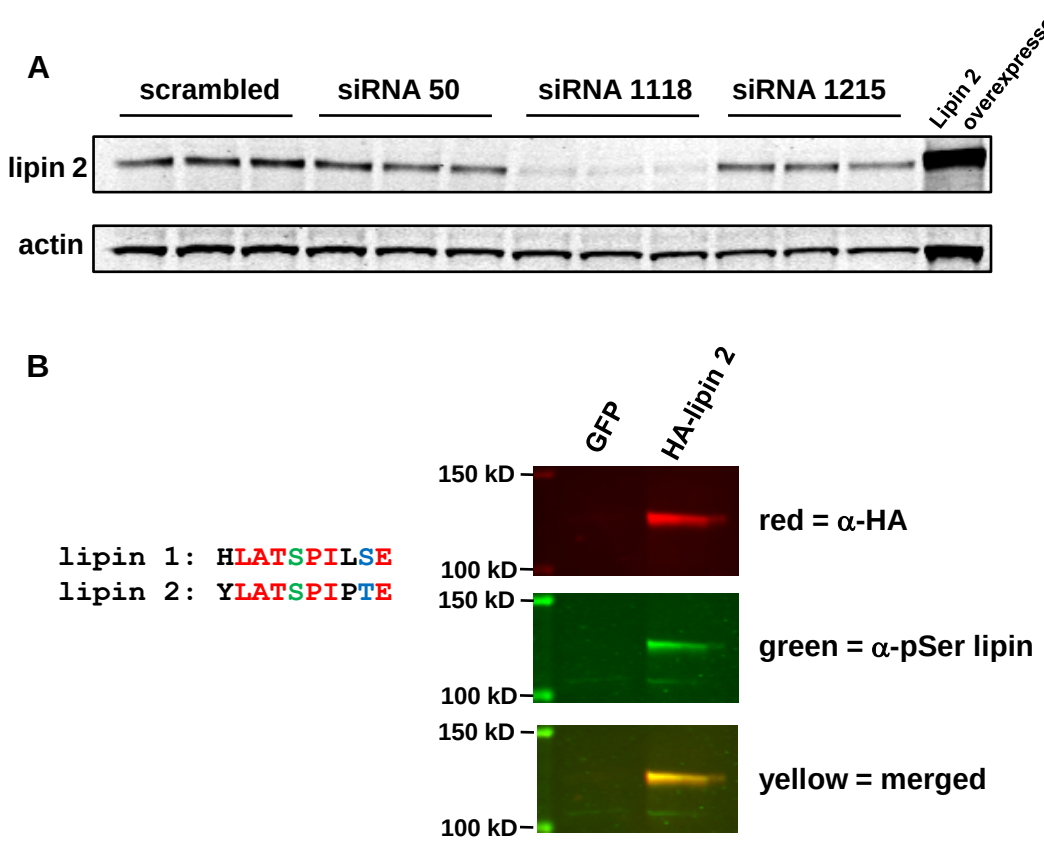
Supplemental Table 1. Primer sequence for PCR analyses

SYBR GREEN RT PCR		
Gene	**Fwd**	**Rev**
36B4	GCAGACAACGTGGGCTCCAAGCAGAT	GGTCCTCCTTGGTGAACACGAAGCCC
Lpin1	AGTCAGCATCGTATCCCAGTTCG	AATCTACCAGGCTGCTGGGG
Lpin2	CAGTGAAGATGAGAAGACGGTTCAGGA	TTCCTTCACAGTGACGAGCACCTG
Lpin3	TCACCCTTCCACGTGCGCTTC	TCTTCCTCATCACTGTCCAGCTCCT

Supplemental Table 2. Profile of TG species in P8 mouse liver. *P*<0.05 *fld* vs. WT for all species.

TG Species	WT nmol/mg protein	*fld* nmol/mg protein	*fld*:WT
C57:2	1.11 ± 0.24	8.00 ± 0.34	7.2
C57:1	0.98 ± 0.19	8.33 ± 0.27	8.5
C56:6	1.65 ± 0.35	24.61 ± 1.95	14.9
C56:5	0.96 ± 0.21	13.76 ± 1.03	14.4
C55:4	0.90 ± 0.24	8.67 ± 0.59	9.6
C55:1	2.68 ± 0.57	18.52 ± 1.32	6.9
C55:0	2.67 ± 0.62	30.71 ± 2.44	11.5
C54:6	2.58 ± 0.56	43.05 ± 4.04	16.7
C54:5	3.81 ± 0.92	79.45 ± 7.67	20.8
C54:4	2.90 ± 0.76	83.86 ± 7.90	28.9
C54:3	2.04 ± 0.48	62.42 ± 5.46	30.6
C53:3	1.37 ± 0.37	13.09 ± 1.01	9.6
C53:2	1.33 ± 0.37	12.91 ± 1.06	9.7
C53:1	0.94 ± 0.21	10.53 ± 0.73	11.3
C52:5	1.11 ± 0.26	34.69 ± 4.68	31.1
C52:4	5.34 ± 1.39	103.70 ± 12.68	19.4
C52:3	8.37 ± 2.29	177.98 ± 19.35	21.3
C52:2	4.23 ± 1.23	111.46 ± 9.65	26.4
C50:3	1.72 ± 0.44	70.72 ± 6.99	41.1
C50:2	2.98 ± 0.77	103.34 ± 9.37	34.7
C50:1	1.64 ± 0.41	49.86 ± 3.24	30.4
C48:2	1.05 ± 0.25	46.06 ± 2.75	44.0
C48:1	0.90 ± 0.21	36.88 ± 1.98	41.1

Supplemental Figure 1



Supplemental Figure 1: Validation of lipin 2 siRNA oligonucleotides and crossreactivity of phosphoserine106 lipin antibody. **[A]** Representative western blots for lipin 2 or actin using lysates from hepatocytes transfected with lipin 2 siRNA oligonucleotides (siRNA 50, 1118, 1215) or scrambled siRNA control oligonucleotide. Based on efficiency, siRNA1118 was chosen for all experiments shown in Figure 8 and Figure 9. **[B]** Inset is the aligned peptide sequence of the region surrounding the serine 106 residue of mouse lipin 1and lipin 2. The phosphorylated serine residue is denoted in green. Representative two color western blots using a LiCor infrared detection system are shown. Hepatocytes were infected with control GFP adenovirus or adenovirus to overexpress HA-tagged lipin 2. The lysates were then concomitantly probed with mouse anti-HA or rabbit anti-phosphoserine 106 lipin 1antibody. Secondary antibodies tagged with red (anti mouse) or green (anti rabbit) fluorophores were then incubated with the blots and detection performed with the LiCor system. Blots were visualized at both wavelengths. Images depict the wavelengths individually or merged. The yellow appearance of the lipin 2 band in the merged image at bottom clearly shows that the phosphoserine106 lipin antibody recognizes lipin 2.