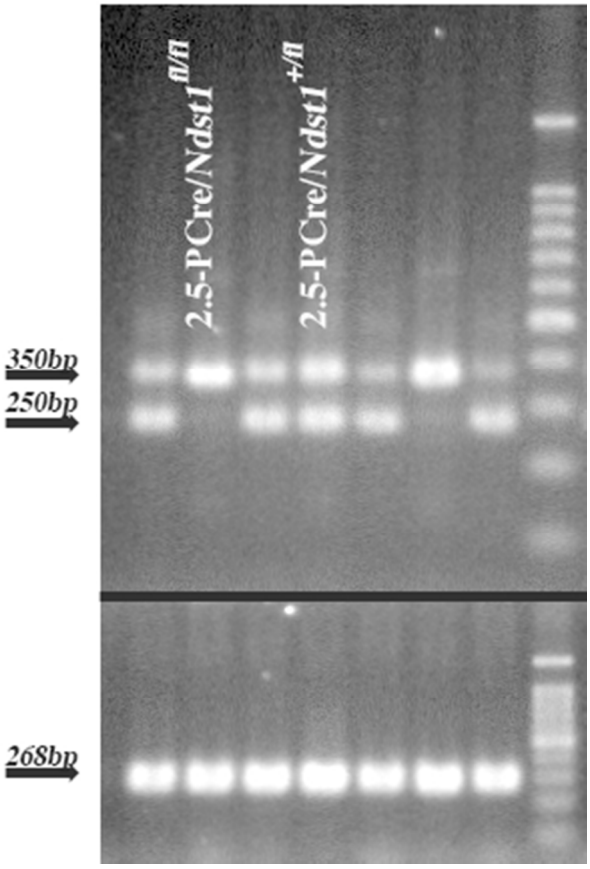
Supplementary Figure 1. Figure 1 shows an agarose gel of the results of genotyping *Ndst1* heterozygous and homozygous animals. The upper gel shows the bands for PCR products of 250bp (wild type) and 350bp (floxed allele) for *Ndst1*. The lower gel shows PCR products for the same animals genotyped using primer sets for the 2.5P-Cre transgene (268 bp).

Supplementary Figure 2. Panels A and B are photomicrographs of frozen sections of *NDST1*$^{+/+}$ (A) and *NDST1*$^{-/-}$ (B) kidneys that were stained with Oil Red O. The arrows in each panel point to the vacuoles present in the renal tubule epithelium. Although Oil Red O stains smaller lysosomes within the tissue section, the larger vacuoles are predominantely negative for the staining. Final magnification 400x. Panels C-F are photomicrographs of 0.5µm thick plastic-embedded sections of *NDST1*$^{+/+}$ (C & E) and *NDST1*$^{-/-}$ (D &F) kidneys from animals 9 (C & D) and 12 (E & F) months of age. Panels D &F show the presence of darkly stained lysosomes within the epithelial cells of the proximal tubules.



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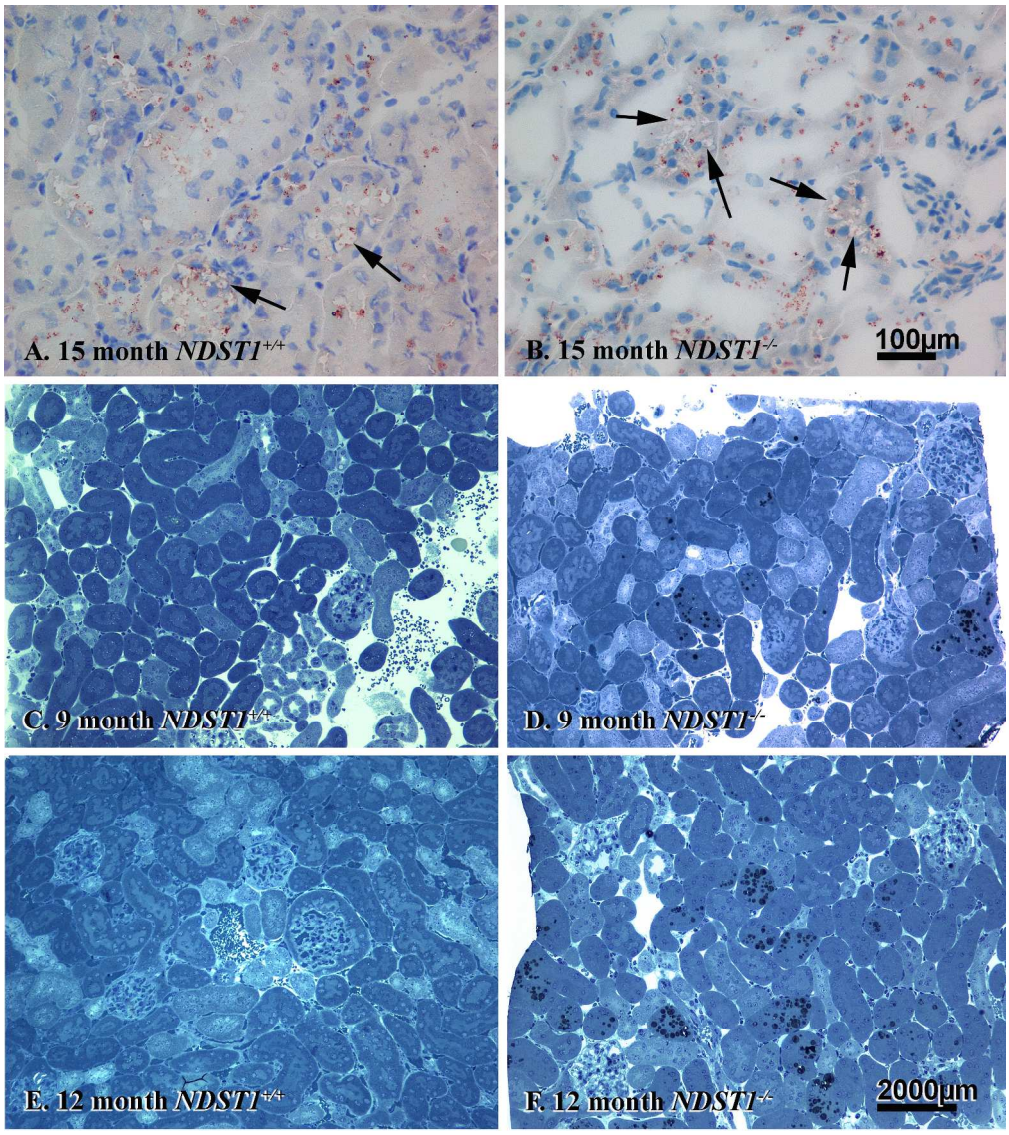
46x75mm (167 x 167 DPI)



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