

The Consumption of Cholesterol-Enriched Diets Conditions the Development of a Subtype of HCC with High Aggressiveness and Poor Prognosis

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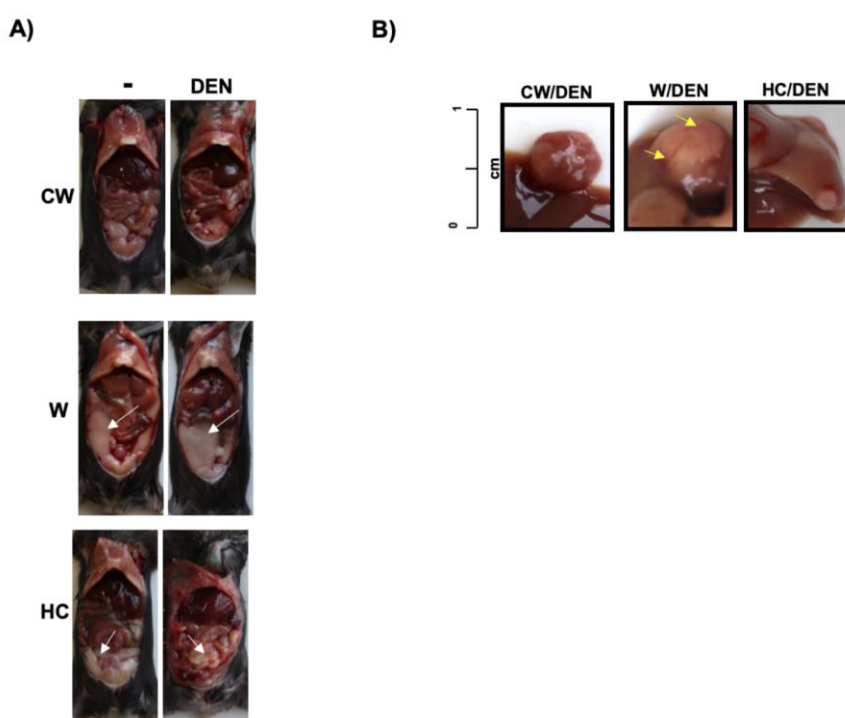


Figure S1. **A)** Gross inspection of mice fed with the different diets and treated or not with DEN. Representative image of at least eight animals, white arrows show adipose tissue. **B)** Tumor gross inspection of mice under different diets. Representative image of at least eight livers, yellow arrows show vascularity. Images are representative of at least eight mice.

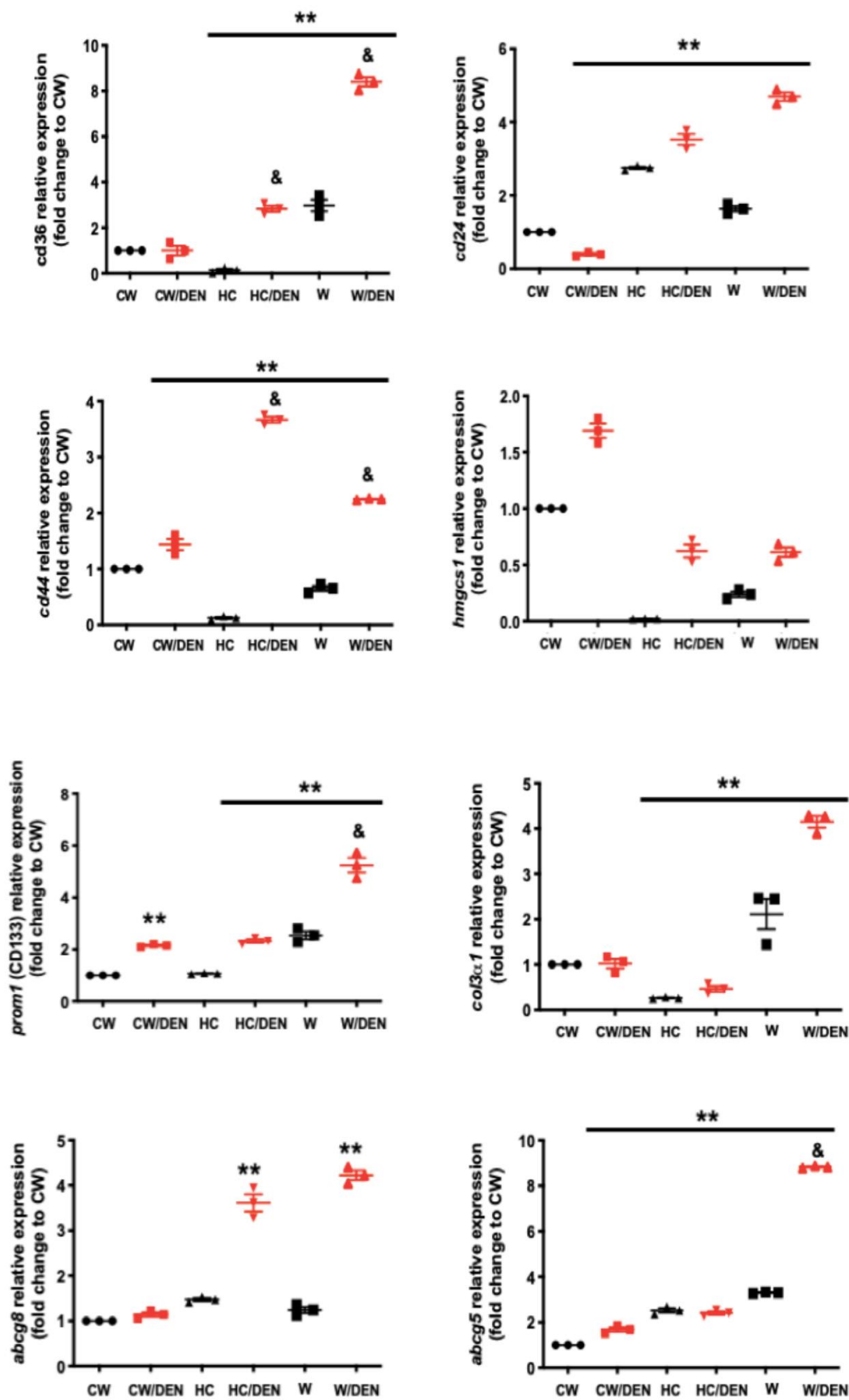


Figure S2. Expression of eight randomly selected genes in samples not included in the RNA-seq, as technical and biological validation. Each graph plots the individual data points, the superimpose horizontal line indicates the arithmetic mean and error bars showing \pm SEM. ** $p < 0.01$ vs CW group; & $p < 0.05$ vs diet control.

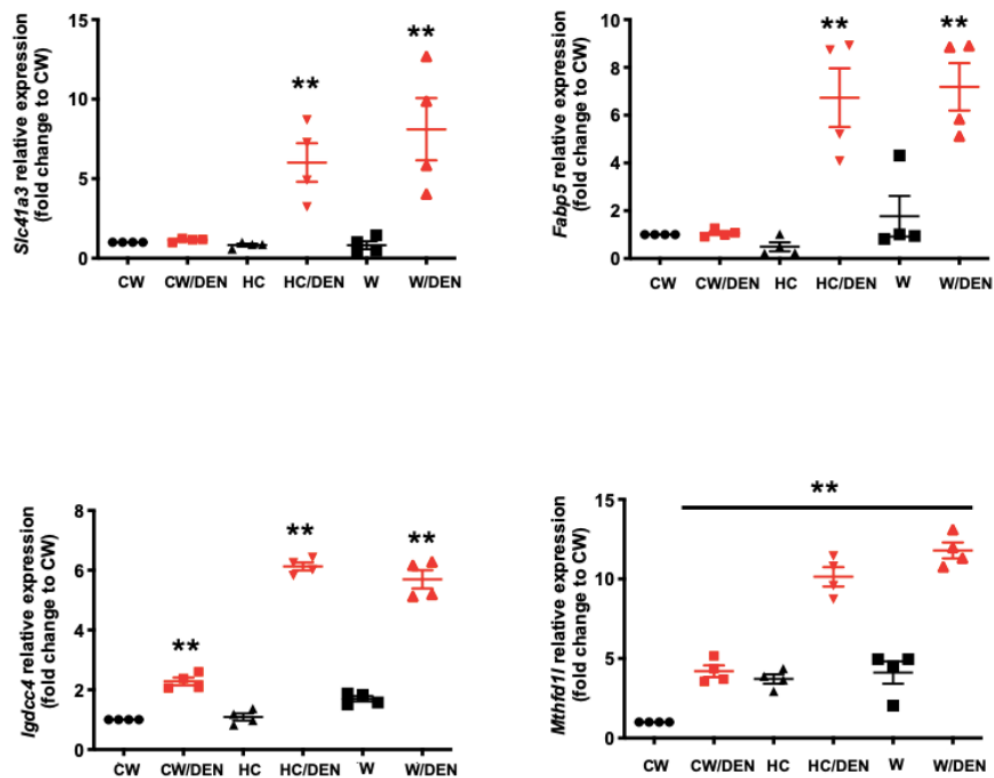


Figure S3. Expression of the 4 genes differentially overexpressed related to high lipid overload with potential relevance in tumor promotion: Mthfd1, Slc41a3, Fabp5, Igdcc4. Each graph plots the individual data points, the superimpose horizontal line indicates the arithmetic mean and error bars showing \pm SEM. ** $p < 0.01$ vs CW group.

Table S1. Mice groups under different diets and treatments.

Group Number	Diet	DEN Single dose (10 ug/kg, ip)	Group ID	Number of Animals (n)
1	Regular Chow	-	CW	8
2	Regular Chow	+	CW/DEN	8
3	Western	-	W	8
4	Western	+	W/DEN	8
5	High cholesterol 1%	-	HC	8
6	High cholesterol 1%	+	HC/DEN	8

Table S2. Primers used in the study.

Gene Name	Ensembl ID	Primer Sequence
Cd24	ENSMUSG00000047139	5'-GCTCCTACCCACGCAGATTT-3' (20)
		5'-TGGTGGTAGCGTTACTTGGGA-3' (20)
Prom1	ENSMUSG00000029086	5'-GAAAAGTTGCTCTGCGAACC-3' (20)
		5'-TCTCAAGCTGAAAAGCAGCA-3' (20)
Cd44	ENSMUSG00000005087	5'-TGGATCCGAATTAGCTGGAC-3' (20)
		5'-AGCTTTTCTTCTGCCACA-3' (20)

Col3a1	ENSMUSG00000026043	5'-GTGTCAAAGGTGAACGTGGC-3' (20) 5'-ATCCCAGCAATCCCAAGTGG-3' (20)
Slc41a3	ENSMUST00000032177	5'-AACAGCCAGACCTTTGTGGTGC-3' (20) 5'-GATGCAGTGGTTGTCAGGATCC-3' (20)
Fabp5	ENSMUST00000029046	5'-GGTGCATTGGTTCAGCATCAGG-3' (20) 5'-TCATAGATCCGAGTACAGGTGAC-3' (20)
Igdcc4	ENSMUST00000035499	5'-CGCACACCTGAATGTCAACTCC-3' (20) 5'-CGTGGATGTCTCCAGTCAAGTG-3' (20)
Mthfd11	ENSMUST00000043735	5'-GCCATGGATGCCTTAAGTTC-3' (20) 5'-AGCCAGGTAAACGAGTGAGC-3' (20)
Cd36	ENSMUST00000082367	5'-CCTTAAAGGAATCCCCGTGT-3' (20) 5'-TGCATTTGCCAATGTCTAGC-3' (20)
Hmgcs1	ENSMUST00000179869	5'-TTTGATGCAGCTGTTGAGG-3' (20) 5'-CCACCTGTAGGTCTGGCATT-3' (20)
Abcg8	ENSMUST00000045714	5'-CCTGATCCGTCGTCAGATTT-3' (20) 5'-CCATGGCCGTAGTAAAGGAA-3' (20)
Abcg5	ENSMUST00000066175	5'-CGTCCAGAACAACACGCTAA-3' (20) 5'-GCAGCATCTGCCACTTATGA-3' (20)
Rps18	ENST00000414228	5'-TGTGGTGTGAGGAAAGCAG-3' (20) 5'-TCCCATCCTTCACATCCTTC-3' (20)

Table S3. Antibodies used in the study.

Antibody	Brand	Catalog number	Dilution
CD34	Abcam	ab81289	1:1000
F4/80	Abcam	ab60343	1:1000
CD206	Santa Cruz	sc-376232	1:250

Table S4. Gene expression profile of W/DEN vs CW/DEN.

Symbol	log2FoldChange	pvalue	padj
Lcn2	6.144249476	3.45E-37	7.73E-35
Klrb1b	6.02917133	1.11E-16	6.13E-15
Cyp2a4	6.005827794	3.82E-63	2.57E-60
Apoa4	5.998886702	2.12E-228	3.42E-224
Gpc3	5.982100042	5.65E-14	2.34E-12
Gldn	5.970045534	2.88E-16	1.51E-14
Ly6d	5.92348089	1.03E-13	4.09E-12
5330417C22Rik	5.584570455	6.93E-26	8.27E-24
Akr1c18	5.429597703	5.65E-14	2.34E-12
Mmp12	5.416961539	2.99E-14	1.28E-12
Tspan8	5.323519633	7.47E-20	5.57E-18
Kif5c	5.323052085	8.00E-11	2.28E-09
Cacna1b	4.696180458	4.37E-11	1.29E-09
Gm14936	4.627904898	3.66E-10	9.46E-09
Cd63	4.576152649	1.61E-15	7.70E-14
Adcy1	4.409834832	8.07E-23	7.60E-21

Serpina12	4.360637563	1.47E-93	3.96E-90
Il1rn	4.355639448	2.92E-10	7.70E-09
Mep1b	4.27501959	1.33E-07	2.21E-06
GpnmB	4.237963381	1.38E-13	5.39E-12
Cdh17	4.185554666	4.76E-09	1.01E-07
Ifi2712b	4.159263621	3.34E-22	3.01E-20
Rgs16	4.156732381	1.62E-26	2.06E-24
Aebp1	4.152364362	2.22E-15	1.05E-13
Fgf21	4.144283377	2.44E-10	6.51E-09
Cyp2b13	4.056988206	1.05E-08	2.13E-07
Psat1	4.051031065	3.79E-07	5.79E-06
Gria3	4.015795605	9.03E-13	3.25E-11
Pnpla5	3.990753527	7.98E-09	1.65E-07
Tlr1	3.981567094	3.44E-13	1.30E-11
Vmn2r3	3.903778609	8.36E-08	1.46E-06
Galnt6	3.87819635	1.33E-12	4.71E-11
Sgsm1	3.874246865	4.89E-10	1.24E-08
Mmp13	3.872872042	1.56E-08	3.09E-07
Nrg1	3.860096689	3.95E-08	7.28E-07
Nid1	3.846041182	1.50E-164	8.04E-161
Afp	3.822330051	3.09E-24	3.28E-22
Ocstamp	3.800300586	1.89E-14	8.19E-13
Shc2	3.796698238	9.08E-09	1.85E-07
Fam83a	3.751915473	1.96E-07	3.17E-06
Fst	3.736884935	5.20E-11	1.52E-09
Tmem54	3.607996424	4.29E-07	6.47E-06
Esm1	3.603017942	3.58E-09	7.82E-08
Fstl4	3.523169199	3.33E-06	4.23E-05
Spink1	3.521534323	9.87E-07	1.40E-05
Lpar2	3.515135681	9.05E-08	1.56E-06
Slc24a3	3.466003116	5.85E-06	7.07E-05
Crybg2	3.459202163	2.28E-10	6.11E-09
Itih5	3.456801018	7.12E-37	1.57E-34
Ccdc120	3.436843765	2.05E-06	2.73E-05
Itgax	3.428892088	3.91E-10	1.01E-08
Ptpre	3.415252249	3.39E-15	1.58E-13

B4gal6	3.413139284	2.21E-17	1.32E-15
Dab1	3.411976156	1.84E-06	2.48E-05
Dusp5	3.403156029	4.26E-07	6.43E-06
Lpl	3.379294591	5.62E-39	1.37E-36
Rad51b	3.350889497	8.07E-08	1.41E-06
Stap1	3.333851029	1.47E-07	2.44E-06
Clec7a	3.322445914	1.36E-14	5.94E-13
Mtmr11	3.320308971	3.46E-12	1.18E-10
Kazald1	3.319635151	8.19E-06	9.57E-05
Spp1	3.30271085	1.85E-76	2.30E-73
Golm1	3.29253552	7.04E-18	4.47E-16
Igfbp1	3.281109685	7.00E-17	3.94E-15
Cacna1c	3.133815428	6.05E-09	1.26E-07
Neurl1a	3.115707478	1.97E-06	2.64E-05
Abcd2	3.113308463	4.28E-44	1.28E-41
Tff3	3.111638191	6.74E-07	9.80E-06
Ntrk2	3.096815611	1.22E-06	1.71E-05
Gm13387	3.093223938	1.17E-08	2.36E-07
Trem2	3.084582288	7.70E-07	1.11E-05
Mpped1	3.084508324	1.11E-05	0.00012532
Tmem86a	3.083149209	3.94E-19	2.81E-17
Rasal1	3.078432784	4.43E-05	0.00043346
Tlr13	3.037861586	4.65E-07	6.94E-06
Ipcef1	3.002340096	9.61E-08	1.65E-06
Igsf23	2.993160174	2.67E-05	0.00027774
Phgdh	2.967018996	3.65E-07	5.59E-06
Zfp57	2.95800455	7.73E-08	1.36E-06
Saa1	2.939575243	5.82E-15	2.67E-13
Rims2	2.934984852	3.41E-09	7.46E-08
Tnfrsf12a	2.929747583	1.38E-14	6.02E-13
Cd14	2.913639412	1.29E-07	2.17E-06
Scd2	2.898182419	1.54E-12	5.41E-11
Mpeg1	2.880338559	6.43E-50	2.53E-47
F2rl1	2.874831327	8.03E-05	0.00074066
Aspm	2.864264918	8.47E-08	1.47E-06
Itga2	2.856246294	1.50E-07	2.48E-06

Ddr1	2.851998527	7.26E-08	1.28E-06
Osbp13	2.843868969	4.45E-47	1.49E-44
Lyve1	2.835994713	9.52E-18	5.99E-16
Cntnap1	2.795180228	9.03E-16	4.45E-14
Ptges	2.779583209	7.48E-05	0.0006955
Col1a1	2.757587669	5.89E-30	9.49E-28
Cdhr2	2.748217767	6.50E-05	0.00061257
Ccl6	2.744812808	1.28E-08	2.58E-07
Serpine1	2.741809992	8.27E-06	9.64E-05
Mthfd11	2.740371517	3.95E-06	4.95E-05
Cers6	2.736767355	8.29E-47	2.73E-44
H19	2.736502713	0.00067516	0.00475947
Plch1	2.731543411	5.29E-05	0.00051154
Cenpf	2.726498734	1.56E-08	3.09E-07
Fhl3	2.725248034	0.00019505	0.00162339
Ephb2	2.719101785	3.47E-05	0.00034986
Abhd2	2.718082453	7.11E-217	5.73E-213
Scn8a	2.714650239	2.42E-11	7.46E-10
Cxcl9	2.710852908	6.14E-11	1.77E-09
Col4a3	2.707018975	2.54E-13	9.72E-12
Stambp11	2.705549328	3.43E-06	4.35E-05
Smpd3	2.699862618	7.93E-10	1.94E-08
Cyp2b9	2.697233386	4.59E-07	6.86E-06
Tnfsf13	2.684083382	1.63E-05	0.00017735
Inhbb	2.680214602	2.54E-06	3.32E-05
Tmem229a	2.674392393	3.60E-09	7.85E-08
Anxa2	2.673682501	1.99E-25	2.31E-23
Tnfrsf21	2.669529818	5.29E-17	3.02E-15
Myo5c	2.667275002	4.16E-06	5.17E-05
Slc41a3	2.666553276	1.10E-07	1.86E-06
Btg2	2.666094379	1.08E-26	1.40E-24
Saa2	2.664266191	2.12E-10	5.74E-09
Elovl7	2.662217301	5.90E-05	0.00056212
Gdpd1	2.659216565	7.45E-05	0.00069365
Thbs1	2.649147404	8.31E-13	3.03E-11
Saa3	2.643228075	1.16E-12	4.13E-11

Drc1	2.614207271	0.00028636	0.00228438
Ccr2	2.597060547	2.62E-07	4.14E-06
Adgrv1	2.594527936	2.09E-12	7.31E-11
S1pr3	2.59377194	1.06E-09	2.53E-08
Sybu	2.589083503	3.43E-05	0.0003462
Amot	2.583695843	2.60E-18	1.75E-16
Cdkn2b	2.555065459	0.00064067	0.00453819
Zfp37	2.537395818	4.04E-05	0.00040107
Grk3	2.524256683	6.93E-15	3.13E-13
Cidec	2.514018281	1.58E-16	8.58E-15
Csf2rb2	2.499307372	7.50E-08	1.32E-06
Rgs2	2.492034968	1.39E-06	1.91E-05
Lgals3	2.491956101	6.04E-07	8.88E-06
Dbp	2.489564018	9.64E-16	4.73E-14
Pnpla3	2.477318288	4.72E-06	5.80E-05
Klf10	2.472125509	1.97E-24	2.16E-22
Hid1	2.471388538	3.95E-09	8.48E-08
Prom1	2.460917493	5.14E-09	1.08E-07
Psrc1	2.456288419	0.00047032	0.00350232
Ccl2	2.439390774	0.00028694	0.00228786
Cxcl1	2.438947197	1.83E-20	1.43E-18
Nucb2	2.438211173	1.25E-11	3.97E-10
Clmp	2.433136874	2.08E-05	0.00022152
Itpril2	2.419625796	7.15E-16	3.58E-14
P2rx7	2.419230887	5.19E-10	1.31E-08
Cgref1	2.419118996	2.76E-06	3.56E-05
Itga6	2.416334638	3.09E-18	2.04E-16
Haus8	2.410787192	1.66E-09	3.80E-08
Vcam1	2.39863435	6.21E-25	7.00E-23
Scube1	2.391077176	8.31E-05	0.00076263
Mfge8	2.389849401	1.17E-21	1.01E-19
Apoc2	2.383076442	4.14E-55	2.09E-52
Gm5148	2.382471451	0.0001877	0.00156938
Ppl	2.375343956	1.31E-17	8.08E-16
Aqp7	2.373914919	0.00011082	0.0009882
Cyp4f16	2.370935681	4.13E-07	6.26E-06

Tyrobp	2.370759052	1.26E-07	2.12E-06
Aldh112	2.361810969	0.00016621	0.00141031
H2-Eb1	2.361531506	5.89E-18	3.75E-16
Clip2	2.359651495	2.42E-08	4.66E-07
Ear2	2.357276425	1.51E-05	0.00016563
Trpm4	2.355584839	5.90E-06	7.12E-05
Aldh18a1	2.349727646	2.01E-05	0.00021461
Gpc6	2.346035965	1.09E-14	4.82E-13
Thsd4	2.345489729	8.73E-11	2.46E-09
Cyp39a1	2.341430756	1.45E-20	1.14E-18
Blnk	2.334954752	4.19E-06	5.20E-05
Tmc5	2.332712092	2.29E-05	0.0002415
Per3	2.330803004	6.76E-24	6.99E-22
Osbp110	2.325039526	0.00092513	0.00624838
Cdkn1a	2.324510383	5.52E-05	0.0005313
Fndc3b	2.32427769	4.32E-46	1.37E-43
Nipal1	2.323776019	0.00024901	0.0020204
Col1a2	2.309602544	1.46E-22	1.35E-20
A2ml1	2.307187715	1.64E-09	3.76E-08
Ly9	2.302123004	6.50E-05	0.00061257
Plxna3	2.291804826	2.31E-06	3.06E-05
Ctss	2.289402355	8.95E-16	4.43E-14
Sytl5	2.288926722	5.38E-05	0.00051852
Ttc39a	2.280256824	3.17E-07	4.89E-06
Mmp27	2.277287756	9.04E-05	0.00082371
Synj2	2.271732654	1.78E-23	1.77E-21
4930533B01Rik	2.266982713	0.00023034	0.00188403
Trib3	2.264031273	3.72E-08	6.88E-07
Pold4	2.263891255	6.43E-08	1.15E-06
Zfp9	2.261444305	4.54E-07	6.79E-06
Dhrs9	2.247962773	8.38E-06	9.72E-05
Cyb561	2.241014518	4.60E-08	8.34E-07
Lratd2	2.214377289	2.84E-08	5.40E-07
Slc9a7	2.214083291	6.54E-05	0.00061624
Myof	2.213632764	9.42E-13	3.38E-11
Mki67	2.210226447	1.55E-08	3.07E-07

Fabp5	2.195864893	6.44E-07	9.40E-06
Aig1	2.177834152	1.12E-17	6.90E-16
Ptafr	2.164696117	0.00015537	0.00132535
Cd300lb	2.161787797	0.00045363	0.00339839
Cdh1	2.158855866	3.03E-10	7.95E-09
Tmem71	2.158021359	6.29E-05	0.0005951
Pck2	2.154974385	4.65E-05	0.00045334
Ms4a7	2.148683775	0.00094351	0.00634597
Pls1	2.144821815	0.00119133	0.0077228
Lgmn	2.139916522	2.52E-28	3.68E-26
Clca3a1	2.129845364	5.68E-16	2.89E-14
Rgs1	2.127915165	4.30E-05	0.00042282
Uap1l1	2.126011657	1.22E-09	2.88E-08
Hist1h2bq	2.122830485	0.00106766	0.00705443
Ifngr1	2.122695129	8.25E-33	1.53E-30
Plaur	2.120818652	7.77E-05	0.00071885
Tenn4	2.120215357	0.00031226	0.00245694
Cd44	2.118857539	6.70E-14	2.73E-12
Chka	2.112119284	2.64E-64	1.94E-61
Ccnd1	2.105009198	5.18E-13	1.91E-11
Nxn	2.098769673	1.85E-05	0.00019942
Adamts14	2.096663088	6.38E-08	1.14E-06
Plau	2.096088307	1.50E-05	0.00016505
Rhoc	2.087570833	2.76E-06	3.56E-05
Tmsb10	2.084767353	0.00055356	0.00402002
Pak1	2.084046828	8.28E-06	9.65E-05
Clcf1	2.082831361	3.31E-05	0.00033561
Alox5	2.080139032	3.04E-05	0.00031091
Tnfrsf11a	2.079841506	0.00053894	0.00393339
Airn	2.07778919	1.41E-10	3.88E-09
Tnc	2.076463773	4.73E-09	1.00E-07
S100a11	2.074586646	0.00155018	0.00967253
Itga4	2.0697042	6.05E-14	2.49E-12
Top2a	2.06920185	1.34E-06	1.85E-05
Plat	2.067626229	0.00019791	0.00164471
Mt1	2.065345283	3.83E-06	4.82E-05

Sorl1	2.06425559	3.01E-09	6.66E-08
Cidea	2.062952498	1.12E-07	1.89E-06
Cav2	2.059943922	8.12E-06	9.50E-05
Rab3d	2.059359288	5.98E-10	1.49E-08
Racgap1	2.058647513	0.00126727	0.00814629
Sorbs2os	2.057231232	2.20E-08	4.26E-07
Slfn2	2.051856371	0.00028136	0.0022489
Armcx4	2.049880067	2.73E-07	4.29E-06
Igdcc4	2.04744231	4.06E-05	0.00040259
Prrg4	2.044328275	0.00022361	0.00183552
Hmmr	2.040418241	0.00077111	0.00534244
Sh3pxd2b	2.039313322	2.28E-08	4.42E-07
Themis	2.036090623	3.09E-07	4.80E-06
Gprc5b	2.035933862	2.39E-05	0.00025107
Apcs	2.034057776	2.26E-15	1.07E-13
Armcx3	2.033675608	1.48E-07	2.45E-06
Mycn	2.032896971	0.00014263	0.0012316
Arhgef2	2.032158894	1.48E-15	7.09E-14
Ifi44	2.028151729	2.98E-05	0.00030644
Tbc1d31	2.026138649	8.34E-21	6.72E-19
Cybb	2.021824646	5.91E-12	1.95E-10
01-Mar	2.017332258	2.90E-05	0.0002996
Gm3362	2.016537573	0.00041079	0.00311951
Eda2r	2.013191446	0.00030824	0.00243034
Sectm1a	2.011485935	0.00149449	0.00937516
Alcam	2.008441098	4.70E-49	1.76E-46
Cd300a	2.003783179	1.01E-06	1.43E-05
Hist1h2ao	2.002258246	0.00133926	0.0085211
Zfp641	1.999180812	0.00022993	0.00188171
H2-Aa	1.996746996	1.32E-19	9.74E-18
Slc20a1	1.993564182	1.29E-22	1.20E-20
H2-Ab1	1.990283577	4.48E-11	1.32E-09
Unc5b	1.981868871	7.13E-11	2.04E-09
Itgb2	1.981533095	3.09E-09	6.82E-08
Tc2n	1.9793893	2.93E-09	6.48E-08
Zfp462	1.976662646	5.57E-08	1.00E-06

Fkbp11	1.96774403	2.73E-08	5.20E-07
Laptm5	1.966820582	8.67E-11	2.45E-09
Hspa1b	1.9661202	2.18E-05	0.00023133
Sirpa	1.963354166	4.93E-13	1.83E-11
Atf3	1.95865219	0.00042894	0.00323451
Adam8	1.956669092	0.00035234	0.00273392
Capg	1.949540172	0.00049362	0.00365158
Steap4	1.94522797	9.49E-51	3.92E-48
Cpe	1.94223659	0.00050507	0.00372156
Ms4a6c	1.942105434	3.04E-05	0.00031135
App	1.94074764	2.54E-51	1.11E-48
Tent5a	1.940277244	2.69E-09	5.98E-08
Myo1f	1.939988834	2.05E-07	3.30E-06
Bcl2l11	1.937941196	9.21E-11	2.59E-09
Slamf8	1.935729312	0.00040128	0.00306029
Slc16a6	1.930288195	6.42E-11	1.84E-09
Kdelr3	1.927223109	0.00019632	0.00163319
Cd74	1.926352295	5.83E-17	3.31E-15
Slc7a7	1.925715603	1.08E-07	1.83E-06
Gas2l3	1.918747359	2.86E-06	3.67E-05
Osmr	1.918352355	8.07E-13	2.94E-11
St6gal1	1.917615058	4.04E-31	6.92E-29
Hk2	1.916973912	4.42E-05	0.00043328
Trim68	1.916315378	0.00056074	0.00406122
Col3a1	1.916063709	1.46E-18	1.01E-16
Rnu1b6	1.91557664	0.00020205	0.00167562
Cxcl10	1.91463833	0.0007257	0.00506704
Cln6	1.912779879	2.28E-05	0.00024038
Lepr	1.909726431	1.36E-08	2.73E-07
Arhgap22	1.906662644	0.00106335	0.00702881
Vill	1.903307713	0.00134348	0.00854252
Pdlim7	1.900953814	3.88E-06	4.87E-05
Ncapg2	1.900608338	5.76E-05	0.00055066
Abcc12	1.892579273	0.00109838	0.00721554
Emp1	1.89093594	0.00024446	0.00198847
Glis3	1.888757469	2.34E-06	3.09E-05

C3ar1	1.877795408	1.39E-05	0.00015347
F630028O10Rik	1.874170067	5.12E-06	6.25E-05
Cenpe	1.873568767	9.85E-05	0.00089195
Gpc1	1.86257432	8.71E-16	4.32E-14
Slc35f2	1.856740844	0.00087031	0.00592028
Tceal8	1.849975181	5.62E-05	0.00053919
Rbp1	1.846889149	2.08E-05	0.00022188
Ccnb2	1.846860474	0.00081271	0.00559698
Iqgap1	1.845246997	1.49E-18	1.02E-16
Igfbp3	1.839313448	3.48E-16	1.79E-14
Myo7b	1.839026312	0.00042104	0.00318238
Slc7a1	1.826578349	0.00030299	0.00239568
Soat1	1.825959002	8.31E-09	1.71E-07
Cd24a	1.823651336	0.00040953	0.00311289
A930019D19Rik	1.809683376	3.10E-05	0.00031624
Ckap4	1.807038091	9.97E-06	0.00011415
Caprin2	1.80527918	5.95E-05	0.00056637
Tpm1	1.80377147	6.91E-23	6.56E-21
2010003K11Rik	1.799639339	1.81E-06	2.44E-05
Unc119	1.792666338	1.84E-05	0.0001986
Ubd	1.791322124	0.00135414	0.00859166
Spaca6	1.791203593	1.27E-13	4.96E-12
Bco1	1.788219605	2.99E-06	3.83E-05
Anln	1.788039817	0.00100133	0.00669575
Klf6	1.78493858	5.72E-10	1.43E-08
Parvg	1.782726632	0.00074802	0.00520254
Pcdh17	1.779197215	3.24E-07	4.99E-06
Clec4a2	1.779103037	0.00083926	0.00575276
Abcg1	1.778288222	5.46E-10	1.37E-08
Plagl1	1.777932872	0.00160737	0.00995896
Nrg4	1.77414325	1.02E-07	1.74E-06
Bcl6	1.768638177	1.08E-14	4.81E-13
Klhl13	1.768280147	2.22E-05	0.00023531
Ypel4	1.763981168	0.00046319	0.00345879
Sla	1.761567168	9.15E-06	0.00010562
Ptprc	1.757973018	3.20E-14	1.37E-12

Rcan3	1.754065037	0.00085398	0.00583135
Pla2g7	1.752421985	9.48E-05	0.00086069
Gspt2	1.748023439	0.0008026	0.00553679
Ms4a6b	1.747797594	0.00034304	0.00267565
Cstb	1.74747649	1.86E-05	0.00020055
Plekha1	1.744993802	3.06E-16	1.59E-14
Pfkfb4	1.743930067	0.00044105	0.00331344
Ikbip	1.743825262	1.98E-05	0.00021153
Kbtbd11	1.743478334	0.00063301	0.00449858
Axl	1.740597955	7.51E-15	3.38E-13
Piga	1.737901899	2.45E-08	4.72E-07
Cd68	1.732690243	1.43E-06	1.97E-05
Sh3bp4	1.731174665	0.00018199	0.00153132
Rtn4	1.729241428	5.47E-22	4.80E-20
Snn	1.719382906	0.00107908	0.0071153
Itgam	1.718281949	0.00049928	0.00368564
Tlr9	1.717935175	0.00041333	0.00313735
Psd4	1.710828244	3.01E-06	3.85E-05
Ptgfrn	1.710004553	4.01E-06	5.00E-05
Ica1	1.709254199	3.50E-07	5.38E-06
Cd300lf	1.702908546	0.00010494	0.00094094
Fam217b	1.701728844	0.00103156	0.00686374
Enc1	1.699820951	2.14E-08	4.16E-07
Zfp608	1.699079126	3.70E-08	6.86E-07
Btc	1.695263294	0.00053319	0.00390018
Ly6e	1.694983905	4.78E-23	4.61E-21
Pdgfb	1.694637765	0.00098226	0.0065764
Cd53	1.689134827	4.88E-06	5.98E-05
Kif20b	1.684215837	0.00076769	0.0053233
Hpgds	1.68315584	0.0002706	0.00217259
Prrg1	1.681592546	0.00114224	0.00744651
Fgl2	1.681093424	1.77E-07	2.90E-06
Fam83g	1.681033243	0.00088427	0.0060026
Fblim1	1.680009327	0.00089344	0.00605214
Gbp2	1.677439338	0.00011519	0.00101985
Prc1	1.673819664	5.53E-05	0.00053172

Lrrtm2	1.662415807	4.33E-08	7.93E-07
Srrm4	1.66210021	8.84E-06	0.00010228
Tlr2	1.659099392	0.00034014	0.00265558
Lyz2	1.657093717	9.72E-08	1.67E-06
Prr51	1.65565232	5.56E-05	0.0005341
Tmem263	1.654117806	8.88E-08	1.54E-06
Igsf6	1.651951577	6.44E-06	7.70E-05
Cd93	1.645221235	5.21E-13	1.92E-11
Rps12	1.644370157	3.67E-09	7.96E-08
Ikbke	1.643104711	5.64E-24	5.87E-22
Pygb	1.64155796	3.23E-08	6.06E-07
Lama5	1.64005384	8.92E-13	3.22E-11
H2-Q1	1.635572	9.92E-05	0.00089573
Loxl4	1.634431649	4.12E-08	7.57E-07
Cyp4f18	1.633269744	0.00142344	0.00898536
Prss8	1.632802232	1.06E-06	1.49E-05
Coq8b	1.632244801	2.05E-07	3.31E-06
Cpne8	1.631397431	7.69E-05	0.00071263
Itpr3	1.628442769	1.56E-06	2.13E-05
Greb1l	1.62573449	9.37E-08	1.61E-06
Selenon	1.62572821	0.000167	0.00141552
Aph1b	1.625297272	0.0010732	0.0070794
Gm15408	1.625278216	8.34E-05	0.00076529
Plin4	1.623215765	1.46E-05	0.00016046
Bcl2l1	1.623084685	2.23E-18	1.51E-16
Morc4	1.621735693	0.00074513	0.0051847
1700017B05Rik	1.621030608	4.17E-11	1.24E-09
Fcgr4	1.620143462	0.00025063	0.00203147
Fcgr3	1.619740264	0.000108	0.00096627
Susd2	1.616991857	0.00070616	0.00496065
Cd5l	1.615699815	1.06E-09	2.54E-08
Uggt2	1.614834387	2.99E-08	5.65E-07
Abcb1a	1.614001203	2.20E-07	3.53E-06
Adgre1	1.609933635	1.02E-07	1.75E-06
Oas3	1.606732667	0.00077887	0.00538922
Mycl	1.600726542	0.00042674	0.00322244

Pgm1	1.597383394	0.00023858	0.00194456
Unc13b	1.595531146	3.60E-15	1.67E-13
Dcbld1	1.594614225	2.69E-07	4.24E-06
Csf2rb	1.592620938	2.32E-06	3.07E-05
Tspan2	1.592297654	0.00124283	0.00802119
Slc22a27	1.581920989	0.00103359	0.00687439
Arsg	1.581686779	5.42E-14	2.26E-12
Btg3	1.578143455	0.00093527	0.00630633
Myadm	1.56999005	1.15E-13	4.57E-12
Mllt3	1.568715873	4.21E-07	6.36E-06
H2-DMa	1.567999905	0.00108182	0.00713046
Tmc3	1.566937452	0.00038357	0.00294192
Vnn3	1.562043352	1.03E-41	2.92E-39
Wfdc2	1.555166069	0.00014617	0.00125749
Dnajc10	1.554028189	3.48E-24	3.67E-22
Sorbs2	1.553961382	1.78E-21	1.49E-19
Fxyd5	1.552343058	0.00129353	0.00827877
Sema4d	1.547895525	0.00126872	0.00815238
Ppbp	1.547694569	0.00142799	0.00900709
D1Ert622e	1.546583156	1.14E-06	1.60E-05
St8sia4	1.542981305	0.00071459	0.00500893
Rbl1	1.542763668	0.00014957	0.00128469
Limch1	1.54119807	0.00056272	0.00407187
Orm2	1.540224748	0.00056879	0.00411398
Sel1l3	1.538904802	2.03E-16	1.09E-14
Tubb6	1.536683625	1.04E-05	0.00011789
Insyn2b	1.535370596	0.00111504	0.00729571
Gm19705	1.535295995	0.00125924	0.00810436
Rsad2	1.53413326	2.60E-06	3.40E-05
Slc30a4	1.532742517	2.35E-08	4.55E-07
Gramd1b	1.528773819	1.06E-06	1.49E-05
Anxa9	1.527497329	0.00044862	0.003364
Myo5a	1.523390756	2.44E-05	0.00025595
Icam1	1.520323402	7.19E-08	1.27E-06
Creb3l2	1.520161564	1.98E-24	2.16E-22
Kcnj8	1.517887363	0.00015092	0.00129493

Rhbdf1	1.515857082	8.68E-08	1.50E-06
Clec12a	1.513848857	0.0002673	0.00215361
Tm4sf4	1.506569188	1.43E-21	1.22E-19
Gsdme	1.505992855	2.51E-11	7.69E-10
Bcl2	1.50484005	0.0004755	0.00353273
Zfp704	1.503826306	4.87E-14	2.05E-12
Exd1	-1.502979625	0.00013875	0.00120196
Smad9	-1.507109526	1.01E-07	1.73E-06
Sugct	-1.508335982	3.50E-11	1.05E-09
Ces1f	-1.51419683	1.80E-11	5.63E-10
Alas2	-1.51908263	4.05E-18	2.64E-16
Pigr	-1.52199712	2.42E-38	5.57E-36
Dcxr	-1.522835274	2.76E-13	1.05E-11
C4a	-1.528144017	3.09E-07	4.80E-06
Serpina6	-1.531102381	2.14E-27	2.89E-25
Lipc	-1.531316296	2.48E-19	1.79E-17
D630024D03Rik	-1.53163833	0.00052024	0.00381762
Tat	-1.532800963	0.00012377	0.00108679
Hhip	-1.538316922	0.00086958	0.00591783
Neat1	-1.540711373	9.51E-10	2.29E-08
Apoa2	-1.542317157	2.68E-31	4.75E-29
Gsta3	-1.544078905	3.35E-68	3.00E-65
Cyp4a12a	-1.546181399	4.97E-08	8.94E-07
Coq8a	-1.547653574	8.17E-17	4.56E-15
Gstt2	-1.550347065	1.42E-15	6.83E-14
D630039A03Rik	-1.563232201	9.75E-08	1.67E-06
Snord85	-1.563574713	2.80E-05	0.00029038
Ndrp2	-1.564873935	2.50E-59	1.49E-56
Nfil3	-1.565177474	1.06E-11	3.41E-10
Abcb11	-1.565225463	5.98E-09	1.25E-07
Ugt2a3	-1.566147615	2.78E-22	2.54E-20
Socs2	-1.569083822	6.86E-05	0.00064365
Ces1d	-1.574355443	1.80E-16	9.70E-15
Cyp4f15	-1.576484984	4.36E-84	7.81E-81
Cyp3a44	-1.578510695	0.00022632	0.00185529
Asl	-1.582250785	3.38E-14	1.44E-12

Cyp2e1	-1.586193446	3.76E-22	3.35E-20
Fam184a	-1.587019022	0.00094129	0.00633367
Rdh19	-1.589845576	0.00153235	0.0095791
Mapk15	-1.591556589	2.60E-13	9.90E-12
Otc	-1.591768395	2.15E-20	1.67E-18
Ttc36	-1.599581916	1.42E-40	3.87E-38
Ido2	-1.600074202	1.63E-21	1.38E-19
Cyp2d9	-1.608897148	9.22E-19	6.46E-17
Serpina3k	-1.612160401	4.44E-29	6.69E-27
Rgn	-1.616715	1.22E-23	1.25E-21
Col13a1	-1.622182609	5.16E-06	6.28E-05
Ugt1a9	-1.622221743	1.49E-09	3.45E-08
Hdh3	-1.626151987	8.25E-06	9.63E-05
Cndp1	-1.628610561	0.00111306	0.00728574
Foxa2	-1.63152565	4.49E-08	8.17E-07
Pah	-1.643928446	8.77E-26	1.03E-23
Gm4952	-1.646327196	2.27E-24	2.44E-22
Ugt2b1	-1.66028266	4.53E-10	1.15E-08
Slc27a5	-1.671838992	1.17E-67	9.91E-65
Ggt6	-1.680851172	2.44E-11	7.50E-10
Arntl	-1.682758604	2.28E-11	7.05E-10
Ces1c	-1.687729627	8.71E-57	4.84E-54
Chic1	-1.691340954	4.17E-05	0.00041132
Nat8f5	-1.69508371	2.04E-08	3.97E-07
1700042O10Rik	-1.698088672	0.00020712	0.00170975
Npr2	-1.699137343	2.78E-35	5.82E-33
Pecr	-1.700458548	1.43E-27	1.99E-25
Slc22a28	-1.705659424	1.12E-10	3.11E-09
Ces2c	-1.706929049	5.34E-07	7.91E-06
Tmem86b	-1.707782526	1.08E-16	5.96E-15
Onecut1	-1.714356216	6.69E-05	0.00062891
Gstt3	-1.716953214	5.24E-06	6.38E-05
Pms1	-1.718844919	7.91E-16	3.95E-14
Adck5	-1.744199977	5.00E-13	1.85E-11
Cyp2u1	-1.749578559	2.93E-09	6.48E-08
Lrit1	-1.752202049	1.12E-14	4.92E-13

Mup14	-1.75470347	3.21E-12	1.10E-10
Aox3	-1.757658852	2.53E-28	3.68E-26
Lifr	-1.758307748	4.75E-20	3.61E-18
Msmo1	-1.75938414	1.88E-16	1.01E-14
Car3	-1.759838234	1.54E-09	3.54E-08
Fndc1	-1.760698578	0.00156701	0.00974936
Arhgef37	-1.763068396	1.32E-06	1.83E-05
Moxd1	-1.765054477	2.10E-07	3.39E-06
Agxt	-1.765523732	6.79E-42	1.95E-39
Ahcy	-1.772680596	1.83E-49	7.01E-47
Cyp2d11	-1.773822367	1.82E-07	2.96E-06
Mbl2	-1.774638021	3.99E-53	1.89E-50
Mreg	-1.776505296	8.62E-14	3.48E-12
Mir1948	-1.781519598	1.11E-07	1.88E-06
Car5a	-1.791766511	2.13E-11	6.60E-10
E2f8	-1.798855634	3.92E-05	0.00039058
Ncam2	-1.799544796	3.57E-07	5.48E-06
Gm4737	-1.804080553	6.20E-23	5.91E-21
Mup10	-1.809250142	3.16E-08	5.94E-07
Rfx4	-1.810840469	8.17E-06	9.56E-05
Slco1a1	-1.819725786	3.25E-14	1.38E-12
LOC100862446	-1.835449664	1.85E-08	3.62E-07
Nlrp5-ps	-1.84156466	1.25E-07	2.09E-06
Clec2d	-1.846750365	2.01E-112	6.47E-109
Ddc	-1.855231663	3.66E-23	3.60E-21
Apol7a	-1.858381076	1.30E-35	2.75E-33
Igfbp2	-1.859075878	1.22E-56	6.56E-54
Serpina9	-1.862064605	0.00046666	0.00347826
Mup17	-1.88252774	4.05E-06	5.06E-05
Tmem254c	-1.883308331	0.00019475	0.00162179
Pdlim3	-1.884197857	0.00071458	0.00500893
4933404O12Rik	-1.892015916	9.21E-05	0.00083776
Cish	-1.893373631	6.60E-06	7.86E-05
Abat	-1.895948169	5.93E-73	5.97E-70
Sntg2	-1.907906926	3.89E-09	8.38E-08
Aldh111	-1.908090079	2.09E-80	3.38E-77

Pon1	-1.91215168	8.15E-31	1.34E-28
Cadm4	-1.91506585	6.27E-06	7.52E-05
Myh11	-1.915317708	2.11E-13	8.12E-12
Colgalt2	-1.916583885	1.03E-05	0.00011757
Idi1	-1.924369302	4.81E-35	9.95E-33
Mup-ps16	-1.927909228	6.17E-14	2.53E-12
Mup21	-1.929111863	1.25E-10	3.47E-09
Ugt3a1	-1.931688984	1.22E-15	5.93E-14
Bhmt	-1.933259348	1.46E-15	7.05E-14
Hal	-1.936231756	1.41E-17	8.64E-16
Scnn1a	-1.938360443	4.34E-15	2.01E-13
Car14	-1.94458693	1.46E-09	3.38E-08
Fcna	-1.947313976	1.85E-10	5.02E-09
Sucnr1	-1.948433609	1.21E-07	2.03E-06
Mup2	-1.952015051	9.40E-07	1.34E-05
Enho	-1.954756807	4.16E-05	0.00041083
Cd163	-1.960535562	4.65E-12	1.56E-10
Cyp4f14	-1.962532691	4.74E-51	2.01E-48
Tlcd2	-1.975081888	9.82E-15	4.38E-13
Cyp27a1	-1.977431609	2.29E-139	9.24E-136
Prlr	-1.981679913	1.69E-26	2.12E-24
Rapgef4	-1.986678339	3.40E-16	1.76E-14
Ugt2b38	-1.993492259	3.53E-09	7.71E-08
Ttc39c	-2.001429242	1.49E-34	3.05E-32
Ces1b	-2.002041376	2.46E-48	8.80E-46
S1pr5	-2.01101317	4.15E-07	6.28E-06
Avpr1a	-2.01497132	3.82E-12	1.29E-10
Cyp4a32	-2.017018761	1.03E-29	1.59E-27
Efna3	-2.018347431	2.86E-06	3.67E-05
Sult2a8	-2.020260142	8.29E-26	9.83E-24
Cyp2f2	-2.026309993	2.25E-30	3.66E-28
Grm8	-2.028301651	4.86E-08	8.80E-07
C7	-2.03199112	9.19E-08	1.58E-06
Mup3	-2.037221714	2.00E-15	9.51E-14
Nudt7	-2.039082426	3.06E-20	2.33E-18
Cyp4a12b	-2.052612065	1.06E-14	4.71E-13

9030616G12Rik	-2.05545123	3.55E-08	6.61E-07
Dpy19l3	-2.058135066	4.98E-22	4.39E-20
Akr1d1	-2.062593688	8.36E-24	8.59E-22
Akr1c19	-2.07458014	5.92E-33	1.11E-30
Mup15	-2.079098112	6.95E-09	1.44E-07
Hpd	-2.098851421	1.55E-34	3.12E-32
Cyp2c69	-2.106945127	4.58E-06	5.64E-05
Cyp2d12	-2.134247265	2.85E-06	3.67E-05
Noct	-2.146729759	1.17E-12	4.16E-11
Lhpp	-2.152403695	1.75E-21	1.48E-19
Ces1g	-2.154538841	5.03E-57	2.90E-54
Gm4956	-2.179663126	4.21E-10	1.08E-08
Nat8	-2.18027007	4.94E-15	2.27E-13
Neb	-2.186176544	4.87E-55	2.38E-52
Cyp3a11	-2.188226919	2.33E-21	1.94E-19
Cyp3a41b	-2.194942353	1.97E-06	2.64E-05
Dct	-2.246517437	6.54E-06	7.80E-05
Mup4	-2.270854112	1.17E-09	2.77E-08
Ces1e	-2.274250353	2.80E-48	9.82E-46
Ankrd33b	-2.292472713	1.48E-27	2.02E-25
Adh6-ps1	-2.29252163	5.42E-24	5.67E-22
Pkhd11l	-2.292716253	5.89E-05	0.00056117
Trhde	-2.298973524	6.64E-08	1.18E-06
Cyp26a1	-2.301549881	9.55E-11	2.67E-09
Mup5	-2.304445213	1.05E-13	4.18E-12
Gsta2	-2.326608176	1.69E-13	6.56E-12
Cyp2c23	-2.351717544	8.71E-80	1.28E-76
Mup6	-2.358659167	1.15E-16	6.31E-15
Nnmt	-2.359630547	7.51E-21	6.08E-19
Selenbp2	-2.364164725	1.25E-08	2.52E-07
Slco1a4	-2.368765469	9.21E-30	1.44E-27
Ass1	-2.390416304	2.51E-20	1.93E-18
Cth	-2.397802726	2.96E-21	2.45E-19
Serpine2	-2.410776075	8.64E-16	4.30E-14
Cyp7b1	-2.453120558	2.81E-19	2.02E-17
Cyp2a5	-2.457921434	5.99E-22	5.22E-20

Slc13a2	-2.51691014	2.78E-07	4.36E-06
Tm7sf2	-2.524953308	3.86E-34	7.60E-32
Lrtm1	-2.52727082	1.33E-07	2.21E-06
Urad	-2.530069634	4.49E-17	2.61E-15
Serpina1e	-2.571186137	2.46E-37	5.59E-35
Cyp1a2	-2.649073132	7.65E-37	1.67E-34
Ces2a	-2.650526677	5.00E-48	1.72E-45
Igfals	-2.658191643	3.82E-65	3.08E-62
Oat	-2.688720856	6.78E-31	1.13E-28
Snhg11	-2.707780525	2.74E-42	8.02E-40
Gm5424	-2.718655333	8.87E-32	1.59E-29
Cyp8b1	-2.737245799	2.38E-44	7.24E-42
Srgap3	-2.747121562	2.08E-12	7.26E-11
Hamp	-2.755967956	2.66E-46	8.58E-44
Cyp3a16	-2.769927747	8.41E-11	2.38E-09
Mup16	-2.799100418	2.03E-13	7.84E-12
Gm12718	-2.80433765	3.09E-11	9.32E-10
Sult5a1	-2.80718959	2.95E-16	1.54E-14
Mup8	-2.819923679	4.56E-17	2.63E-15
Mup13	-2.835894621	3.00E-16	1.56E-14
Cyp4a14	-2.867274916	2.97E-18	1.97E-16
Capn8	-2.93093182	2.37E-15	1.12E-13
Pitx3	-2.980496456	3.96E-07	6.02E-06
Gnmt	-3.020435265	4.48E-88	1.03E-84
Capn11	-3.046970827	5.36E-08	9.63E-07
Cyp2c50	-3.125256032	1.72E-40	4.63E-38
Hacl1	-3.197063753	9.71E-78	1.30E-74
Cyp2c29	-3.306978059	1.14E-28	1.69E-26
Slc22a7	-3.326308254	2.25E-38	5.25E-36
Mup1	-3.365817468	4.06E-17	2.37E-15
Keg1	-3.366449451	2.88E-31	5.05E-29
Cyp4a10	-3.385984073	2.85E-45	8.84E-43
Cyp2c37	-3.486340194	2.41E-62	1.56E-59
Ces3b	-3.593742494	1.47E-61	9.13E-59
Cyp2c55	-3.612160533	5.78E-16	2.93E-14
Mup12	-3.728477488	1.45E-24	1.60E-22

Cyp2c54	-3.892888884	4.83E-76	5.56E-73
Hsd3b5	-4.018599523	1.76E-34	3.50E-32
Susd4	-4.117351431	4.58E-52	2.05E-49
Clec2h	-4.248217248	1.15E-26	1.48E-24
Cyp2c53-ps	-4.262878134	9.46E-14	3.80E-12
Mup7	-4.370398726	1.70E-52	7.84E-50
Cyp2b10	-4.399872642	3.19E-23	3.16E-21

Table S5. Gene expression profile of HC/DEN vs CW/DEN.

Symbol	log2FoldChange	p-value	padj
Saa2	7.432689453	1.23E-55	2.71E-52
Saa1	6.924540616	8.61E-69	1.14E-64
Lcn2	6.127052739	5.30E-37	4.07E-34
Moxd1	5.064040715	6.34E-19	1.48E-16
Orm2	4.534215431	3.84E-20	1.08E-17
Mt1	4.054434467	3.21E-13	4.17E-11
Per3	4.017268886	1.87E-63	1.24E-59
Dbp	3.677768446	8.21E-29	4.35E-26
Mt2	3.658480259	2.91E-09	1.77E-07
Mfsd2a	3.347056711	4.82E-24	1.96E-21
Orm3	3.157770021	6.24E-15	9.72E-13
Tmc5	3.05873482	4.01E-07	1.46E-05
Per1	3.050589709	2.82E-16	5.04E-14
Grem2	3.036205707	1.27E-16	2.33E-14
Apoa4	2.999698609	1.99E-57	6.60E-54
Fgl1	2.942136775	3.98E-63	1.75E-59
Smpd3	2.899977005	6.65E-11	5.83E-09
Rgs16	2.884678692	1.71E-14	2.55E-12
Alpk1	2.868289008	9.93E-13	1.10E-10
Ciart	2.706357128	2.46E-07	9.65E-06
Acpp	2.703478006	2.21E-10	1.66E-08
Fabp5	2.701179097	1.58E-09	1.01E-07
Usp2	2.675796349	3.81E-13	4.80E-11
Lpin1	2.583084934	1.42E-12	1.54E-10
Dnah1	2.582424433	5.44E-06	0.00015697
Il1r1	2.573838693	9.53E-19	2.14E-16
Xirp1	2.551795277	7.50E-08	3.36E-06
Cxcl14	2.538433724	6.95E-06	0.00019372
Isyna1	2.523856858	3.05E-06	9.22E-05
Slc13a5	2.514468866	6.93E-07	2.45E-05
Slc37a1	2.456222446	1.00E-08	5.57E-07

E030018B13Rik	2.438119503	2.99E-08	1.50E-06
Cpne8	2.436546718	1.64E-08	8.64E-07
Mthfd11	2.416418819	2.17E-05	0.00052431
Slc7a15	2.413885237	1.22E-08	6.71E-07
Pnpla3	2.379129508	8.21E-06	0.00022598
Mmd2	2.378420685	3.36E-05	0.00075696
Chil3	2.300166521	0.00026881	0.0042215
Scara5	2.267437065	7.40E-11	6.40E-09
H2-B1	2.260689448	0.00015828	0.00280519
C4a	2.251152704	5.95E-14	8.57E-12
Adam11	2.243305668	5.86E-22	1.94E-19
Per2	2.233722943	6.48E-22	2.09E-19
Cyp21a1	2.233716958	4.52E-05	0.00096805
Nos1ap	2.22802671	7.15E-13	8.38E-11
Tff3	2.22099297	4.90E-05	0.00103716
Thrsp	2.209798539	1.66E-13	2.28E-11
Gm18852	2.208302496	0.00026509	0.00417298
Serpina3n	2.204558419	3.35E-50	5.54E-47
Hcn3	2.179283775	2.45E-08	1.24E-06
Slc13a1	2.176429169	0.00014075	0.00257593
Prg4	2.17465808	1.70E-35	1.19E-32
Nrep	2.165396299	7.37E-07	2.59E-05
Cyb561	2.15994217	1.97E-07	7.92E-06
Lrg1	2.159547936	2.69E-24	1.15E-21
Upp2	2.148330216	1.63E-21	5.15E-19
Rad51b	2.103701721	4.36E-05	0.00093888
Cd300lf	2.101716008	1.58E-05	0.00039538
Socs3	2.087851828	8.95E-07	3.03E-05
Mpeg1	2.074997456	5.57E-26	2.63E-23
Nrg4	2.073840387	1.83E-09	1.16E-07
Acot11	2.03756466	6.42E-08	2.99E-06
Tef	2.026380647	2.39E-34	1.44E-31
Rnu1b6	1.96689313	0.00014892	0.00269341
Gm4070	1.961258784	0.00018179	0.00312966
Ifi2712b	1.947390906	1.65E-06	5.25E-05
Coq10b	1.946337807	8.01E-14	1.14E-11
Gpcpd1	1.936156757	3.18E-13	4.17E-11
Myc	1.923953542	3.52E-05	0.00078607
Lepr	1.899112608	3.20E-08	1.59E-06
Slc43a1	1.885710287	3.64E-08	1.76E-06
Igdcc4	1.884086883	8.08E-05	0.00158429
Snx10	1.863524879	2.91E-13	3.86E-11

Esm1	1.861249885	5.84E-05	0.00121096
Apcs	1.845035836	8.39E-13	9.58E-11
Cyp7a1	1.838223788	3.88E-12	3.95E-10
Orm1	1.834182846	2.78E-19	6.94E-17
Scd1	1.833631896	4.84E-10	3.46E-08
Nmrk1	1.823478818	9.99E-12	9.59E-10
Esr1	1.819019003	5.21E-10	3.71E-08
Alas1	1.813102716	1.41E-10	1.13E-08
Rorc	1.801553627	9.20E-21	2.71E-18
Clca3a1	1.784972374	8.58E-11	7.28E-09
Lonrf1	1.784782104	3.10E-07	1.18E-05
Syne4	1.783743558	0.00061267	0.00823471
Mycl	1.77276599	0.00018092	0.0031188
Ly75	1.758366541	3.42E-08	1.67E-06
Eif4e3	1.75320225	0.00015148	0.00272627
Ccdc57	1.747162838	3.31E-07	1.24E-05
Agap2	1.741711619	0.00014238	0.00259286
Ptch2	1.722739106	0.00040934	0.00589053
Irak3	1.717778292	0.00036821	0.00536775
Slc41a3	1.69744247	0.00040573	0.00584492
Cobl	1.692342619	1.38E-16	2.50E-14
Bhlhe40	1.675968122	2.50E-08	1.26E-06
Pfkfb3	1.675493444	4.96E-07	1.79E-05
Tmem268	1.672850135	9.31E-08	4.10E-06
Cd5l	1.657377087	5.59E-10	3.96E-08
Slc3a1	1.654531285	8.23E-14	1.16E-11
Tmprss2	1.653879776	0.00016951	0.00296062
Steap4	1.648861879	3.39E-35	2.24E-32
Bcl6	1.628126488	7.08E-12	7.00E-10
Nampt	1.625705654	6.20E-12	6.21E-10
Pklr	1.621963368	5.32E-13	6.34E-11
Scd2	1.60660189	6.87E-05	0.00138771
Neil2	1.600949695	0.00025998	0.00410731
Gadd45g	1.568994757	8.19E-05	0.00159832
Adrb3	1.566731178	1.09E-05	0.0002872
Plk3	1.566141398	9.65E-07	3.25E-05
Tnip2	1.555819509	8.42E-06	0.00023135
Slc20a1	1.553333958	4.18E-13	5.22E-11
Tgm1	1.549152992	5.30E-06	0.00015408
Ly6e	1.547975745	7.26E-19	1.66E-16
Arid5a	1.544794405	0.00037221	0.00540914
Tifa	1.543012096	3.73E-06	0.00011116

Zbp1	1.536526327	0.00030334	0.00462661
Slc13a3	1.521135647	1.95E-09	1.22E-07
Map3k14	1.520830017	2.65E-05	0.00061682
Wfdc2	1.500821962	0.00039336	0.00568529
Hpx	1.500718692	6.95E-24	2.70E-21
Fstl1	-1.513227737	0.00024307	0.00389122
Mapk15	-1.525607498	1.53E-08	8.12E-07
Creg1	-1.532125346	6.65E-11	5.83E-09
Ypel2	-1.53419641	5.89E-10	4.15E-08
Hamp	-1.536004759	2.27E-15	3.71E-13
Eps8l2	-1.546130794	7.77E-17	1.47E-14
Ces2a	-1.546378092	2.95E-17	5.92E-15
Rab36	-1.548868826	2.03E-09	1.26E-07
Sdr9c7	-1.560546873	1.83E-10	1.42E-08
Ccn1	-1.574210546	5.48E-06	0.00015714
Msmo1	-1.574302097	7.37E-13	8.56E-11
Pctp	-1.574634152	1.58E-12	1.68E-10
Cyp51	-1.591094054	2.76E-10	2.04E-08
Timp2	-1.595984501	9.08E-06	0.00024791
Sdf2l1	-1.602328355	3.73E-09	2.22E-07
Avpr1a	-1.626141331	2.30E-07	9.12E-06
Mme	-1.628311606	5.47E-16	9.52E-14
Cyp1a2	-1.643370353	4.83E-15	7.61E-13
Gstm6	-1.644346074	1.43E-08	7.67E-07
Agxt	-1.652506625	2.52E-26	1.29E-23
Ces1b	-1.66152036	4.89E-24	1.96E-21
Tubb4b	-1.664759092	6.53E-13	7.72E-11
Ehhadh	-1.665416668	6.14E-20	1.63E-17
Aox1	-1.693466298	4.23E-39	4.31E-36
Cyp3a59	-1.712274537	6.19E-16	1.06E-13
Mir122	-1.71966781	2.44E-05	0.00057684
Gstm4	-1.721271019	1.84E-10	1.42E-08
Clstn3	-1.722738129	1.37E-08	7.41E-07
Tubb2a	-1.723137731	5.49E-07	1.96E-05
Hmgcs1	-1.732604849	9.43E-08	4.12E-06
Cidea	-1.740641074	3.30E-05	0.00074733
Srgap3	-1.742345511	3.44E-05	0.0007723
Crot	-1.757645891	6.02E-38	5.69E-35
Ppp1r3c	-1.769335415	7.01E-05	0.00141018
Abcc3	-1.777037655	3.25E-26	1.59E-23
Mpzl1	-1.784927411	0.00025959	0.00410603
Nsdhl	-1.823409421	3.40E-09	2.03E-07

Gm4952	-1.848292484	1.48E-19	3.84E-17
Vegfd	-1.860704645	0.00037842	0.00549333
Ephx1	-1.902052013	6.54E-18	1.35E-15
Gm4956	-1.908304111	5.47E-06	0.00015713
Meg3	-1.931060453	0.00019575	0.00329677
Gdf15	-1.945039162	2.73E-10	2.03E-08
G6pc2	-1.964568499	0.00072446	0.0093806
Slc13a2	-1.976074021	0.00056874	0.00776238
Gclc	-1.999998391	9.30E-38	8.21E-35
Clpx	-2.004524322	1.56E-44	1.88E-41
Mreg	-2.022064963	8.49E-13	9.61E-11
Cyp3a41b	-2.061650633	9.81E-05	0.00188682
Car3	-2.09534793	7.52E-13	8.66E-11
Ces1g	-2.118553897	1.46E-46	1.93E-43
Pitx3	-2.142440054	0.00078094	0.00999561
Lrfr3	-2.202775407	2.72E-07	1.05E-05
Csad	-2.323180715	5.31E-35	3.34E-32
Pdk4	-2.343147394	1.40E-08	7.57E-07
Raet1a	-2.345492704	1.22E-09	7.94E-08
Cyp2b10	-2.348134144	3.32E-07	1.24E-05
Myh11	-2.387773811	1.47E-11	1.38E-09
Gstm1	-2.407624804	1.85E-37	1.53E-34
Gsta4	-2.414340431	2.89E-12	3.01E-10
Cyp2c55	-2.426784697	1.40E-07	5.87E-06
Clec2h	-2.434207741	4.60E-13	5.69E-11
Gstm3	-2.445407564	2.48E-10	1.85E-08
Spon2	-2.46982861	2.22E-08	1.14E-06
Cyp3a44	-2.507616152	1.71E-06	5.42E-05
Gsta2	-2.541652769	2.06E-10	1.58E-08
Hsd17b6	-2.728590227	8.27E-25	3.65E-22
Cyp3a16	-2.822072976	9.71E-07	3.26E-05
Acta2	-2.828444234	1.02E-07	4.41E-06
Cyp4a10	-2.888166655	2.35E-32	1.30E-29
Arntl	-3.034545458	1.49E-15	2.46E-13
Cyp3a11	-3.104204805	3.36E-41	3.71E-38
Idi1	-3.634828259	1.31E-33	7.55E-31
Cyp4a14	-5.09373492	3.40E-51	6.44E-48

Table S6. Gene expression profile shared by W/DEN vs HC/DEN.

Symbol	log2FoldChange HC/DEN	log2FoldChange W/DEN
Lcn2	6.127052739	6.144249476
Apoa4	2.999698609	5.998886702

Ly6e	1.547975745	5.92348089
Ifi2712	1.947390906	4.159263621
Rgs16	2.884678692	4.156732381
Esm1	1.861249885	3.603017942
Rad51b	2.103701721	3.350889497
Tff3	2.22099297	3.111638191
Saa1	6.924540616	2.939575243
Scd	1.60660189	2.898182419
Mpeg1	2.074997456	2.880338559
Mthfd11	2.416418819	2.740371517
Smpd3	2.899977005	2.699862618
Slc41a3	1.69744247	2.666553276
Saa1	7.432689453	2.664266191
Dbp	3.677768446	2.489564018
Pnpla3	2.379129508	2.477318288
Tmc5	3.05873482	2.332712092
Per3	4.017268886	2.330803004
Cyb561	2.15994217	2.241014518
Fabp5	2.701179097	2.195864893
Mt1e	4.054434467	2.065345283
Igdcc4	1.884086883	2.04744231
Apcs	1.845035836	2.034057776
Slc20a1	1.553333958	1.993564182
Steap4	1.648861879	1.94522797
Lepr	1.899112608	1.909726431
Nrg4	2.073840387	1.77414325
Bcl6	1.628126488	1.768638177
Cd300lf	2.101716008	1.702908546
Cpne8	2.436546718	1.631397431
Cd5l	1.657377087	1.615699815
Mycl	1.77276599	1.600726542
Wfdc2	1.500821962	1.555166069
Orm2	4.534215431	1.540224748
Cyp3a5	-2.507616152	-1.578510695
Mapk15	-1.525607498	-1.591556589
Arntl	-3.034545458	-1.682758604
Msmo1	-1.574302097	-1.75938414
Ca3	-2.09534793	-1.759838234
Moxd1	5.064040715	-1.765054477
Agxt	-1.652506625	-1.765523732
Mreg	-2.022064963	-1.776505296
Myh11	-2.387773811	-1.915317708

Idi1	-3.634828259	-1.924369302
Ces1	-1.66152036	-2.002041376
Avpr1a	-1.626141331	-2.01497132
Ces1	-2.118553897	-2.154538841
Cyp3a4	-3.104204805	-2.188226919
Cyp3a7	-2.061650633	-2.194942353
Gsta5	-2.541652769	-2.326608176
Slc13a2	-1.976074021	-2.51691014
Cyp1a2	-1.643370353	-2.649073132
Ces2	-1.546378092	-2.650526677
Srgap3	-1.742345511	-2.747121562
Hamp	-1.536004759	-2.755967956
Cyp3a7	-2.822072976	-2.769927747
Pitx3	-2.142440054	-2.980496456
Cyp4a11	-2.888166655	-3.385984073
Cyp2c18	-2.426784697	-3.612160533
Clec2d	-2.434207741	-4.248217248
Cyp2b6	-2.348134144	-4.399872642
