

## Data Supplements

**Supplemental Table 1.** The other significantly changed genes in lipid metabolism-related pathways by dexamethasone administration in ethanol-fed mouse liver via microarray analysis (Ethanol plus DEX vs. Ethanol).

EnterzGen	Symbol	<i>q</i> -value	log <sub>2</sub> (fold change)
Mmu00140 Steroid hormone biosynthesis			
13074	Cyp17a1	0.0004	2.202
15496	Hsd3b5	0.0008	2.370
20860	Sult1e1	0.0024	1.602
13112	Cyp3a11	0.0029	1.306
13113	Cyp3a13	0.0034	1.089
27400	Hsd17b6	0.0042	-1.146
12846	Comt	0.0053	0.221
56388	Cyp3a25	0.0057	0.808
71773	Ugt2b1	0.0090	0.122
72094	Ugt2a3	0.0145	-0.498
394436	Ugt1a1	0.0161	-0.409
231396	Ugt2b36	0.0202	0.287
100727	Ugt2b34	0.0224	-0.104
15486	Hsd17b2	0.0283	0.107
57357	Srd5a3	0.0340	-0.014
15493	Hsd3b2	0.0448	0.149
394434	Ugt1a9	0.0503	0.367
14979	H2-Ke6	0.0518	-0.460
394433	Ugt1a5	0.0597	0.134
552899	Ugt2a2	0.0709	0.049
22236	Ugt1a2	0.0934	0.022
Mmu00120 Primary bile acid biosynthesis			
13123	Cyp7b1	0.0006	1.481
56050	Cyp39a1	0.0102	1.248
26459	Slc27a5	0.0117	0.047
12012	Baat	0.0292	0.129
15488	Hsd17b4	0.0719	0.131
101502	Hsd3b7	0.0752	-0.034
17117	Amacr	0.0999	0.042
Mmu00830 Retinol metabolism			
13094	Cyp2b9	0.0000	-5.443

13086	Cyp2a4	0.0005	-1.954
13089	Cyp2b13	0.0009	-2.706
13082	Cyp26a1	0.0033	0.588
243881	Cyp2b23	0.0040	-0.158
19683	Rdh16	0.0056	-1.371
19682	Rdh5	0.0056	0.657
26358	Aldh1a7	0.0100	0.719
13087	Cyp2a5	0.0421	-0.672
67442	Retsat	0.0434	0.376
13088	Cyp2b10	0.0482	0.651
232174	Cyp26b1	0.0681	-0.257

Mmu04146 Peroxisome

11611	Agxt	0.0023	-1.296
18631	Pex11a	0.0030	-0.630
56794	Hacl1	0.0077	0.720
19301	Pxmp2	0.0113	0.485
15112	Hao1	0.0131	0.841
19193	Pipox	0.0139	-0.504
212503	Paox	0.0254	-0.331
18632	Pex11b	0.0263	0.252
19302	Pxmp3	0.0279	0.507
19298	Pex19	0.0311	0.281
19299	Abcd3	0.0314	-0.154
26874	Abcd2	0.0333	-0.138
18634	Pex7	0.0393	-0.044
11666	Abcd1	0.0425	0.079
67993	Nudt12	0.0427	0.759
54683	Prdx5	0.0430	0.369
17527	Mpv17	0.0474	0.036
20655	Sod1	0.0504	-0.129
15356	Hmgcl	0.0546	-0.126
68603	Pmvk	0.0712	-0.009
72129	Pex13	0.0844	0.261
56535	Pex3	0.0850	0.170

Mmu00071 Fatty acid metabolism

277753	Cyp4a12a	0.0001	3.455
13118	Cyp4a12b	0.0002	3.093
13119	Cyp4a14	0.0024	-0.883
666168	Cyp4a31	0.0032	-0.573
13177	Dci	0.0089	-0.401
11370	Acadv1	0.0226	-0.242
11409	Acads	0.0235	-0.503
66885	Acadsb	0.0568	-0.446

231086	Hadhb	0.0899	-0.051
Mmu04142 Lysosome			
74008	Arsg	0.0048	1.223
12512	Cd63	0.0067	-0.111
12757	Clta	0.0090	-0.565
16784	Lamp2	0.0094	0.719
67963	Npc2	0.0127	-0.427
52120	Hgsnat	0.0146	-0.375
19025	Ctsa	0.0184	-0.776
18145	Npc1	0.0273	-0.283
16792	Laptm5	0.0276	-0.700
56629	Dnase2b	0.0315	0.140
27419	Naglu	0.0319	-0.321
110173	Manba	0.0330	-0.233
15586	Hyal1	0.0336	0.315
12751	Tpp1	0.0338	-0.310
17113	M6pr	0.0363	-0.318
17159	Man2b1	0.0383	-0.278
14387	Gaa	0.0433	0.048
15931	Ids	0.0502	-0.299
12752	Cln3	0.0515	-0.325
74105	Gga2	0.0539	-0.249
16783	Lamp1	0.0586	-0.082
67464	Entpd4	0.0588	-0.169
83429	Ctns	0.0605	-0.332
19156	Psap	0.0617	0.038
11765	Ap1g1	0.0635	0.157
67489	Ap4b1	0.0661	0.072
12514	Cd68	0.0697	0.081
13040	Ctss	0.0700	-0.148
11766	Ap1g2	0.0725	0.265
214505	Gnptg	0.0767	0.137
94178	Mcoln1	0.0853	-0.114
64138	Ctsz	0.0868	-0.118
11774	Ap3b1	0.0883	0.126
74325	Cltb	0.0929	0.343
11881	Arsb	0.0951	0.168
19063	Ppt1	0.0971	0.165
16541	Napsa	0.0996	0.076
Mmu00010 Glycolysis / Gluconeogenesis			
103988	Gck	0.0028	-0.144
11671	Aldh3a2	0.0049	-0.819
14377	G6pc	0.0059	-0.900

18770	Pklr	0.0063	-0.570
230163	Aldob	0.0105	-0.337
68263	Pdhb	0.0150	-0.627
58810	Akr1a4	0.0186	-0.313
18655	Pgk1	0.0186	0.455
11674	Aldoa	0.0221	0.515
18642	Pfkm	0.0261	-0.500
18641	Pfkl	0.0358	0.082
18746	Pkm2	0.0392	-0.331
16828	Ldha	0.0406	0.172
72535	Aldh1b1	0.0432	-0.133
14751	Gpi1	0.0437	-0.236
14121	Fbp1	0.0442	-0.411
18597	Pdha1	0.0486	-0.012
11668	Aldh1a1	0.0566	-0.126
14433	Gapdh	0.0652	0.165
11676	Aldoc	0.0682	-0.199
100045967	LOC100045967	0.0704	-0.240
433182	Gm5506	0.0810	-0.172
433229	Gm5514	0.0982	-0.098

Mmu04145 Phagosome

14961	H2-Ab1	0.0028	-1.100
67951	Tubb6	0.0034	-0.449
20390	Sftpd	0.0035	0.779
22154	Tubb5	0.0037	-0.772
71693	Colec11	0.0061	-0.619
12475	Cd14	0.0063	-0.227
73710	Tubb2b	0.0075	0.195
17195	Mbl2	0.0093	-0.839
227613	Tubb2c	0.0098	-0.156
11461	Actb	0.0099	-0.036
14969	H2-Eb1	0.0106	-0.637
14960	H2-Aa	0.0114	-0.730
17533	Mrc1	0.0125	-0.459
19345	Rab5c	0.0190	0.189
20333	Sec22b	0.0192	0.442
16419	Itgb5	0.0210	0.257
56644	Clec7a	0.0214	-0.182
12317	Calr	0.0236	0.755
15040	H2-T23	0.0293	-0.395
13057	Cyba	0.0307	-0.131
66212	Sec61b	0.0358	0.445
280408	Rilp	0.0512	-0.176
22143	Tuba1b	0.0525	0.251

110557	H2-Q6	0.0585	0.055
14972	H2-K1	0.0673	-0.518
22142	Tuba1a	0.0704	0.000
22153	Tubb4	0.0720	0.109
22144	Tuba3a	0.0739	-0.054
53421	Sec61a1	0.0756	-0.030
21826	Thbs2	0.0788	-0.101
19353	Rac1	0.0808	-0.177
53857	Tuba8	0.0880	-0.183
21828	Thbs4	0.0922	0.083
16402	Itga5	0.0930	0.139
20778	Scarb1	0.0940	0.198
14991	H2-M3	0.0989	0.041

Mmu00190 Oxidative phosphorylation

76429	Lhpp	0.0084	-0.667
12856	Cox17	0.0176	-0.186
228033	Atp5g3	0.0185	-0.260
67895	Ppa1	0.0191	0.567
74776	Ppa2	0.0194	-0.141
11973	Atp6v1e1	0.0245	-0.110
11974	Atp6v0e	0.0272	0.484
12864	Cox6c	0.0291	0.229
66218	Ndufb9	0.0304	0.085
66416	Ndufa7	0.0351	-0.108
68375	Ndufa8	0.0367	0.358
66495	Ndufb3	0.0439	0.019
67942	Atp5g2	0.0479	-0.098
66043	Atp5d	0.0480	0.105
12866	Cox7a2	0.0482	0.250
67003	Uqcrc2	0.0545	-0.037
66377	Ndufc1	0.0556	0.144
66142	Cox7b	0.0580	0.218
27425	Atp5j	0.0598	-0.039
71679	Atp5h	0.0626	-0.062
28080	Atp5o (ou)	0.0627	0.180
11957	Atp5j	0.0631	0.272
72900	Ndufv2	0.0638	0.133
68194	Ndufb4	0.0664	0.051
230075	Ndufb6	0.0717	0.252
12865	Cox7a1	0.0729	-0.172
73834	Atp6v1d	0.0731	0.005
11975	Atp6v0a1	0.0731	0.080
11964	Atp6v1a	0.0741	-0.217
22273	Uqcrc1	0.0746	-0.181

11947	Atp5b	0.0769	0.178
66046	Ndufb5	0.0772	0.107
27060	Tcirg1	0.0779	-0.533
17991	Ndufa2	0.0782	0.092
12861	Cox6a1	0.0860	0.089
54405	Ndufa1	0.0867	0.267
66290	Atp6v1g1	0.0873	0.061
66445	Cyc1	0.0998	-0.025

Mmu01040 Biosynthesis of unsaturated fatty acids

170439	Elov16	0.0006	-2.086
26897	Acot1	0.0008	-1.123
171281	Acot3	0.0014	-0.814
68801	Elov15	0.0200	-0.012
76267	Fads1	0.0303	-0.339
111175	Pecr	0.0337	-0.388
171282	Acot4	0.0357	-0.162
171210	Acot2	0.0379	-0.049
70025	Acot7	0.0785	-0.038

Mmu00100 Steroid biosynthesis

66234	Sc4mol	0.0114	1.230
20775	Sqle	0.0131	1.311
73166	Tm7sf2	0.0136	-0.534
223920	Soat2	0.0252	0.002
18194	Nsdhl	0.0309	1.043
15490	Hsd17b7	0.0380	0.595
13121	Cyp51	0.0471	0.794
74754	Dhcr24	0.0664	-0.144
13595	Ebp	0.0870	0.073
12613	Cel	0.0920	-0.081
13095	Cyp2c29	0.0007	-1.989
226143	Cyp2c44	0.0019	-1.785
72082	Cyp2c55	0.0055	-0.780
226105	Cyp2c70	0.0080	-0.205
74519	Cyp2j9	0.0174	-0.390
13077	Cyp1a2	0.0204	-0.960
107141	Cyp2c50	0.0268	-0.713
83702	Akr1c6	0.0423	-0.250
13096	Cyp2c37	0.0719	-0.606
13098	Cyp2c39	0.0842	0.164

Mmu00020 Citrate cycle (TCA cycle)

104112	Acly	0.0022	-1.222
269951	Idh2	0.0191	-0.675

15926	Idh1	0.0248	-0.212
15929	Idh3g	0.0296	0.270
12974	Cs	0.0411	-0.170
18563	Pcx	0.0497	0.149
170718	Idh3b	0.0523	-0.146
18293	Ogdh	0.0607	-0.178
11428	Aco1	0.0617	-0.085
66925	Sdhd	0.0851	-0.125
67834	Idh3a	0.0996	0.116

Mmu00561 Glycerolipid metabolism

225913	Dak	0.0015	-1.179
67800	Dgat2	0.0054	-0.773
19012	Ppap2a	0.0079	-0.383
67512	Agpat2	0.0139	0.742
102247	Agpat6	0.0187	-0.685
11997	Akr1b7	0.0207	0.539
218121	Mboat1	0.0362	0.185
28169	Agpat3	0.0490	0.244
67916	Ppap2b	0.0533	-0.311
14732	Gpam	0.0580	0.395
110524	Dgkq	0.0594	-0.053
231510	Agpat9	0.0619	-0.072
68262	Agpat4	0.0856	-0.078
18947	Pnliprp2	0.0911	-0.125
380921	Dgkh	0.0991	-0.051

Mmu00600 Sphingolipid metabolism

58994	Smpd3	0.0049	0.613
22234	Ugcg	0.0068	-0.520
74442	Sgms2	0.0080	0.449
230379	Acer2	0.0104	-0.495
56632	Sphk2	0.0159	0.062
11883	Arsa	0.0195	-0.385
18010	Neu1	0.0214	0.053
20597	Smpd1	0.0289	0.196
70750	Kdsr	0.0397	-0.174
13244	Degs1	0.0405	-0.488
66190	Acer3	0.0406	-0.327
23956	Neu2	0.0469	0.096
20397	Sgpl1	0.0622	-0.055
11886	Asah1	0.0703	0.041
20598	Smpd2	0.0729	-0.147
70059	Degs2	0.0795	0.057

Mmu00564 Glycerophospholipid metabolism

14571	Gpd2	0.0033	-1.296
12660	Chka	0.0041	-0.767
212862	Chpt1	0.0087	0.925
226856	Lpgat1	0.0109	0.262
192654	Pla2g15	0.0217	0.116
66350	Pla2g12a	0.0230	-0.227
66826	Taz	0.0350	0.196
18777	Lypla1	0.0556	0.599
214253	Etnk2	0.0604	-0.279
69836	Pla2g12b	0.0717	0.199
665270	Plb1	0.0727	-0.081
14712	Gnpat	0.0791	0.090
27388	Ptdss2	0.0820	0.062
28042	Ept1	0.0910	0.158
237625	Pla2g3	0.0927	0.062
66586	Crls1	0.0946	0.272

Mmu04975 Fat digestion and absorption

238055	Apob	0.0033	0.419
11808	Apoa4	0.0052	1.904
27409	Abcg5	0.0135	0.106
20661	Sort1	0.0243	-0.721
17777	Mttp	0.0319	0.459
67470	Abcg8	0.0558	-0.358

---