



Figure S3. The PCM scaffold permits mRNA localization in early embryos. Maximum intensity projections of NC 11 control and *cnn<sup>B4</sup>* embryos expressing *Asl-YFP* and labeled with (A) *Plp* or (C) *Cen* smFISH probes (magenta) and DAPI (blue). (B) The percentage of *Plp* mRNA localizing within 1  $\mu\text{m}$  from the *Asl* surface. The percentage of *Cen* mRNA (D) localizing and (D') residing within granules (defined as  $\geq 4$  RNA molecules per granule) within 1  $\mu\text{m}$  from the *Asl* surface. (E) The AlphaFold Cnn CM2 predicted structure (gray) was superimposed on the 3D crystal structure of Cnn CM2 (PDB: 5MVW; green) [61]. RMSD = 1.4111, (433 to 433 atoms) out of 490 atoms. (F) Side view and top view images of the top 3-ranked AlphaFold models of the Plp F2-Cnn CM2 interaction. Shown are Plp amino acids 1177-1306 (yellow) and Cnn CM2 (gray). Mean  $\pm$  S.D. is displayed. \*\*\*\* $p < 0.0001$  by unpaired student t-test. Scale bars: 5  $\mu\text{m}$  (main panels); 2  $\mu\text{m}$  (insets).