



**Figure S1. Inhibition of CTPsyn filament structures without altering CTPsyn protein levels.** (A–B') Multiple merged-surface confocal sections of Flag-CTPsyn overexpressing egg chambers treated with DMSO (control, A–A'') or 60  $\mu$ M MG132

(B–B') were stained with anti-Flag (green), anti-CTPsyn (red) and DAPI (blue, nuclei). (C) Western blot analysis of Flag-CTPsyn protein expression by anti-Flag antibody (arrow). Ovarian cell lysates were extracted from *hsGal4::Flag-CTPsyn* after heat shock for 2 h or 4 h, and treated with DMSO (-) or increasing doses of MG132. Tubulin was used as a loading control. Relative Flag-CTPsyn expression levels were analyzed with a densitometer and normalized to the level at 2 h. (D) Wild-type egg chambers were treated with DMSO, or 20  $\mu$ M or 60  $\mu$ M MG132. The percentage of nil phenotypes (red column) was calculated for DMSO (Ctrl. 16.6%), 20  $\mu$ M MG132 (28.3%), and 60  $\mu$ M MG132 (42.7%) treatments. (E) The percentages of nil phenotypes in stages 8–10A egg chambers with each indicated drug treatment were calculated. (F–F'') Multiple merged-surface confocal sections of stage 9 *RasV12* overexpressing (green) egg chambers stained with anti-CTPsyn (red) and DAPI (blue). The results are shown as the mean  $\pm$  s.d.; \* $p$  < 0.05 and \*\* $p$  < 0.01. Scale bar: 20  $\mu$ m.