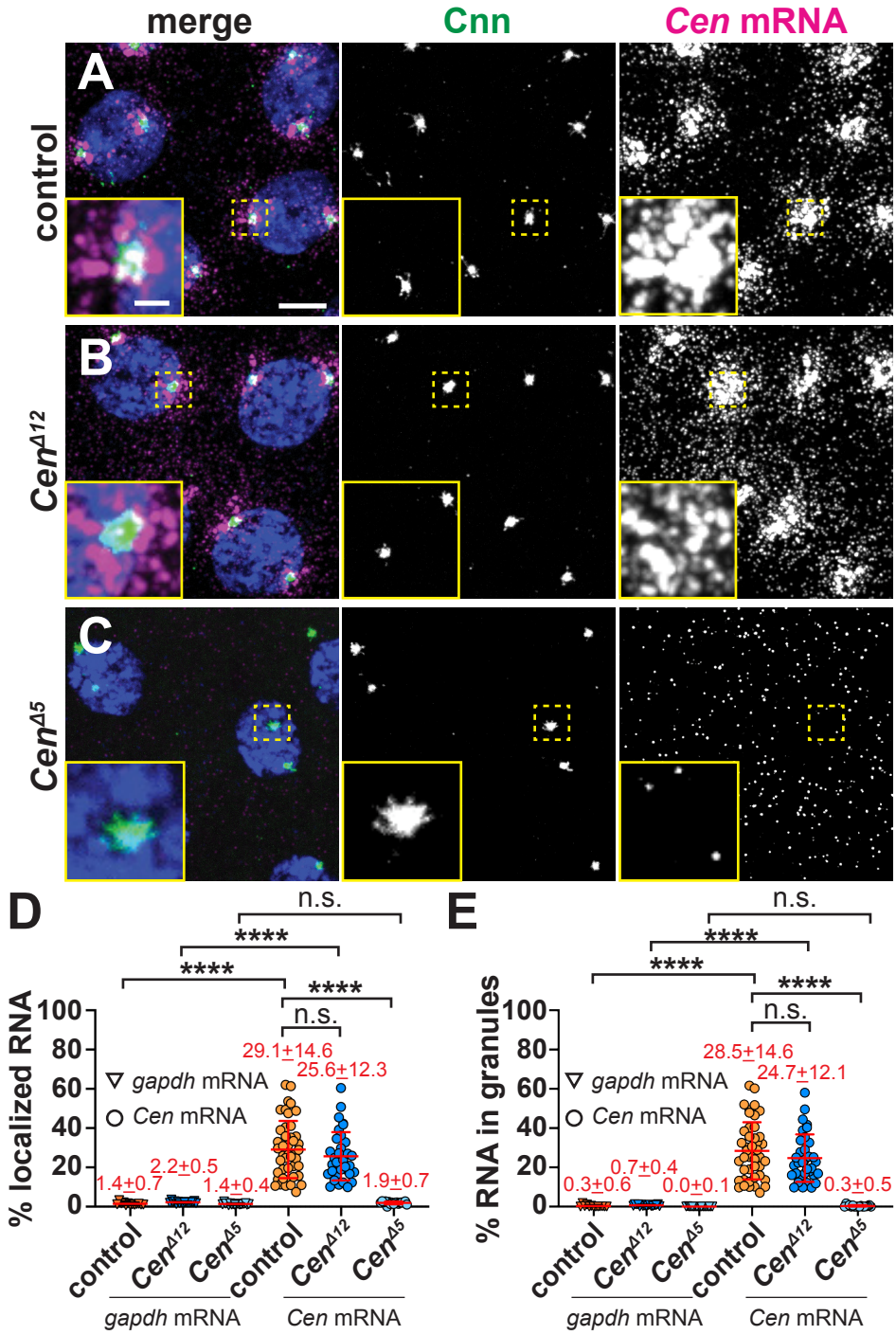
Supplemental Figure 1. Mass spectrometry analysis of Cen protein products. (B) Sequence mapping of spectra (green lines) from (A) CenFL and (B) Cen-ATG, as identified by mass spectrometry following anti-HA immunoprecipitation from 1–2-day ovarian extracts. The HA-tagged constructs were expressed in the Cen null background. The UniProt reference Cen sequence used was Q9VIK6. The arrow marks the most N'-terminal position where abundant Cen spectra map to the Cen-ATG protein product. The first 90–100 AA are not well covered by the spectra and are likely absent from the truncation. Data shown are representative of two independent experiments.



Supplemental Figure 2. Cen mRNA localization in early embryos. Maximum-intensity projections of NC 11 interphase embryos expressing GFP-Cnn (green) stained with Cen smFISH (magenta) and DAPI (blue nuclei). (A) Control embryos show Cen mRNA enriched at centrosomes, primarily in RNPs, which are also present in (B) CenΔ12 samples. (C) Cen mRNA localization and granule formation are severely impaired in CenΔ5 embryos. Quantification of the percentage of Cen or gapdh mRNAs (D) overlapping with the centrosome surface and (E) residing in granules (0 μm distance from Cnn). Each dot represents a single measurement from control (N= 13 gapdh and 44 Cen mRNA), CenΔ12 (N= 17 gapdh and 34 Cen mRNA), and CenΔ5 (N= 18 gapdh and 17 Cen mRNA) labelled embryos. Mean ± SD shown. ****, P<0.0001 by Brown-Forsythe and Welch ANOVA tests followed by Dunnett's T3 multiple comparison test. Scale bar: 5μm; 1μm (insets).