



Figure 6—figure supplement 1. *fz5/8-4*, *wntA*, and *ndk* locally restrict mRG expression in animals with expanded brain tissue and ectopic eyes. FISH and ISH in intact RNAi animals after 8 or 12 RNAi feedings. (A,D) FISH experiments show normal (A, after only 8 RNAi feedings) and abnormal (D, after 12 RNAi feedings) organization in the expression of the secretory cell marker *mag-1* (green). (B,C) FISH experiments show expression domain shifts of prepharyngeal mRGs *ndl-2* (magenta, B) and *wnt2* (C). (B-D) Posterior mRG expression domains (*wntP-2*, *wnt11-1*, *wnt11-2*, both *wnt11* genes pooled in C) did not change. *opsin* (green or magenta) and NB.22.1e (yellow). For all FISH images, red arrows point to the posterior edge of the mRG expression domain. White arrows point to eyes. Anterior, up. Scale bar, 100 μ m. FISH images are representative of $n > 8$, FISH experiments. DAPI shows ectopic eyes in the *fz5/8-4; ndk RNAi* animal imaged (yellow arrows) in B. FISH have been performed twice from independent RNAi experiments. (E) ISH using *ndk* RNA probe shows posterior expansion of the *ndk* expression domain in a *fz5/8-4; wntA RNAi* animal after 8 RNAi feedings. Images are representative of $n > 5$ animals per condition. Anterior, left. Right graph shows quantification of increased *ndk* expression by qRT-PCR. Cartoons on top indicate the region from which mRNA was extracted.