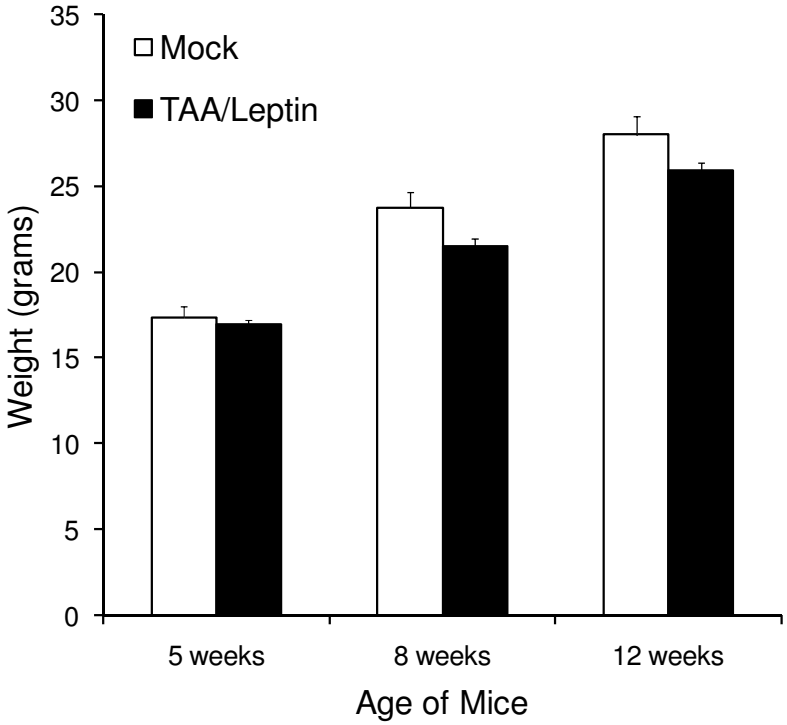
Supplemental Table 1. List of fluorescently-conjugated antibodies used for flow cytometry.

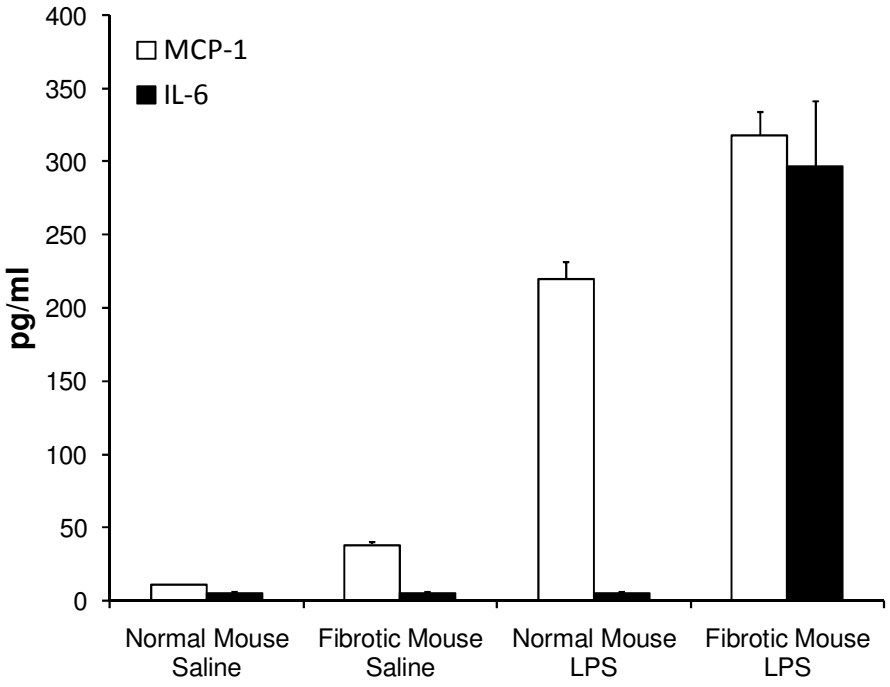
Surface Antigen	Clone	Source
MHC I	H-2K^b	e Biosciences
MHC II	I-A^b	e Biosciences
CD3ε	17A2	BD Biosciences
CD4	RM4-5	e Biosciences
CD8α	53–6.7	e Biosciences
CD11b	M1/70	BD Biosciences
CD11c	HL3	e Biosciences
CD25	PC61.5	e Biosciences
CD40	HM40-3	e Biosciences
CD44	IM7	e Biosciences
CD45.2	104	BD Biosciences
CD54	YN1/1.7.4	e Biosciences
CD69	H1.2F3	e Biosciences
CD80	16-10A1	e Biosciences
CD86	GL1	e Biosciences
CD178	MFL3	e Biosciences
B220	RA3-6B2	e Biosciences
Gr1	RB6-8C5	BD Biosciences
NK1.1	PK136	BD Biosciences
Foxp3	FJK-16s	e Biosciences

Supplemental Figure 1. Mice with experimental liver fibrosis have reduced weight gain and increased susceptibility to bacterial LPS. (A) Mice were either mock-injected or injected with TAA+Leptin (4-5/group) thrice weekly beginning at 3 weeks of age until they were 12 weeks old. Mice were weighed at 5, 8, and 12 weeks of age. TAA/leptin treated mice had slightly retarded weight gain ($p<0.05$ at 8 week time point only). **(B)** Mice treated for 6 weeks with TAA+Leptin and weight-matched controls were injected i.p. with 1µg of LPS or saline (3 mice/group). After 24h, serum was harvested and analyzed for expression of MCP-1 and IL-6. Fibrotic mice had a greater inflammatory response to LPS. Similarly, LPS-treated mice with liver fibrosis were more lethargic on examination at 24h compared with controls (not shown).

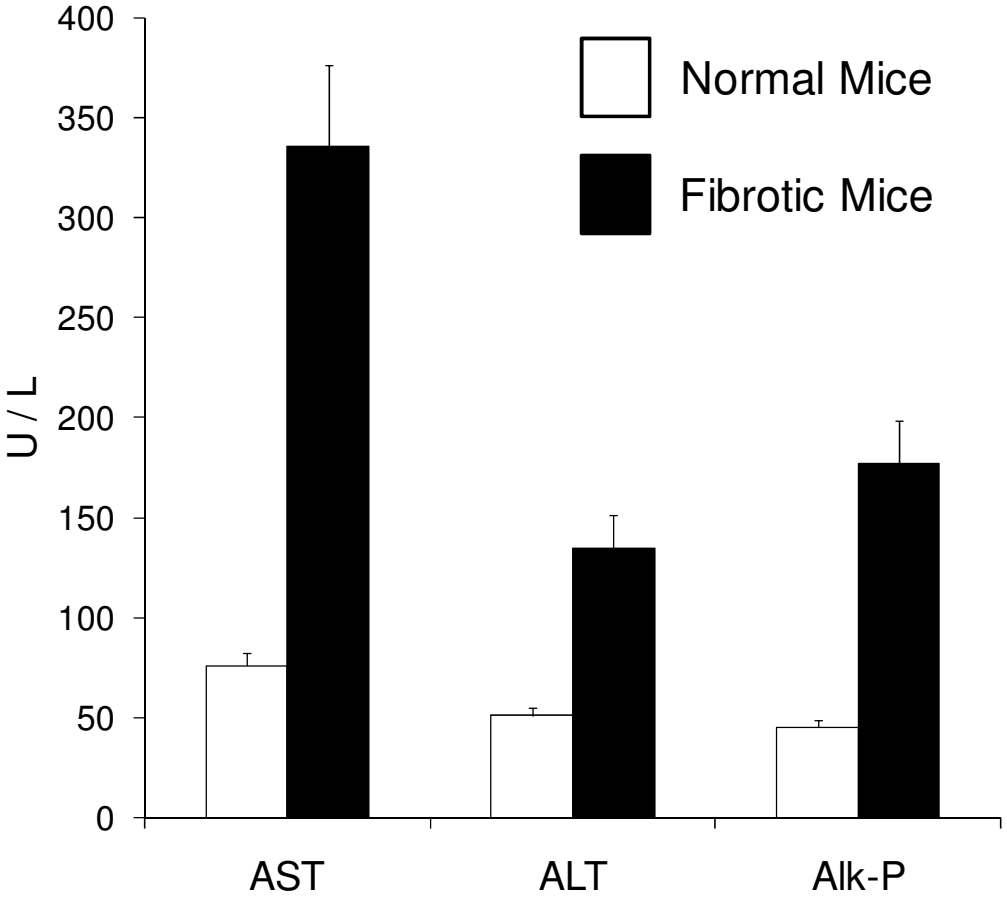
(A)



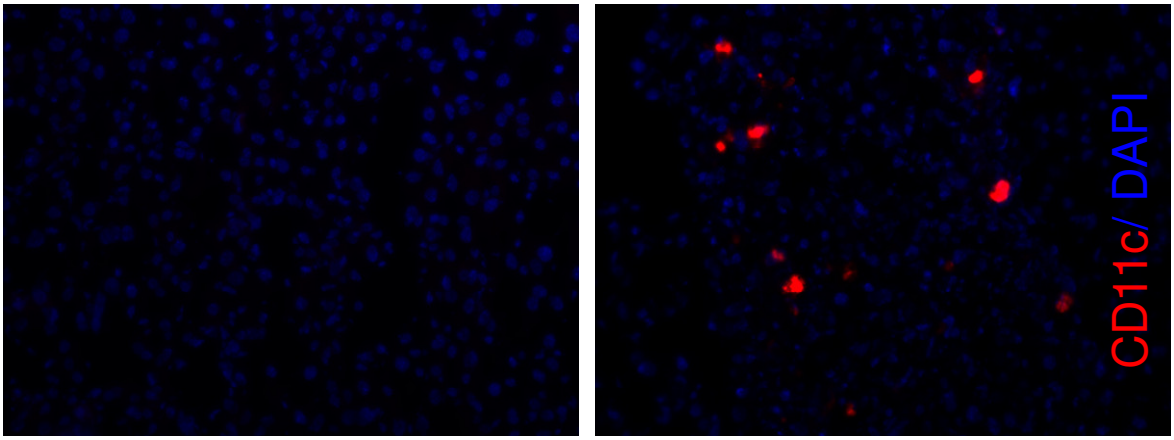
(B)



Supplemental Figure 2. **Serum liver enzymes are elevated in mice treated with TAA + Leptin**. Analysis of serum liver enzymes in mice treated for 6 weeks with TAA/leptin revealed elevated Aspartate transaminase (AST), Alanine transaminase (ALT), and Alkaline phosphatase, (Alk-P) ($p<0.05$). Averages of three mice per group are shown. This experiment was repeated twice.

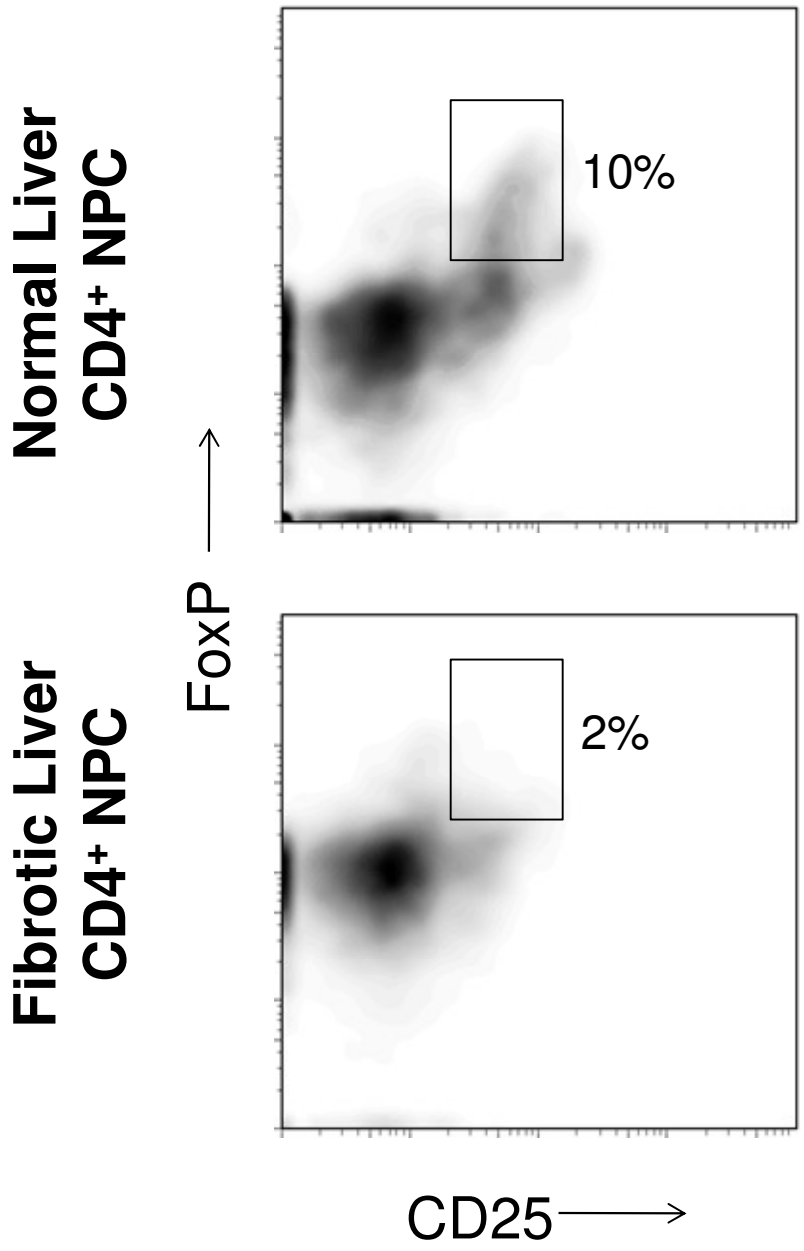


Supplemental Figure 3. DC expand in the fibrotic liver. Immunofluorescent staining of frozen liver sections with antibodies against CD11c demonstrated considerable recruitment of $CD11c^+$ DC to the fibrotic liver. In contrast, there was no detectable staining for CD11c in the liver of untreated mice.

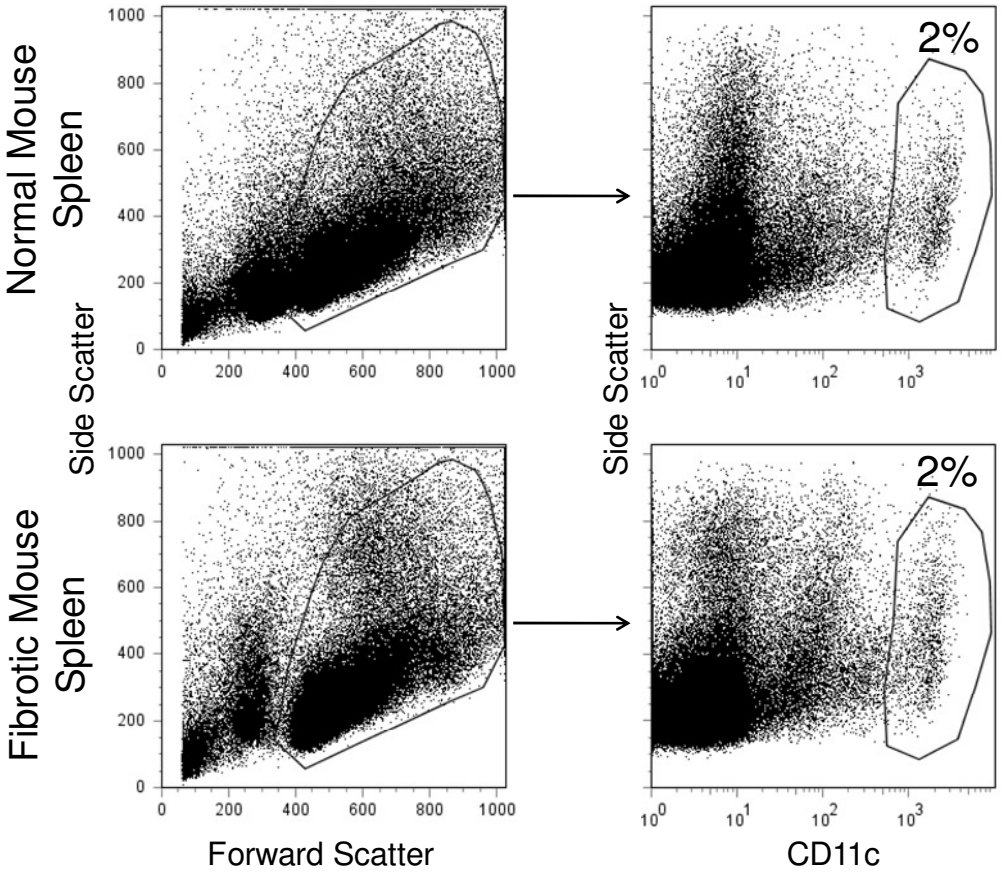


Normal Liver Fibrotic Liver

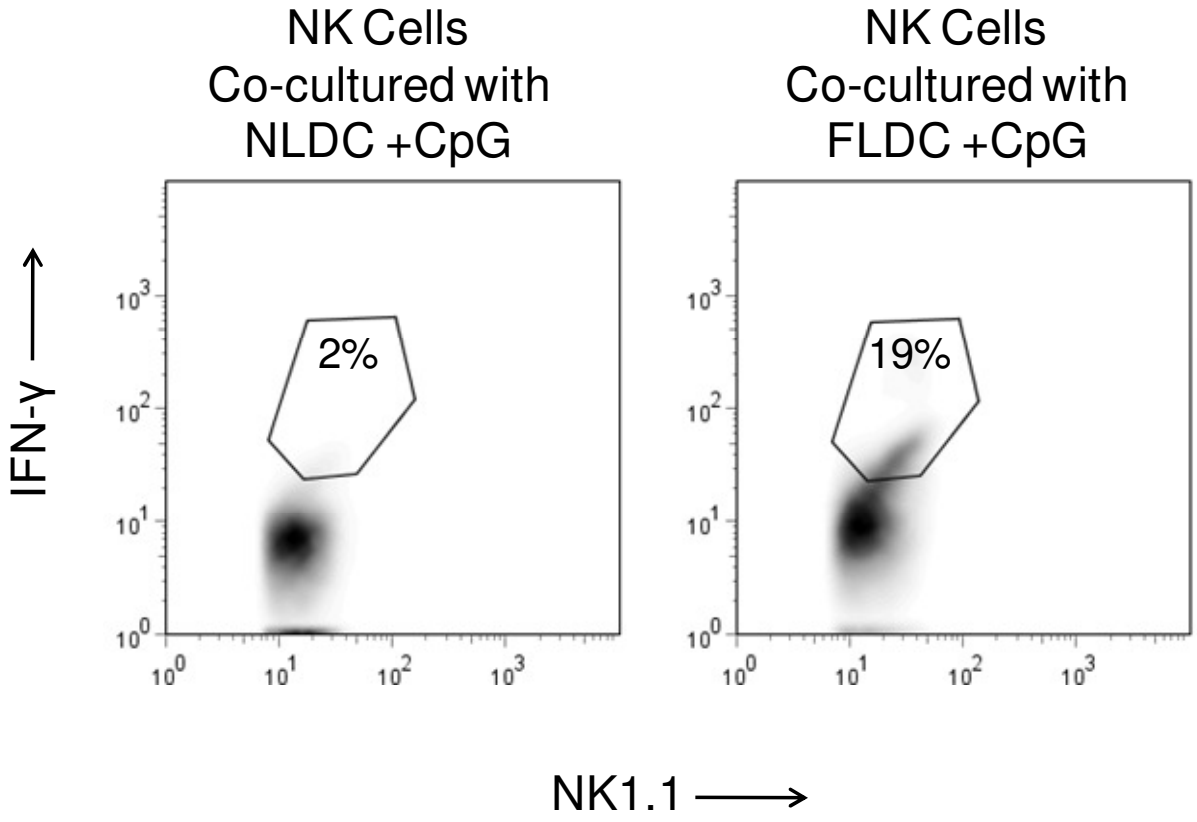
Supplemental Figure 4. Tregs are decreased in the fibrotic liver. Liver NPC were harvested from normal of fibrotic mice and analyzed by flow cytometry. $CD4^+$ cells were gated on and analyzed for co-expression of CD25 and Foxp. The percentage of cells within each gate is indicated. In normal liver 10% of NPC were $CD25^+Foxp^+$ while in fibrotic liver only 2% of cells are Tregs. This experiment was repeated 4 times with consistent results.



Supplemental Figure 5. Spleen DC are not expanded in mice with liver fibrosis. Mice were treated for 6 weeks with TAA/Leptin before sacrifice and analysis of live splenocytes (gated) for CD11c expression by flow cytometry. Neither the fraction of $CD11c^+$ cells (2%) nor the total number of spleen DC were increased in mice with liver fibrosis.



Supplemental Figure 6. FLDC induce NK cell IFN-γ production. Splenic NK cells ($1x10^5$) were co-cultured with either NLDC or FLDC ($2x10^5$) supplemented with CpG (5μm) in 96-well plates for 24h. Cells were then harvested, incubated with Brefeldin A, stained with fluorescently-conjugated surface Abs for NK1.1 and CD11c, fixed, permeabilized, stained for intracellular IFN-γ, and analyzed by flow cytometry. In the density plots shown, $NK1.1^+$ cells are gated and assessed for IFN- γ expression. NK cells co-cultured with FLDC express higher intracellular levels of IFN- γ (19%) than NK cells co-cultured with NLDC (2%). $CD11c^+$ NLDC or FLDC did not contain detectible intracellular IFN-γ (not shown).



Supplemental Figure 7. FLDC have increased capacity to stimulate CD8 T cells. To test the capacity of liver DC to stimulate antigen-restricted $CD8^+$ T cells in vivo, C57BL/6 mice were administered $2x10^6$ $CD8^+$OT-I T cells before i.v. adoptive transfer of FLDC.$Ova_{257-264}$ or NLDC.$Ova_{257-264}$ 24h later. The percentage of $CD3^+CD8^+$ $Ova_{257-264}$$Pentamer^+$ T cells among all hepatic $CD3^+CD8^+$ T cells was measured at 90 hours. The percentage of cells within each gate is indicated. CD44 expression on $Ova_{257-264}$ $Pentamer^+$ T cells is also shown. The percentage of $CD3^+CD8^+Ova_{257-264}Pentamer^+$ T cells was higher in mice immunized with FLDC.$Ova_{257-264}$ compared with mice immunized with NLDC.$Ova_{257-264}$. The percentage of cells within each gate is indicated. This experiment was repeated three times using 2-3 mice per experimental group with similar results.