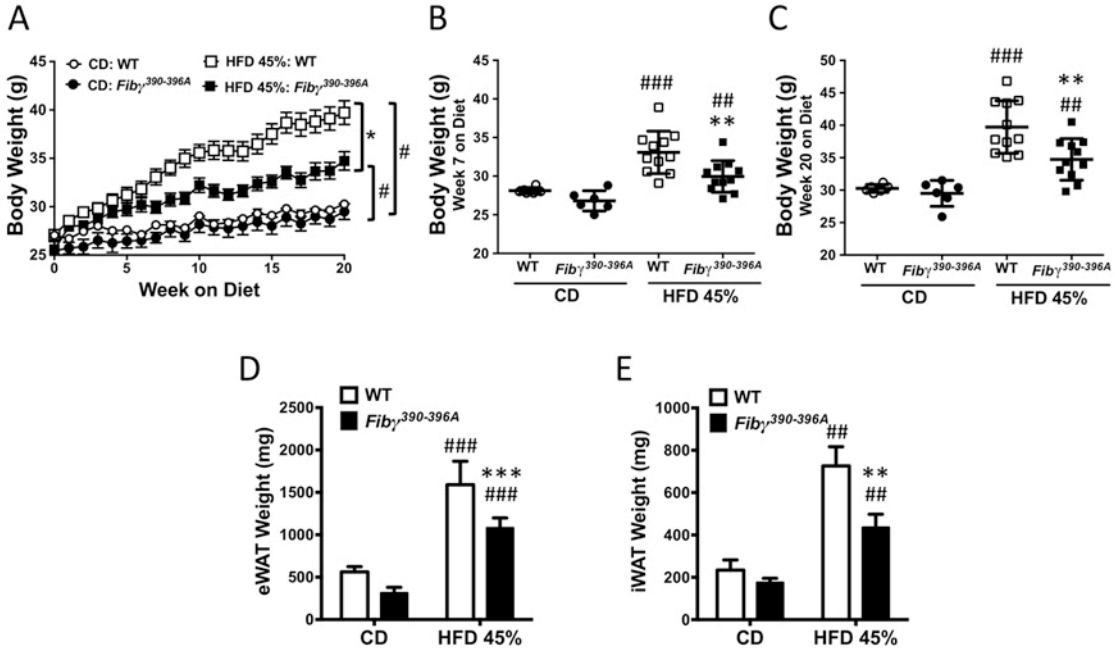
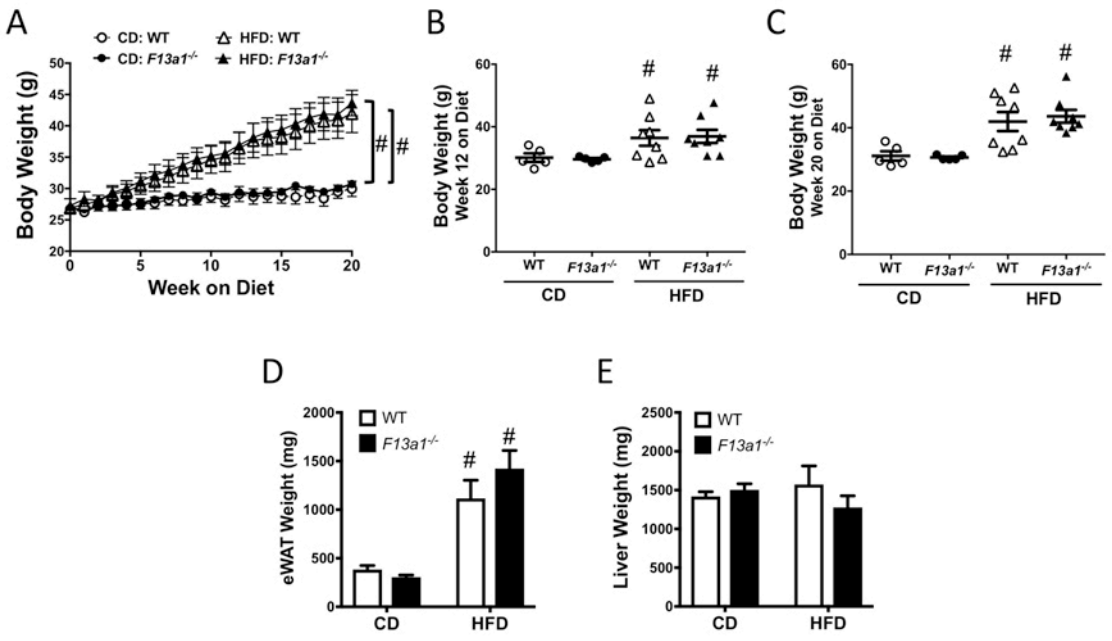
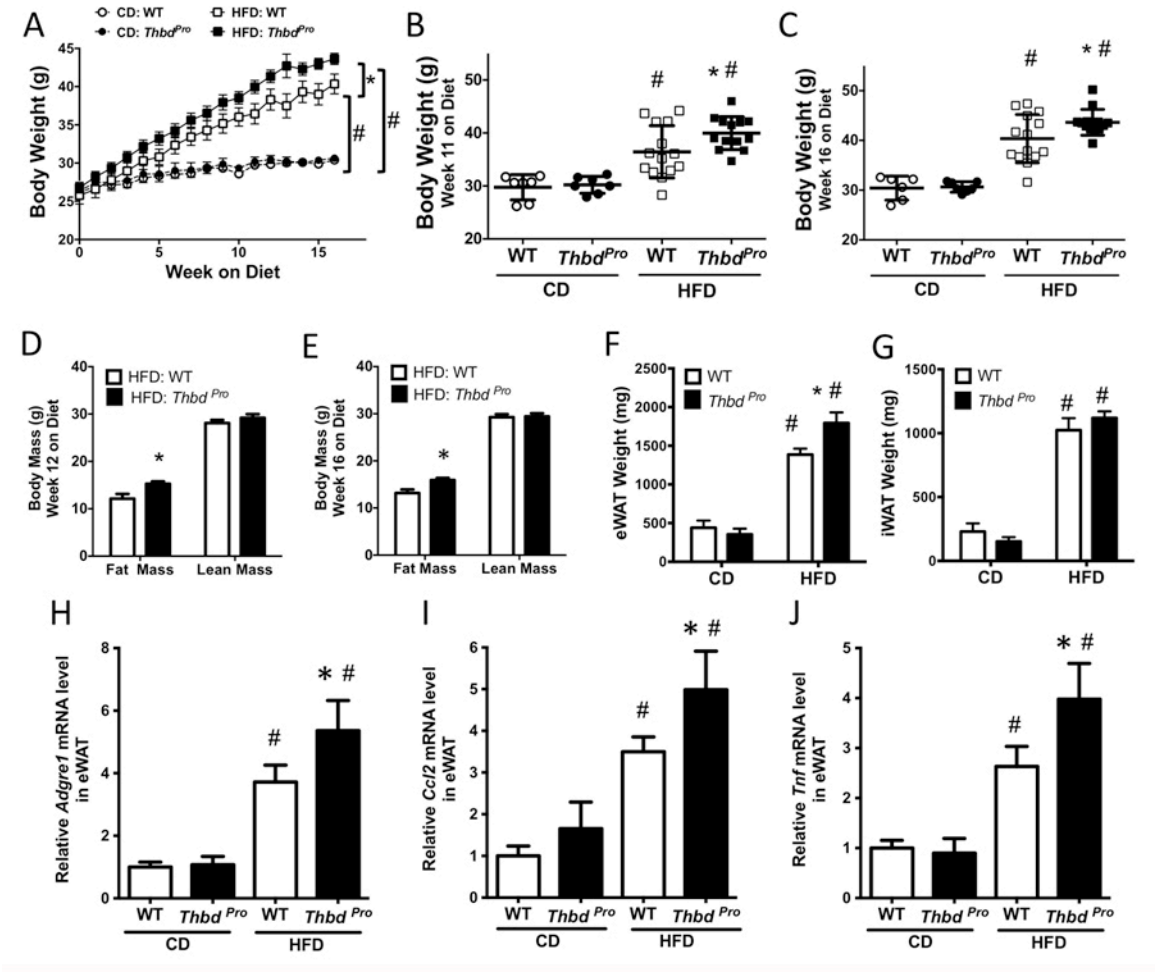
Kopec et al., Supplement Figures



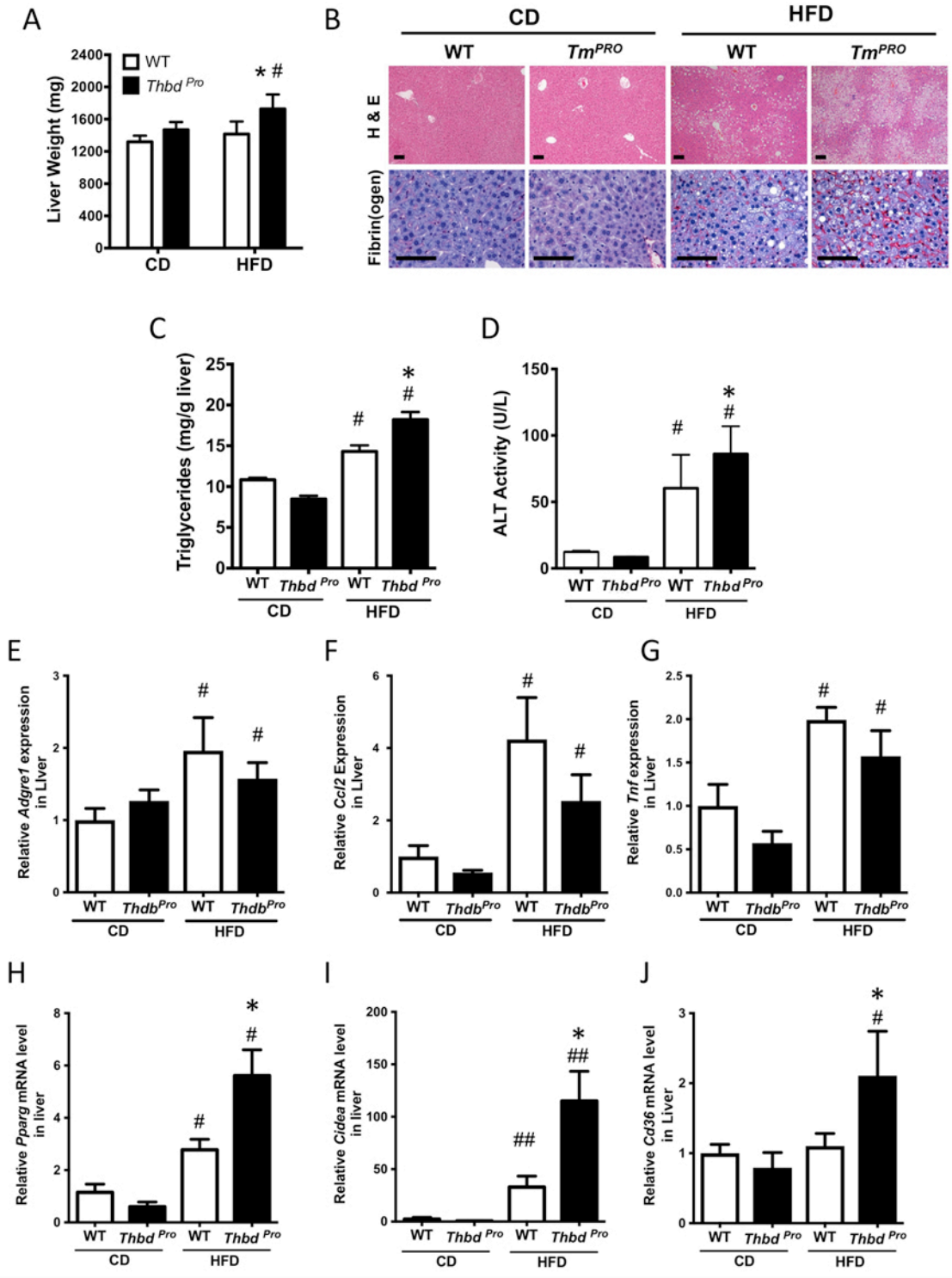
Supplement Figure 1. *Fibγ*$^{390\text{-}396A}$ mice are protected from the development of HFD-driven obesity upon challenge with a HFD in which 45% of kcals are derived from fat. Wildtype (WT) and *Fibγ*$^{390\text{-}396A}$ mice were fed either a CD (n= 6 mice per genotype) or a 45% HFD (n=11 mice per genotype). (A) Mean body weights of mice over a 20-week feeding period. Distribution of body weights for WT and *Fibγ*$^{390\text{-}396A}$ mice fed the CD or 45% HFD at (B) week 7 and (C) week 20 on diet. Total fat pad weights of (D) eWAT and (E) iWAT for WT and *Fibγ*$^{390\text{-}396A}$ mice at week 20 on diet. Data are expressed as the mean ± SEM. *P < 0.05, **P < 0.01, ***P < 0.001 for analyses comparing differences between genotypes on the same diet. #P < 0.05, ##P < 0.01, ###P < 0.001 for analyses comparing differences between diets with mice of the same genotype.



Supplement Figure 2. Factor XIII-deficient mice have similar body weight gain to wildtype mice when fed either a CD or HFD. (A) Mean body weights of wildtype (WT) and Factor XIII A subunit-deficient (*F13a1*$^{-/-}$) mice fed a control diet (CD) (n=5 mice per genotype) or 60% high fat diet (HFD) (n= 8-9 mice per genotype) over a 20-week feeding period. Distribution of body weights for WT and *F13a1*$^{-/-}$ mice fed a CD or 60% HFD at (B) week 12 and (C) week 20 on diet. Total weights of (D) epididymal white adipose tissue (eWAT) and (G) liver for WT and *F13a1*$^{-/-}$ mice at week 20 on diet. Data are expressed as the mean ± SEM. #P < 0.05 for analyses comparing differences between diets with mice of the same genotype.

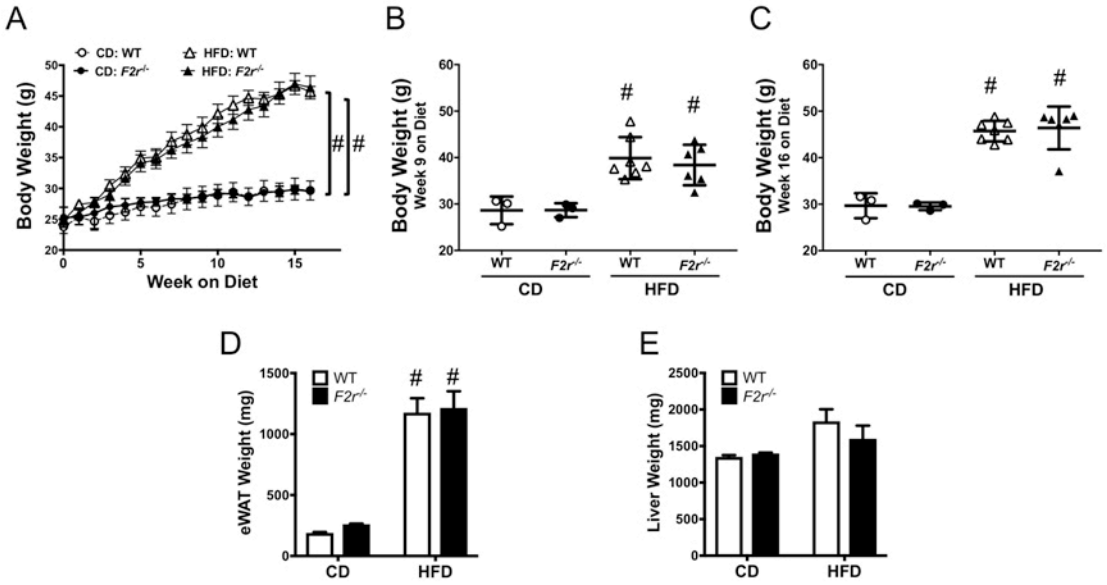


Supplement Figure 3. *Thbd*^{Pro} mice that have a genetically imposed enhanced procoagulant state exhibit exacerbated obesity following a high fat diet challenge. (A) Mean body weights of wildtype (WT) and *Thbd*^{Pro} mice fed a control diet (CD) (n=7 mice per genotype) or 60% high fat diet (HFD) (n= 13-14 mice per genotype). Distribution of body weights for WT and *Thbd*^{Pro} mice fed a CD or 60% HFD at (B) week 11 and (C) week 16 on diet. Analysis of body mass composition for HFD-fed WT and *Thbd*^{Pro} mice performed at (D) week 12 and (E) week 16. Total fat pad weights of (F) epididymal white adipose tissue (eWAT) and (G) inguinal white adipose tissue (iWAT) for WT and *Thbd*^{Pro} mice at week 16 on diet. Quantitative RT-PCR analysis of epididymal white adipose tissue (eWAT) from WT and *Tm*^{Pro} mice fed either a CD (n=3 mice per genotype) or 60% HFD (n=7 mice per genotype) for 16 weeks. Relative mRNA levels of (H) the macrophage marker F4/80 (*Adgre1*), (I) the macrophage chemokine MCP-1 (*Ccl2*), and (J) the pro-inflammatory cytokine TNFα (*Tnf*) were each significantly elevated in HFD-fed *Thbd*^{Pro} mice compared to HFD-fed WT mice. All data are expressed as mean ± SEM. *P < 0.05 for analyses comparing differences between genotypes on the same diet. #P < 0.05 for analyses comparing differences between diets with mice of the same genotype.



Supplement Figure 4. *Thbd*^{Pro} mice develop significantly increased HFD-induced fatty liver disease and hepatocellular injury. Wildtype (WT) and *Thbd*^{Pro} mice were fed either a control diet (CD) (n = 6-7 mice per genotype) or a 60% high fat diet (HFD) (n = 13-14 mice per

genotype) for 16 weeks. (A) Total liver weights of mice following the 16-week diet challenge. (B) Representative H&E and fibrin(ogen) immunohistochemistry (red) stained sections of liver tissue. Sections from CD-fed mice revealed a normal hepatic histological appearance with little to no fibrin(ogen) deposition. In contrast, liver tissue from HFD-fed WT mice displayed evidence of hepatocyte triglyceride accumulation (steatosis) and sinusoidal fibrin(ogen) deposition. Scale bars equal 100 μm. (C) Analysis of liver triglyceride content confirmed significantly elevated hepatic steatosis in HFD-fed *Thbd*^{Pro} mice relative to WT animals. (D) Analysis of circulating alanine transaminase (ALT) in CD- and HFD-fed WT and *Thbd*^{Pro} mice indicated significantly increased hepatocellular damage in HFD-fed *Thbd*^{Pro} mice. Quantitative RT-PCR analysis of liver tissue for mRNA levels of inflammatory genes (E) F4/80 (*Adgre1*), (F) MCP-1 (*Ccl2*), and (G) TNFα (*Tnf*) as well as lipogenic genes (H) PPARγ (*Pparg*), (I) CIDEA (*Cidea*), and (J) CD36 (*Cd36*) in HFD-fed *Thbd*^{Pro} mice. All data are expressed as mean ± SEM. *P < 0.05 for analyses comparing differences between genotypes on the same diet. #P < 0.05 and ##P < 0.01 for analyses comparing differences between diets with mice of the same genotype.



Supplement Figure 5. *F2r*-deficient mice have similar body weight gain to wildtype mice when fed either a CD or HFD. Mean body weights of wildtype (WT) and PAR-1-deficient (*F2r*$^{-/-}$) mice fed a control diet (CD) (n=3 mice per genotype) or 60% high fat diet (HFD) (n= 7 mice per genotype) over a 16-week feeding period. Distribution of body weights for WT and *F2r*$^{-/-}$ mice fed a CD or 60% HFD at (B) week 9 and (C) week 16 on diet. Total tissue weights of (D) epididymal white adipose tissue (eWAT) and (E) liver for WT and *F2r*$^{-/-}$ mice at week 16 on diet. Data are expressed as mean ± SEM. #P < 0.05 for analyses comparing differences between diets with mice of the same genotype.