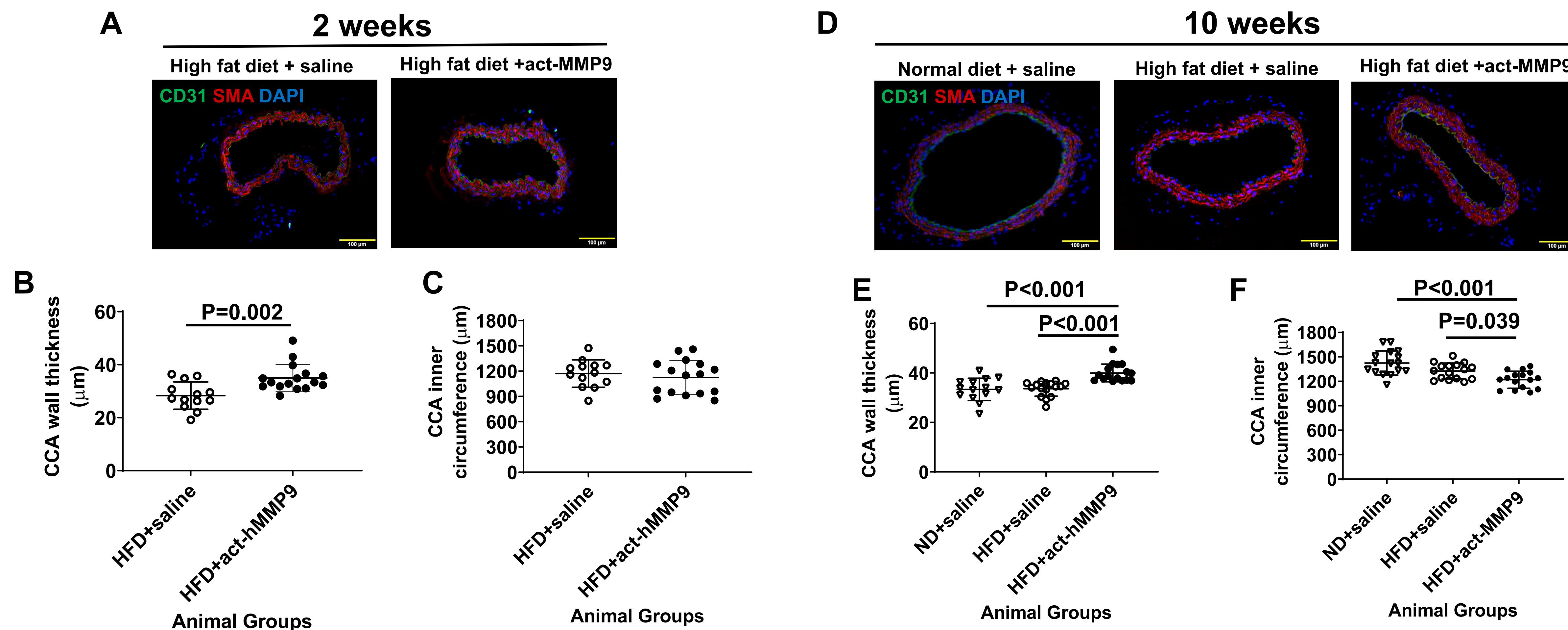


**Supplemental Figure 1. Western Blot for analyzing ERK1/2 and P38MAPK signaling pathways inhibited by PDTC in the presence of act-hMMP9.** Representative Western Blot image (A) and quantification (B) for P-ERK1/2 and ERK1/2 protein expressions in HCASMCs with or without PDTC and/or act-hMMP9. Representative Western Blot image (C) and quantification (D) for P-p38MAPK and p38MAPK protein expressions in HCASMCs with or without PDTC and/or act-hMMP9. N = 4 biological replicates for each data. Values are presented as means  $\pm$  SD. One-way ANOVA. Vs Ctrl and act-hMMP9 treatment: \*\*:  $p < 0.01$  and \*\*\*:  $p < 0.001$ ; Vs Ctrl, #:  $p < 0.05$ , ##:  $p < 0.01$ , ###:  $p < 0.001$ ; vs act-hMMP9 treatment: ^:  $p < 0.05$ .



**Supplemental Figure 2. Wall thickness and inner circumference of common carotid arteries (CCAs) of KK mice.** (A) Fluorescence staining for CD31 and SMA expression to visualize morphology of CCAs in mice at 2 weeks after treatment. Quantification of wall thickness (B) and inner circumferences (C) of CCAs at 2 weeks after treatment. (D) Fluorescence staining for CD31 and SMA expression to visualize morphology of CCAs in mice at 10 weeks after treatment. Quantification of wall thickness (E) and inner circumferences (F) of CCAs in mice at 10 weeks after treatment. N = 13 or 16 CCAs from 7 - 8 animals for each data. Values are presented as means  $\pm$  SD. Panels B and C: Independent T-Test; Panels E and F: One-way ANOVA.