Kidney triglyceride accumulation in the fasted mouse is dependent upon serum free fatty acids.

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Gene Name	Ensembl Gene ID	ΔLog2	padj	Fed				Fasted			
Acer2	ENSMUSG00000038007	0.392	0.121	500.898	776.04	1010.29	507.89	706.85	1097.76	1195.03	784.25
Acer3	ENSMUSG00000030760	0.170	0.238	882.712	797.21	643.27	792.44	850.08	925.51	891.00	819.82
Arsa	ENSMUSG00000022620	-0.161	0.347	361.718	323.12	399.91	386.56	323.66	325.21	267.59	353.00
Asah1	ENSMUSG00000031591	-0.158	0.208	2952.544	2619.00	2353.39	2551.27	2185.65	2407.62	2338.28	2201.60
Asah2	ENSMUSG00000024887	0.058	0.675	3059.720	3469.61	2958.51	3524.10	3295.21	3199.44	3648.40	3366.42
B4galt6	ENSMUSG00000056124	-0.409	0.016	770.326	812.86	891.89	547.62	526.42	470.47	609.03	541.51
Cerk	ENSMUSG00000035891	0.249	0.143	745.021	897.55	782.71	595.94	878.91	1018.06	999.38	904.29
Cers2	ENSMUSG00000015714	0.071	0.721	5180.163	5217.76	3800.42	5054.22	4844.70	5929.70	4968.12	4794.44
Cers3	ENSMUSG00000030510	0.143	NA	2.233	4.60	3.95	6.44	7.44	5.14	1.92	6.22
Cers4	ENSMUSG00000008206	0.165	0.262	250.077	263.28	231.52	260.93	273.44	281.51	269.51	319.21
Cers5	ENSMUSG00000023021	0.039	0.833	1193.819	1204.10	1014.23	1195.10	1157.93	1102.90	1257.38	1080.35
Cers6	ENSMUSG00000027035	-0.082	0.526	2834.204	2737.76	2755.93	2728.44	2511.17	2601.72	2991.42	2596.40
Degs1	ENSMUSG00000038633	-0.383	0.001	5157.835	4875.31	4302.93	4924.29	3543.54	3977.13	3199.54	3344.19
Degs2	ENSMUSG00000021263	0.022	0.945	1215.403	1130.45	776.13	1407.71	1023.07	1416.55	1135.57	981.65
Gal3st1	ENSMUSG00000049721	-0.263	0.067	711.528	624.14	516.98	528.29	503.16	502.60	464.20	521.06
Galc	ENSMUSG00000021003	-0.234	0.127	2872.162	2816.01	3835.94	2738.10	2565.11	2929.50	2553.11	2355.43
Gba	ENSMUSG00000028048	-0.111	0.356	980.956	1013.54	823.49	945.99	875.19	862.53	846.88	874.95
Gba2	ENSMUSG00000028467	-0.146	0.409	366.184	374.67	415.69	414.47	386.91	362.49	373.09	376.12
Gla	ENSMUSG00000031266	0.117	0.559	193.512	208.05	161.80	219.05	198.10	210.81	218.67	201.84
Glb1	ENSMUSG00000045594	-0.256	0.109	4601.861	4898.32	4287.14	4772.89	3529.59	3952.71	3830.63	3155.69
Kdsr	ENSMUSG00000009905	0.011	0.945	1079.945	1096.39	1123.42	1100.61	1140.26	1225.02	1063.64	1012.77
Neu1	ENSMUSG00000007038	-0.454	0.000	13653.005	17105.00	14179.54	16458.69	11170.98	12448.13	10569.24	10650.56
Neu2	ENSMUSG00000079434	-0.200	0.417	183.836	243.95	148.65	241.60	192.52	140.11	211.00	173.39
Neu3	ENSMUSG00000035239	0.116	0.674	113.130	167.54	122.34	100.93	139.51	129.83	117.97	165.39
Phlpp1	ENSMUSG00000044340	0.044	0.767	1213.915	1462.78	1385.20	1342.21	1408.11	1334.28	1447.28	1478.70
Phlpp2	ENSMUSG00000031732	-0.086	0.559	813.494	842.32	966.88	1017.93	854.73	813.68	889.08	876.73
Ppap2b	ENSMUSG00000028517	0.065	0.609	1722.255	1812.59	1724.59	1808.22	2057.30	1754.62	1927.78	1810.36
Sgms1	ENSMUSG00000040451	0.299	0.000	2400.291	2515.90	2427.06	2582.41	3043.16	3208.44	2951.14	2832.92
Sgms2	ENSMUSG00000050931	0.061	0.619	6211.730	6336.24	6345.87	6598.29	6458.35	5916.85	6741.49	7052.95
Sgpl1	ENSMUSG00000020097	0.081	0.432	2632.505	2723.03	2399.43	2612.47	2626.50	2762.39	2690.26	2946.73
Sgpp1	ENSMUSG00000021054	0.283	0.029	5652.779	5315.34	5002.77	6073.22	5915.20	7324.39	6910.29	6061.52
Sgpp2	ENSMUSG00000032908	0.011	0.957	730.135	660.04	801.13	672.18	778.46	628.58	775.91	710.45
Smpd1	ENSMUSG00000037049	-0.265	0.022	2962.220	2874.92	2537.56	2932.46	2207.04	2379.34	2293.20	2120.69
Smpd2	ENSMUSG00000019822	0.079	0.697	1924.699	2077.71	2019.26	1949.96	1765.26	2173.67	2226.06	1855.71
Smpd3	ENSMUSG00000031906	-0.169	0.677	22.328	11.05	17.10	11.81	16.74	16.71	17.26	13.34
Smpd4	ENSMUSG00000005899	-0.038	0.751	788.933	793.53	786.66	823.58	763.58	782.83	789.34	794.92
Sphk1	ENSMUSG00000061878	0.627	0.000	117.596	150.05	169.70	118.11	196.24	221.09	246.49	225.85
Sphk2	ENSMUSG00000057342	0.037	0.883	1064.315	1197.65	1512.80	1438.85	1096.54	1410.12	1293.82	1512.49
Sptlc1	ENSMUSG00000021468	-0.060	0.748	2166.588	2002.23	1677.24	2034.79	1789.44	2006.56	1868.32	1660.09
Sptlc2	ENSMUSG00000021036	-0.149	0.204	3510.751	3695.14	3479.44	3779.66	3143.61	3799.74	3137.20	3041.87
Sptlc3	ENSMUSG00000039092	0.485	0.031	66.241	65.36	59.20	92.34	91.15	129.83	77.69	114.70
Ugcg	ENSMUSG00000028381	-0.183	0.139	718.971	733.69	772.19	671.10	611.05	650.43	658.90	560.18
Ugt8a	ENSMUSG00000032854	-0.461	0.033	5641.615	4114.00	3955.64	3431.76	2433.97	2488.60	3885.30	2255.84

Supplemental Table 1. Genes associated with ceramide biosynthesis. Genes were identified using sphingolipid metabolism KEGG database (Pathway map mmu00600). Differentially expressed genes were identified with Bioconductor package DEseq2 (3.2) and Benjamini and Hochberg's method was used to control for false discovery rate (FDR).

Gene	Orientation	Sequence
Aox	forward	CAGGAAGAGCAAGGAAGTGG
	reverse	GACATCTGAGCCCCTGTGAT
Cpt1a	forward	CATGTCAAGCCAGACGAAGA
	reverse	TGGTAGGAGAGCAGCACCTT
Acsl1	reverse	CTTGAACCCCTTCTGGATCA
	forward	TGACCTCTCCATGCAGTCAG
Angptl4	forward	AGCAGAGATACCTATCAAAGCAGAA
	reverse	AGTCATCTCACAGTTGACCAAAAAT
Atgl	forward	CGCCTTGCTGAGAATCACCAT
	reverse	AGTGAGTGGCTGGTGAAAGGT
Cd36	forward	TGTGTTTGGAGGCATTCTCA
	reverse	TGGGTTTTGCACATCAAAGA
Fatp2	forward	ATGCCGTGTCCGTCTTTTAC
	reverse	GACCTGTGGTTCCCGAAGTA
Hsl	forward	ACACAAATCCCGCTATG
	reverse	CTCGTTGCGTTTGTAGT
Lpl	forward	GCTGGTGGGAAATGATGTG
	reverse	TGGACGTTGTCTAGGGGGTA
18s rRNA	forward	CCATCCAATCGGTAGTAGCG
	reverse	GTAACCCGTTGAACCCCATT
Srebp1c	forward	GGAGCCATGGATTGCACATT
	reverse	GGCCCGGGAAGTCACTGT
Vldlr	forward	TGACGCAGACTGTTCAGACC
	reverse	GCCGTGGATACAGCTACCAT
Fasn	forward	TTGCTGGCACTACAGAATGC
	reverse	AACAGCCTCAGAGCGACAAT
Dgat1	forward	GTGCACAAGTGGTGCATCAG
	reverse	CAGTGGGATCTGAGCCATCA
Dgat2	forward	CTGTCACCTGGCTCAACAGA
	reverse	TATCAGCCAGCAGTCTGTGC
Plin2	forward	CTACGACGACACCGAT
	reverse	CATTGCGGAATACGGAG
Plin5	forward	GTGATCAGACAGCTCAGGACCCT
	reverse	CGATTCACCACATTCTGCTGG

Supplemental Table 2. Primer sequences for quantitative PCR.