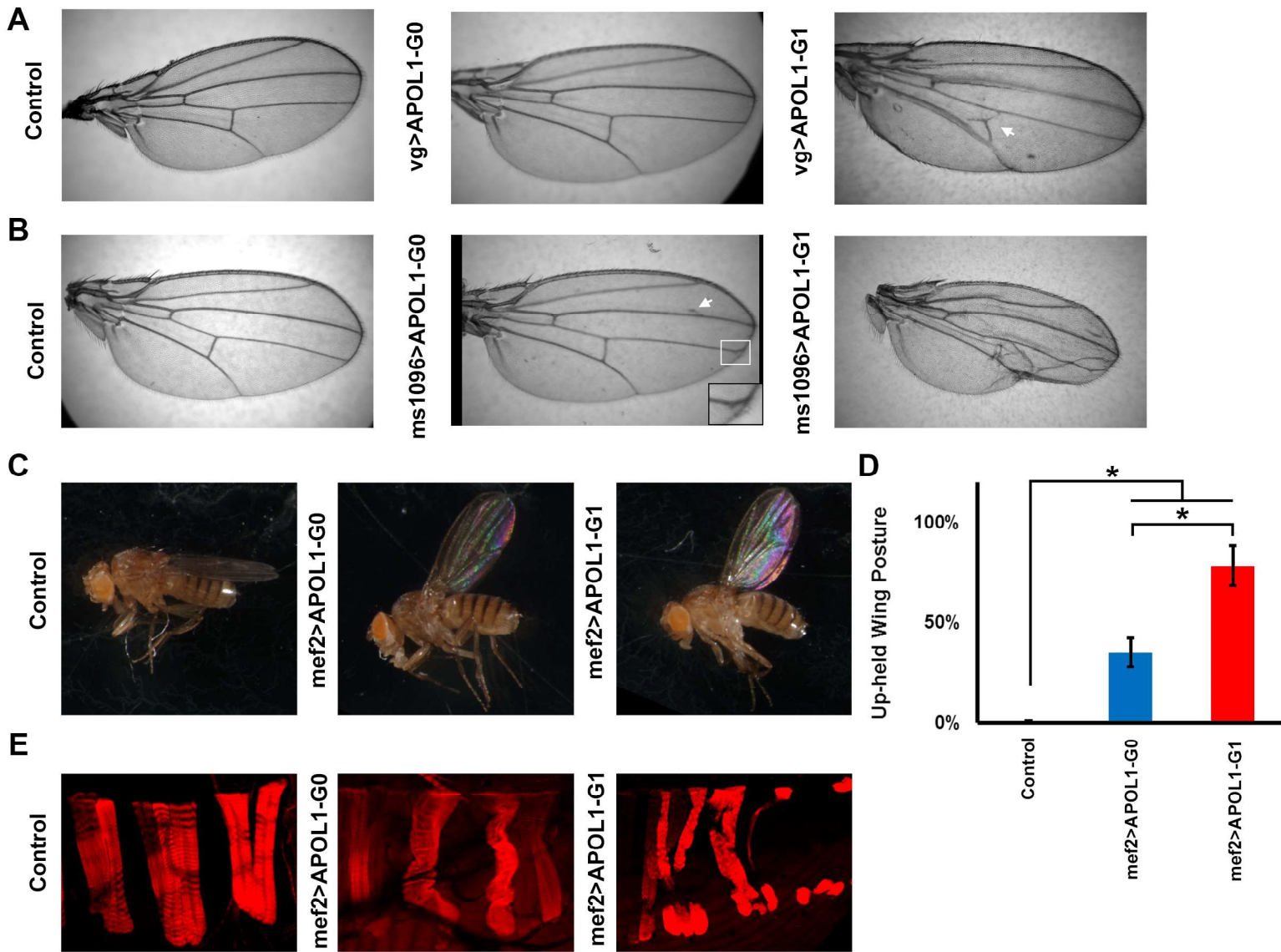


Figure S1



Supplementary Figure 1. Wing and muscle specific expression of APOL1 G1 induces more severe phenotypes compared to APOL1 G0. A. *vg*-GAL4 directed expression of APOL1 G1 in the wing disc induced wing vein abnormalities (arrow). APOL1 G0 expression did not affect wing phenotype. Control carries *vg*-GAL4 without UAS-APOL1 transgene. B. *ms1096*-GAL4 directed expression of APOL1 G1 in the wing disc led to abnormal wing shape and size, plus vein abnormalities. APOL1 G0 expression induced only relatively subtle vein defects (arrow and boxed inset). Control carries MS1096-GAL4 without UAS-APOL1 transgene. Representative wing phenotypes are shown from over 200 flies examined per each genotype. C. *mef2*-GAL4 directed expression of APOL1 G0 and G1 in muscle cells was associated with up-held wing posture phenotype. D. The Up-held wing posture phenotype was significantly more penetrant in flies expressing APOL1 G1 compared to G0. Experimental crosses to generate flies of appropriate genotype were performed in triplicate. The results are presented as mean percentage of progeny exhibiting Up-held wing posture  $\pm$  SD. Statistical significance (\*) was defined as  $P < 0.05$ . E. *mef2*-GAL4 directed expression of APOL1 G0 and G1 in muscle cells was associated with disruption of normal muscle tissue structure. Muscle tissue was visualized by phalloidin staining (red). The muscle phenotype was more severe in flies expressing APOL1 G1 compared to G0.