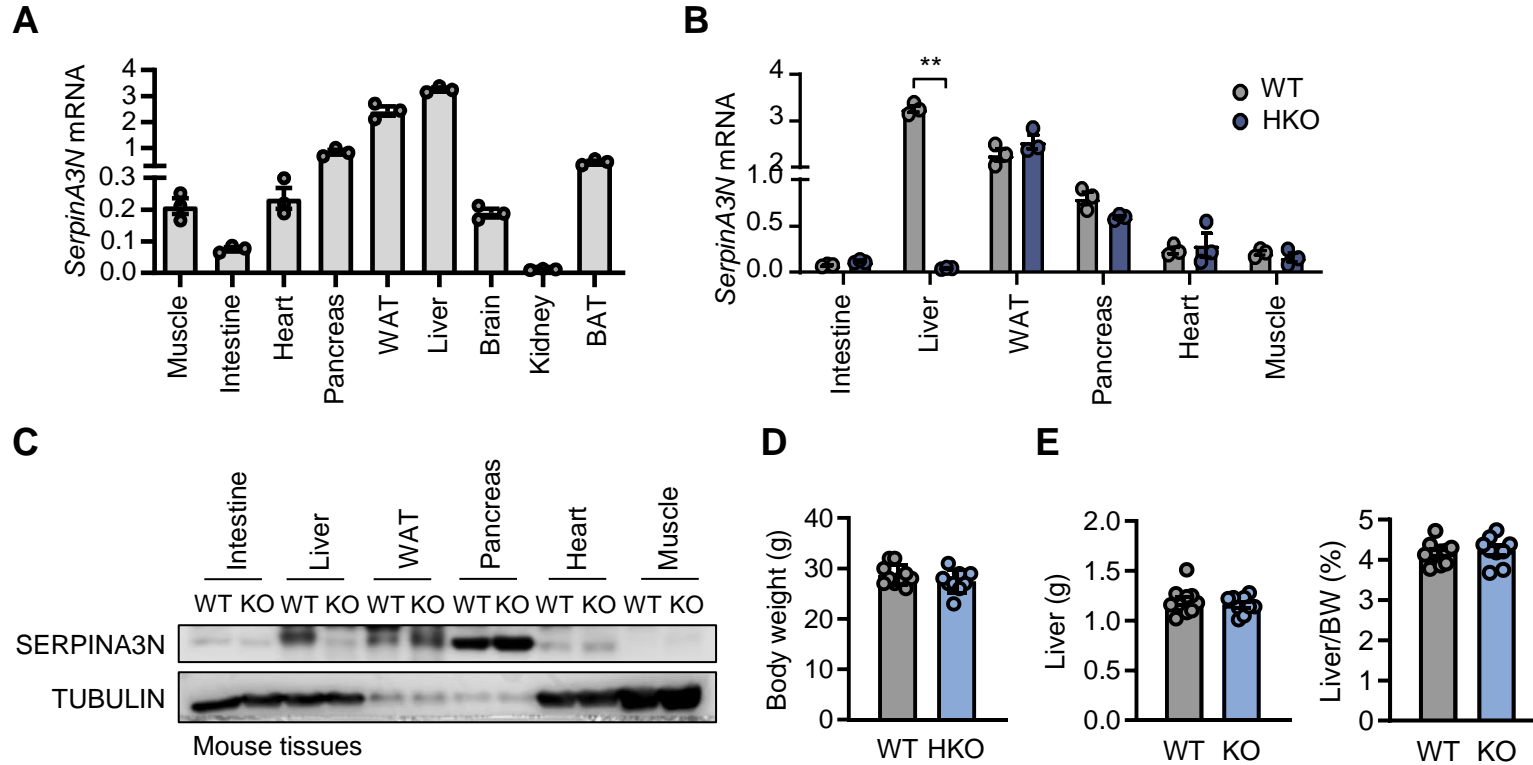


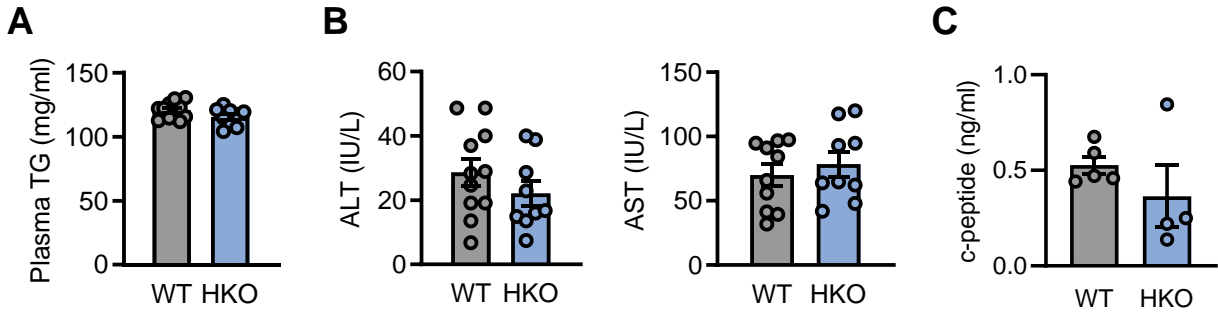
Supplementary Fig. S1



Supplementary Fig. S1. SerpinA3N expression in mouse tissues

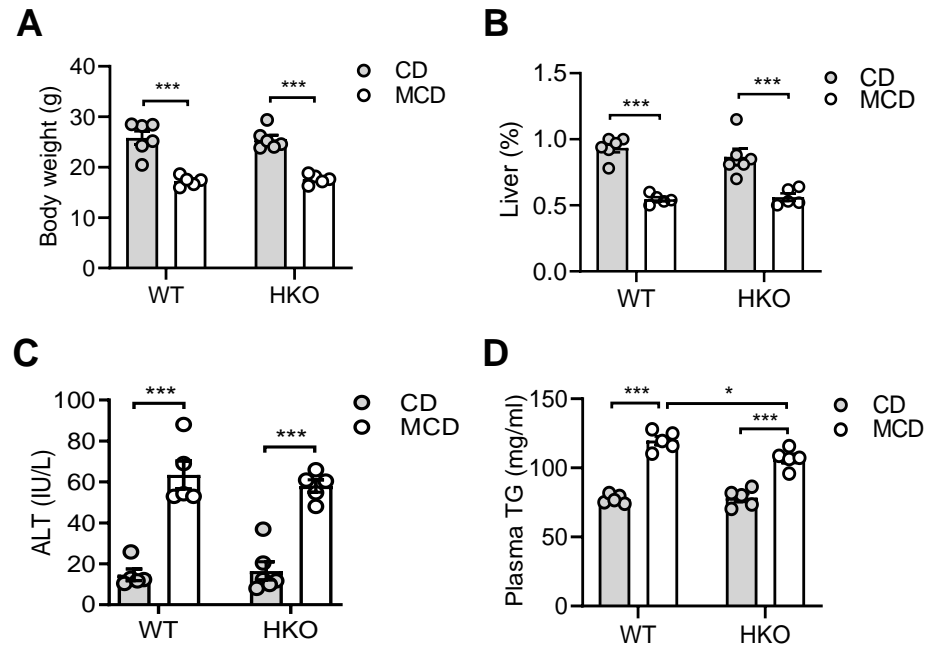
(A) qPCR analysis of SerpinA3N mRNA abundance in mouse (B) qPCR analysis of SerpinA3N mRNA and (C) protein expression in intestine, liver, WAT, pancreas, heart and muscle of WT and SerpinA3N HKO mice (D) Body weights and (E) liver weights of WT and SerpinA3N HKO mice fed the chow diet. Data are represented as mean \pm SEM. A Student's *t*-test was used to determine differences between groups. ** $p < 0.01$ vs. WT.

Supplementary Fig. S2



Supplementary Fig. S2. Plasma analysis in chow fed mice
Plasma (A) TG (B) ALT and AST (C) c-peptide levels analysed from WT and SerpinA3N HKO mice fed the chow diet. Data are represented as mean \pm SEM.

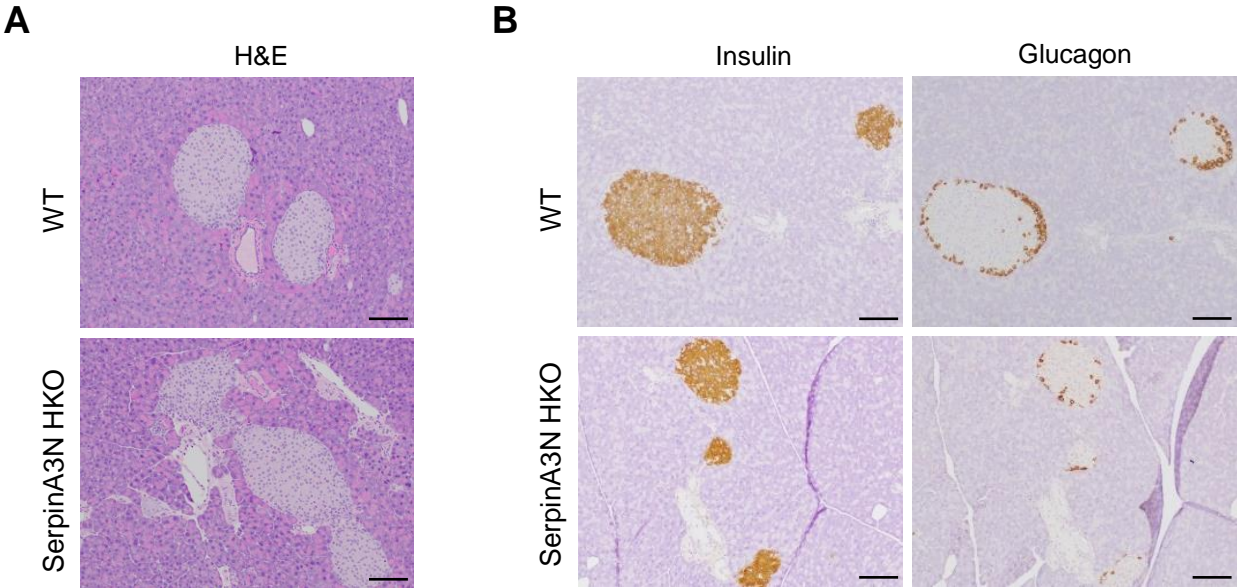
Supplementary Fig. S3



Supplementary Fig. S3. Body weight and plasma analysis in MCD fed mice.

Body weight (A) and relative liver weights (B) in WT and SerpinA3N HKO mice fed the control diet (CD) or methionine and choline deficient (MCD) diet for 4 weeks. Plasma TG (C) and ALT (D) levels were analysed from WT and SerpinA3N HKO mice fed the control diet or MCD diet. Data are represented as mean \pm SEM. A two-way ANOVA was used to determine differences between groups. Statistical significance is indicated by *** $p < 0.001$, * $p < 0.05$.

Supplementary Fig. S4



Supplementary Fig. S4. Pancreatic morphology in HFHS fed mice. Representative images of (A) H&E staining of islet morphology and (B) insulin (left panel) and glucagon (right panel) immunostaining in WT and SerpinA3N HKO mice fed the high fat high sucrose diet for 12 weeks, scale bar = 100 μ M.