Figure S1. Genotyping of experimental mice for calpain-1 alleles by PCR. Genomic DNA from tail biopsies was isolated and screened by PCR for calpain-1 wild type (+/+) and null (-/-) alleles. Reaction products were sized using agarose gel electrophoresis.
Figure S2. Calpain-1 deficiency did not affect lipoprotein cholesterol distributions. Lipoproteins were resolved by size-exclusion chromatography. Total cholesterol concentrations are expressed as mean absorbance per fraction. Symbols represent the means and bars are SEMs of 5 individual mice per group: Calpain-1 +/+ (circles) and calpain-1 -/- (triangles).
Figure S3. Examples of vascular pathology measurements. Ultrasound images (A - Day 0 and Day 28), ex vivo pictures of suprarenal aortas (B - after termination) and ascending arch aortas (C), that represent aortic diameters nearest the mean of each group.
Figure S4. Calpain-1 deficiency had no effect on AngII-induced atherosclerosis in LDL receptor -/- mice. Atherosclerotic lesion areas were measured on aortic arch intimal surfaces (n = 18-19). Open circles (calpain-1 +/+ ) and gray circles (calpain-1 -/- ) represent individual mice, diamonds represent means, and bars are SEMs. Statistical analyses were performed with nonparametric Mann-Whitney Rank sum test.
Figure S5. Histological and cellular characteristics of AngII-induced abdominal AAs in calpain-1 +/+ and calpain-1 -/- mice. Representative suprarenal aortic tissue-sections from AngII infused calpain-1 +/+ and calpain-1 -/- mice stained with Movat’s pentachrome (A-D) and immunostained for CD68 (E-H). Elastin stains black; CD68+ cells stain red. Scale bars corresponds to 50μm. Arrow indicates medial break and positive staining with CD68. A,C,E and G = 40x; B,D,F and H = 200x.
Figure S6. Histological and cellular characteristics of AngII-induced ascending AAs in calpain-1 +/+ and calpain-1 -/- mice. Representative anterior ascending aortic tissue-sections from AngII infused calpain-1 +/+ and calpain-1 -/- mice stained with Movat’s pentachrome (A-D) and immunostained for CD68 (E-H). Elastin stains black; CD68+ cells stain red. Scale bars corresponds to 50μm. Arrow indicates medial break and positive staining with CD68. A,C,E and G = 40x; B,D,F and H = 200x.