



**Supplementary Figure S1. Confocal images of wildtype and *vtila* null chromaffin cells stained for *vtila* and *syb-2*, GM130, syntaxin-6, Lamp1 and Chromogranin B.** A. Confocal images of wildtype (top) and *vtila* null (bottom) chromaffin cells co-stained against *vtila* (green) and *syb-2* (magenta). B. Confocal images of wildtype (top) and *vtila* null (bottom) chromaffin cells co-stained against *vtila* (green) and GM130 (magenta). C. Confocal images of wildtype (top) and *vtila* null (bottom) chromaffin cells co-stained against *vtila* (green) and syntaxin-6 (magenta). Di. Confocal images of chromaffin cells co-stained against *vtila* (green) and Lamp1 (magenta). Dii. Quantification of lysosome number, area and size. E. Confocal images of wildtype chromaffin cells co-stained against *vtila* (green) and chromogranin B (magenta). The left panel in Dii shows the same data as in Figure 2Aii. Numbers on bars in (D) give the number of cells analyzed. Scale bars: 2  $\mu$ m.