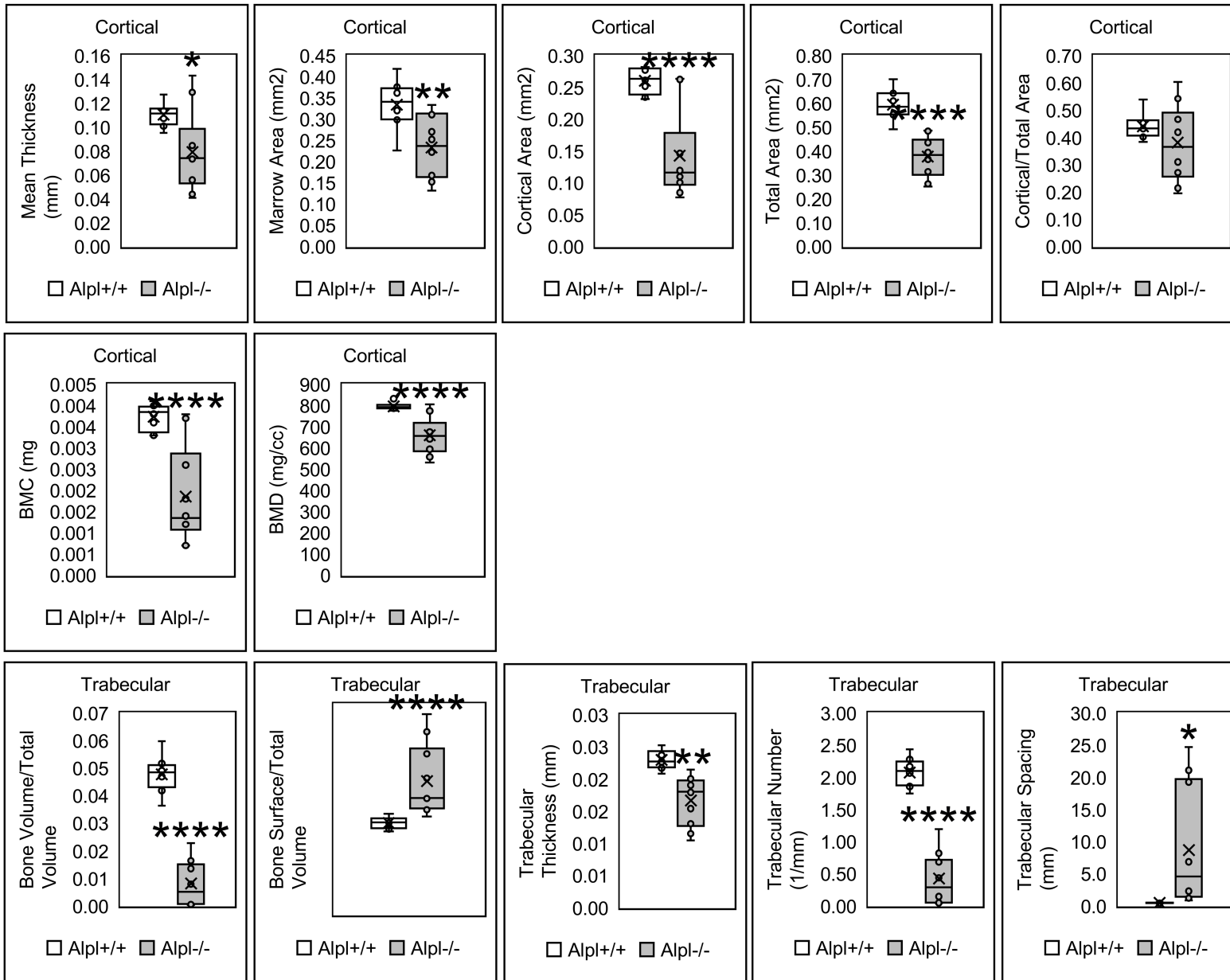
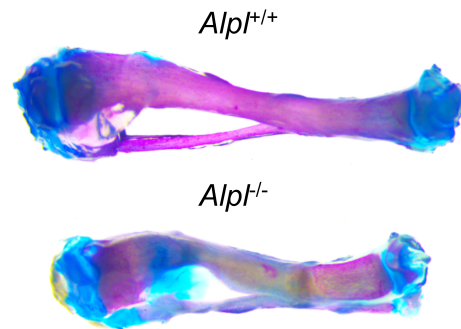


Supplementary Figure 1. Cortical and trabecular bone parameters of donor *Alpl^{+/+}* and *Alpl^{-/-}* tibias.



*p value < 0.05 between genotypes, ** p value < 0.01 between genotypes, *** p value < 0.005 between genotypes, **** p value < 0.001 between genotypes

Supplementary Figure 2. Skeletal staining demonstrates diminished mineralization and size of *Alpl*^{+/+} and *Alpl*^{-/-} mouse long bones. Tibias were stained with alizarin red for bone mineral and alcian blue for cartilage. Note shorter bone length and reduced alizarin staining in *Alpl*^{-/-} bones.



Supplementary Figure 3. Real time PCR demonstrates that Sol8 cells stably transduced with shRNA for TNAP express significantly less *Alpl* (TNAP) mRNA than Sol8 cells stably transduced with non-target shRNA. NT = non-target.

