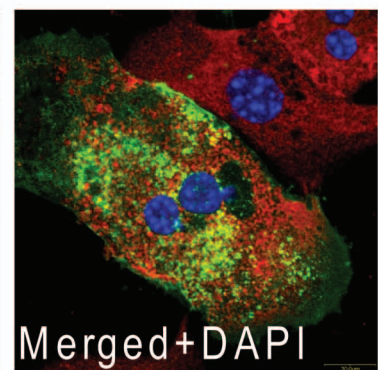
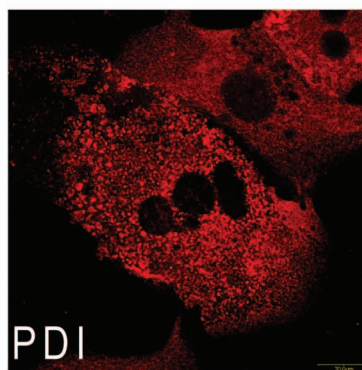
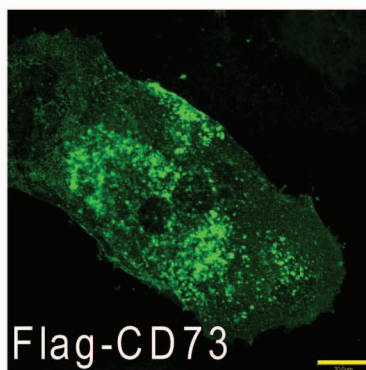
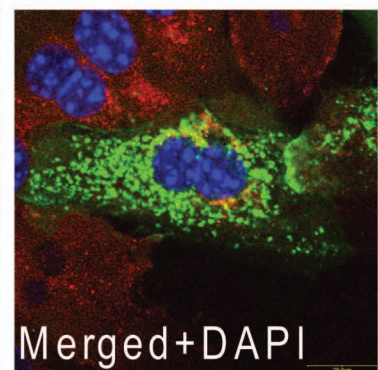
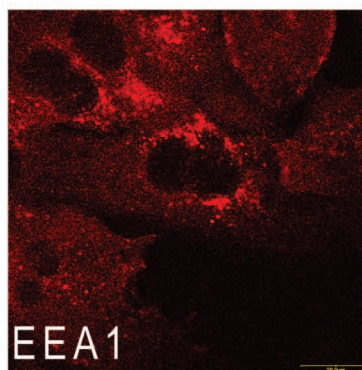
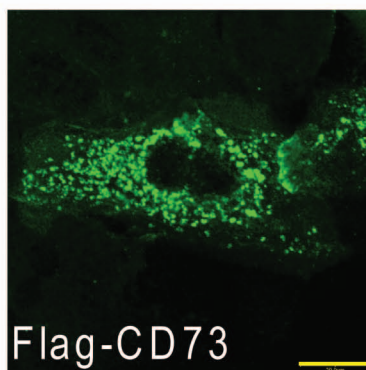


100 μ M DDC, 24h

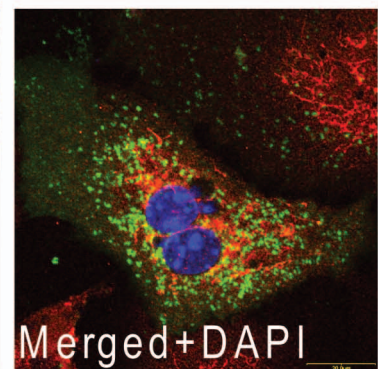
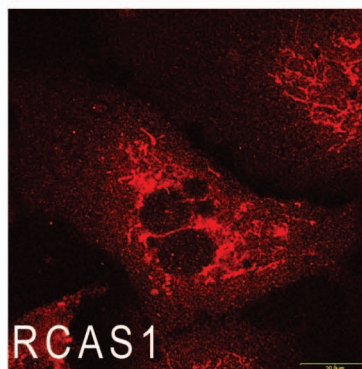
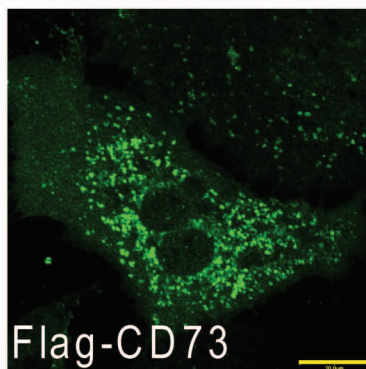
Endoplasmic
reticulum



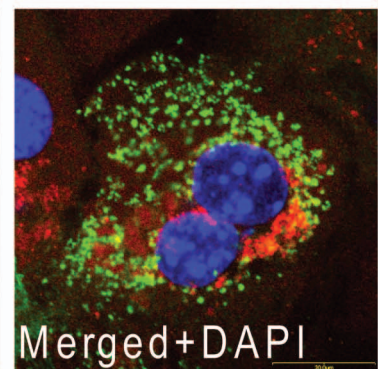
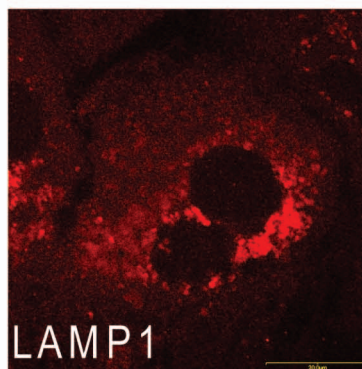
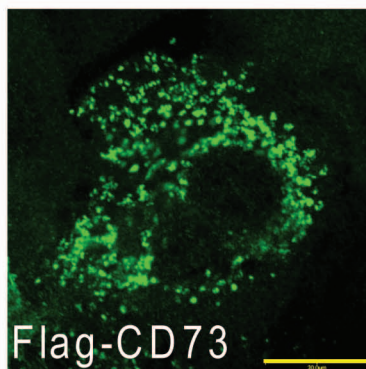
Early
endosomes

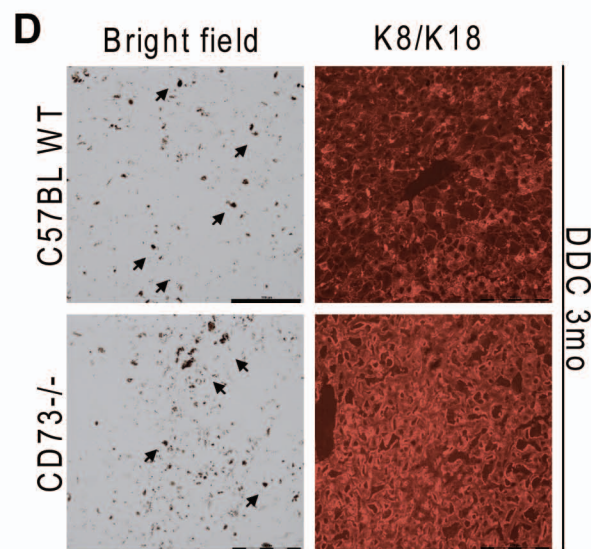
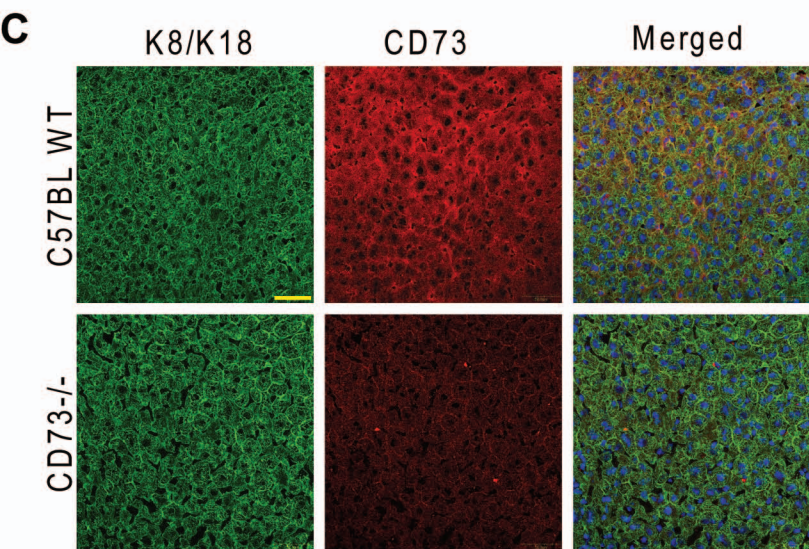
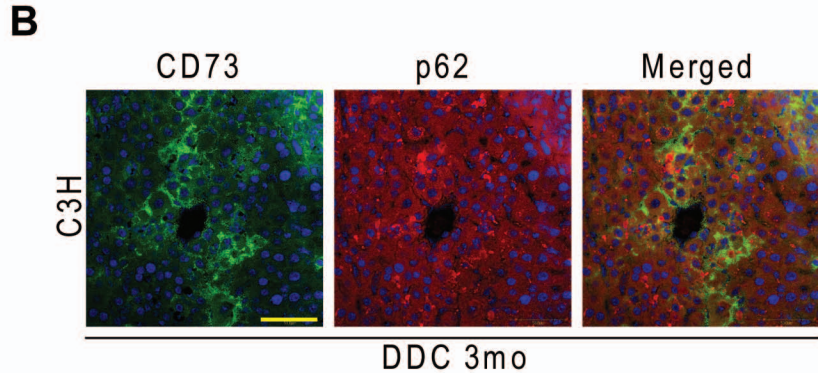
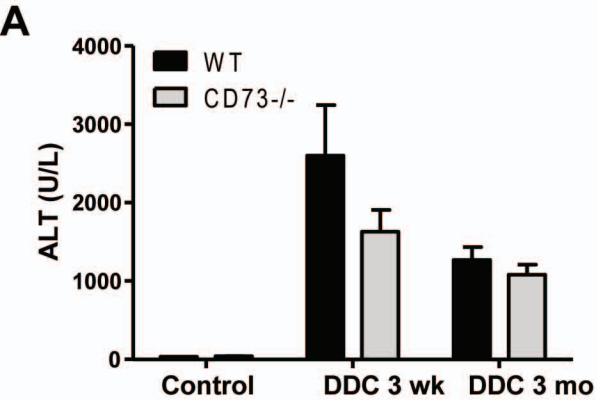


Golgi



Lysozomes





Supplementary Figure 2

Supplementary Table 1. Primers used for qPCR of human (h) and mouse (m) genes	
h18S-F	CCATCCAATCGGTAGTAGCG
h18S-R	GTAACCCGTTGAACCCATT
hCD73-F	CTCCTCTCAATCATGCCGCT
hCD73-R	CAAATGTGCCTCCAAAGGGC
hCOL1A1-F	GAACATCACCTACCACTGCA
hCOL1A1-R	GTTGGGATGGAGGGAGTTTA
hCXCL10-F	TTTGCTGCCTTATCTTTCTGACTC
hCXCL10-R	GATGGCCTTCGATTCTGGATTC
hFABP4-F	CTTAGATGGGGGTGTCCTGGTA
hFABP4-R	AACGTCCCTTGGCTTATGCTC
hIFNG-F	GTTTTGGGTTCTCTTGGCTGTTA
hIFNG-R	TTTGGCTCTGCATTATTTTTCTGT
m18S-F	ACCTGGTTGATCCTGCCAGTAG
m18S-R	TTAATGAGCCATTCGCAGTTTC
mADA-F	CCCTCCCGGCAGATACAGTGG
mADA-R	ACGCCCTCCTTGCCTTCATCT
mAPRT-F	GGCCTCCCATCTGAAGTCCAC
mAPRT-R	GGCCAGCAGGTCATCCACAAT
mCD39-F	CATCCAAGCATCACCAGACT
mCD39-R	ATGATCTTGGCACCCCTGGAA
mCD73-F	CAAGTTCTCTGCAGCAAGTCATTA
mCD73-R	TGTTACAAAGCCAGGTCTCCAG
mPNP-F	CGCCCCCTGCTAAAGCCCTATGG
mPNP-R	GGAGGGGTCTAATCACGGTCACAG
mXO-F	CCTGGCGGACGCGATTGCTAC
mXO-R	ATGGGGCTCGCGGTGATGATG

Supplementary Table 2. Characteristics of human specimens used for qPCR

A

Sample	Ishak Score	Steatohepatitis Grading				Periportal Inflammation	MDBs	Evidence of steatohepatitis
		Steatosis	Lobular Inflammation	Ballooning	Total NASH score			
Control 1	0	0	0	0	0	0	0	No
Control 2	0	0	0	0	0	0	0	No
HCV 1	1	1	1 (mostly lymphocytes)	0	2	2 (mostly lymphocytes)	0	No
HCV 2	2	0	1 (mostly lymphocytes)	0	1	1 (mostly lymphocytes)	0	No
HCV 3	5	0	1 (mostly lymphocytes)	0	1	1 (mostly lymphocytes)	0	No
HCV 4	6	1	1 (mostly lymphocytes)	0	2	2 (mostly lymphocytes)	1	No

Scoring systems:							
Steatosis:		Lobular inflammation		Ballooning and MDBs		Periportal inflammation	
0	<5%	0	No foci	0	None	0	None
1	5-33%	1	<2 foci per 200X field	1	Few	1	Mild
2	33-66%	2	2-4 foci per 200X field	2	Many	2	Moderate
3	>66%	3	>4 foci per 200X field			3	Severe

B

Sample	Fibrosis Grade	Steatosis Grade	Liver Biopsy Reading
NAFLD 1	3	2	Steatosis with bridging and pericellular fibrosis
NAFLD 2	3	1	Mild steatosis with rare ballooning hepatocytes. Bridging fibrosis and focal pericellular fibrosis
NAFLD 3	1	0	Nondiagnostic changes: spotty remote lobular necrosis, mild portal lymphocytosis.
NAFLD 4	1	1	Mild steatosis. Trichrome stain shows no fibrosis

Supplementary Table 3. Statistically-significant metabolite differences between C3H and C57BL mouse livers				
	C3H:C57BL ratio	p value	HMDB Accession #	Function
Amino Acids				
5-aminopentanoate	2.2	0.02	HMDB03355	protein and amino acid biosynthesis
N-alpha-acetyllysine	1.2	0.03	HMDB00446	protein and amino acid biosynthesis
asparagine	0.76	0.01	HMDB33780	nutrient
N-acetylglutamic acid	0.57	0.02	HMDB01138	urea cycle
O-succinyl-L-homoserine	0.36	0.02	N/A	amino acid metabolism
Carbohydrates				
N-acetyl-D-glucosamine	1.9	0.02	HMDB00215	glycoprotein metabolism
6-deoxy-L-galactose	1.3	0.03	HMDB00174	component of N-linked glycans
Vitamins				
tocopherol	1.5	0.01	HMDB01893	antioxidant
retinoate	0.36	0.02	HMDB12874	cell signaling, energy source/storage
Lipids				
behenic acid	0.69	0.03	HMDB00944	cell signaling, energy source/storage