Supplementary Table 1. Microarray analysis of the inflammation related, PGC-1α regulated genes in mouse hepatocytes. The data was filtered to contain only genes up- or downregulated at least 1.5 fold in the same direction by both PGC-1α-Ad and fasting. To identify the genes involved in inflammatory processes the data was analyzed with the Ingenuity software and the genes falling into categories immunological disease and inflammatory disease were selected. Several of the filtered genes are considered having primarily metabolic functions although associated with inflammation in certain context.

#	Gene Name	PGC1a-Ad/ GFP-Ad	GFP-Ad/ Not Infected	Fasted/ Fed	Unigene Symbol	Description
1	Aco2	3,67	1,07	1,68	Mm_154581	aconitase 2, mitochondrial
2	Txnip	3,50	-1,17	8,88	Mm_410189	thioredoxin interacting protein
3	Brap	3,19	1,01	2,67	Mm_153372	BRCA1 associated protein
4	Cd36	3,04	-1,03	4,11	Mm_18628	CD36 antigen
5	Il15ra	2,57	1,05	1,64	Mm_200196	interleukin 15 receptor, alpha chain
6	Mgrn1	2,46	-1,23	1,53	Mm_291326 Mm_391848	mahogunin, ring finger 1
7	Mertk	2,44	1,23	1,64	Mm_239655	c-mer proto-oncogene tyrosine kinase
8	Kiaa0564	2,32	-1,55	3,02	Mm_159651	RIKEN cDNA 1300010F03 gene
9	Tmem135	2,07	-1,16	1,56	Mm_208477	transmembrane protein 135
10	Il1rn	2,01	1,15	2,04	Mm_882	interleukin 1 receptor antagonist
11	Cyp17a1	1,95	1,00	24,65	Mm_1262	cytochrome P450, family 17, subfamily a, polypeptide 1
12	Acad10	1,86	-1,85	2,04	Mm_45423	acyl-Coenzyme A dehydrogenase family, member 10
13	Cpt1a	1,86	-1,07	3,35	Mm_18522	carnitine palmitoyltransferase 1a, liver
14	D1Ertd53e	1,82	1,13	1,94	Mm_382288	DNA segment, Chr 1, ERATO Doi 53, expressed
15	Tmem86a	1,78	-1,57	1,86	Mm_27338	transmembrane protein 86A
16	Lipe	1,78	-1,32	1,97	Mm_333679	lipase, hormone sensitive
17	Lgals4	1,76	-1,29	8,36	Mm_210336	lectin, galactose binding, soluble 4
18	Slc17a1	1,75	-1,34	1,65	Mm_2656	solute carrier family 17 (sodium phosphate), member 1
19	Slc25a13	1,69	1,13	1,62	Mm_24513	solute carrier family 25 member 13
20	Esrrg	1,67	1,12	1,52	Mm_89989 Mm_388156	estrogen-related receptor gamma
21	Frap1	1,66	1,02	2,46	Mm_21158	FK506 binding protein 12-rapamycin associated protein 1
22	Atg16l1	1,56	-1,22	1,58	Mm_272972	autophagy-related 16-like 1 (yeast)
23	Rxrg	1,52	-1,16	1,53	Mm_3475	retinoid X receptor gamma
24	Acot12	1,52	-1,10	2,78	Mm_275963	acyl-CoA thioesterase 12
25	Lgals1	-1,50	1,01	-2,82	Mm_43831	lectin, galactose binding, soluble 1
26	Gmds	-1,52	1,03	-1,54	Mm_247143	GDP-mannose 4, 6-dehydratase
27	Narg1l	-1,53	1,52	-1,60	Mm_24425	NMDA receptor regulated 1-like
28	Pkhd1	-1,56	-1,80	-2,19	Mm_249253	polycystic kidney and hepatic disease 1
29	Ube2l6	-1,56	-1,07	-1,64	Mm_38261	ubiquitin-conjugating enzyme E2L 6
30	Crem	-1,56	-1,03	-1,99	Mm_5244	cAMP responsive element modulator
31	Aacs	-1,63	1,18	-4,89	Mm_439974	acetoacetyl-CoA synthetase
32	Tubb5	-1,65	1,22	-2,10	Mm_273538 Mm_472638	tubulin, beta 5
33	Cxcl1	-1,66	-1,17	-6,08	Mm_21013	chemokine (C-X-C motif) ligand 1
34	Tnfsf12*	-1,67	-3,69	-1,57	Mm_8983	tumor necrosis factor (ligand) superfamily, member 12
35	Alcam	-1,69	-1,01	-1,90	Mm_288282	activated leukocyte cell adhesion molecule
36	Slc25a37	-1,71	1,16	-2,55	Mm_293635	solute carrier family 25, member 37
37	Thbd	-1,71	-1,03	-1,62	Mm_24096	thrombomodulin
38	Egfr	-1,78	-1,29	-8,94	Mm_8534 Mm_420648 Mm_439882	epidermal growth factor receptor
39	Hspa1a	-1,80	5,54	-3,12	Mm_6388	heat shock protein 1A

40	**Nup155**	-1,82	1,43	-2,20	Mm_295168	**nucleoporin 155**
41	**Pfkfb3**	-1,96	1,82	-3,92	Mm_19669	**6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3**
42	**Psmb9**	-2,01	1,39	-2,28	Mm_390983	**proteasomesubunit, beta type 9**
43	**Cadps2**	-2,08	1,20	-2,56	Mm_259632 Mm_379572	**Ca2+-dependent activator protein for secretion 2**
44	**Fasn**	-2,16	1,19	-4,22	Mm_236443	**fatty acid synthase**
45	**Rfc5**	-2,23	1,53	-1,95	Mm_27997	**replication factor C (activator 1) 5**
46	**Ccl9**	-2,27	-1,22	-1,58	Mm_416125	**chemokine (C-C motif) ligand 9**
47	**Hnmt**	-2,44	1,24	-1,72	Mm_33120	**histamine N-methyltransferase**
48	**Slc10a2**	-2,45	2,82	-1,76	Mm_3500	**solute carrier family 10, member 2**
49	**Rcn1**	-2,58	-1,14	-1,54	Mm_4876	**reticulocalbin 1**
50	**Serpine2**	-2,62	1,03	-2,21	Mm_3093	**serine (or cysteine) peptidase inhibitor, clade E, member 2**
51	**Pold2**	-2,78	2,02	-3,95	Mm_35788	**polymerase (DNA directed), delta 2, regulatory subunit**
52	**Tk1**	-3,29	2,43	-2,53	Mm_2661	**thymidine kinase 1**
53	**Cd24a**	-3,38	1,37	-3,30	Mm_29742	**CD24a antigen**
54	**Dck**	-3,57	2,46	-2,33	Mm_298892	**deoxycytidine kinase**
55	**Tpst1**	-3,77	1,62	-2,09	Mm_332720	**protein-tyrosine sulfotransferase 1**
56	**Cnpy4**	-3,77	1,72	-1,58	Mm_24592	**canopy 4 homolog (zebrafish)**
57	**Steap4**	-4,49	1,66	-3,47	Mm_31403	**STEAP family member 4**
58	**Msh6**	-5,21	2,05	-1,52	Mm_18210	**mutS homolog 6 (E, coli)**

* name Tweak is used in this publication