL4* only) stage 9 egg chambers, Stau-GFP (green, A and A’) and Kinesin-β-gal (red, A and A’’) localize to the oocyte posterior. This reflects proper re-polarization of the oocyte microtubule cytoskeleton. B-B’’) *Sema1b* RNAi knockdown causes mislocalization of both reporter proteins to the center of the oocyte. F-actin is in white. Scale bar represents 50 μm.