

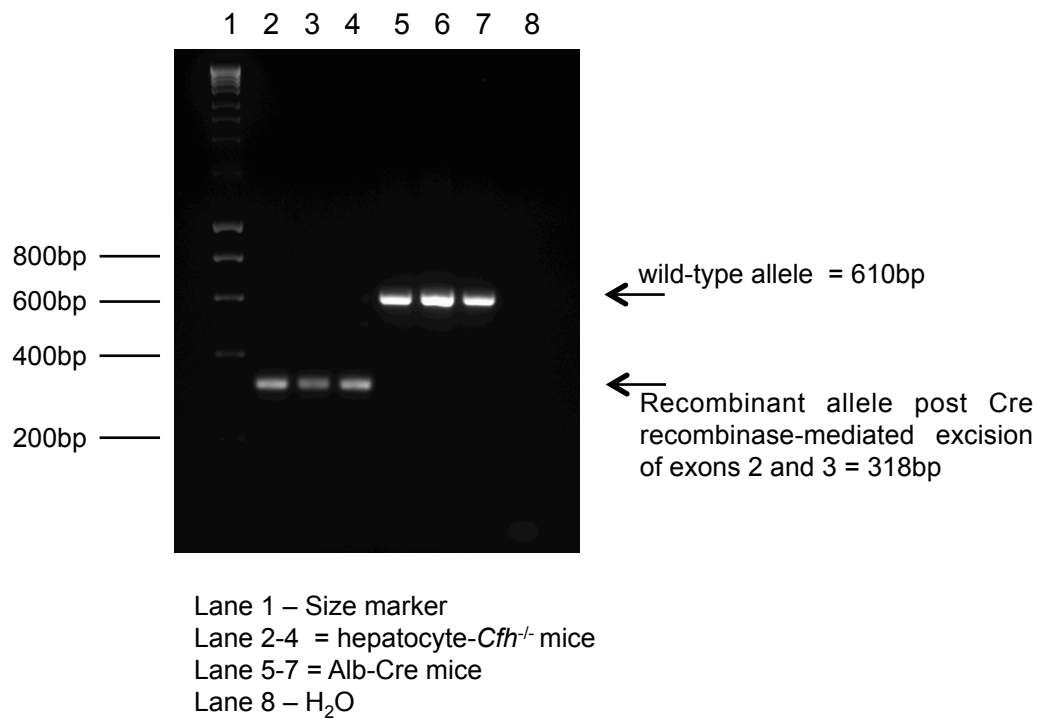
Partial complement factor H deficiency is associated with both C3 glomerulopathy and thrombotic microangiopathy

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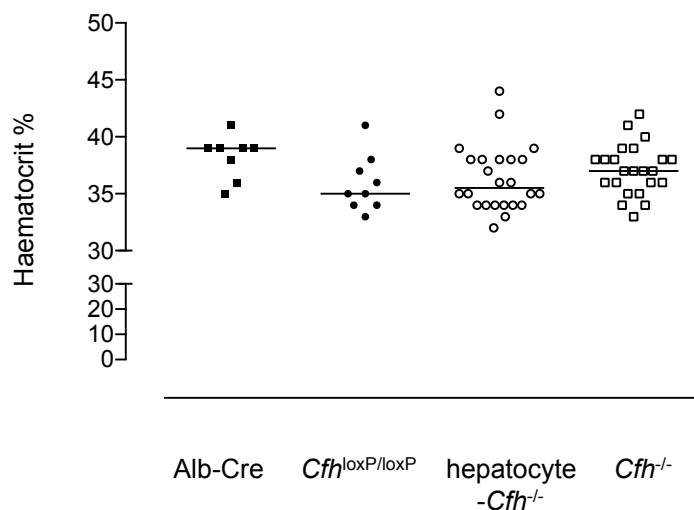
Supplemental Figures 1 to 6

Supplemental Table 1

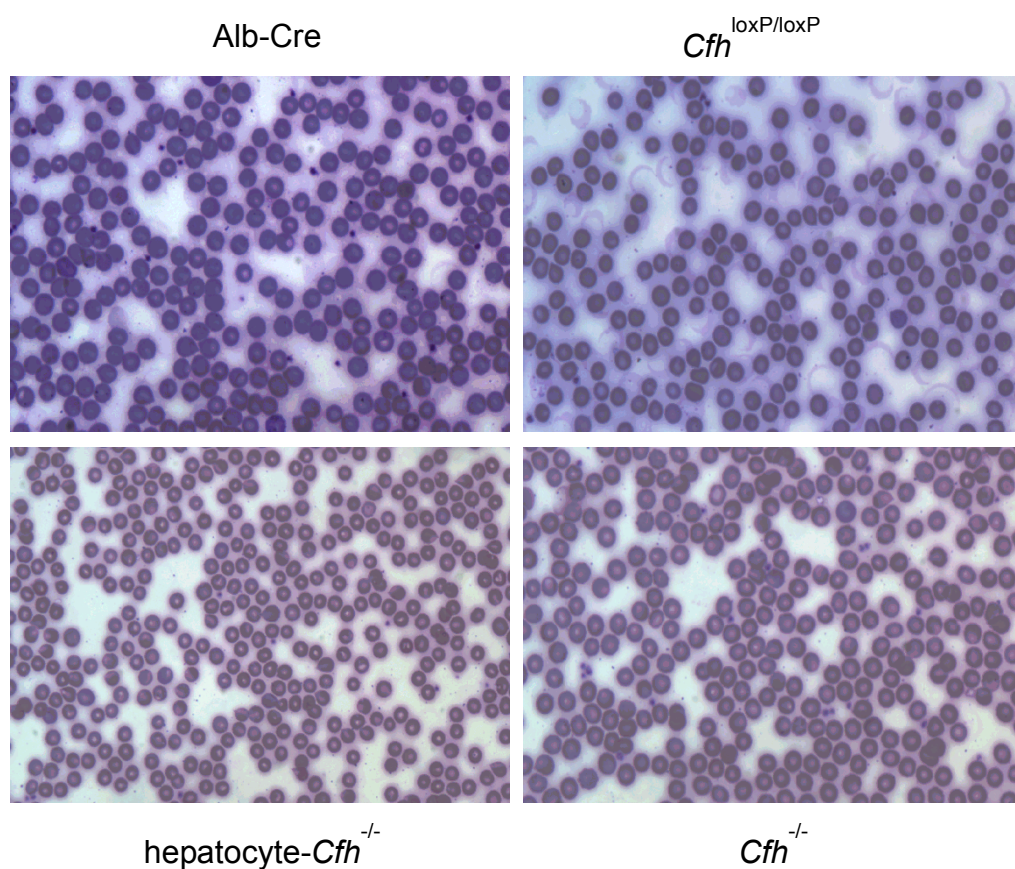


Supplemental Figure 1: **PCR on cDNA generated from RNA from livers of hepatocyte-*Cfh*^{-/-} (lanes 2-4) and Alb-Cre mice (lanes 5-7).** The PCR used primers that flanked exons 2 and 3 and resulted in a 610-bp amplicon using cDNA from wild-type mice. Primer pair: 5'-CTGTCAGCAAGAATTATTTGGC-3' and 5'-ACACATCGTGGCTTTTCATTGC-3'. After Cre recombinase-mediated excision of exons 2 and 3 the amplicon is reduced to 318bp. The smaller amplicon is seen in all hepatocyte-*Cfh*^{-/-} mice (lanes 2-4).

A

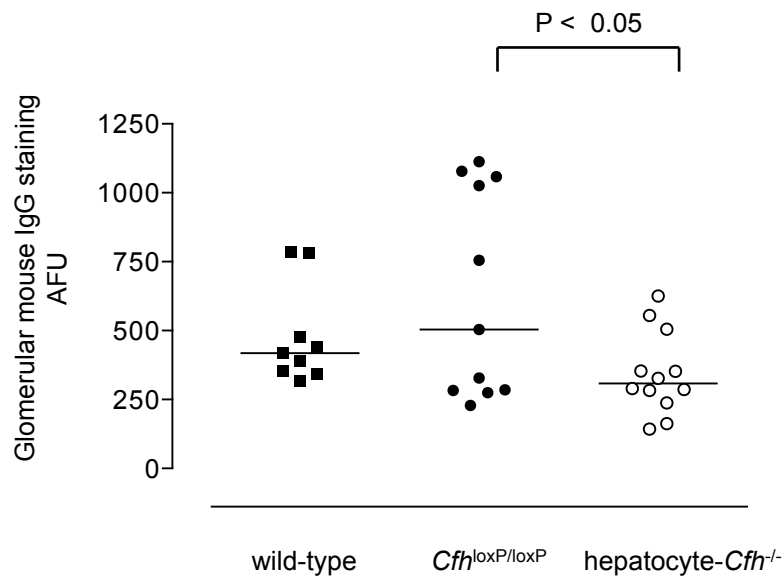


B

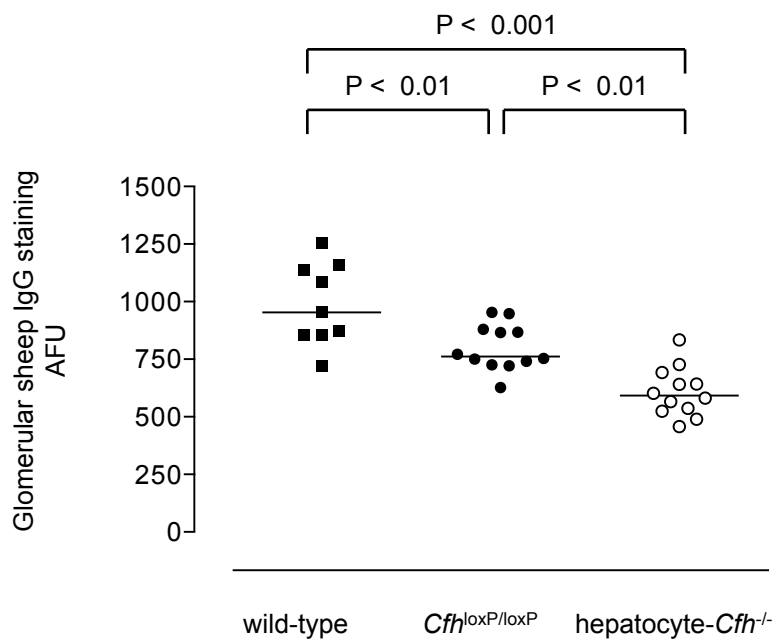


Supplemental Figure 2: **Haematocrit (A) and blood smear (B) in Alb-Cre, *Cfh*^{loxP/loxP}, hepatocyte-*Cfh*^{-/-} and *Cfh*^{-/-} mice.** Horizontal bars denote median values. Representative images of blood smears in Alb-Cre, *Cfh*^{loxP/loxP}, hepatocyte-*Cfh*^{-/-} and *Cfh*^{-/-} mice.

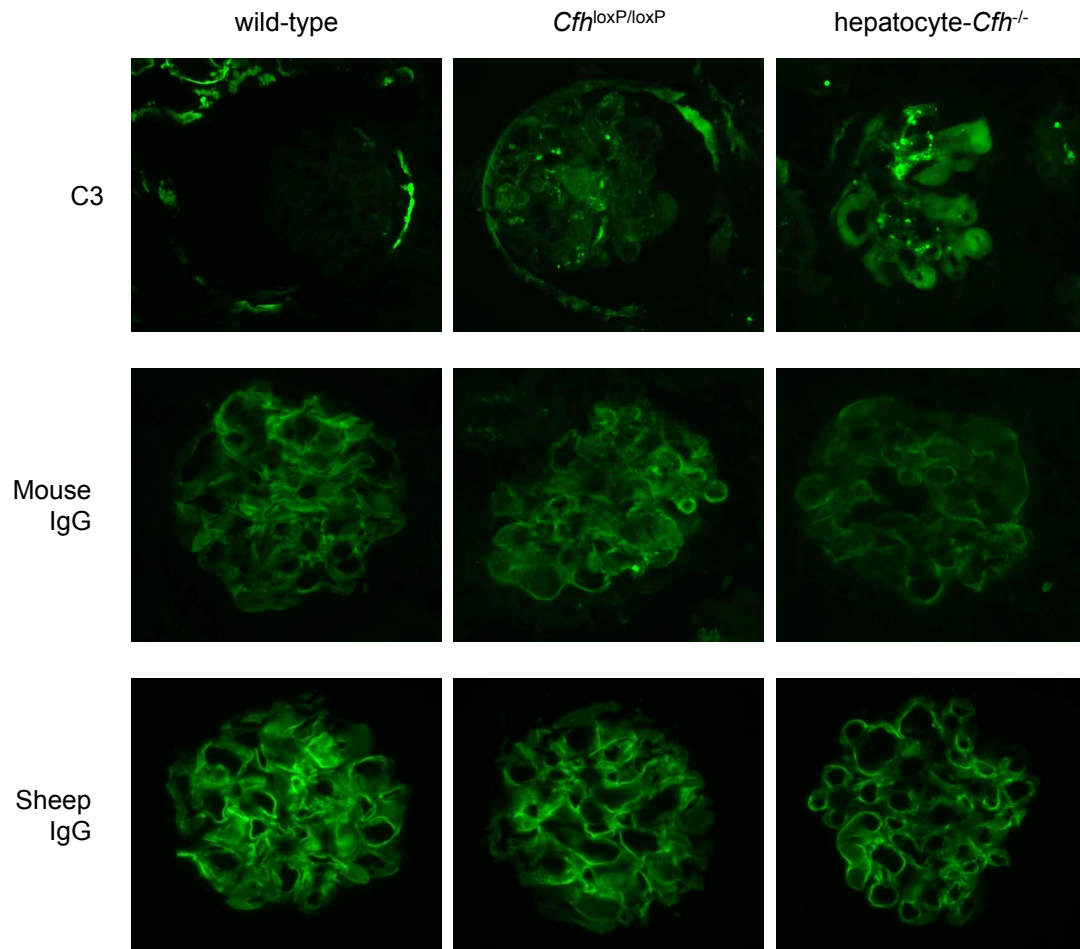
A



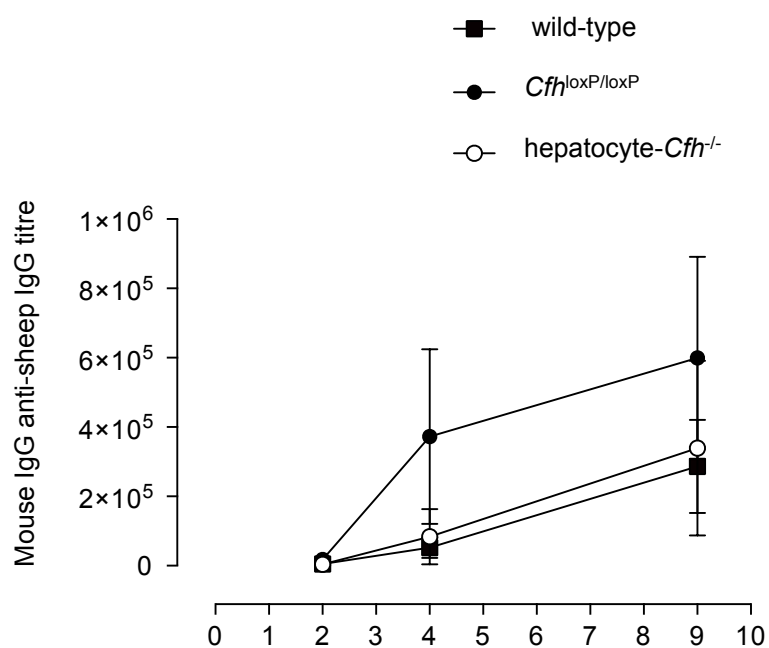
B



Supplemental Figure 4: **(A) Glomerular mouse IgG immunofluorescence studies in wild-type, $Cfh^{loxP/loxP}$ and hepatocyte- $Cfh^{-/-}$ mice at day 3 following NTS injection. (B) Glomerular sheep IgG immunofluorescence studies in wild-type, $Cfh^{loxP/loxP}$ and hepatocyte- $Cfh^{-/-}$ mice at day 3 following NTS injection. P values calculated using Bonferroni multiple comparison test. Horizontal bars denote median values. AFU – arbitrary fluorescence units.**



Supplemental Figure 5: **Representative immunofluorescence staining images for C3, mouse IgG and sheep IgG in wild-type, *Cfh*^{loxP/loxP} and hepatocyte-*Cfh*^{-/-} mice at day 3 following NTS injection.** Glomerular C3 deposition was significantly greater in hepatocyte-*Cfh*^{-/-} mice compared to wild-type animals.



Supplemental Figure 6: **Immune response to sheep IgG in complete Freund's adjuvant in the absence of NTN in wild-type, *Cfh*^{loxP/loxP} and hepatocyte-*Cfh*^{-/-} mice.** Sheep IgG in adjuvant was administered intra-peritoneally at day 0 and serum samples collected at days 2, 4 and 9. No significant differences in the mouse IgG anti-sheep IgG titres were seen between the groups at any of the time points.

SUPPLEMENTAL TABLE 1. SUMMARY OF SPONTANEOUS PARAMETERS IN THE DIFFERENT MOUSE STRAINS

Strain	Plasma FH % wild-type ¹	Plasma C3 μg/ml ²	Haematocrit % ²	Serum urea mmol/l ²	Glomerular cellularity Grade 0 - 4 ^{2,7}
Alb-Cre	93 (71-137, n=6) ³	171.5 (158.8-273.1, n=8) ⁵	39 (35-41, n=8)	8 (6-19.7, n=8)	0.5 (0-1, n=8)
<i>Cfh</i> ^{loxP/loxP}	59.9 (37-103, n=8) ⁴	131.1 (118.4-272.8, n=9)	35 (33-41, n=9)	7.2 (3.1-13.7, n=9)	0 (0-1, n=9)
hepatocyte- <i>Cfh</i> ^{-/-}	19 (14-29, n=7)	41.5 (28.6-82.2, n=25) ⁶	35.5 (32-44, n=24)	12 (7.4-26.5, n=25)	1 (0-4, n=25)
<i>Cfh</i> ^{-/-}	not applicable	15.8 (7.9-26.6, n=23)	37 (33-42, n=23)	12.4 (6-21.7, n=23)	1 (0-2, n=23)

Data are median with range and sample number in parenthesis;

P values derived from Bonferroni multiple comparison tests;

¹12 week old animals;

²9 month old animals (see supplemental figure 2A);

³P=0.032 vs. *Cfh*^{loxP/loxP} and P<0.0001 vs. hepatocyte-*Cfh*^{-/-} animals (see figure 1B);

⁴P=0.0016 vs. hepatocyte-*Cfh*^{-/-} animals (see figure 1B);

⁵P<0.05 vs. *Cfh*^{loxP/loxP} animals (see figure 2A);

⁶P<0.001 vs. *Cfh*^{-/-} and P<0.0001 vs. *Cfh*^{loxP/loxP} animals (see figure 2A);

⁷see figure 2C