

## Supplemental Figure Legends

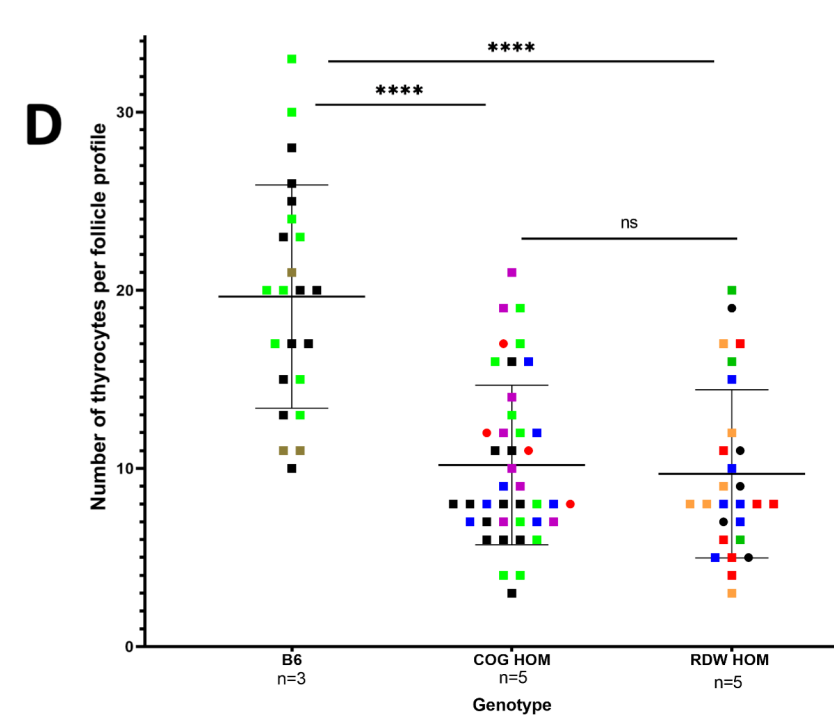
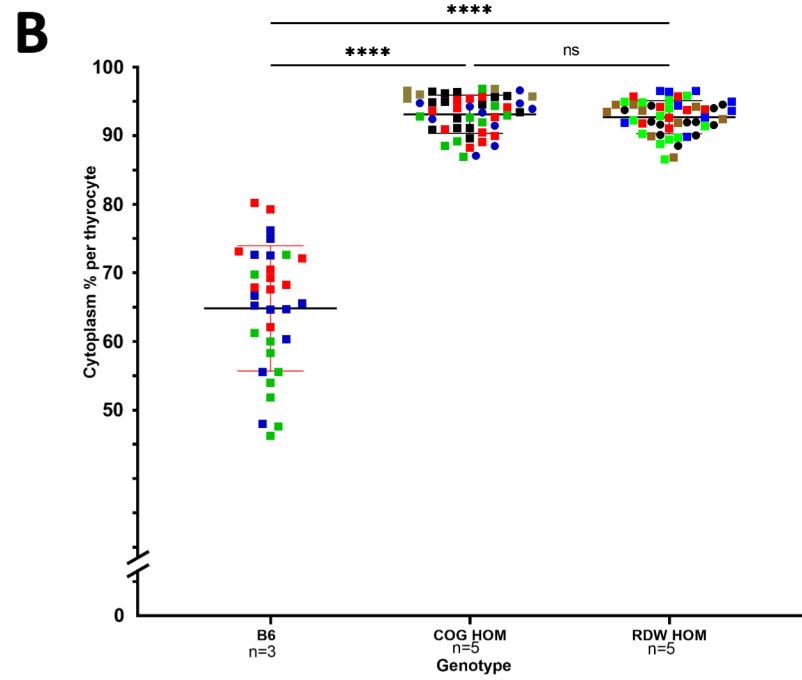
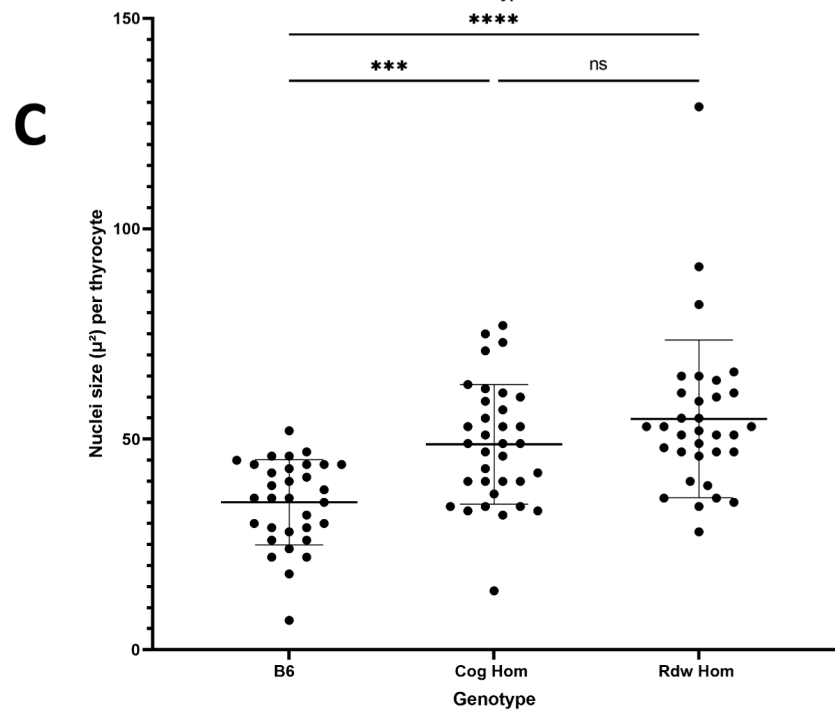
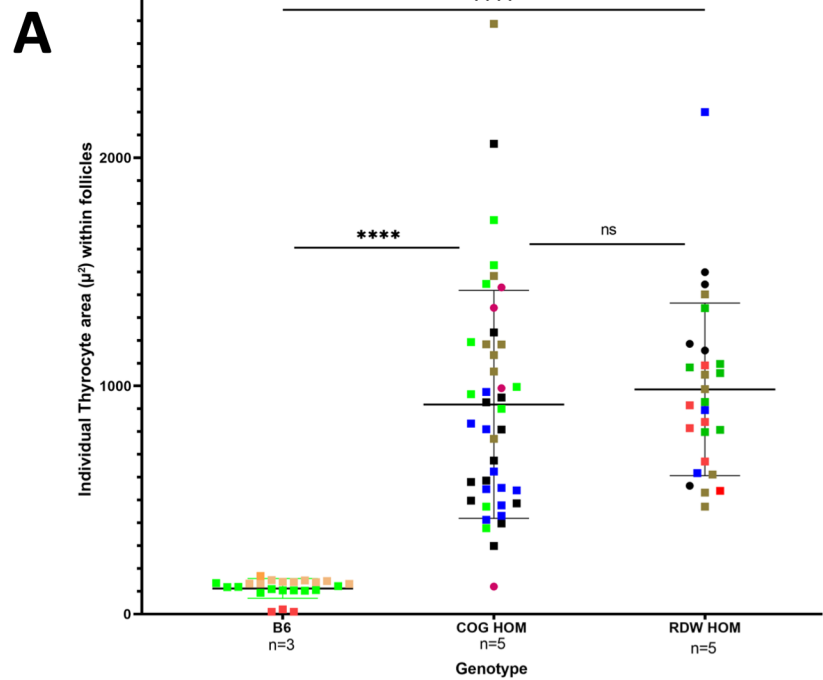
**Supplemental Figure S1.** Location of *cog* (Tg-L2263P) and *rdw* (Tg-G2298R) mutations within the *TG* coding sequence.

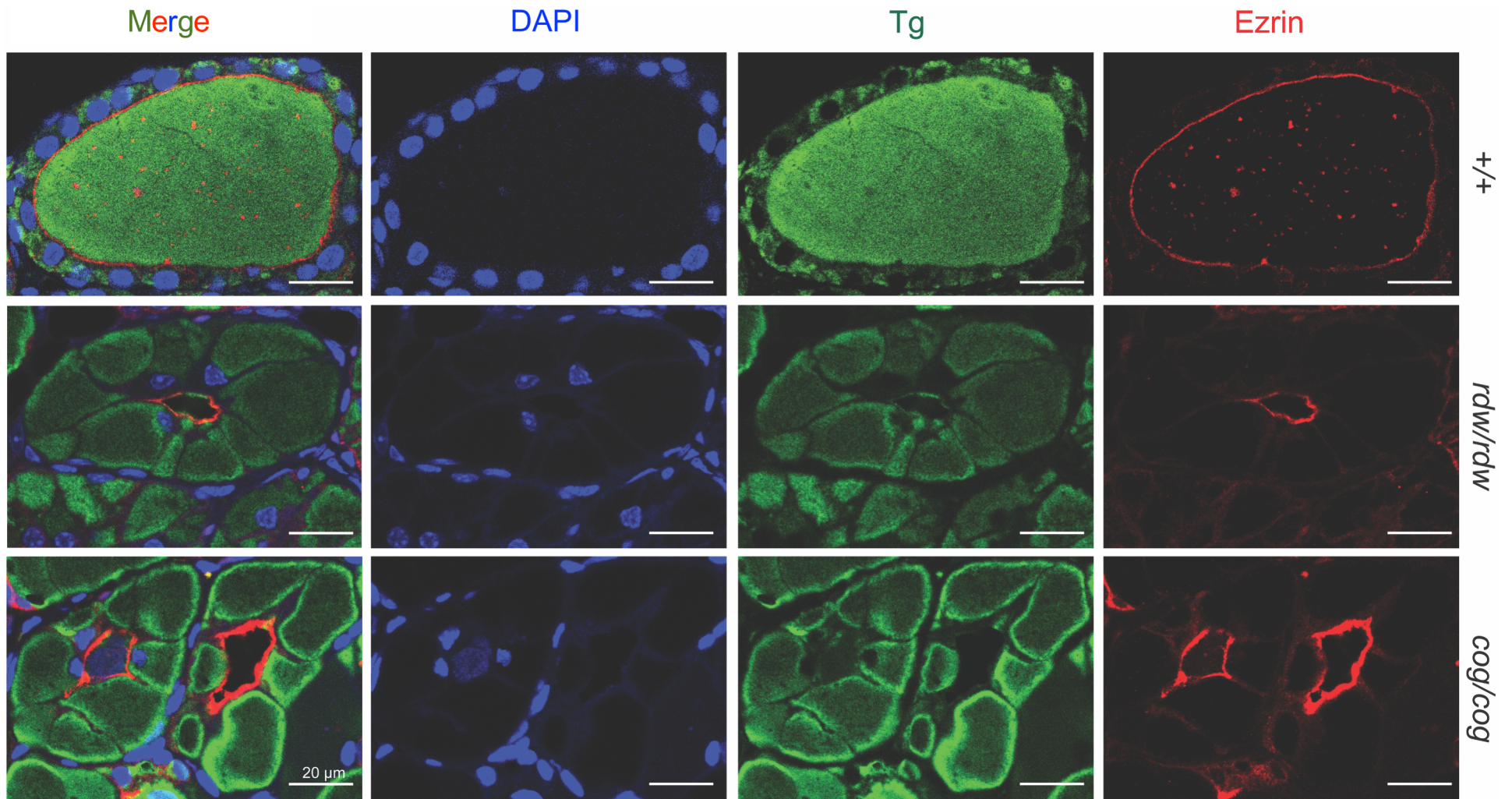
**Supplemental Figure S2.** Quantitation of thyroid histology of C57BL6/J (B6),  $TG^{cog/cog}$  (COG HOM), and  $TG^{rdw/rdw}$  (RDW HOM) mice at 3 months of age (squares are males; circles are females). A) Measured area of individual thyroid epithelial cells. B) Fraction of total cell area comprised of cytoplasm. C) Area occupied by nuclear profile. D) Number of thyrocytes per cross-sectional follicle profile.

**Supplemental Figure S3.** Individual channel immunofluorescence images from Figure 2B (n=5 animals per group). Scale bars = 20  $\mu$ m.

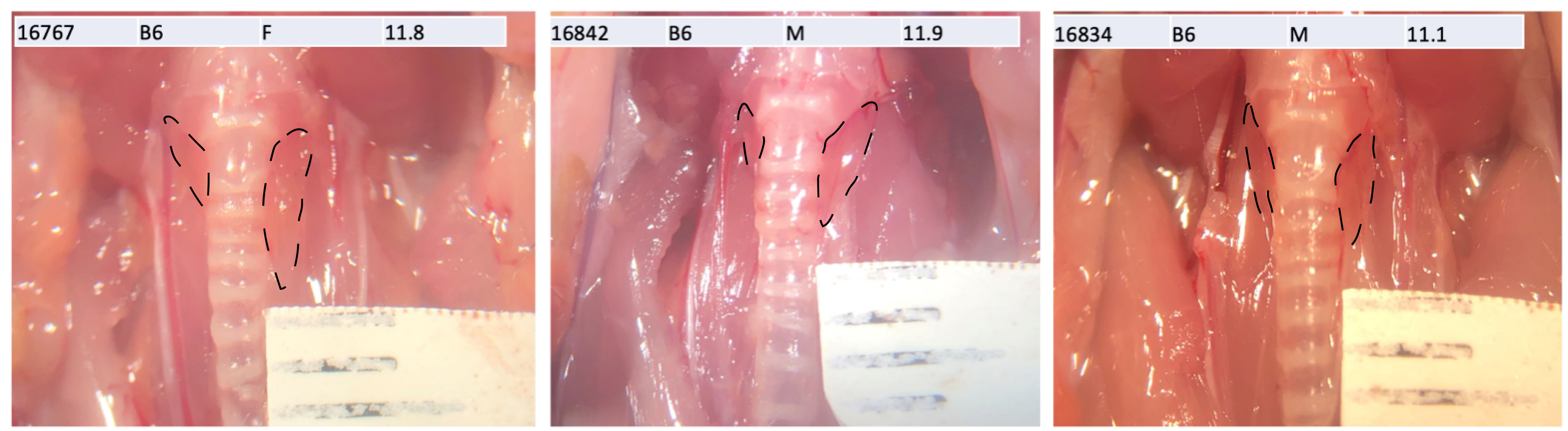
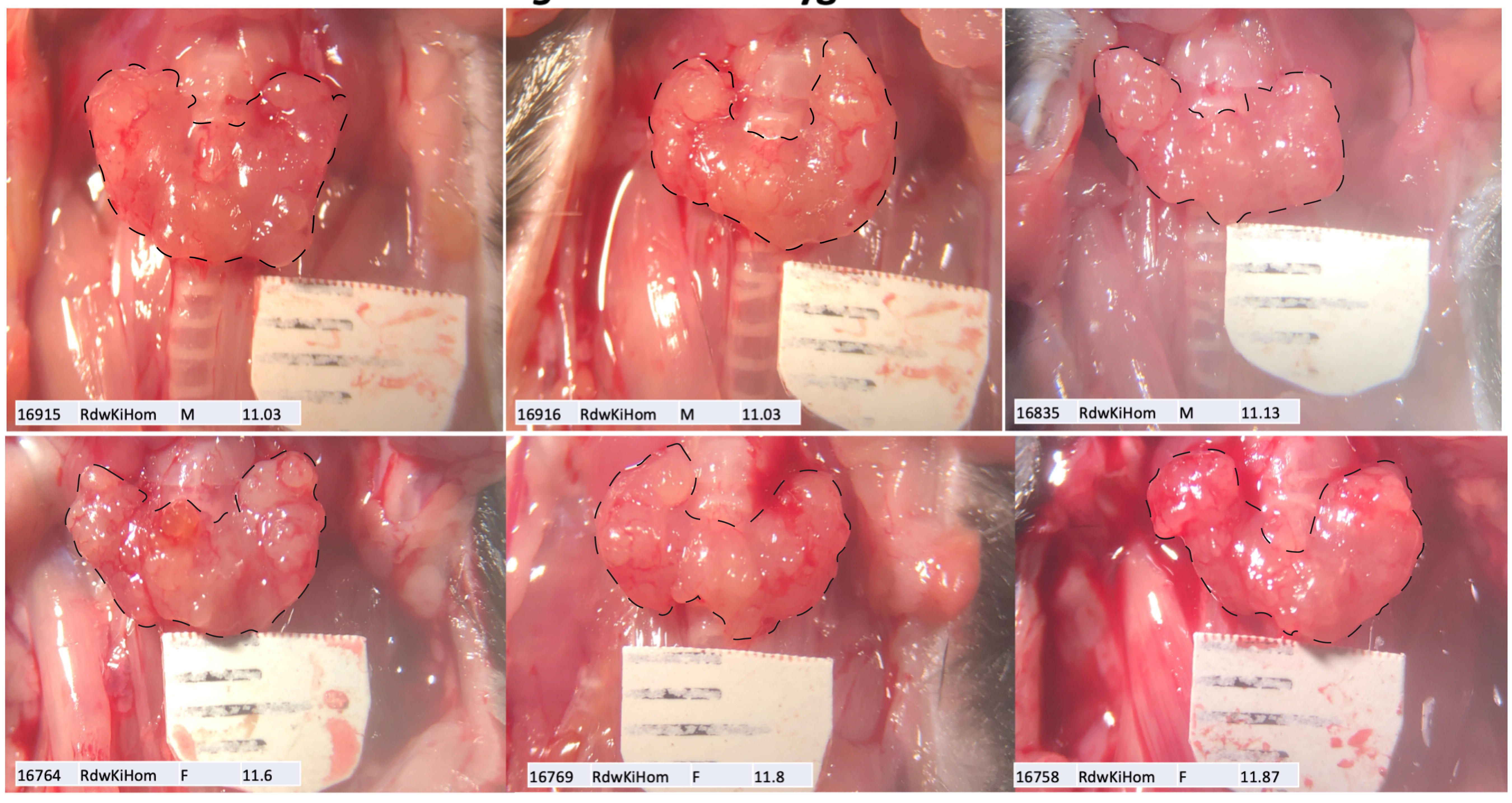
**Supplemental Figure S4.** Images of the neck dissection of 11-12 month-old C57BL6/J,  $TG^{rdw/rdw}$ , and  $TG^{cog/cog}$  mice. A size marker is included in each image with 1 mm scale bars. The thyroid gland area is specifically outlined in each image with a dashed black line; note the multinodular goiters in  $TG^{rdw/rdw}$ , and  $TG^{cog/cog}$  mice.







Zhang, Malik, et al., Supplemental Fig. S3

**A****C57BL6/J mice****B*****Tg<sup>rdw/rdw</sup>* homozygous mice****C*****Tg<sup>cog/cog</sup>* homozygous mice**