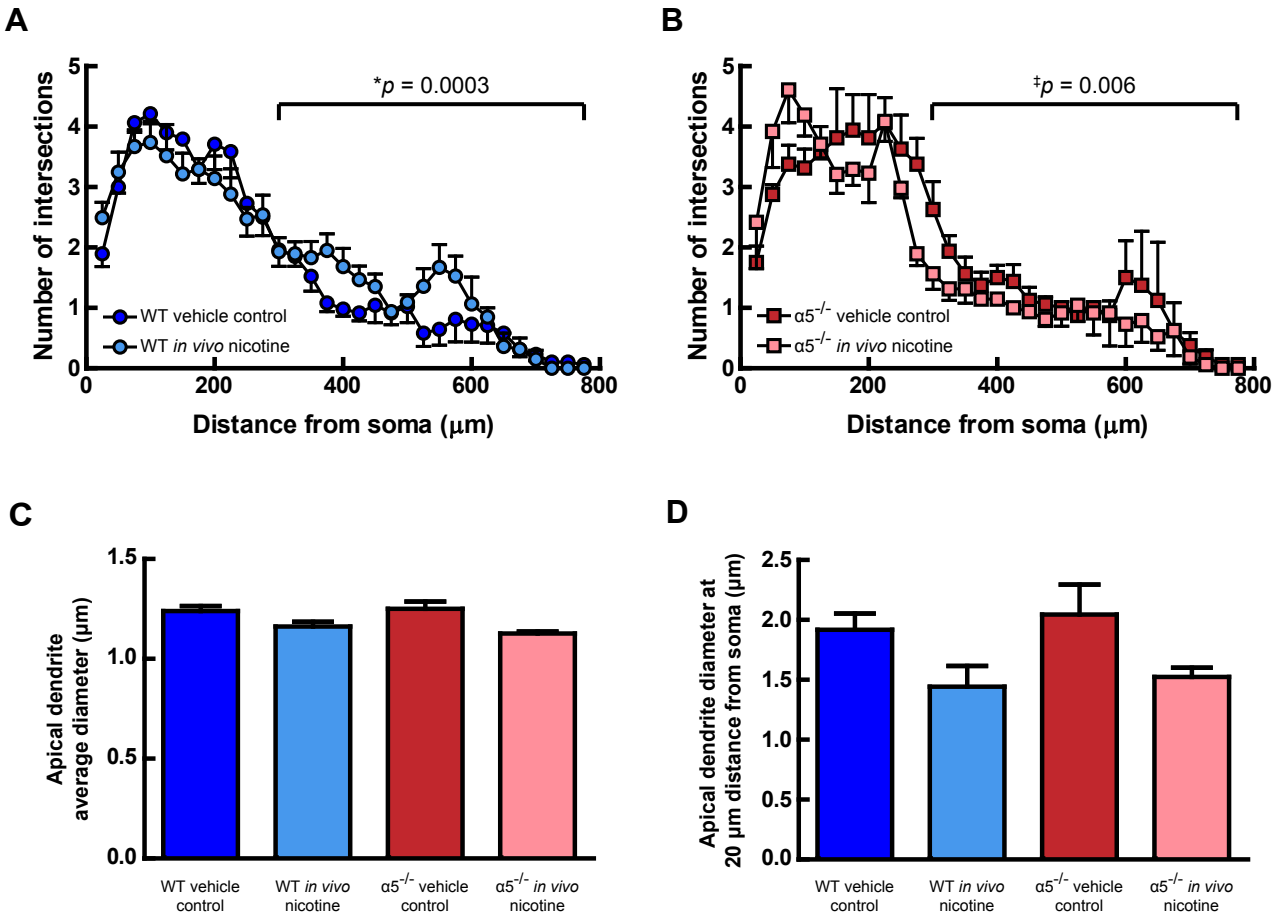
Supplemental Figure 1



Supplemental Figure 1. Effects of developmental *in vivo* nicotine exposure on apical dendrite morphology in adult mice, with experimental animals represented as independent units. Three -dimension Sholl analysis demonstrates that developmental *in vivo* nicotine increases distal apical dendrite complexity for wildtype mice (*A*, two-way ANOVA, main effect of developmental *in vivo* nicotine, $F(1,120) = 13.85$, $^{*}p = 0.0003$) and decreases distal apical dendrite complexity for $\alpha5^{-/-}$ mice (*B*, main effect of developmental in vivo nicotine, $F(1,120) = 7.69$, $^{‡}p = 0.006$). Developmental *in vivo* nicotine exposure also decreased average dendrite diameter along apical dendrite trees (*C*, two-way ANOVA, main effect of developmental *in vivo* nicotine, $F(1,12) = 15.13$, $p = 0.002$) and also decreased the diameter of apical dendrites measured at a distance of 20 μm from the soma (*D*, main effect of developmental *in vivo* nicotine, $F(1,12) = 8.44$, $p = 0.01$). All data are shown as mean ± SEM for four mice in each experimental group.