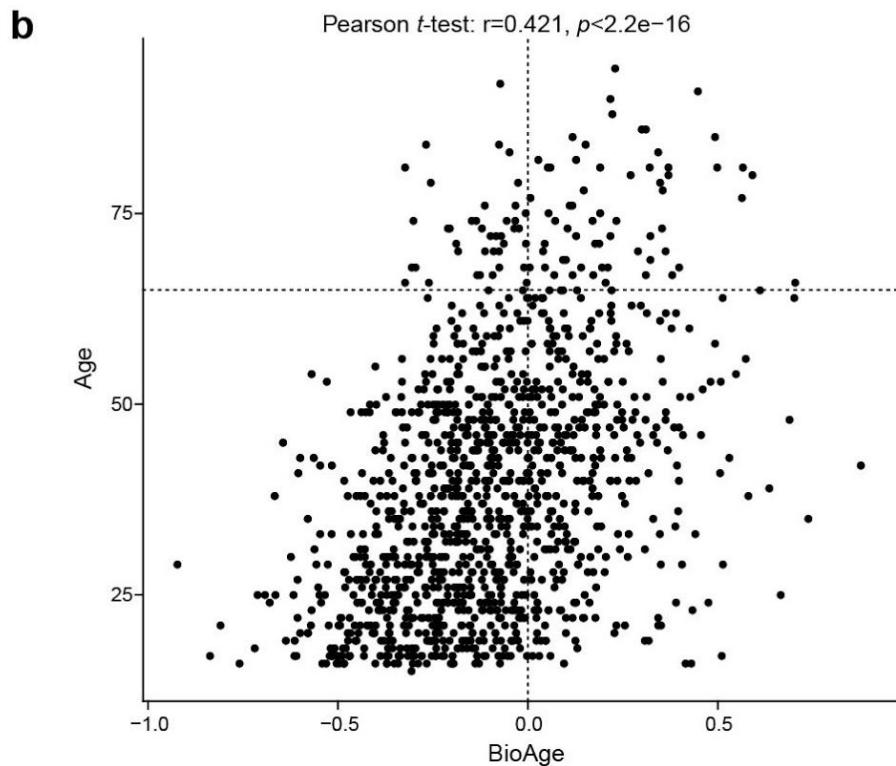
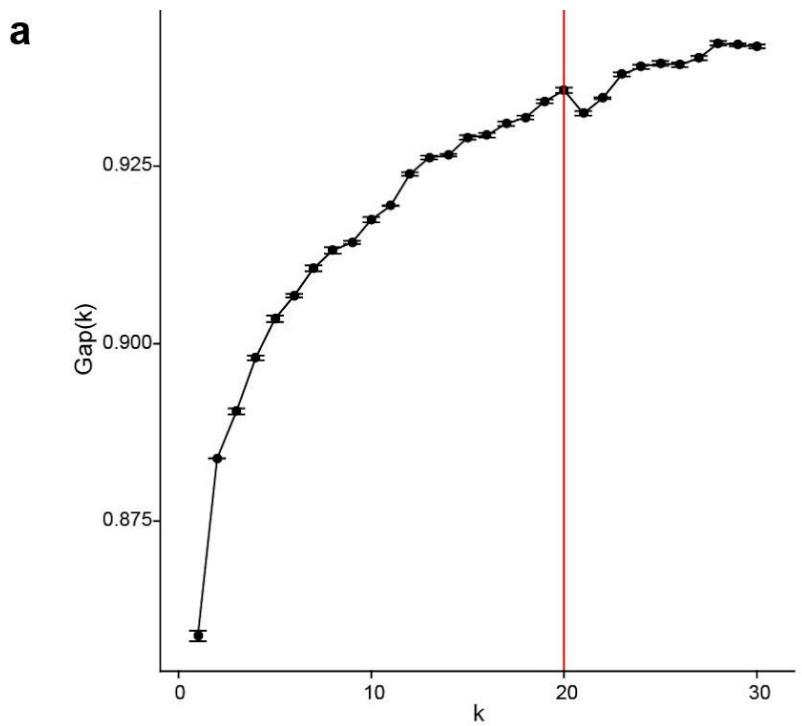


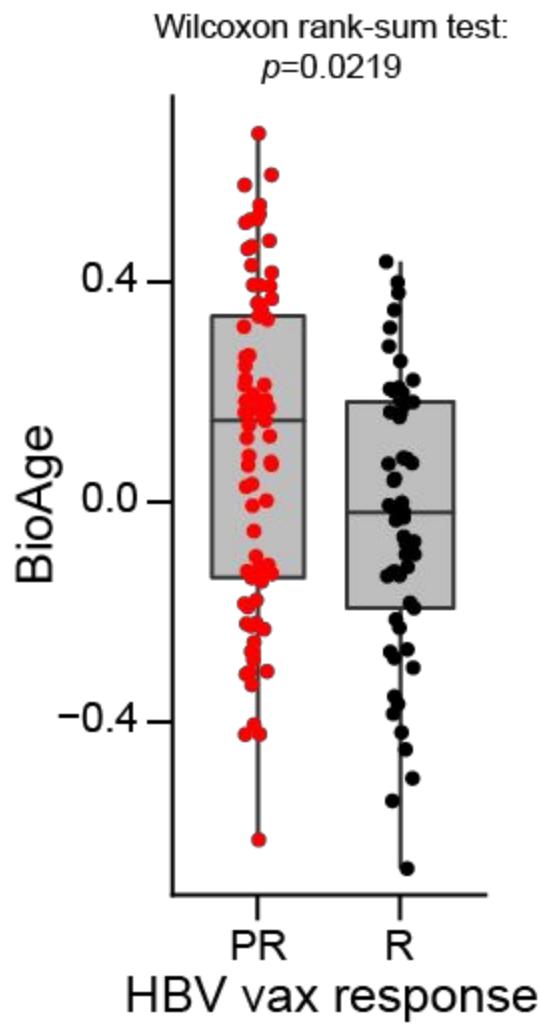
**Supplementary Figure 1. Two groups of responders to the HBV vaccine can be identified based on the antibody response titers**

(a) Response plots showing antibody titers as function of the vaccination status (x-axis: before and after receiving the vaccines). The analysis was restricted to subjects with undetectable titers pre-vaccination (hep. B: n= 170, dip: n=105, tet: n=67 and chol: n=151). The titers for HBsAg (hep. B), diphtheria toxin (dip.), tetanus toxin (tet.) and cholera toxin (chol.) are given on natural log scale. The unit of every titer is given in the y-axis label. Red horizontal lines indicated standard titer cutoffs used to define protective antibody levels. The percentage of patients having antibody titers above the protective thresholds (Protect. Ab) post-vaccination is indicated above each plot. (b) Density of the anti-HBsAg levels detected post-vaccination. Ab titers are given in mIU/mL in natural log scale space. 94 of the 174 subjects (54%) present Ab titers below the detection threshold of 5 mIU/mL while 79 subjects presented Ab titers ranging between 5.07 to 17,311.4 mIU/mL. Kernel density estimation of the Ab titers revealed two groups of responders based on Ab titers, HBV vaccine poor-responders (red line) with Ab titers below the detection threshold and HBV vaccine responders (black line) with Ab titers above 5 mIU/mL.



**Supplementary Figure 2. Development of the BioAge signature on the SAFHS cohort**

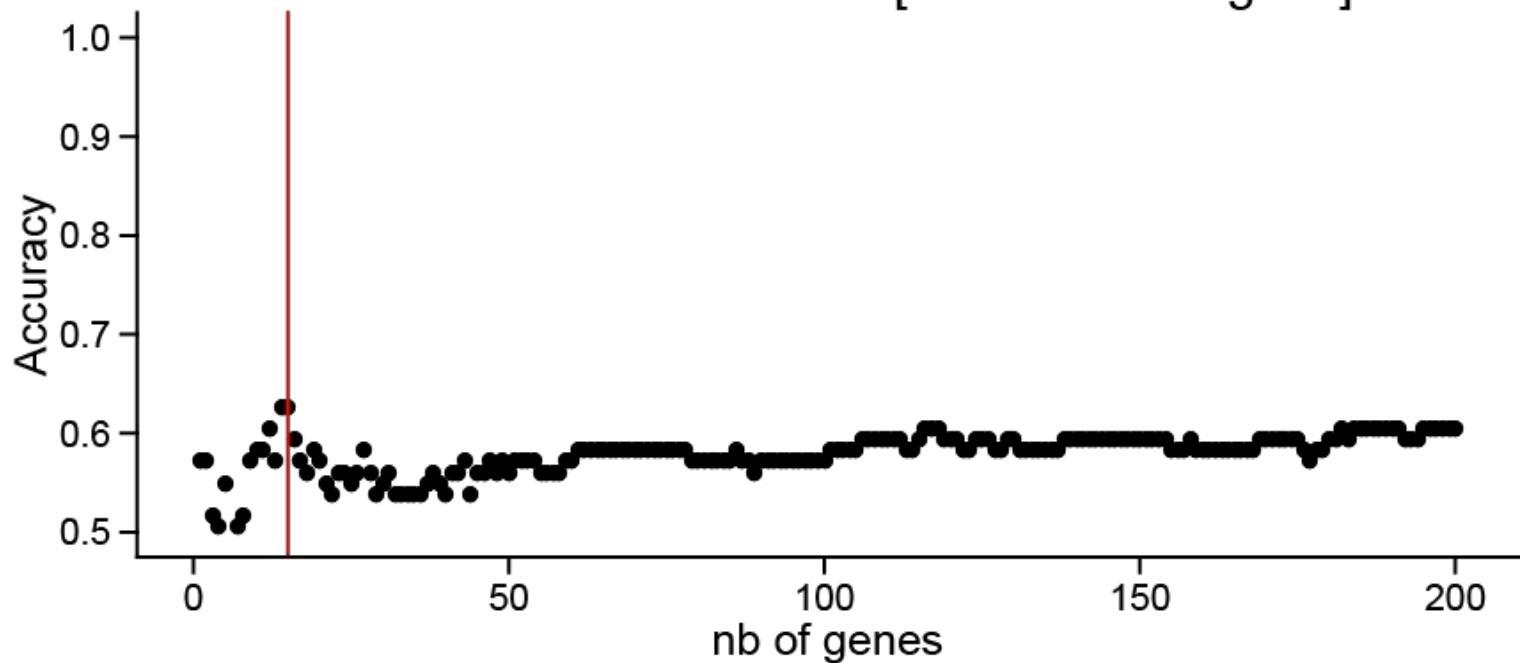
(a) Scatter plot showing the gap statistic estimation of the optimal number of cluster of genes among the 2285 genes correlated to age on the SAFHS cohort. The x-axis corresponds to the different number of clusters tested and the y-axis corresponds to the gap statistic (Gap) and its 95% confidence interval. The gap statistic corresponds to the between-clusters variance divided by the intra-cluster variance (the greater the gap statistic the better the fit). The optimal number of clusters was obtained following the rule described in Tibshirani *et al.* defined as the smallest  $k$  such that  $\text{Gap}(k) \geq \text{Gap}(k+1) - \text{sd}(k+1)$ . Consequently, twenty clusters were identified as the optimal number of clusters of genes. (b) Scatter plot showing the chronological age as a function of the BioAge on the SAFHS dataset. Among the 109 donors aged 65 or over (which is the population with the same age range as the elderly in EM131), 42 (39%) have a young BioAge ( $\text{BioAge} < 0$ ) while 67 (61%) have an old BioAge ( $\text{BioAge} \geq 0$ ).



**Supplementary Figure 3. Boxplot showing the BioAge score as a function of HBV vaccine response on the EM131 elderly cohort**

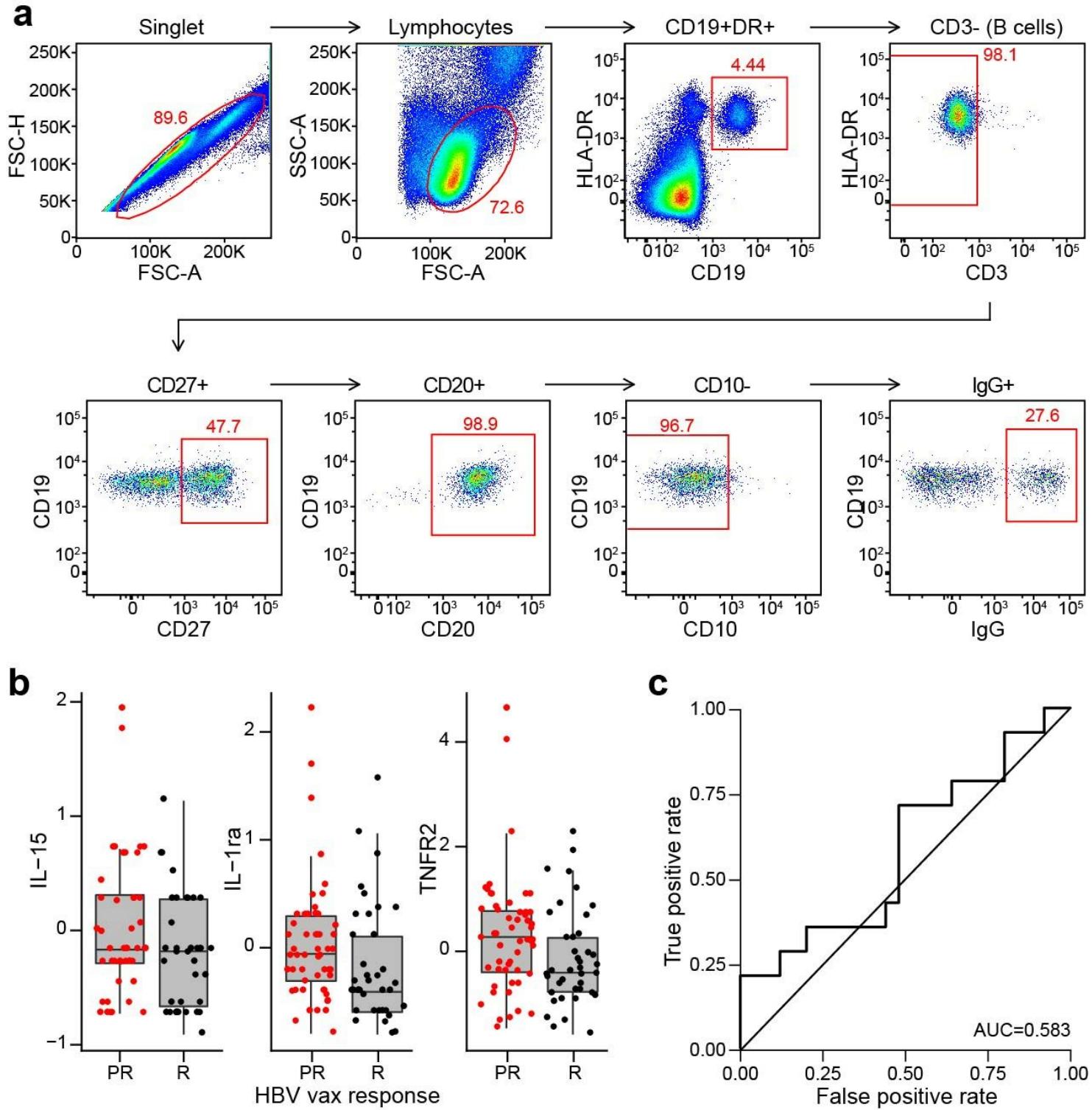
A Wilcoxon rank-sum test was used to test for statistical difference in BioAge between HBV vaccine responders (R) and poor-responders (PR), the  $p$ -value is presented above the boxplot.

## 10-fold cross-validation [EM131 training set]



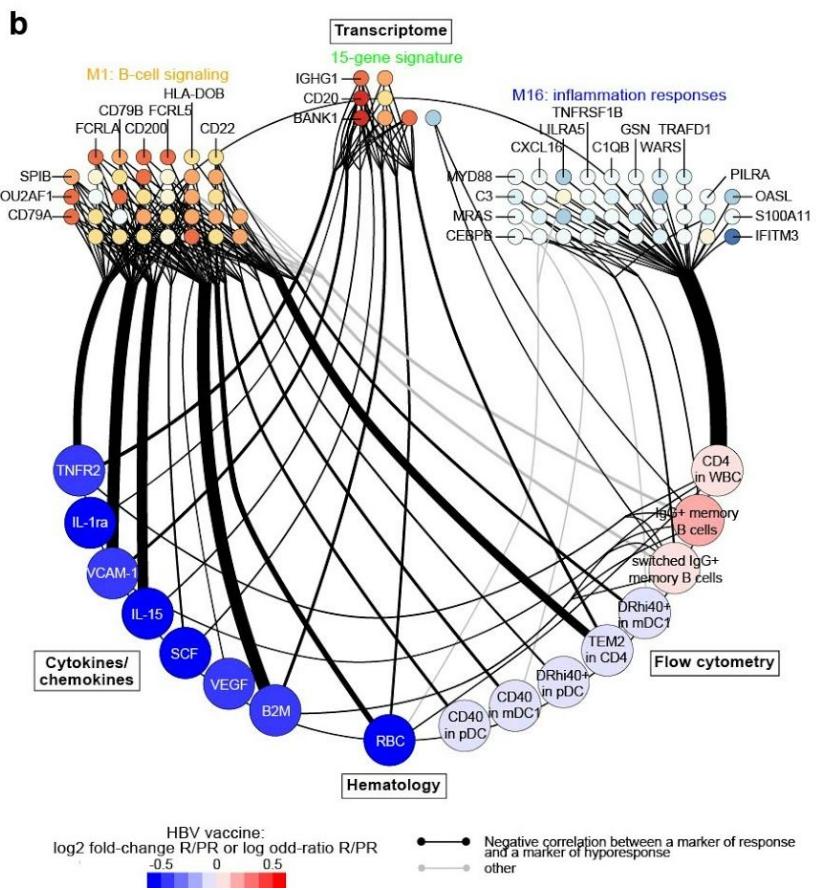
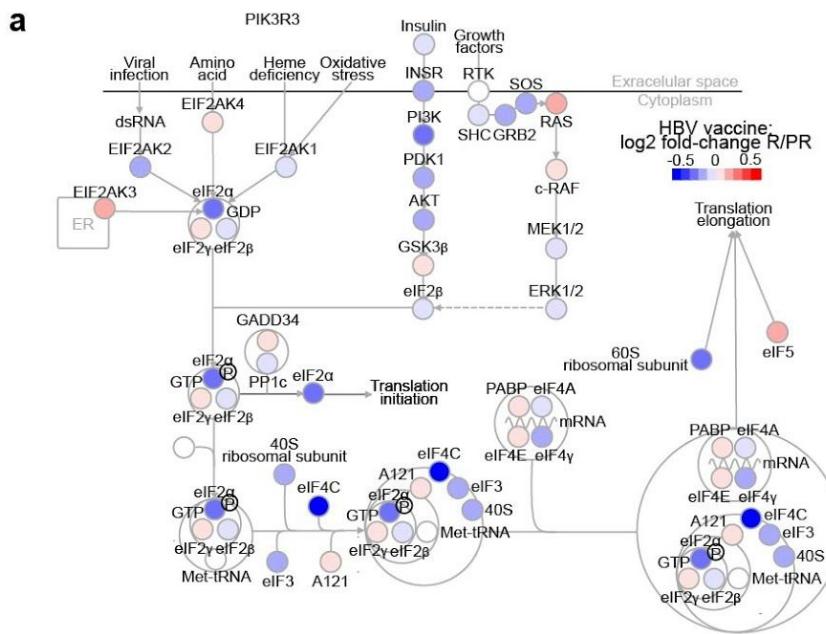
**Supplementary Figure 4.** Scatter plot showing the results of the 10-fold cross-validation on the EM131 training set.

The red line corresponds to naïve Bayes classifier of 15 genes, which gave an estimated accuracy of 62.6% accuracy.



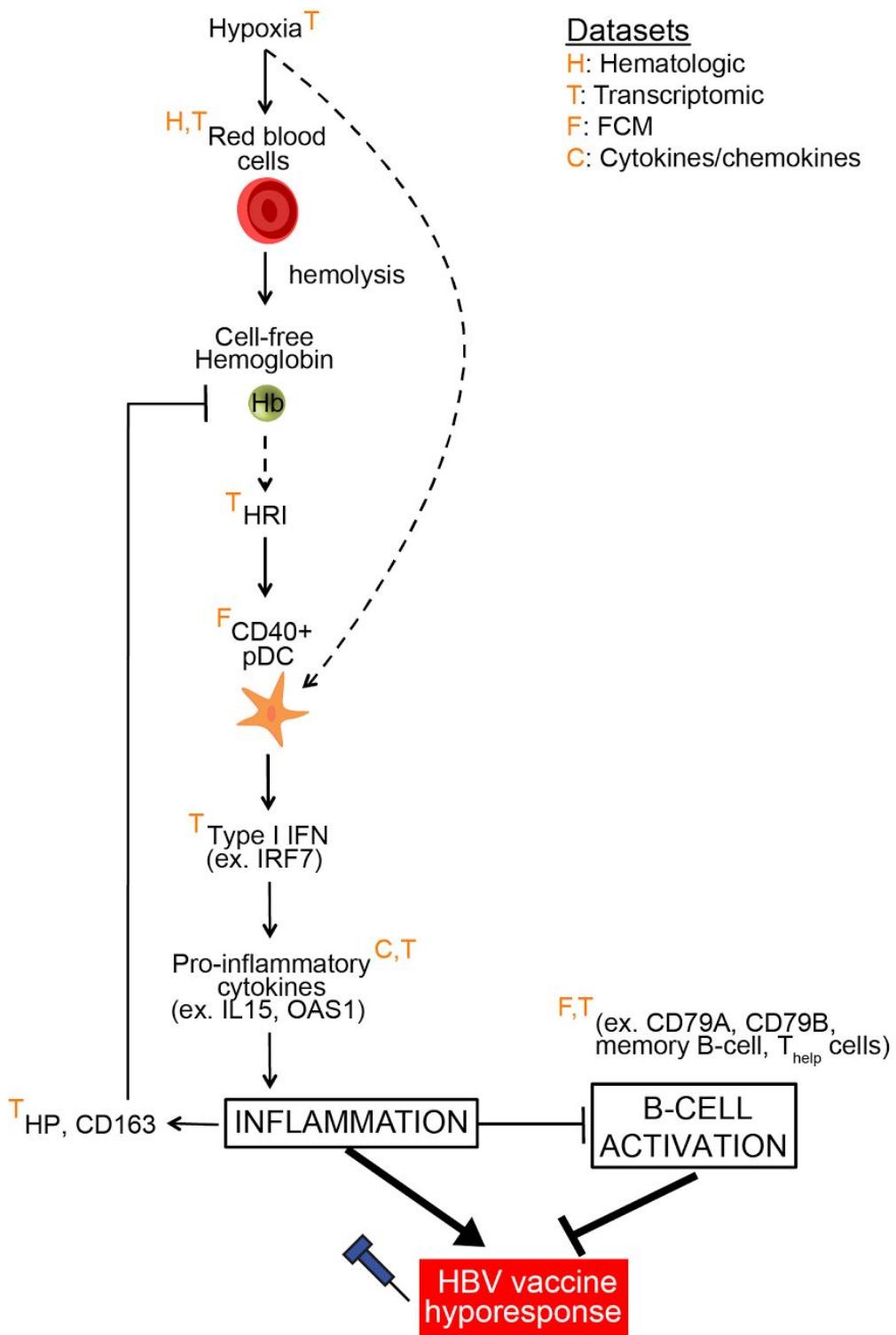
**Supplementary Figure 5. FCM and cytokines associated with response to the HBV vaccine on the EM131 training set**

(a) Examples of our gating procedure for obtaining the percentage of memory IgG+ B cell populations (CD3-CD19+HLA-DR+CD20+CD27+CD10-IgG+) among total B cells (CD3-CD19+HLA-DR+) for subject 2087 at visit 2 (value=12.6%). Please see **Supplementary Table 5a** for cell population annotations. (b-c) Cytokine-expression was analyzed in order to identify markers of response to the HBV vaccine. (b) Boxplots presenting the levels of three cytokines selected in the forward selection model between responders and poor-responders to the HBV vaccine on the EM131 training set. The three cytokines selected are implicated in the inflammatory mechanism. (c) ROC curves for the prediction of the HBV vaccine response using the cytokine data on the EM131 test set.



**Supplementary Figure 6. Integrative analysis reveals negative correlations between biomarkers of response and hyporesponse to the HBV vaccine**

(a) EIF2 signaling pathway is associated with hyporesponse to the HBV vaccine. Ingenuity EIF2 canonical pathway where nodes are colored by the fold-change difference between HBV vaccine responders (R) compared to poor-responders (PR) as calculated on the EM131 training set. (b) Least square regressions between pairs of “omics” was performed using the R package “mixOmics”. The results regression coefficients were converted to Pearson correlation between pairs of features of the different “omics”. Significant ( $t$ -test:  $p \leq 0.05$ ) negatives correlations are presented as edges and the features as vertices. The vertices are colored by fold-change between HBV vaccine responders vs. poor-responders of the EM131 training set.



**Supplementary Figure 7. Proposed mechanism leading to hyporesponse to HBV vaccine**

Hypoxia (HIF-1 $\alpha$  signaling pathway) leads to the increase in red blood cells. Turnover of red blood cells will release free-hemoglobin in the circulation. Hemoglobin, a source of heme-complex, will trigger the activation of the heme-regulated eIF2 $\alpha$  kinase (HRI). In turn, HRI will stimulate the production of type I interferon by pDCs and promote the release of pro-inflammatory cytokines in the system. The resulting inflammatory response will hinder response to HBV vaccination. A negative feedback loop involving haptoglobin (HP) and CD163 will be activated to catalyze the degradation of cell-free hemoglobin. In parallel, the absence of B-cell activation or the low frequency of memory B-cell will result in hyporesponse to HBV vaccine. The datasets (transcriptomic, FCM, cytokines/chemokines and hematologic) supporting the elements of the proposed mechanism are indicated on the figure.

**Supplementary Table 1** Clinical characteristics of the study cohort

	Complete data set	Training set	Test set	Fisher's exact test/ Wilcoxon test p-value
n	174	95	49	
Age				
range	[25, 83]	[65, 81]	[65, 83]	0.896
[25-40]	30	0	0	0.810
[65-75]	122	81	41	
[75-83]	22	14	8	
Gender				
male	79	44	23	1.00
female	95	51	26	
Race				
white	174	95	49	N/A
Height (cm)				
range	[139, 190]	[144, 182]	[139, 181]	0.666
Weight (kg)				
range	[40.3, 112.4]	[47.7, 102.5]	[40.3, 94.5]	0.634
BMI (kg/m <sup>2</sup> )				
range	[17.0, 34.9]	[21.5, 33.9]	[17.0, 33.5]	0.452
< 30	140	78	41	0.813
≥ 30	32	16	7	
N/A	2	1	1	
CMV at V2 (IU/mL)				
< 0.75	94	49	24	0.861
≥ 0.75	80	46	25	
HepB at V2 (mIU/mL)				
< 5	171	94	48	N/A
≥ 5	3	1	1	
HepB at V5 (mIU/mL)				
< 5	94	54	30	0.390
≥ 5	79	41	19	
NA	1	0	1	
Cholera at V2 (1/dilution factor)				
< 40	152	83	43	1.00
≥ 40	22	12	6	
Cholera at V4 (1/dilution factor)				
< 40	50	25	13	1.00
≥ 40	123	70	35	
N/A	1	0	1	
Dip at V2 (IU/mL)				
range	]0, 5.72]	]0, 5.72]	]0, 1.61]	0.401
Dip at V4 (IU/mL)				
range	]0, 51.1]	]0, 24.3]	]0, 51.1]	0.377
Tet at V2 (IU/mL)				
range	]0, 24.9]	]0, 19.4]	]0, 24.9]	0.628
Tet at V4 (IU/mL)				
range	]0, 71.3]	]0, 71.3]	]0, 41.6]	0.696

All participants were of European descent with BMI below 35 kg/m<sup>2</sup>; ~55% were women; and none had histories of autoimmunity, immunomodulating medications, cancer, recent vaccination or recent infection. The Fisher's exact test (categorical variable) and the Wilcoxon Rank sum test (continuous variable) were used to assess difference between the EM131 training set and EM131 test set. No significant difference in term of clinical (BMI: body mass index) or serological (HepB: hepatitis B, Dip: diphtheria, Tet: tetanus) variables was observed between those two sets.

**Supplementary Table 2** Logistic regression with poor-response to HBV vaccination

	Univarite			Multivariate		
	OR	95% CI	p-value	OR	95% CI	p-value
Age ([65, 83] v [25, 65])	2.80	[1.24, 6.69]	<b>0.0158</b>	1.52	[0.593, 4.03]	0.385
Sex (male v female)	2.80	[1.50, 5.33]	<b>0.00142</b>	2.44	[1.26, 4.80]	<b>0.00847</b>
Height (per cm)	1.03	[0.994, 1.07]	0.105	---	---	---
Weight (per kg)	1.02	[0.998, 1.05]	0.0832	---	---	---
BMI (per kg/m <sup>2</sup> )	1.06	[0.959, 1.17]	0.272	---	---	---
CMV ( $\geq 0.75$ v <0.75 IU/ml)	1.26	[0.688, 2.33]	0.453	---	---	---
BioAge (per unit)	5.62	[1.82, 18.6]	<b>0.00343</b>	4.14	[1.21, 15.2]	<b>0.0270</b>

Univariate and Multivariate logistic regression against response to HBV vaccine was performed using clinical variables and the BioAge signature. Only variables presenting a significant association with response to HBV vaccine at the univariate level (z-test: p-value  $\leq 0.05$ ) were included in the multivariate level. Age, gender and the BioAge are significantly associated with HBV vaccine response in the univariate analysis. The BioAge signature maintains significant association with HBV vaccine response even after correcting for clinical variable like age and gender.

Supplementary Table 3a. List of transcript in the BioAge signature

Probe ID	Gene Symbol	Module	Pearson Correlation	Regression Coefficient	t-statistic	nominal p-value	adjusted p-value
GI_4507398-S	<b>TCF4</b>	1	-0.310	-0.00829	-11.4	8.98E-29	3.03E-25
GI_24475968-S	<b>MZB1</b>	1	-0.285	-0.0142	-10.5	1.27E-24	2.15E-21
GI_31542536-S	<b>CDDA7L</b>	1	-0.248	-0.00941	-9.00	8.12E-19	6.51E-16
GI_13375806-S	<b>BEND5</b>	1	-0.232	-0.0160	-8.38	1.39E-16	7.72E-14
GI_32189367-S	<b>IGJ</b>	1	-0.218	-0.0138	-7.85	8.93E-15	3.80E-12
Hs.449609-S	---	1	-0.216	-0.0149	-7.80	1.28E-14	5.31E-12
GI_23238191-S	<b>TNFRSF17</b>	1	-0.216	-0.0194	-7.78	1.55E-14	6.20E-12
GI_38348195-S	<b>DERL3</b>	1	-0.207	-0.0146	-7.46	1.67E-13	5.59E-11
Hs.449584-S	---	1	-0.200	-0.0236	-7.19	1.15E-12	3.22E-10
GI_20336304-I	<b>BCL11A</b>	1	-0.196	-0.00621	-7.03	3.36E-12	8.40E-10
GI_41190507-S	---	1	-0.186	-0.0123	-6.64	4.58E-11	9.30E-09
GI_40317614-A	<b>PMEPA1</b>	1	-0.185	-0.0247	-6.63	4.99E-11	1.00E-08
GI_41190543-S	---	1	-0.184	-0.0169	-6.57	7.16E-11	1.37E-08
Hs.449602-S	<b>IGLL5</b>	1	-0.183	-0.0120	-6.57	7.58E-11	1.43E-08
GI_21361744-S	<b>STRBP</b>	1	-0.183	-0.00643	-6.54	9.24E-11	1.72E-08
GI_40804747-S	<b>LIMS2</b>	1	-0.180	-0.0113	-6.45	1.62E-10	2.93E-08
Hs.512137-S	---	1	-0.180	-0.0126	-6.43	1.84E-10	3.25E-08
GI_12669916-S	<b>E2F5</b>	1	-0.179	-0.00752	-6.40	2.19E-10	3.77E-08
Hs.205675-S	---	1	-0.176	-0.0106	-6.28	4.66E-10	7.42E-08
Hs.16515-S	---	1	-0.169	-0.00809	-6.01	2.40E-09	3.39E-07
hmm11123-S	---	1	-0.168	-0.0238	-6.01	2.50E-09	3.50E-07
Hs.512124-S	---	1	-0.165	-0.00928	-5.88	5.30E-09	6.79E-07
hmm10298-S	---	1	-0.165	-0.0129	-5.88	5.32E-09	6.80E-07
GI_40254976-S	<b>MIR600HG</b>	1	-0.160	-0.0102	-5.72	1.34E-08	1.61E-06
GI_21264573-S	<b>TSPAN13</b>	1	-0.159	-0.00968	-5.68	1.72E-08	1.99E-06
GI_21536441-S	<b>BCL7A</b>	1	-0.159	-0.0125	-5.66	1.87E-08	2.13E-06
GI_41350329-S	<b>MOB3B</b>	1	-0.159	-0.00854	-5.66	1.92E-08	2.17E-06
GI_37546969-S	---	1	-0.156	-0.0117	-5.54	3.59E-08	3.90E-06
GI_31542945-S	---	1	-0.156	-0.00399	-5.53	3.85E-08	4.16E-06
GI_7019342-S	<b>CD24</b>	1	-0.155	-0.0112	-5.53	3.95E-08	4.24E-06
GI_4507176-S	<b>SPIB</b>	1	-0.153	-0.00717	-5.45	6.00E-08	6.21E-06
GI_41281541-S	<b>COBL1</b>	1	-0.151	-0.0154	-5.37	9.42E-08	9.37E-06
GI_42662613-S	---	1	-0.149	-0.00893	-5.31	1.27E-07	1.21E-05
GI_5453933-S	<b>POU2AF1</b>	1	-0.148	-0.00975	-5.25	1.76E-07	1.64E-05
GI_18641377-S	<b>HLA-DOB</b>	1	-0.144	-0.00797	-5.11	3.73E-07	3.19E-05
GI_7661757-S	<b>KIAA0125</b>	1	-0.143	-0.00580	-5.09	4.06E-07	3.43E-05
Hs.406489-S	---	1	-0.140	-0.0129	-4.99	6.82E-07	5.44E-05
GI_27500987-S	<b>LINC00494</b>	1	-0.137	-0.0198	-4.87	1.24E-06	9.09E-05
GI_21040361-A	<b>BACE2</b>	1	-0.137	-0.00735	-4.85	1.38E-06	0.000100
Hs.449605-S	---	1	-0.136	-0.00930	-4.85	1.42E-06	0.000103
GI_4502650-S	<b>CD22</b>	1	-0.136	-0.00678	-4.82	1.59E-06	0.000112
Hs.188173-S	---	1	-0.134	-0.00872	-4.76	2.12E-06	0.000145
GI_23110986-A	<b>CD20</b>	1	-0.134	-0.00731	-4.75	2.27E-06	0.000154
GI_32484980-S	<b>BANK1</b>	1	-0.132	-0.00595	-4.69	3.08E-06	0.000203
GI_6912271-S	<b>STAP1</b>	1	-0.128	-0.00897	-4.55	5.82E-06	0.000356
GI_7662295-S	<b>FCHSD2</b>	1	-0.126	-0.00326	-4.45	9.27E-06	0.000543
GI_11415027-S	<b>TCL1A</b>	1	-0.122	-0.00860	-4.34	1.53E-05	0.000837
GI_21264601-S	<b>LAMA5</b>	1	-0.120	-0.00598	-4.26	2.17E-05	0.00112
GI_20270264-A	<b>FCRL2</b>	1	-0.119	-0.0120	-4.23	2.47E-05	0.00124
Hs.444414-S	---	1	-0.118	-0.0105	-4.17	3.20E-05	0.00154
GI_19923628-I	<b>FCRL2</b>	1	-0.118	-0.00752	-4.17	3.21E-05	0.00154
GI_23238205-S	<b>TNFRSF13B</b>	1	-0.117	-0.00577	-4.16	3.41E-05	0.00162
Hs.469446-S	---	1	-0.116	-0.00779	-4.10	4.33E-05	0.00197
Hs.132571-S	---	1	-0.116	-0.0108	-4.10	4.33E-05	0.00197
GI_11038671-A	<b>CD79A</b>	1	-0.114	-0.00603	-4.02	6.15E-05	0.00266
GI_20302136-S	<b>KIAA0125</b>	1	-0.112	-0.0119	-3.98	7.22E-05	0.00302
GI_32698768-S	<b>GNG7</b>	1	-0.110	-0.00492	-3.90	0.000102	0.00402
GI_34147712-S	<b>TLE1</b>	1	-0.110	-0.00792	-3.89	0.000104	0.00409
GI_23110988-I	<b>CD20</b>	1	-0.109	-0.00597	-3.86	0.000117	0.00448
GI_31542206-S	<b>FAM129C</b>	1	-0.108	-0.00599	-3.83	0.000133	0.00498
GI_33469981-S	<b>BLK</b>	1	-0.108	-0.00491	-3.82	0.000137	0.00512
GI_42544162-S	<b>FCRLA</b>	1	-0.101	-0.00534	-3.58	0.000363	0.0113
GI_4826763-S	<b>HS3ST1</b>	1	-0.0991	-0.0158	-3.51	0.000472	0.0140
GI_7019566-S	<b>VPREB3</b>	1	-0.0982	-0.0120	-3.47	0.000529	0.0153
GI_15451903-S	<b>CD200</b>	1	-0.0981	-0.0104	-3.47	0.000537	0.0155
GI_32441282-I	<b>RALGPS2</b>	1	-0.0976	-0.0129	-3.45	0.000575	0.0164
Hs.136376-S	---	1	-0.0973	-0.0182	-3.44	0.000598	0.0169
GI_27777635-S	<b>TCF3</b>	1	-0.0973	-0.00263	-3.43	0.000619	0.0173
GI_13376686-S	<b>KIAA0226L</b>	1	-0.0963	-0.00455	-3.40	0.000686	0.0188
GI_32481214-S	<b>CD19</b>	1	-0.0949	-0.00502	-3.35	0.000826	0.0218
GI_14550413-S	<b>FCRL5</b>	1	-0.0934	-0.00789	-3.30	0.000992	0.0251
GI_9961251-A	<b>ABCBA4</b>	1	-0.0925	-0.00750	-3.27	0.001103	0.0273
Hs.446193-S	---	1	-0.0917	-0.0134	-3.24	0.001212	0.0293
hmm3577-S	---	1	-0.0913	-0.00726	-3.23	0.001292	0.0307
GI_37546026-S	---	1	-0.0907	-0.00638	-3.21	0.001380	0.0323
hmm3574-S	---	1	-0.0879	-0.00606	-3.11	0.001933	0.0422
GI_8922306-I	---	1	-0.0863	-0.0152	-3.05	0.002349	0.0490
GI_11038675-A	<b>CD79B</b>	1	-0.0863	-0.00344	-3.04	0.002377	0.0494
GI_18375502-A	<b>APEX1</b>	2	-0.255	-0.00413	-9.18	1.80E-19	1.52E-16
GI_25777719-A	<b>ALDH5A1</b>	2	-0.207	-0.0133	-7.43	2.06E-13	6.73E-11
GI_5453602-S	<b>CCT2</b>	2	-0.195	-0.00413	-6.97	5.18E-12	1.25E-09
GI_16905527-A	<b>DAP3</b>	2	-0.189	-0.00237	-6.67	3.72E-11	7.69E-09
GI_34222198-S	<b>LRRC8D</b>	2	-0.172	-0.00383	-6.13	1.21E-09	1.77E-07
GI_17388802-S	<b>PAICS</b>	2	-0.168	-0.00707	-6.00	2.59E-09	3.57E-07

## Legend

█ Genes negatively correlated to age  
█ Genes positively correlated to age

GI_4506792-S	ATXN1	2	0.168	0.00449	5.99	2.72E-09	3.73E-07
GI_38787975-S	TSPAN3	2	-0.167	-0.00675	-5.95	3.42E-09	4.57E-07
GI_37540654-S	ZNF518B	2	-0.162	-0.00616	-5.77	1.02E-08	1.23E-06
GI_22748692-S	ARL14EP	2	-0.157	-0.00463	-5.59	2.81E-08	3.11E-06
GI_4505454-S	NRIP1	2	-0.153	-0.00887	-5.44	6.31E-08	6.50E-06
GI_7657135-S	GPR160	2	-0.152	-0.00488	-5.39	8.55E-08	8.64E-06
GI_4506558-S	ABCE1	2	-0.151	-0.00462	-5.38	8.92E-08	8.99E-06
GI_27764872-S	CRLF3	2	-0.151	-0.00431	-5.36	1.00E-07	9.90E-06
GI_29570797-S	PPAT	2	-0.149	-0.00608	-5.31	1.27E-07	1.21E-05
GI_40254433-S	PDE3B	2	-0.148	-0.0245	-5.27	1.60E-07	1.49E-05
GI_10864048-S	FAM60A	2	-0.146	-0.00313	-5.18	2.53E-07	2.27E-05
GI_34222383-S	THNSL1	2	-0.144	-0.0244	-5.12	3.57E-07	3.06E-05
GI_7662509-S	LEPROTL1	2	-0.144	-0.00687	-5.11	3.82E-07	3.27E-05
GI_21359901-S	NSA2	2	-0.144	-0.00363	-5.09	4.12E-07	3.48E-05
GI_21265090-S	MRPL3	2	-0.140	-0.00450	-4.96	8.02E-07	6.27E-05
GI_24475984-S	TMEM14C	2	-0.139	-0.00425	-4.93	9.45E-07	7.23E-05
GI_16445423-S	WDR12	2	-0.139	-0.00422	-4.93	9.52E-07	7.27E-05
GI_19743810-S	TBK1	2	0.139	0.00255	4.89	1.15E-06	8.58E-05
GI_34147704-S	HMGN1	2	-0.138	-0.00469	-4.88	1.18E-06	8.75E-05
GI_40255150-S	---	2	-0.137	-0.00856	-4.87	1.27E-06	9.33E-05
GI_16950596-A	MRPS33	2	-0.136	-0.00314	-4.83	1.57E-06	0.000111
GI_7705432-S	EIF3L	2	-0.136	-0.00235	-4.79	1.89E-06	0.000131
GI_4502890-S	CLNS1A	2	-0.134	-0.00225	-4.72	2.58E-06	0.000173
GI_16306478-S	CEP41	2	-0.132	-0.0163	-4.69	3.00E-06	0.000198
GI_18482382-S	KLHL6	2	-0.132	-0.00601	-4.69	3.02E-06	0.000199
GI_37059742-S	NIFK	2	-0.133	-0.00315	-4.69	3.06E-06	0.000202
GI_42789728-S	LRMP	2	-0.131	-0.00220	-4.60	4.69E-06	0.000294
GI_40353732-S	NPM1	2	-0.129	-0.00536	-4.59	4.95E-06	0.000307
GI_4503520-S	EIF3E	2	-0.128	-0.00448	-4.53	6.58E-06	0.000399
GI_33286443-S	MAML2	2	-0.127	-0.00638	-4.52	6.73E-06	0.000406
GI_3435263-A	ZMYND8	2	-0.126	-0.00246	-4.45	9.48E-06	0.000554
GI_22748758-S	LRRK75A-AS1	2	-0.124	-0.00381	-4.40	1.19E-05	0.000677
GI_26190615-S	KLHDC1	2	-0.124	-0.00449	-4.39	1.23E-05	0.000699
GI_4506742-S	RPS8	2	-0.123	-0.00259	-4.34	1.53E-05	0.000837
GI_4506890-S	SET	2	-0.123	-0.00235	-4.34	1.56E-05	0.000854
GI_5730038-S	SETMAR	2	-0.122	-0.00347	-4.32	1.67E-05	0.000899
GI_14211872-S	EBPL	2	-0.120	-0.00320	-4.26	2.23E-05	0.00114
GI_37543779-S	AMN1	2	-0.120	-0.00519	-4.25	2.30E-05	0.00117
GI_10864022-S	ZBED5	2	-0.120	-0.00304	-4.24	2.38E-05	0.00121
GI_20127469-S	EEF1E1	2	-0.120	-0.00344	-4.23	2.56E-05	0.00128
GI_40789255-S	SRP72	2	-0.120	-0.00231	-4.21	2.72E-05	0.00134
GI_38455426-S	CCT4	2	-0.118	-0.00238	-4.14	3.64E-05	0.00171
GI_21359925-S	HMG20A	2	-0.117	-0.00376	-4.14	3.68E-05	0.00173
GI_13376622-S	THOC7	2	-0.117	-0.00215	-4.10	4.33E-05	0.00197
GI_8922630-S	EXD2	2	-0.116	-0.0198	-4.10	4.37E-05	0.00198
GI_20143934-I	RLN2	2	-0.114	-0.0198	-4.05	5.36E-05	0.00236
GI_7705727-S	CUTC	2	-0.115	-0.00224	-4.05	5.38E-05	0.00236
GI_22538484-S	PRPSAP2	2	-0.115	-0.00211	-4.04	5.61E-05	0.00245
GI_17402905-S	RPL22	2	-0.114	-0.00404	-4.03	5.82E-05	0.00253
GI_30315657-A	SPTBN1	2	-0.113	-0.0153	-4.01	6.30E-05	0.00272
GI_37694064-A	EBAG9	2	-0.114	-0.00212	-4.01	6.42E-05	0.00276
GI_17017971-S	RPL26L1	2	-0.114	-0.00209	-4.00	6.61E-05	0.00282
GI_15812219-S	RPL31	2	-0.114	-0.00167	-4.00	6.78E-05	0.00288
GI_13491165-S	PUM1	2	-0.113	-0.00214	-3.99	7.09E-05	0.00298
GI_24497598-A	PIGP	2	-0.112	-0.00295	-3.96	7.81E-05	0.00323
GI_11496890-S	ADH5	2	-0.112	-0.00377	-3.96	7.81E-05	0.00323
GI_40538800-S	TMEM200A	2	0.110	0.00698	3.89	0.000107	0.00418
GI_34147499-S	PPP1R2	2	-0.110	-0.00385	-3.88	0.000111	0.00429
GI_16418408-S	TMEM123	2	-0.110	-0.00463	-3.87	0.000112	0.00433
GI_13514830-S	DDX10	2	-0.110	-0.00226	-3.87	0.000113	0.00433
GI_8923351-S	MAP4K4	2	-0.109	-0.00376	-3.85	0.000123	0.00469
GI_16950602-S	MRPS35	2	-0.110	-0.00207	-3.85	0.000124	0.00470
GI_33519472-S	NDFIP1	2	-0.109	-0.00374	-3.84	0.000132	0.00494
GI_37538683-S	LINC-PINT	2	0.108	0.00558	3.81	0.000148	0.00545
Hs.508436-S	RABGAP1L	2	0.108	0.00473	3.80	0.000150	0.00551
GI_5453997-S	IPO7	2	-0.107	-0.00618	-3.80	0.000150	0.00552
GI_37550602-S	RPL22L1	2	-0.108	-0.00227	-3.79	0.000156	0.00567
GI_33239442-A	SYPL1	2	-0.107	-0.00366	-3.79	0.000161	0.00581
GI_40788009-S	CD55	2	-0.107	-0.00284	-3.77	0.000170	0.00609
GI_4504522-S	---	2	-0.106	-0.00383	-3.73	0.000201	0.00700
GI_7106298-S	ATXN10	2	-0.106	-0.00227	-3.72	0.000206	0.00712
GI_4758733-S	PMPCB	2	-0.106	-0.00188	-3.72	0.000207	0.00716
GI_23510357-A	RIOK1	2	-0.105	-0.00246	-3.71	0.000220	0.00753
GI_21314761-S	MCEE	2	-0.105	-0.00314	-3.71	0.000220	0.00753
GI_21389390-S	FOPNL	2	-0.105	-0.00171	-3.69	0.000232	0.00790
GI_33186904-S	OMA1	2	-0.104	-0.00345	-3.69	0.000237	0.00804
GI_21389336-S	RPIA	2	-0.104	-0.00206	-3.67	0.000256	0.00857
GI_24429565-I	PDE7A	2	-0.104	-0.0104	-3.67	0.000257	0.00858
GI_28416426-I	ZNF655	2	-0.104	-0.00207	-3.65	0.000273	0.00899
GI_38505204-S	PTEN	2	-0.103	-0.00211	-3.64	0.000286	0.00937
GI_42658173-S	SUN1	2	-0.102	-0.00256	-3.59	0.000340	0.0108
Hs.519802-S	NPM1	2	-0.102	-0.00434	-3.59	0.000340	0.0108
GI_21265077-S	MRPL15	2	-0.102	-0.00197	-3.59	0.000349	0.0110
GI_34147413-S	NOA1	2	-0.102	-0.00189	-3.58	0.000353	0.0111
GI_37059748-S	TBC1D15	2	-0.102	-0.00198	-3.58	0.000363	0.0113
GI_24429565-A	PDE7A	2	-0.101	-0.0141	-3.56	0.000385	0.0118
GI_31982952-I	POGLUT1	2	-0.100	-0.00337	-3.54	0.000413	0.0125

GI_8922941-S	AGPAT5	2	-0.100	-0.00387	-3.54	0.000415	0.0125
GI_16117786-A	RPL34	2	-0.100	-0.00313	-3.54	0.000418	0.0126
GI_38327549-S	LPAR6	2	0.100	0.00375	3.54	0.000423	0.0127
GI_4507130-S	SNRPF	2	-0.100	-0.00211	-3.53	0.000426	0.0128
GI_9506672-S	MIOS	2	-0.101	-0.00143	-3.53	0.000430	0.0129
GI_9966880-S	NUP107	2	-0.100	-0.00223	-3.53	0.000432	0.0129
GI_7662231-S	ZC3H11A	2	-0.100	-0.00224	-3.51	0.000462	0.0137
GI_14149729-S	SMARCAD1	2	-0.0987	-0.00528	-3.49	0.000500	0.0146
GI_8051634-S	XPO1	2	-0.0985	-0.00229	-3.47	0.000542	0.0156
GI_40255235-S	ZNF281	2	-0.0981	-0.00204	-3.45	0.000577	0.0165
GI_14042922-S	TMEM245	2	-0.0979	-0.00254	-3.45	0.000582	0.0166
GI_9951918-S	KATNA1	2	0.0975	0.00250	3.44	0.000610	0.0171
GI_29244580-S	ZDHHC17	2	-0.0971	-0.00244	-3.42	0.000642	0.0179
GI_31442407-S	SNRK	2	-0.0967	-0.00421	-3.42	0.000653	0.0182
GI_7662455-S	FOXJ3	2	-0.0974	-0.00162	-3.41	0.000659	0.0183
GI_17017970-S	RPL26	2	-0.0968	-0.00283	-3.41	0.000659	0.0183
GI_13375984-S	ZFAND1	2	-0.0968	-0.00308	-3.41	0.000659	0.0183
GI_4885386-S	HADH	2	-0.0970	-0.00221	-3.41	0.000662	0.0183
GI_7661795-S	GTPBP8	2	-0.0965	-0.00272	-3.40	0.000685	0.0188
GI_42476207-S	AMZ2	2	0.0961	0.00220	3.38	0.000738	0.0199
GI_16306499-S	FBXO21	2	-0.0963	-0.00162	-3.37	0.000765	0.0204
GI_29171760-S	PPA1	2	-0.0953	-0.00255	-3.36	0.000802	0.0213
GI_21237801-S	SMARCC1	2	-0.0962	-0.00140	-3.36	0.000804	0.0213
GI_18699723-S	PNISR	2	-0.0950	-0.00301	-3.35	0.000828	0.0218
GI_4505816-S	PIP5K1B	2	-0.0946	-0.0145	-3.34	0.000849	0.0222
GI_13376244-S	GGNBP2	2	-0.0953	-0.00164	-3.34	0.000856	0.0224
GI_27501445-S	DENR	2	-0.0950	-0.00185	-3.34	0.000877	0.0228
GI_12545407-S	RASA2	2	-0.0940	-0.00397	-3.32	0.000925	0.0237
GI_34101266-A	BCKDHB	2	-0.0939	-0.00444	-3.32	0.000930	0.0238
GI_30425377-S	DRAM2	2	-0.0935	-0.00272	-3.30	0.001006	0.0253
GI_29743852-S	PRMT3	2	-0.0929	-0.00309	-3.28	0.001074	0.0267
GI_7656970-S	N4BP2L2	2	-0.0930	-0.00232	-3.28	0.001081	0.0268
GI_20357534-S	ATP6V1G1	2	-0.0929	-0.00192	-3.26	0.001131	0.0278
GI_12597621-S	CLPX	2	-0.0925	-0.00215	-3.26	0.001162	0.0284
GI_14591917-S	SEH1L	2	-0.0919	-0.00431	-3.24	0.001206	0.0292
GI_41151340-S	HLA-F-AS1	2	-0.0919	-0.00223	-3.24	0.001242	0.0298
GI_5729936-S	MTX2	2	-0.0918	-0.00253	-3.23	0.001250	0.0300
GI_23270402-A	CRYZL1	2	-0.0915	-0.00244	-3.22	0.001299	0.0309
GI_4504450-S	RBMX	2	-0.0921	-0.00146	-3.22	0.001303	0.0309
GI_41054845-S	ARMCX5	2	-0.0907	-0.00803	-3.21	0.001375	0.0322
GI_31543090-S	MAK16	2	-0.0908	-0.00222	-3.20	0.001421	0.0331
GI_38158017-S	CNTRL	2	-0.0907	-0.00245	-3.20	0.001424	0.0332
GI_6912487-S	LSM5	2	-0.0906	-0.00274	-3.20	0.001430	0.0333
GI_34328903-A	PIGN	2	-0.0903	-0.00282	-3.18	0.001484	0.0343
GI_14110394-S	XBP1	2	-0.0905	-0.00190	-3.18	0.001513	0.0348
GI_40254881-S	C21orf91	2	0.0900	0.00342	3.18	0.001528	0.0351
GI_13384595-S	ZNF330	2	-0.0900	-0.00187	-3.16	0.001608	0.0366
GI_19923363-S	ARPP19	2	0.0889	0.00247	3.13	0.001778	0.0395
GI_32483368-A	ORC3	2	-0.0887	-0.00371	-3.13	0.001783	0.0396
GI_25777737-S	ALDH6A1	2	-0.0886	-0.00235	-3.12	0.001844	0.0406
GI_4505540-S	USO1	2	-0.0882	-0.00199	-3.10	0.001968	0.0428
GI_32306540-S	TRIT1	2	-0.0877	-0.00370	-3.10	0.002011	0.0435
GI_19311011-S	BRIX1	2	-0.0878	-0.00218	-3.09	0.002036	0.0440
GI_11863158-S	RYK	2	-0.0876	-0.00181	-3.08	0.002124	0.0454
GI_21389378-S	GTSF1	2	0.0871	0.00398	3.08	0.002141	0.0457
GI_39725682-S	NARS2	2	-0.0870	-0.00565	-3.07	0.002164	0.0460
GI_37059785-S	LRRN3	3	-0.529	-0.0431	-21.9	2.74E-90	1.29E-85
GI_4505674-S	PDE9A	3	-0.390	-0.0268	-14.9	2.56E-46	4.04E-42
GI_4503680-S	FCGBP	3	-0.357	-0.0179	-13.4	1.47E-38	1.16E-34
GI_4503746-S	FLNB	3	-0.319	-0.0101	-11.8	1.60E-30	6.86E-27
GI_30795213-S	CCR7	3	-0.317	-0.0168	-11.7	3.08E-30	1.21E-26
GI_4507052-S	SLC7A6	3	-0.289	-0.00832	-10.6	3.45E-25	6.79E-22
GI_31542834-S	GAL3ST4	3	-0.268	-0.0174	-9.80	6.64E-22	7.66E-19
GI_22749458-S	GPC2	3	-0.265	-0.0138	-9.68	2.03E-21	2.16E-18
GI_21361616-S	FAM134B	3	-0.265	-0.0146	-9.68	2.06E-21	2.16E-18
GI_34147607-S	NOSIP	3	-0.265	-0.00760	-9.63	3.31E-21	3.33E-18
Hs_146543-S	---	3	-0.264	-0.0140	-9.62	3.59E-21	3.53E-18
GI_19923451-S	LEF1	3	-0.261	-0.0153	-9.50	1.05E-20	1.01E-17
GI_42661554-S	ZNF667-AS1	3	-0.259	-0.0168	-9.44	1.78E-20	1.65E-17
GI_40354211-S	IPCEF1	3	-0.256	-0.00658	-9.28	7.29E-20	6.39E-17
GI_23510435-S	CD27	3	-0.244	-0.0121	-8.86	2.63E-18	1.97E-15
GI_37552665-S	SGK223	3	-0.244	-0.00961	-8.84	3.32E-18	2.38E-15
GI_37059752-S	SUSD3	3	-0.242	-0.00741	-8.77	5.73E-18	3.82E-15
GI_33356175-S	SATB1	3	-0.241	-0.0111	-8.74	7.49E-18	4.92E-15
GI_31341850-S	LINC00282	3	-0.239	-0.0180	-8.67	1.30E-17	8.40E-15
GI_34147626-S	ZSCAN18	3	-0.236	-0.0177	-8.53	4.16E-17	2.55E-14
GI_21361852-S	PLXDC1	3	-0.235	-0.0129	-8.50	5.39E-17	3.27E-14
GI_19923906-S	OXNAD1	3	-0.233	-0.0153	-8.44	8.63E-17	5.10E-14
GI_4505668-S	PDE6B	3	-0.233	-0.00668	-8.41	1.08E-16	6.31E-14
GI_21284386-A	ABLM1	3	-0.231	-0.00952	-8.36	1.62E-16	8.92E-14
GI_42660348-S	---	3	-0.229	-0.0119	-8.29	2.98E-16	1.62E-13
GI_5453765-S	NELL2	3	-0.224	-0.0148	-8.09	1.37E-15	6.81E-13
GI_22748704-S	BTBDF11	3	-0.223	-0.00965	-8.04	2.12E-15	1.04E-12
GI_33354248-S	DNAJA4	3	-0.220	-0.00499	-7.90	6.16E-15	2.75E-12
GI_37546957-S	TRABD2A	3	-0.214	-0.0128	-7.72	2.30E-14	8.71E-12
GI_42558263-S	FAM102A	3	-0.207	-0.00689	-7.42	2.12E-13	6.86E-11
GI_19923900-S	PCED1B	3	-0.200	-0.00700	-7.16	1.42E-12	3.83E-10

GI_4507610-S	TNK1	3	-0.199	-0.0270	-7.15	1.44E-12	3.85E-10
GI_4505466-S	NT5E	3	-0.197	-0.0216	-7.06	2.82E-12	7.17E-10
GI_22748948-S	IGF1R	3	-0.193	-0.0105	-6.91	7.82E-12	1.84E-09
GI_7706512-S	RAPGEF6	3	-0.191	-0.00560	-6.82	1.38E-11	3.09E-09
GI_22027529-S	LDLRAP1	3	-0.188	-0.00711	-6.74	2.42E-11	5.23E-09
GI_18426908-A	SIRPG	3	-0.188	-0.00887	-6.74	2.49E-11	5.32E-09
GI_37545997-S	C14orf64	3	-0.188	-0.0301	-6.74	2.50E-11	5.33E-09
GI_37546229-S	BEX4	3	-0.188	-0.00552	-6.73	2.53E-11	5.37E-09
GI_8393671-S	KLHL3	3	-0.187	-0.00638	-6.68	3.68E-11	7.63E-09
GI_42660596-S	IGF1R	3	-0.184	-0.0143	-6.60	5.91E-11	1.16E-08
GI_42660198-S	TBC1D4	3	-0.185	-0.00812	-6.60	6.00E-11	1.18E-08
GI_20143980-S	HSD17B8	3	-0.185	-0.00518	-6.60	6.06E-11	1.18E-08
GI_27262654-A	IL16	3	-0.182	-0.00451	-6.51	1.11E-10	2.05E-08
GI_22507386-S	CELA1	3	-0.179	-0.0160	-6.39	2.34E-10	3.98E-08
GI_13540489-S	BACH2	3	-0.177	-0.0121	-6.35	3.10E-10	5.16E-08
Hs.264076-S	RBM26-AS1	3	-0.176	-0.0243	-6.29	4.36E-10	7.02E-08
GI_34222221-S	EPHX2	3	-0.174	-0.0255	-6.24	6.03E-10	9.35E-08
GI_19923326-S	NET1	3	-0.175	-0.00500	-6.22	6.63E-10	1.02E-07
GI_21614516-A	GYPC	3	-0.169	-0.00528	-6.04	2.07E-09	2.96E-07
GI_34147517-S	FAIM3	3	-0.169	-0.00719	-6.02	2.29E-09	3.24E-07
GI_8393383-S	C6orf48	3	-0.166	-0.00475	-5.89	4.91E-09	6.41E-07
GI_42476192-S	TMEM66	3	-0.164	-0.00324	-5.81	8.01E-09	9.94E-07
GI_13376301-S	---	3	-0.161	-0.0154	-5.73	1.25E-08	1.50E-06
GI_11968026-S	AKTIP	3	-0.159	-0.00479	-5.66	1.84E-08	2.11E-06
GI_34222126-S	PIK3IP1	3	-0.158	-0.00741	-5.63	2.27E-08	2.55E-06
GI_32698973-S	LINC00663	3	-0.158	-0.00659	-5.62	2.42E-08	2.71E-06
GI_31543215-S	MYC	3	-0.155	-0.00682	-5.52	4.17E-08	4.45E-06
GI_37059747-S	ADPRM	3	-0.153	-0.00486	-5.43	6.88E-08	7.03E-06
GI_22035553-A	APBB1	3	-0.150	-0.00768	-5.33	1.16E-07	1.14E-05
GI_23110934-I	PSMA1	3	-0.146	-0.0127	-5.20	2.37E-07	2.14E-05
GI_41393585-A	DGKA	3	-0.145	-0.00559	-5.15	3.05E-07	2.68E-05
GI_4504706-S	INPP4B	3	0.143	0.00531	5.09	4.15E-07	3.49E-05
GI_31542293-S	CD2	3	0.141	0.00622	5.00	6.49E-07	5.25E-05
GI_22027626-A	TRAF5	3	-0.140	-0.00400	-4.98	7.27E-07	5.77E-05
GI_32699055-S	---	3	-0.138	-0.00691	-4.90	1.06E-06	8.02E-05
Hs.519321-S	---	3	-0.136	-0.0206	-4.84	1.49E-06	0.000107
GI_13375927-S	ANKRD55	3	-0.136	-0.0249	-4.83	1.52E-06	0.000108
hmm8270-S	FAM159A	3	-0.134	-0.00590	-4.75	2.27E-06	0.000154
GI_4507742-S	TXK	3	-0.133	-0.00975	-4.73	2.55E-06	0.000171
GI_33624782-I	SEPT6	3	-0.131	-0.00420	-4.64	3.84E-06	0.000248
GI_27477118-S	CAMK4	3	-0.131	-0.0134	-4.64	3.85E-06	0.000248
GI_32967308-S	EPHA1	3	-0.131	-0.0118	-4.64	3.89E-06	0.000251
GI_40255142-S	FAM184A	3	-0.129	-0.0190	-4.59	4.80E-06	0.000300
GI_34147571-S	ISG20	3	-0.129	-0.00358	-4.56	5.71E-06	0.000350
GI_34594658-S	MAPKAPK5-AS1	3	-0.128	-0.00264	-4.51	6.95E-06	0.000418
GI_28372504-S	CBX7	3	0.125	0.00328	4.43	1.05E-05	0.000607
GI_24497579-S	AKR1B1	3	-0.126	-0.00201	-4.42	1.06E-05	0.000613
Hs.497588-S	---	3	-0.123	-0.0239	-4.36	1.38E-05	0.000768
GI_44680134-A	BDH1	3	-0.123	-0.0104	-4.36	1.38E-05	0.000768
GI_18426907-I	SIRPG	3	-0.121	-0.0100	-4.28	2.00E-05	0.00105
GI_18598508-S	CDR2	3	-0.120	-0.00711	-4.27	2.12E-05	0.00110
GI_24475858-S	ZNF101	3	-0.119	-0.00429	-4.23	2.52E-05	0.00126
hmm18828-S	BEX2	3	-0.118	-0.0109	-4.19	3.00E-05	0.00146
GI_4758815-S	NMT2	3	-0.118	-0.00626	-4.18	3.08E-05	0.00149
GI_7657436-S	SESN1	3	-0.117	-0.00398	-4.14	3.76E-05	0.00175
hmm19321-S	PRKCQ-AS1	3	-0.117	-0.00727	-4.13	3.83E-05	0.00178
GI_38045937-S	RNF144A	3	-0.115	-0.00360	-4.07	5.06E-05	0.00225
GI_21362099-S	ELOVL4	3	-0.115	-0.0101	-4.06	5.17E-05	0.00228
GI_38158029-S	SRSF6	3	-0.113	-0.00214	-3.97	7.70E-05	0.00319
GI_37546926-S	---	3	-0.112	-0.00262	-3.95	8.39E-05	0.00341
GI_13569871-S	LBH	3	-0.111	-0.00454	-3.92	9.22E-05	0.00370
GI_7657101-S	PGAP2	3	-0.111	-0.00501	-3.92	9.51E-05	0.00379
GI_22062022-S	TMEM41B	3	-0.110	-0.00300	-3.90	0.000103	0.00403
GI_12232446-S	CRTC3	3	-0.110	-0.00290	-3.89	0.000105	0.00411
GI_31542322-S	CRIP2	3	0.110	0.00942	3.89	0.000105	0.00411
GI_16905512-S	RPLP2	3	-0.110	-0.00237	-3.89	0.000106	0.00415
GI_29735368-S	PP7080	3	-0.110	-0.00391	-3.89	0.000107	0.00418
GI_19923670-S	FOXP1	3	-0.110	-0.00367	-3.87	0.000114	0.00437
GI_40255167-S	TSHZ2	3	0.109	0.0169	3.85	0.000123	0.00469
GI_28144902-S	IL23A	3	-0.109	-0.00632	-3.84	0.000129	0.00486
GI_4503718-S	FHIT	3	-0.107	-0.00787	-3.80	0.000150	0.00552
GI_5453610-S	CD28	3	-0.107	-0.00510	-3.79	0.000155	0.00566
Hs.137587-S	LOC643733	3	0.107	0.00532	3.77	0.000169	0.00605
GI_4758719-S	MLLT3	3	-0.106	-0.00383	-3.75	0.000187	0.00659
GI_4265994-S	---	3	-0.105	-0.00342	-3.72	0.000211	0.00728
GI_28610150-S	IL7R	3	-0.105	-0.00596	-3.71	0.000215	0.00738
GI_7662075-S	KIAA0355	3	-0.104	-0.00234	-3.65	0.000271	0.00893
GI_37551029-S	FAM171A1	3	-0.103	-0.0111	-3.63	0.000296	0.00965
GI_6996015-A	LTB	3	-0.100	-0.00474	-3.54	0.000410	0.0125
GI_21361928-S	SLC38A1	3	-0.100	-0.00339	-3.54	0.000415	0.0125
GI_35038527-S	PASK	3	-0.100	-0.00666	-3.53	0.000424	0.0128
GI_9257221-S	FOXO1	3	-0.100	-0.00397	-3.53	0.000425	0.0128
GI_12408664-A	MAL	3	-0.093	-0.00545	-3.51	0.000463	0.0137
GI_4753158-S	GTF3A	3	-0.100	-0.00207	-3.50	0.000481	0.0141
GI_18765693-S	DPP4	3	-0.0970	-0.00397	-3.43	0.000631	0.0176
GI_14110406-A	HNRNPDL	3	-0.0967	-0.00332	-3.41	0.000662	0.0183
GI_28827775-S	LY9	3	-0.0962	-0.00373	-3.40	0.000706	0.0193

Hs.439334-S	---	3	0.0954	0.00578	3.37	0.000767	0.0205
GI_7661651-S	<b>ZBTB20</b>	3	-0.0949	-0.00271	-3.35	0.000845	0.0222
Hs.510761-S	---	3	-0.0936	-0.00655	-3.31	0.000969	0.0246
GI_27500902-S	--	3	-0.0927	-0.00234	-3.27	0.001120	0.0276
GI_9966902-S	<b>MAN1C1</b>	3	-0.0914	-0.00618	-3.23	0.001272	0.0304
GI_24475729-S	<b>CCDC65</b>	3	0.0911	0.00699	3.22	0.001322	0.0312
GI_42661225-S	<b>PRKCA</b>	3	-0.0894	-0.00335	-3.15	0.001652	0.0374
GI_42656393-S	<b>KIAA1147</b>	3	-0.0888	-0.00289	-3.13	0.001781	0.0396
GI_20336210-I	<b>GAMT</b>	3	-0.0880	-0.00896	-3.11	0.001908	0.0417
Hs.349094-S	<b>TENM1</b>	3	-0.0871	-0.00525	-3.08	0.002150	0.0457
GI_21359840-S	<b>TTCT3</b>	3	-0.0867	-0.00320	-3.06	0.002281	0.0480
GI_42657549-S	--	3	-0.0869	-0.00149	-3.04	0.002389	0.0495
GI_4557268-S	<b>ADSL</b>	4	-0.205	-0.00300	-7.29	5.44E-13	1.64E-10
GI_31543180-S	<b>PCYOX1L</b>	4	-0.203	-0.00380	-7.24	7.91E-13	2.30E-10
GI_13376239-S	<b>ZNF671</b>	4	-0.195	-0.00541	-6.98	4.67E-12	1.14E-09
GI_37546867-S	<b>WDR43</b>	4	-0.193	-0.00485	-6.90	8.41E-12	1.96E-09
GI_9558740-S	<b>FAM216A</b>	4	-0.191	-0.00461	-6.80	1.58E-11	3.49E-09
GI_22748624-S	<b>ZNF439</b>	4	-0.183	-0.00852	-6.55	8.34E-11	1.56E-08
GI_21314689-S	<b>NGLY1</b>	4	-0.169	-0.00307	-6.00	2.58E-09	3.57E-07
GI_5730016-S	<b>RPP40</b>	4	-0.165	-0.00641	-5.89	5.10E-09	6.60E-07
GI_39725714-S	<b>ATIC</b>	4	-0.165	-0.00331	-5.86	5.91E-09	7.49E-07
GI_8923268-S	<b>TEX10</b>	4	-0.161	-0.00304	-5.69	1.62E-08	1.88E-06
GI_22748614-S	<b>C12orf23</b>	4	-0.157	-0.00704	-5.58	2.93E-08	3.24E-06
GI_40786390-S	<b>DNAJA3</b>	4	-0.152	-0.00303	-5.37	9.44E-08	9.37E-06
GI_7770073-A	<b>IARS</b>	4	-0.145	-0.00331	-5.14	3.12E-07	2.73E-05
GI_27482477-S	--	4	-0.143	-0.00474	-5.07	4.62E-07	3.83E-05
GI_22325391-S	<b>TIGD7</b>	4	-0.138	-0.00754	-4.91	1.01E-06	7.72E-05
GI_24431963-S	<b>HBS1L</b>	4	-0.138	-0.00436	-4.88	1.22E-06	9.02E-05
GI_23308516-S	<b>ZNF75A</b>	4	-0.137	-0.00535	-4.84	1.43E-06	0.000103
GI_4757883-S	<b>LDLRAD4</b>	4	-0.135	-0.00530	-4.80	1.77E-06	0.000123
GI_12965196-S	<b>GRAMD3</b>	4	-0.131	-0.0190	-4.65	3.64E-06	0.000236
GI_89239343-S	<b>NKRF</b>	4	-0.130	-0.00360	-4.61	4.36E-06	0.000275
GI_31415881-S	<b>EXOSC8</b>	4	-0.130	-0.00246	-4.60	4.73E-06	0.000297
GI_32698917-S	<b>NSUN6</b>	4	-0.129	-0.00329	-4.57	5.33E-06	0.000328
GI_38679908-S	<b>TEX2</b>	4	-0.125	-0.00407	-4.42	1.09E-05	0.000625
GI_36287129-S	<b>MRPS25</b>	4	-0.124	-0.00574	-4.38	1.28E-05	0.000722
GI_20336200-A	<b>ATM</b>	4	-0.123	-0.00633	-4.36	1.43E-05	0.000790
GI_21362021-S	<b>ZNF419</b>	4	-0.123	-0.00286	-4.35	1.50E-05	0.000826
GI_21717806-S	<b>TBC1D31</b>	4	-0.122	-0.00324	-4.32	1.66E-05	0.000897
GI_34303962-A	<b>POGLUT1</b>	4	-0.121	-0.00228	-4.28	2.05E-05	0.00107
GI_20127480-S	<b>EPM2A</b>	4	-0.121	-0.00326	-4.27	2.06E-05	0.00108
GI_37594468-A	<b>HIBCH</b>	4	-0.121	-0.00367	-4.26	2.18E-05	0.00112
GI_21265083-S	<b>MRPL1</b>	4	-0.120	-0.00246	-4.24	2.35E-05	0.00119
GI_7669480-S	<b>BNIP3</b>	4	-0.120	-0.00421	-4.23	2.47E-05	0.00124
GI_23308510-S	<b>ZFP3</b>	4	-0.119	-0.00626	-4.20	2.87E-05	0.00140
GI_34147689-S	<b>DENNND2D</b>	4	-0.119	-0.00361	-4.20	2.88E-05	0.00141
GI_42658518-S	<b>ZNF789</b>	4	-0.118	-0.00499	-4.19	2.93E-05	0.00143
GI_11024703-S	<b>TRMT13</b>	4	-0.118	-0.00355	-4.18	3.14E-05	0.00151
GI_31377626-S	<b>NOC3L</b>	4	-0.118	-0.00392	-4.16	3.43E-05	0.00163
GI_42794755-S	<b>ACSL5</b>	4	0.118	0.00234	4.15	3.49E-05	0.00165
GI_23503246-S	<b>TCEAL8</b>	4	-0.118	-0.00258	-4.15	3.52E-05	0.00166
GI_11034834-I	--	4	-0.117	-0.00851	-4.14	3.69E-05	0.00173
GI_45593129-S	<b>GNL3</b>	4	-0.117	-0.00398	-4.13	3.83E-05	0.00178
GI_31341800-S	<b>C5orf51</b>	4	-0.116	-0.00425	-4.12	4.07E-05	0.00186
GI_7706780-I	<b>ZNF226</b>	4	-0.114	-0.00486	-4.05	5.39E-05	0.00236
GI_4505430-S	<b>NPAT</b>	4	-0.113	-0.00456	-4.01	6.44E-05	0.00276
Hs.493585-S	--	4	-0.112	-0.0127	-3.99	7.13E-05	0.00299
GI_42656546-S	<b>ANKAR</b>	4	-0.112	-0.00499	-3.97	7.71E-05	0.00319
GI_19913370-S	<b>TBL1XR1</b>	4	-0.112	-0.00256	-3.93	8.83E-05	0.00356
GI_7661809-S	<b>TIMM21</b>	4	-0.111	-0.00241	-3.91	9.63E-05	0.00382
GI_39995081-S	<b>NSUN2</b>	4	-0.112	-0.00167	-3.91	9.79E-05	0.00388
GI_40255000-S	<b>N4BP2L2</b>	4	0.110	0.00269	3.88	0.000109	0.00424
GI_40789232-S	<b>COQ9</b>	4	-0.110	-0.00179	-3.88	0.000112	0.00432
GI_40789269-S	<b>ZNF573</b>	4	-0.109	-0.00372	-3.87	0.000116	0.00445
GI_38201711-A	<b>DDX17</b>	4	-0.109	-0.00237	-3.85	0.000124	0.00470
GI_33620772-S	<b>KIAA0020</b>	4	-0.108	-0.00276	-3.82	0.000138	0.00513
GI_37552523-S	--	4	-0.108	-0.0112	-3.81	0.000145	0.00537
GI_2882773-S	<b>DYRK4</b>	4	-0.108	-0.00269	-3.81	0.000147	0.00543
GI_41150782-S	<b>OXLD1</b>	4	-0.107	-0.00286	-3.79	0.000161	0.00581
GI_42741681-S	<b>ZRANB2</b>	4	-0.105	-0.00338	-3.72	0.000211	0.00728
GI_21327681-S	<b>ACADM</b>	4	-0.104	-0.00256	-3.66	0.000267	0.00885
GI_21735567-S	<b>CEPT1</b>	4	-0.104	-0.00227	-3.65	0.000274	0.00900
GI_33946328-S	<b>RALA</b>	4	-0.103	-0.00248	-3.62	0.000309	0.00997
GI_40254985-S	<b>HSDL2</b>	4	-0.102	-0.00208	-3.60	0.000328	0.0105
GI_38327028-S	<b>UBE4A</b>	4	-0.102	-0.00185	-3.60	0.000333	0.0106
GI_14110410-I	<b>HNRNPDL</b>	4	-0.101	-0.00290	-3.58	0.000361	0.0113
GI_16418033-S	<b>N4BP2L1</b>	4	-0.102	-0.00184	-3.57	0.000369	0.0114
GI_4758293-S	<b>EPRS</b>	4	-0.101	-0.00206	-3.56	0.000380	0.0117
GI_6005726-S	<b>CCT8</b>	4	-0.100	-0.00287	-3.54	0.000415	0.0125
GI_29826334-S	<b>EIF2S2</b>	4	-0.101	-0.00157	-3.53	0.000435	0.0130
GI_20149642-S	<b>ZNHIT6</b>	4	-0.100	-0.00283	-3.53	0.000435	0.0130
GI_14149614-S	<b>RPAIN</b>	4	-0.101	-0.00155	-3.52	0.000451	0.0134
GI_24308321-S	<b>ZCCHC7</b>	4	-0.100	-0.00343	-3.52	0.000454	0.0135
GI_32307149-A	<b>OGT</b>	4	-0.0990	-0.00288	-3.49	0.000498	0.0145
GI_26667176-S	<b>MRPL46</b>	4	-0.0992	-0.00206	-3.49	0.000500	0.0146
GI_23618925-S	<b>ZNF559</b>	4	-0.0983	-0.00313	-3.47	0.000540	0.0156
GI_37543284-S	<b>ZNF594</b>	4	-0.0976	-0.00964	-3.45	0.000574	0.0164

GI_6912325-S	FAM50B	4	-0.0975	-0.00596	-3.45	0.000587	0.0166
GI_16950599-S	MRPS31	4	-0.0977	-0.00274	-3.44	0.000591	0.0167
GI_17017972-S	RPL27	4	-0.0979	-0.00167	-3.43	0.000619	0.0173
GI_4504160-S	GRSF1	4	-0.0976	-0.00171	-3.42	0.000639	0.0178
GI_28372492-S	CUL4B	4	-0.0971	-0.00182	-3.41	0.000667	0.0184
GI_21361826-S	METTL3	4	-0.0959	-0.00235	-3.38	0.000751	0.0202
GI_5729771-S	CLN5	4	-0.0956	-0.00341	-3.38	0.000757	0.0203
GI_20336299-S	DHX32	4	-0.0957	-0.00245	-3.37	0.000772	0.0206
GI_38570159-S	XPO4	4	-0.0954	-0.00207	-3.35	0.000821	0.0217
GI_4826685-S	DDX1	4	-0.0946	-0.00209	-3.33	0.000896	0.0231
GI_37550558-S	U2SURP	4	-0.0942	-0.00218	-3.31	0.000943	0.0241
GI_45446742-S	DDX42	4	-0.0947	-0.00135	-3.31	0.000974	0.0247
GI_21626467-S	ZNF638	4	-0.0932	-0.00242	-3.28	0.001054	0.0263
Hs.13250-S	WDR33	4	-0.0928	-0.00362	-3.28	0.001078	0.0268
GI_20143932-A	RLN2	4	-0.0926	-0.00496	-3.27	0.001105	0.0274
GI_22035593-A	MRPL35	4	-0.0925	-0.00256	-3.26	0.001148	0.0282
GI_39930470-S	METTL25	4	-0.0924	-0.00246	-3.26	0.001164	0.0284
GI_21314666-S	CPSF3	4	-0.0920	-0.00176	-3.23	0.001274	0.0304
GI_22212923-I	NFX1	4	-0.0917	-0.00187	-3.22	0.001301	0.0309
GI_21361708-S	RPRD1A	4	-0.0914	-0.00246	-3.22	0.001311	0.0310
GI_32698693-S	DCUN1D4	4	-0.0914	-0.00228	-3.22	0.001318	0.0312
GI_24497452-S	NUP88	4	-0.0914	-0.00184	-3.21	0.001356	0.0319
GI_8922499-S	SHQ1	4	-0.0886	-0.00268	-3.12	0.001822	0.0402
GI_25914753-A	MKKS	4	-0.0876	-0.00265	-3.09	0.002069	0.0445
GI_38257145-S	ANKRD46	4	-0.0869	-0.00568	-3.07	0.002182	0.0463
GI_32129211-S	ZSCAN32	4	-0.0869	-0.00238	-3.06	0.002263	0.0477
GI_39725646-S	ALG8	4	-0.0872	-0.00149	-3.05	0.002302	0.0483
GI_8923000-S	ABHD10	4	-0.0866	-0.00266	-3.05	0.002319	0.0485
GI_15451891-S	EIF5B	4	-0.0866	-0.00214	-3.05	0.002349	0.0490
GI_24307912-S	ZNF234	4	-0.0863	-0.00363	-3.05	0.002362	0.0492
GI_4885496-S	MYB	5	-0.273	-0.0100	-9.97	1.46E-22	1.92E-19
GI_4826869-S	NUCB2	5	-0.236	-0.0111	-8.54	4.00E-17	2.49E-14
GI_7661743-S	BZW2	5	-0.218	-0.00631	-7.85	8.82E-15	3.79E-12
GI_41352701-S	DPH2	5	-0.218	-0.00380	-7.78	1.46E-14	5.91E-12
GI_33356127-I	NAA16	5	-0.195	-0.00842	-6.99	4.60E-12	1.13E-09
GI_7661669-S	SH3YL1	5	-0.185	-0.00692	-6.62	5.33E-11	1.07E-08
GI_37545625-S	TAF4B	5	-0.180	-0.00896	-6.44	1.67E-10	3.00E-08
GI_37595546-S	PDK1	5	-0.179	-0.00905	-6.40	2.26E-10	3.87E-08
GI_30425401-S	RPF2	5	-0.178	-0.00421	-6.34	3.24E-10	5.36E-08
GI_14110370-S	CDC16	5	-0.178	-0.00382	-6.32	3.69E-10	6.03E-08
GI_6806888-S	HSF2	5	-0.173	-0.00505	-6.18	8.55E-10	1.29E-07
GI_15812220-S	RPL32	5	-0.165	-0.00280	-5.83	7.18E-09	8.99E-07
GI_22726178-S	LDHB	5	-0.157	-0.00674	-5.58	3.01E-08	3.31E-06
GI_31542492-S	DBP	5	-0.151	-0.00645	-5.38	8.98E-08	9.03E-06
GI_19743797-A	ZNF274	5	-0.150	-0.00354	-5.32	1.22E-07	1.17E-05
GI_37539232-S	EEF1B2	5	-0.143	-0.00497	-5.09	4.21E-07	3.53E-05
GI_45120103-S	MGC70870	5	-0.143	-0.00835	-5.08	4.33E-07	3.61E-05
GI_16757969-I	FAM129A	5	0.142	0.00375	5.04	5.25E-07	4.31E-05
GI_16506300-S	EPB41L4A-AS1	5	-0.142	-0.00310	-5.01	6.29E-07	5.10E-05
GI_37546335-S	NOL11	5	-0.141	-0.00331	-5.00	6.61E-07	5.31E-05
GI_13518227-S	MCCC1	5	-0.141	-0.00334	-4.99	6.82E-07	5.44E-05
GI_29568100-S	ATP5L	5	-0.138	-0.00281	-4.88	1.23E-06	9.03E-05
GI_6631103-S	EI24	5	-0.136	-0.00239	-4.81	1.70E-06	0.000119
GI_33942063-S	SEMA4D	5	-0.130	-0.00296	-4.58	5.13E-06	0.000318
GI_16936532-A	CDK4	5	-0.129	-0.00226	-4.55	6.02E-06	0.000367
GI_4505286-S	IRF4	5	-0.128	-0.00623	-4.52	6.64E-06	0.000401
GI_5454101-S	TACC3	5	-0.126	-0.00347	-4.45	9.27E-06	0.000543
GI_29550827-S	ACBD3	5	-0.126	-0.00260	-4.45	9.32E-06	0.000546
GI_31542291-S	CCT3	5	-0.124	-0.00395	-4.38	1.27E-05	0.000717
GI_25306276-S	GFM1	5	-0.121	-0.00282	-4.26	2.22E-05	0.00114
GI_14602425-S	SEC62	5	-0.120	-0.00243	-4.23	2.49E-05	0.00125
GI_24308126-S	DNAJC10	5	-0.119	-0.00360	-4.20	2.81E-05	0.00138
GI_31542714-S	TUG1	5	-0.117	-0.00292	-4.14	3.68E-05	0.00173
GI_12232418-S	S100PBP	5	-0.116	-0.00303	-4.10	4.45E-05	0.00201
GI_42476016-S	ACPL2	5	-0.115	-0.00515	-4.09	4.63E-05	0.00209
GI_42656629-S	RPL22	5	-0.115	-0.00597	-4.09	4.67E-05	0.00210
GI_34304340-A	PDCD4	5	-0.115	-0.00267	-4.07	4.92E-05	0.00219
GI_8923721-S	UTP6	5	-0.115	-0.00231	-4.05	5.43E-05	0.00238
GI_42661295-S	---	5	-0.114	-0.00292	-4.02	6.27E-05	0.00271
Hs.402644-S	---	5	-0.113	-0.00602	-3.98	7.14E-05	0.00300
GI_34222329-S	NOP58	5	-0.113	-0.00288	-3.98	7.20E-05	0.00302
GI_44890067-S	ZMYM4	5	-0.112	-0.00260	-3.96	8.02E-05	0.00330
GI_4557580-S	FABP5	5	-0.110	-0.00552	-3.91	9.82E-05	0.00388
GI_23463298-S	ST13P4	5	-0.109	-0.00402	-3.85	0.000123	0.00469
GI_42659734-S	---	5	-0.109	-0.00425	-3.85	0.000127	0.00479
GI_29728071-S	TBC1D9	5	-0.108	-0.00340	-3.83	0.000133	0.00498
GI_31340578-S	IQCG	5	0.108	0.00514	3.83	0.000133	0.00499
GI_27886565-A	MALT1	5	-0.107	-0.00283	-3.78	0.000161	0.00582
GI_4507128-S	SNRPE	5	-0.107	-0.00352	-3.78	0.000166	0.00596
GI_8923935-S	USE1	5	-0.106	-0.00290	-3.73	0.000198	0.00693
GI_34304321-S	MRPL45	5	-0.105	-0.00346	-3.70	0.000228	0.00780
GI_42658709-S	RPL15	5	-0.105	-0.00322	-3.69	0.000234	0.00795
GI_24429563-I	---	5	-0.104	-0.0143	-3.68	0.000247	0.00832
GI_21237722-S	ST13	5	-0.103	-0.00461	-3.66	0.000264	0.00876
GI_23111044-S	SNX4	5	-0.102	-0.00250	-3.60	0.000328	0.0105
GI_33624820-A	SEPT6	5	-0.102	-0.00330	-3.60	0.000334	0.0106
GI_39930468-S	RPF2	5	-0.102	-0.00475	-3.59	0.000345	0.0109

GI_21362101-S	TMEM16B	5	-0.102	-0.00315	-3.59	0.000349	0.0110
GI_23463288-S	---	5	-0.100	-0.00337	-3.53	0.000430	0.0129
GI_4505276-S	MTIF2	5	-0.100	-0.00247	-3.53	0.000435	0.0130
GI_23503310-S	TAPT1	5	-0.100	-0.0118	-3.52	0.000440	0.0131
GI_41146530-S	---	5	-0.0984	-0.00337	-3.47	0.000530	0.0154
GI_37556035-S	---	5	-0.0980	-0.00458	-3.46	0.000549	0.0158
GI_14042942-S	TATDN1	5	-0.0978	-0.00606	-3.46	0.000562	0.0161
GI_37545958-S	RBM25	5	-0.0978	-0.00237	-3.44	0.000591	0.0167
GI_15149469-S	SUZ12	5	-0.0977	-0.00221	-3.44	0.000600	0.0169
GI_12056464-S	FBL	5	-0.0972	-0.00331	-3.43	0.000625	0.0175
GI_33946314-I	NIN	5	-0.0962	-0.00319	-3.40	0.000707	0.0193
GI_21614500-A	DEGS1	5	-0.0963	-0.00201	-3.39	0.000733	0.0198
GI_16117795-A	RPL36	5	-0.0966	-0.00157	-3.38	0.000741	0.0200
GI_29337287-S	YEATS4	5	-0.0950	-0.00289	-3.35	0.000833	0.0219
GI_15011942-S	TRIM2	5	0.0944	0.0141	3.34	0.000865	0.0225
GI_8922910-S	RSAD1	5	-0.0949	-0.00216	-3.34	0.000868	0.0226
GI_37544033-S	RPL7	5	-0.0937	-0.00617	-3.31	0.000958	0.0244
GI_14210505-S	ZC3H8	5	-0.0938	-0.00262	-3.30	0.000977	0.0248
GI_7661579-I	WIP12	5	-0.0942	-0.00170	-3.30	0.000983	0.0249
GI_7706680-S	REV1	5	-0.0929	-0.00348	-3.28	0.001067	0.0266
GI_37622889-A	PLAGL1	5	-0.0926	-0.0152	-3.27	0.001090	0.0270
GI_42656857-S	SET	5	-0.0928	-0.00236	-3.27	0.001116	0.0275
GI_18373333-S	TMEM14B	5	-0.0924	-0.00340	-3.26	0.001141	0.0280
GI_19923618-S	EDEM3	5	-0.0923	-0.00363	-3.26	0.001157	0.0283
GI_31542314-S	CNOT8	5	-0.0923	-0.00204	-3.25	0.001205	0.0292
GI_41197110-S	---	5	-0.0921	-0.00218	-3.24	0.001218	0.0294
GI_4758559-S	SNRNP40	5	-0.0920	-0.00205	-3.24	0.001245	0.0299
GI_17482322-S	RPS15A	5	-0.0917	-0.00279	-3.23	0.001249	0.0300
GI_13376668-S	IFT74	5	-0.0915	-0.00431	-3.23	0.001264	0.0303
GI_9966792-S	LZTFL1	5	-0.0910	-0.00303	-3.21	0.001369	0.0322
GI_13435382-S	TRMT61B	5	-0.0908	-0.00489	-3.21	0.001373	0.0322
GI_29735784-S	PPP1R3E	5	-0.0902	-0.00572	-3.19	0.001479	0.0342
GI_37541551-S	RPL10	5	-0.0902	-0.00304	-3.18	0.001495	0.0345
GI_8923576-S	PAK1P1	5	-0.0892	-0.00303	-3.15	0.001688	0.0380
GI_39725648-S	PAGR1	5	-0.0890	-0.00220	-3.13	0.001769	0.0394
Hs_448642-S	RPS25	5	-0.0886	-0.00616	-3.13	0.001786	0.0396
GI_4507656-S	TPP2	5	-0.0885	-0.00543	-3.13	0.001810	0.0400
GI_15718688-A	RPS3A	5	-0.0890	-0.00151	-3.12	0.001876	0.0412
GI_13376287-S	SETD6	5	-0.0875	-0.00259	-3.08	0.002094	0.0449
GI_4504190-S	MSH6	5	-0.0871	-0.00260	-3.07	0.002202	0.0466
GI_37546978-S	UQCRRH	5	-0.0870	-0.00266	-3.07	0.002204	0.0466
GI_39653322-L	PHF20L1	5	-0.0868	-0.00377	-3.07	0.002223	0.0470
GI_17454506-S	---	5	-0.0868	-0.00275	-3.06	0.002264	0.0477
hmm14190-S	RPLP1	5	-0.0867	-0.00392	-3.06	0.002268	0.0477
GI_21359821-S	DROSHA	5	-0.0869	-0.00169	-3.05	0.002328	0.0486
GI_13775598-S	SIRT1	5	-0.0862	-0.00281	-3.04	0.002411	0.0499
GI_42544152-S	LTK	6	-0.299	-0.0149	-11.0	5.15E-27	1.35E-23
GI_5803202-S	TNTN3	6	-0.292	-0.0120	-10.8	7.76E-26	1.67E-22
GI_37548529-S	OBCSN	6	-0.287	-0.0123	-10.5	7.44E-25	1.41E-21
GI_4755145-S	AEBP1	6	-0.275	-0.0164	-10.0	6.96E-23	9.98E-20
GI_40255313-S	OBCSN	6	-0.267	-0.0443	-9.74	1.17E-21	1.32E-18
GI_38569429-S	ATF7IP2	6	-0.245	-0.00708	-8.88	2.38E-18	1.84E-15
GI_42518079-S	TCF7	6	-0.232	-0.00843	-8.39	1.32E-16	7.51E-14
GI_37537721-S	AGMAT	6	-0.222	-0.0182	-8.03	2.30E-15	1.10E-12
Hs_150495-S	---	6	0.220	0.0215	7.95	4.13E-15	1.88E-12
GI_37552337-S	ARRDC5	6	-0.217	-0.00502	-7.80	1.30E-14	5.34E-12
GI_20127439-S	MFSD10	6	0.218	0.00354	7.80	1.34E-14	5.45E-12
GI_5174556-S	MFGE8	6	-0.216	-0.00813	-7.76	1.71E-14	6.63E-12
GI_30150520-S	C1orf228	6	-0.214	-0.00611	-7.67	3.38E-14	1.26E-11
GI_4502010-S	AK1	6	0.208	0.00823	7.49	1.32E-13	4.53E-11
GI_18497287-S	LTBP3	6	-0.204	-0.0103	-7.32	4.33E-13	1.33E-10
GI_14249535-S	CIRH1A	6	-0.199	-0.00313	-7.07	2.59E-12	6.62E-10
GI_5453909-S	PLCD1	6	0.196	0.00663	7.01	3.87E-12	9.59E-10
GI_16507966-S	ENO2	6	0.193	0.00729	6.91	7.81E-12	1.84E-09
GI_31542262-S	SLC17A9	6	-0.184	-0.00504	-6.55	8.15E-11	1.53E-08
GI_10835100-S	KAT2A	6	-0.181	-0.00543	-6.47	1.39E-10	2.53E-08
GI_37577150-S	SPEG	6	-0.177	-0.0140	-6.34	3.17E-10	5.26E-08
GI_4557514-S	DBB2	6	0.170	0.00954	6.08	1.56E-09	2.26E-07
Hs_483403-S	---	6	-0.169	-0.00896	-6.03	2.18E-09	3.10E-07
GI_7656870-S	ZNF544	6	-0.169	-0.00408	-6.00	2.58E-09	3.57E-07
GI_22507400-S	MDS2	6	-0.168	-0.00960	-5.99	2.74E-09	3.75E-07
GI_23238255-A	CPT1B	6	0.168	0.00816	5.98	2.91E-09	3.93E-07
GI_31341765-S	LINC01089	6	-0.166	-0.00568	-5.90	4.59E-09	6.05E-07
GI_19882236-S	RPHN1	6	-0.162	-0.0129	-5.77	1.00E-08	1.22E-06
GI_25914748-S	ABCC10	6	0.163	0.00283	5.75	1.12E-08	1.35E-06
GI_24234723-A	TRADD	6	0.161	0.00316	5.72	1.36E-08	1.62E-06
GI_22748640-S	CHMP7	6	-0.160	-0.00523	-5.70	1.48E-08	1.74E-06
GI_15619005-S	VIPR1	6	-0.155	-0.00482	-5.53	3.98E-08	4.25E-06
GI_31982913-S	WDR54	6	0.153	0.00327	5.42	6.97E-08	7.11E-06
GI_7657350-S	MYBBP1A	6	-0.151	-0.00326	-5.35	1.03E-07	1.02E-05
GI_34147678-S	HOOK1	6	-0.149	-0.00793	-5.32	1.25E-07	1.19E-05
GI_13376651-S	ATHL1	6	-0.148	-0.00718	-5.25	1.80E-07	1.67E-05
GI_23200030-A	TNFRSF25	6	-0.147	-0.00594	-5.22	2.11E-07	1.94E-05
GI_44890064-S	GCF2	6	-0.147	-0.00322	-5.21	2.20E-07	2.01E-05
GI_37537686-S	ZNF444	6	-0.141	-0.00301	-5.00	6.59E-07	5.31E-05
GI_21361764-S	FOXRED1	6	-0.141	-0.00257	-4.96	7.98E-07	6.26E-05
GI_44680152-S	GOLGA2P7	6	-0.139	-0.00598	-4.95	8.34E-07	6.49E-05

GI_12383073-S	TUT1	6	-0.140	-0.00308	-4.94	8.78E-07	6.80E-05
GI_34330189-S	HKR1	6	-0.137	-0.00381	-4.86	1.35E-06	9.89E-05
GI_9910257-S	SDR39U1	6	-0.137	-0.00232	-4.82	1.65E-06	0.000116
GI_13375816-S	NEIL1	6	-0.134	-0.00562	-4.76	2.20E-06	0.000150
GI_13376184-S	RBFA	6	-0.131	-0.00359	-4.63	4.00E-06	0.000256
GI_22027610-S	TRAF1	6	0.131	0.00481	4.63	4.02E-06	0.000256
GI_4504776-S	ITGB7	6	0.130	0.00307	4.59	4.88E-06	0.000304
GI_8923379-S	OSCEP	6	-0.130	-0.00180	-4.57	5.36E-06	0.000330
GI_14249125-S	GTPBP3	6	-0.129	-0.00273	-4.56	5.54E-06	0.000339
GI_34577119-S	MTRF1	6	-0.127	-0.00259	-4.49	7.62E-06	0.000456
GI_19923288-S	PIK3CD	6	-0.127	-0.00226	-4.46	9.10E-06	0.000535
GI_42560245-I	POLR1C	6	-0.125	-0.00250	-4.42	1.07E-05	0.000621
GI_23503298-S	PRR22	6	-0.125	-0.00592	-4.42	1.08E-05	0.000625
GI_42659267-S	RP11-39P17.3	6	-0.124	-0.00441	-4.40	1.19E-05	0.000678
GI_5453923-S	POLD2	6	-0.124	-0.00263	-4.37	1.36E-05	0.000757
GI_33598945-A	PLCG1	6	-0.122	-0.00397	-4.33	1.59E-05	0.000867
GI_26787961-S	AGER	6	-0.123	-0.00301	-4.33	1.62E-05	0.000883
GI_32261299-S	CYHR1	6	-0.121	-0.00414	-4.28	2.06E-05	0.00107
GI_42660343-S	DICER1-AS1	6	-0.117	-0.00407	-4.15	3.61E-05	0.00170
GI_7662449-S	FAN1	6	-0.117	-0.00315	-4.13	3.83E-05	0.00178
GI_4132778-S	DDX55	6	-0.118	-0.00204	-4.13	3.87E-05	0.00179
GI_22779933-S	WDR19	6	-0.116	-0.00292	-4.10	4.40E-05	0.00200
GI_20336200-I	---	6	-0.115	-0.00575	-4.08	4.75E-05	0.00213
GI_34101281-S	SCNN1D	6	-0.115	-0.00443	-4.08	4.81E-05	0.00215
GI_38708010-S	---	6	-0.115	-0.00248	-4.07	5.09E-05	0.00225
GI_40255084-S	UBQLNL	6	-0.113	-0.00884	-4.01	6.30E-05	0.00272
GI_4507546-S	TMFSF2	6	-0.113	-0.00360	-4.01	6.43E-05	0.00276
GI_7706484-S	TRAP1	6	-0.113	-0.00307	-4.00	6.82E-05	0.00289
GI_34147388-S	PTGES3L-AARSD1	6	-0.113	-0.00215	-3.98	7.44E-05	0.00310
GI_24307946-S	HABP4	6	0.111	0.00339	3.92	9.52E-05	0.00379
GI_33859830-S	POLR3C	6	-0.111	-0.00162	-3.90	0.000101	0.00398
GI_4885552-S	---	6	-0.110	-0.00237	-3.89	0.000107	0.00416
GI_11968044-S	INF2	6	-0.110	-0.00391	-3.88	0.000109	0.00424
GI_34147648-S	TLE2	6	-0.109	-0.00446	-3.85	0.000126	0.00476
GI_13376499-S	---	6	-0.107	-0.00303	-3.79	0.000160	0.00578
GI_37563696-S	MEI1	6	0.107	0.00269	3.79	0.000160	0.00581
GI_21717802-S	NSUN5P1	6	-0.107	-0.00273	-3.78	0.000167	0.00600
GI_4557650-S	HSF4	6	0.107	0.00361	3.77	0.000173	0.00619
GI_5453556-S	ARIH2	6	0.107	0.00264	3.76	0.000178	0.00634
GI_34147343-S	GRAMD1A	6	-0.105	-0.00247	-3.68	0.000240	0.00813
GI_4505462-S	CNTNAP1	6	0.104	0.00568	3.68	0.000245	0.00828
GI_9506614-S	PRMT7	6	-0.104	-0.00229	-3.68	0.000248	0.00834
GI_41204979-S	PEAK1	6	-0.104	-0.00232	-3.66	0.000262	0.00869
GI_34222253-A	P4HTM	6	0.104	0.00271	3.66	0.000264	0.00876
GI_20149710-S	SP140L	6	-0.104	-0.00213	-3.65	0.000274	0.00901
GI_8922734-S	ELP2	6	-0.104	-0.00174	-3.64	0.000282	0.00925
GI_37540723-S	RNF214	6	0.103	0.00201	3.63	0.000299	0.00971
GI_23312366-S	TNFRSF4	6	0.102	0.00479	3.62	0.000312	0.0101
GI_12232402-S	C16orf58	6	-0.102	-0.00274	-3.60	0.000336	0.0107
GI_8922412-S	ANKZF1	6	-0.102	-0.00241	-3.59	0.000338	0.0107
GI_30181232-S	SAP25	6	-0.101	-0.00412	-3.58	0.000355	0.0111
GI_42476295-S	TPM2	6	-0.100	-0.00638	-3.55	0.000397	0.0121
GI_27734876-S	TYSND1	6	-0.101	-0.00204	-3.55	0.000399	0.0122
GI_18105029-A	COLQ	6	-0.095	-0.00443	-3.52	0.000455	0.0135
GI_37594443-S	ZMYND10	6	0.0991	0.00711	3.50	0.000474	0.0140
GI_41281526-S	PAN2	6	-0.100	-0.00208	-3.50	0.000479	0.0141
GI_40807460-S	ZNF335	6	0.0965	0.00535	3.41	0.000668	0.0185
GI_14149994-S	TMEM191A	6	0.0961	0.00250	3.39	0.000726	0.0197
GI_34147521-S	ADCK3	6	-0.0961	-0.00159	-3.37	0.000787	0.0210
GI_32698941-S	SLC25A45	6	-0.0947	-0.00337	-3.34	0.000854	0.0223
GI_37622344-A	MZF1	6	-0.0945	-0.00210	-3.32	0.000916	0.0236
GI_31455610-S	ZAP70	6	0.0936	0.00329	3.30	0.000986	0.0250
GI_4758291-S	EPHB6	6	-0.0930	-0.00342	-3.28	0.001055	0.0263
GI_8923393-S	TMEM161A	6	-0.0932	-0.00163	-3.27	0.001108	0.0274
GI_37655174-S	ZNF26	6	-0.0924	-0.00279	-3.26	0.001147	0.0281
GI_23346638-S	NPRL2	6	0.0928	0.00162	3.25	0.001177	0.0287
GI_37547280-S	MEGF6	6	-0.0919	-0.00431	-3.25	0.001196	0.0290
GI_38524588-S	PNPLA7	6	-0.0918	-0.00404	-3.24	0.001224	0.0295
GI_13376422-S	TMEM156	6	-0.0917	-0.00312	-3.24	0.001243	0.0299
GI_15149471-S	PBX4	6	0.0908	0.00362	3.21	0.001381	0.0323
GI_27480910-S	C9orf142	6	0.0912	0.00169	3.20	0.001406	0.0328
GI_27485260-S	PHLDB3	6	-0.0897	-0.00410	-3.17	0.001577	0.0360
GI_37595557-I	BTN3A1	6	0.0894	0.00206	3.15	0.001694	0.0381
GI_7661859-S	LRRK14	6	0.0888	0.00261	3.13	0.001785	0.0396
GI_4885224-I	EWSR1	6	-0.0891	-0.00149	-3.12	0.001850	0.0407
GI_39812452-S	SURF6	6	-0.0876	-0.00187	-3.08	0.002116	0.0452
GI_45439340-S	PPOX	6	-0.0867	-0.00316	-3.06	0.002286	0.0480
GI_21536366-A	TAF1C	6	-0.0868	-0.00165	-3.04	0.002382	0.0494
GI_4758865-S	NREP	7	-0.275	-0.00723	-10.0	6.95E-23	9.98E-20
GI_20336245-S	PCSK5	7	-0.185	-0.00500	-6.61	5.54E-11	1.10E-08
GI_31543835-S	NME8	7	0.180	0.00925	6.43	1.85E-10	3.25E-08
GI_7662259-S	KBTBD11	7	-0.179	-0.00770	-6.41	2.02E-10	3.53E-08
GI_41222688-S	RPL31P11	7	-0.178	-0.0101	-6.36	2.86E-10	4.83E-08
GI_13375757-S	C1orf54	7	-0.147	-0.00557	-5.21	2.23E-07	2.02E-05
GI_27734688-S	SSPO	7	-0.143	-0.0171	-5.10	3.95E-07	3.36E-05
GI_4506760-S	S100A10	7	0.142	0.00568	5.04	5.47E-07	4.48E-05
GI_8923223-I	LRRKIP2	7	0.141	0.00292	4.97	7.69E-07	6.06E-05

GI_27500713-S	ZIK1	7	-0.137	-0.00709	-4.88	1.20E-06	8.89E-05
GI_9845515-A	S100A4	7	0.136	0.00481	4.84	1.48E-06	0.000106
GI_8923764-S	CACNA2D3	7	-0.130	-0.00794	-4.63	4.04E-06	0.000258
GI_16418454-S	RBP7	7	-0.126	-0.00563	-4.48	7.99E-06	0.000476
GI_11037064-S	---	7	-0.125	-0.00482	-4.42	1.09E-05	0.000630
GI_17158002-S	ANTXR2	7	0.124	0.00246	4.38	1.29E-05	0.000726
GI_31747574-S	CLEC5A	7	-0.121	-0.00849	-4.30	1.88E-05	0.000997
GI_40018619-S	TBC1D2B	7	0.121	0.00218	4.26	2.16E-05	0.00111
GI_6912575-S	PADI4	7	-0.120	-0.00455	-4.24	2.42E-05	0.00122
GI_7662375-S	FAM13A	7	0.117	0.00483	4.14	3.71E-05	0.00173
GI_22035639-S	MGST2	7	-0.113	-0.00300	-4.00	6.59E-05	0.00281
GI_33186919-S	---	7	-0.113	-0.00908	-4.00	6.79E-05	0.00288
GI_40255259-S	PID1	7	-0.113	-0.00645	-3.99	7.07E-05	0.00298
GI_4557574-S	FAAH	7	-0.112	-0.00544	-3.95	8.20E-05	0.00335
GI_21314670-S	TRPM4	7	-0.111	-0.00800	-3.95	8.36E-05	0.00340
GI_22095361-S	GLIPR2	7	0.110	0.00264	3.87	0.000113	0.00433
GI_33589822-S	PDK4	7	0.109	0.00672	3.87	0.000114	0.00437
GI_4758707-S	LY86	7	-0.108	-0.00274	-3.82	0.000139	0.00516
GI_27885012-S	C19orf59	7	0.108	0.00418	3.81	0.000147	0.00543
Hs.466809-S	---	7	-0.107	-0.00569	-3.77	0.000168	0.00604
hmm5973-S	MYO15B	7	-0.106	-0.00743	-3.74	0.000195	0.00685
GI_25072198-S	C11orf82	7	-0.105	-0.00557	-3.72	0.000208	0.00720
GI_31377572-S	DUSP18	7	0.100	0.00455	3.53	0.000432	0.0129
GI_30158043-S	PTPRJ	7	0.0993	0.00313	3.51	0.000472	0.0139
GI_19718745-A	OSBPL1A	7	-0.0991	-0.00383	-3.50	0.000480	0.0141
GI_19923275-S	---	7	-0.0981	-0.0148	-3.47	0.000541	0.0156
GI_21536270-I	MPZL2	7	-0.0972	-0.00522	-3.44	0.000607	0.0171
GI_37552472-S	CLN8	7	-0.0968	-0.00372	-3.42	0.000647	0.0180
GI_11038652-S	AQP9	7	0.0962	0.00506	3.40	0.000696	0.0190
GI_5713320-S	SELL	7	-0.0961	-0.00441	-3.39	0.000711	0.0194
GI_31317229-S	FCER1A	7	-0.0958	-0.00628	-3.39	0.000731	0.0198
GI_13375978-S	BAHCC1	7	-0.0949	-0.00839	-3.36	0.000817	0.0216
GI_31542726-S	CPED1	7	-0.0947	-0.00750	-3.35	0.000834	0.0220
GI_45243500-S	BCL2L13	7	-0.0952	-0.00156	-3.34	0.000876	0.0228
GI_22749220-S	SPRED1	7	0.0931	0.00659	3.29	0.001030	0.0258
GI_23308566-S	ASRGL1	7	-0.0931	-0.00731	-3.29	0.001031	0.0258
GI_30181235-S	CPNE2	7	-0.0930	-0.00314	-3.28	0.001058	0.0264
GI_37674209-S	SSH2	7	-0.0933	-0.00194	-3.28	0.001066	0.0266
GI_38348277-S	VSTM1	7	-0.0924	-0.0161	-3.27	0.001116	0.0275
GI_31543440-S	---	7	-0.0904	-0.00192	-3.18	0.001518	0.0349
GI_19747277-S	RHOU	7	0.0897	0.00251	3.16	0.001604	0.0365
Hs.525303-S	---	7	-0.0875	-0.00825	-3.09	0.002032	0.0439
GI_22749378-S	GAPT	7	-0.0871	-0.00362	-3.08	0.002150	0.0457
GI_19923329-S	CTDSP2	7	-0.0872	-0.00149	-3.05	0.002307	0.0484
GI_23397450-S	AMICA1	7	-0.0865	-0.00346	-3.05	0.002328	0.0486
Hs.233167-S	---	8	-0.244	-0.0179	-8.87	2.60E-18	1.97E-15
GI_30154358-S	AGPAT4	8	0.192	0.00534	6.86	1.08E-11	2.45E-09
Hs.185140-S	IPCEF1	8	-0.168	-0.00681	-6.00	2.55E-09	3.56E-07
Hs.370906-S	---	8	-0.162	-0.00943	-5.77	1.03E-08	1.25E-06
Hs.45184-S	---	8	-0.160	-0.00725	-5.70	1.45E-08	1.72E-06
Hs.397082-S	---	8	-0.153	-0.00779	-5.43	6.64E-08	6.81E-06
hmm15104-S	SLC18B1	8	-0.147	-0.00366	-5.21	2.15E-07	1.97E-05
Hs.443639-S	---	8	-0.146	-0.00731	-5.19	2.40E-07	2.16E-05
Hs.436457-S	---	8	0.145	0.0222	5.15	3.04E-07	2.67E-05
Hs.291277-S	---	8	-0.136	-0.00621	-4.83	1.52E-06	0.000108
GI_20475100-S	---	8	0.133	0.00652	4.71	2.69E-06	0.000180
Hs.119065-S	---	8	-0.132	-0.00606	-4.68	3.13E-06	0.000206
Hs.395295-S	---	8	-0.129	-0.00591	-4.59	4.85E-06	0.000303
Hs.437188-S	---	8	-0.127	-0.00804	-4.50	7.60E-06	0.000456
GI_22749246-S	CNST	8	-0.120	-0.00380	-4.24	2.42E-05	0.00122
hmm23672-S	---	8	-0.119	-0.00555	-4.22	2.65E-05	0.00132
Hs.12346-S	---	8	-0.117	-0.00359	-4.13	3.94E-05	0.00181
GI_42659368-S	PDCD11	8	-0.116	-0.00427	-4.10	4.33E-05	0.00197
Hs.348088-S	---	8	0.116	0.00680	4.10	4.50E-05	0.00203
GI_29738101-S	---	8	-0.115	-0.00520	-4.06	5.21E-05	0.00230
Hs.452445-S	---	8	-0.115	-0.00619	-4.06	5.23E-05	0.00230
Hs.465651-S	---	8	-0.113	-0.00528	-4.01	6.50E-05	0.00279
Hs.145444-S	---	8	-0.108	-0.00484	-3.83	0.000135	0.00504
Hs.171301-S	---	8	0.108	0.00645	3.83	0.000136	0.00509
hmm2974-S	MCF2L	8	-0.108	-0.00540	-3.81	0.000148	0.00545
GI_4507810-S	UGCG	8	-0.107	-0.00335	-3.80	0.000154	0.00562
hmm11379-S	RAB3GAP1	8	-0.107	-0.00307	-3.76	0.000176	0.00629
Hs.452714-S	---	8	-0.104	-0.00614	-3.69	0.000234	0.00794
Hs.472282-S	---	8	-0.104	-0.00441	-3.67	0.000248	0.00836
Hs.378028-S	---	8	-0.104	-0.00605	-3.67	0.000252	0.00846
GI_29747364-S	---	8	-0.103	-0.00460	-3.64	0.000288	0.00942
GI_14149666-S	SARM1	8	0.102	0.00485	3.62	0.000303	0.00981
GI_41114517-S	RPS16	8	-0.101	-0.00329	-3.56	0.000391	0.0120
GI_27485604-S	MAVS	8	-0.0994	-0.00367	-3.51	0.000465	0.0138
Hs.497573-S	DICER1-AS1	8	-0.0987	-0.00443	-3.49	0.000507	0.0148
GI_42662645-S	ZNF275	8	-0.0988	-0.00292	-3.49	0.000508	0.0148
Hs.348319-S	---	8	0.0970	0.00449	3.43	0.000627	0.0175
GI_12232372-S	RABGAP1	8	-0.0964	-0.00152	-3.38	0.000759	0.0203
Hs.368169-S	---	8	0.0950	0.00507	3.36	0.000808	0.0214
Hs.194417-S	---	8	-0.0947	-0.00378	-3.35	0.000845	0.0222
Hs.508413-S	---	8	-0.0940	-0.00680	-3.32	0.000921	0.0237
hmm19663-S	JMJD1C	8	-0.0932	-0.00312	-3.29	0.001036	0.0259

GI_7661625-S	SERBP1	8	-0.0934	-0.00152	-3.27	0.001105	0.0274
Hs.445048-S	---	8	-0.0921	-0.00285	-3.25	0.001200	0.0291
Hs.459570-S	ANKRD18A	8	0.0914	0.00441	3.23	0.001280	0.0305
Hs.473369-S	---	8	0.0914	0.00454	3.23	0.001282	0.0305
GI_27499805-S	LINC00641	8	-0.0909	-0.00354	-3.21	0.001368	0.0321
Hs.471449-S	---	8	-0.0903	-0.00711	-3.19	0.001455	0.0338
GI_5902159-S	ZNF22	8	-0.0904	-0.00283	-3.19	0.001470	0.0340
Hs.192103-S	---	8	-0.0901	-0.00309	-3.18	0.001513	0.0348
Hs.296713-S	---	8	-0.0897	-0.00433	-3.17	0.001567	0.0358
Hs.283500-S	---	8	0.0894	0.00277	3.15	0.001658	0.0375
GI_38502313-S	C22orf34	8	-0.0890	-0.00582	-3.14	0.001703	0.0383
Hs.12867-S	---	8	-0.0882	-0.00554	-3.12	0.001878	0.0412
Hs.311881-S	---	8	0.0872	0.00694	3.08	0.002097	0.0449
GI_13186319-A	METTL1	9	-0.273	-0.00628	-9.93	2.07E-22	2.65E-19
GI_6857817-S	NPM3	9	-0.257	-0.00850	-9.35	4.07E-20	3.69E-17
GI_38045911-A	NME1	9	-0.214	-0.00468	-7.65	3.97E-14	1.45E-11
GI_22748804-S	C1orf216	9	0.210	0.00803	7.54	8.91E-14	3.17E-11
GI_32171195-S	CENPV	9	-0.207	-0.00647	-7.44	1.83E-13	6.09E-11
GI_42476209-S	TMC04	9	0.202	0.00348	7.21	9.61E-13	2.75E-10
GI_34147590-S	PUS1	9	-0.202	-0.00327	-7.20	1.06E-12	2.99E-10
GI_8923076-S	ZNF586	9	-0.193	-0.00441	-6.89	8.79E-12	2.04E-09
GI_34222270-S	SFXN2	9	-0.192	-0.00817	-6.89	9.10E-12	2.10E-09
GI_4504688-S	IMPDH2	9	-0.190	-0.00385	-6.76	2.09E-11	4.57E-09
GI_31657128-S	PFAS	9	-0.184	-0.00548	-6.57	7.23E-11	1.37E-08
GI_42542387-S	SFXN4	9	-0.182	-0.00480	-6.49	1.25E-10	2.31E-08
GI_11993934-S	CHI3L2	9	-0.176	-0.00741	-6.29	4.47E-10	7.15E-08
GI_41349477-S	PRDM7	9	-0.173	-0.00397	-6.14	1.11E-09	1.64E-07
GI_4885584-S	SAE1	9	-0.174	-0.00259	-6.13	1.18E-09	1.74E-07
GI_38348207-S	C1orf122	9	0.166	0.00280	5.86	5.85E-09	7.44E-07
GI_16554601-S	MRPS18B	9	-0.160	-0.00300	-5.67	1.82E-08	2.09E-06
GI_41352062-S	PFKP	9	0.158	0.00409	5.60	2.71E-08	3.02E-06
GI_4885080-S	ATP5G1	9	-0.157	-0.00246	-5.53	3.92E-08	4.23E-06
GI_21361347-S	UTP14A	9	-0.153	-0.00240	-5.40	7.90E-08	8.00E-06
GI_40317613-A	MRRF	9	-0.151	-0.00225	-5.32	1.21E-07	1.17E-05
GI_9558742-S	CCDC106	9	-0.150	-0.00506	-5.32	1.22E-07	1.17E-05
GI_4507208-S	SRM	9	-0.150	-0.00338	-5.31	1.33E-07	1.26E-05
GI_11968046-S	POLR1E	9	-0.150	-0.00308	-5.30	1.39E-07	1.31E-05
GI_22035587-A	MRPL24	9	-0.148	-0.00408	-5.24	1.90E-07	1.75E-05
GI_7706271-S	DPH5	9	-0.147	-0.00362	-5.22	2.05E-07	1.88E-05
GI_13435349-A	FDXR	9	0.146	0.00403	5.19	2.46E-07	2.21E-05
GI_14150140-S	PDCD2L	9	-0.146	-0.00452	-5.18	2.55E-07	2.28E-05
GI_31543400-S	PIM1	9	0.141	0.00418	5.01	6.22E-07	5.05E-05
GI_28559082-A	CTPS2	9	-0.139	-0.00423	-4.94	8.68E-07	6.74E-05
GI_20070219-S	PRMT5	9	-0.140	-0.00268	-4.93	9.32E-07	7.17E-05
GI_39725941-S	C10orf2	9	-0.136	-0.00807	-4.84	1.49E-06	0.000107
GI_27478147-S	PTRH1	9	0.135	0.00695	4.78	1.92E-06	0.000132
GI_24430136-S	LAGE3	9	-0.135	-0.00283	-4.77	2.09E-06	0.000143
GI_40353202-S	FAM219B	9	0.133	0.00203	4.68	3.14E-06	0.000206
GI_19593984-S	SURF4	9	0.133	0.00211	4.68	3.15E-06	0.000206
GI_20127554-S	---	9	-0.132	-0.00279	-4.66	3.45E-06	0.000225
GI_7657121-S	GEMIN4	9	-0.132	-0.00334	-4.66	3.44E-06	0.000225
GI_10835020-S	IGFBP4	9	-0.128	-0.00424	-4.55	6.03E-06	0.000367
GI_40254875-S	PDZD11	9	0.125	0.00219	4.40	1.18E-05	0.000671
GI_22035625-S	CDS2	9	0.125	0.00213	4.39	1.21E-05	0.000687
GI_22095396-S	CRELD1	9	-0.124	-0.00307	-4.38	1.31E-05	0.000737
GI_14249519-S	FAM136A	9	-0.123	-0.00261	-4.35	1.45E-05	0.000802
GI_17975596-S	SELM	9	0.122	0.00491	4.31	1.78E-05	0.000950
GI_21614498-S	EZR	9	0.121	0.00377	4.28	2.03E-05	0.00106
GI_7662339-S	MORC2	9	-0.121	-0.00309	-4.28	2.05E-05	0.00107
GI_11386190-S	EIF2D	9	-0.121	-0.00330	-4.26	2.18E-05	0.00112
GI_15011919-S	NHP2	9	-0.121	-0.00206	-4.26	2.23E-05	0.00114
GI_40217837-I	WDR4	9	-0.119	-0.00326	-4.22	2.66E-05	0.00132
GI_34577121-S	NFKB1	9	-0.119	-0.00214	-4.19	2.96E-05	0.00144
GI_27498545-S	CCDC167	9	0.117	0.00336	4.13	3.89E-05	0.00180
GI_15431296-A	RPL13	9	-0.116	-0.00309	-4.08	4.69E-05	0.00211
GI_7706199-S	THEM6	9	-0.114	-0.00338	-4.03	5.84E-05	0.00254
GI_23110931-A	PSMB9	9	0.114	0.00253	4.03	5.86E-05	0.00254
GI_23199997-A	NSUN5	9	-0.112	-0.00205	-3.95	8.30E-05	0.00338
GI_38327035-S	HAGH	9	0.111	0.00255	3.92	9.41E-05	0.00375
GI_38683842-S	DNPH1	9	-0.109	-0.00296	-3.84	0.000130	0.00488
GI_13904869-S	RP55	9	-0.108	-0.00254	-3.82	0.000141	0.00524
GI_31543422-S	POLE3	9	-0.109	-0.00142	-3.81	0.000148	0.00545
GI_32698695-S	TMEM97	9	-0.108	-0.00319	-3.80	0.000150	0.00550
GI_10835092-S	PTTG2	9	0.107	0.00392	3.80	0.000154	0.00562
GI_4759187-S	STX8	9	0.108	0.00179	3.79	0.000158	0.00573
GI_33356546-S	MCM2	9	-0.107	-0.00313	-3.77	0.000170	0.00610
GI_39812361-S	PSMD8	9	0.107	0.00166	3.74	0.000192	0.00675
GI_37059745-S	PEX5	9	-0.106	-0.00148	-3.72	0.000208	0.00719
GI_38679979-A	ACACA	9	-0.105	-0.00204	-3.71	0.000217	0.00747
GI_4885062-S	ALDOC	9	-0.104	-0.00319	-3.67	0.000256	0.00855
GI_24308523-S	TMEM9	9	-0.104	-0.00184	-3.65	0.000269	0.00888
GI_30795226-S	DTD1	9	0.102	0.00300	3.58	0.000350	0.0110
GI_14917112-S	SRPRB	9	-0.100	-0.00195	-3.52	0.000446	0.0133
GI_12751492-S	PYCR1	9	-0.0991	-0.00383	-3.50	0.000481	0.0141
GI_22749340-S	FAM76A	9	0.0985	0.00245	3.47	0.000536	0.0155
GI_39725632-S	EXOSC7	9	-0.0987	-0.00166	-3.46	0.000558	0.0160
GI_37540621-S	NOP14	9	-0.0982	-0.00161	-3.44	0.000602	0.0169

GI_7657197-S	DIMT1	9	-0.0980	-0.00165	-3.43	0.000614	0.0172
GI_5032046-S	POP7	9	0.0977	0.00180	3.43	0.000623	0.0174
GI_34147613-S	OBFC1	9	0.0971	0.00172	3.41	0.000682	0.0187
GI_21361595-S	TCEAL4	9	-0.0960	-0.00190	-3.37	0.000765	0.0204
GI_41872630-S	FASN	9	-0.0937	-0.00303	-3.31	0.000969	0.0246
GI_41393591-S	ADC2K	9	0.0940	0.00179	3.30	0.000988	0.0250
GI_21361279-S	TSFM	9	-0.0940	-0.00160	-3.29	0.001018	0.0255
GI_24942125-S	SHMT2	9	-0.0935	-0.00163	-3.28	0.001069	0.0266
GI_17986251-I	SP110	9	-0.0929	-0.00148	-3.25	0.001181	0.0287
GI_38016923-S	PRKAB1	9	0.0917	0.00259	3.23	0.001266	0.0303
GI_41107699-S	RPL18A	9	-0.0904	-0.00197	-3.18	0.001524	0.0350
GI_29741265-S	ETV2	9	0.0883	0.00418	3.12	0.001860	0.0409
GI_42659182-S	SMU1	9	-0.0885	-0.00193	-3.11	0.001898	0.0416
GI_21735547-S	CEP250	9	0.0877	0.00245	3.09	0.002055	0.0443
GI_19923786-S	RER1	9	0.0882	0.00130	3.08	0.002105	0.0450
GI_31455613-S	DERL2	9	0.0870	0.00179	3.06	0.002289	0.0480
GI_14150188-S	HVCN1	9	-0.0866	-0.00288	-3.05	0.002318	0.0485
GI_31560867-S	ITM2C	10	-0.332	-0.0122	-12.3	4.01E-33	2.11E-29
GI_31982900-S	SCD	10	-0.275	-0.0103	-10.0	7.27E-23	1.01E-19
GI_22547194-S	SREBF1	10	-0.272	-0.00832	-9.93	2.14E-22	2.66E-19
GI_27552763-S	TMEM8B	10	-0.219	-0.00595	-7.89	6.47E-15	2.86E-12
GI_42544137-S	EXOSC5	10	-0.204	-0.00560	-7.30	5.28E-13	1.60E-10
GI_23238206-S	TNFRSF21	10	-0.202	-0.0363	-7.28	6.01E-13	1.80E-10
GI_12545379-S	SCT	10	-0.196	-0.0331	-7.04	3.25E-12	8.19E-10
GI_41199582-S	LRRK26	10	-0.194	-0.00900	-6.96	5.56E-12	1.34E-09
GI_24308228-S	PACSN1	10	-0.192	-0.0275	-6.88	9.38E-12	2.15E-09
GI_40804463-S	LAMP5	10	-0.187	-0.00954	-6.70	3.25E-11	6.83E-09
GI_42794770-A	---	10	-0.185	-0.0107	-6.64	4.74E-11	9.57E-09
GI_18677769-S	C5orf20	10	-0.184	-0.0102	-6.60	6.13E-11	1.19E-08
GI_38454325-S	CD38	10	-0.177	-0.0112	-6.31	3.86E-10	6.27E-08
GI_39725933-S	SERPINF1	10	-0.176	-0.0181	-6.30	4.19E-10	6.79E-08
GI_6006016-S	LGALS3BP	10	-0.164	-0.00870	-5.85	6.25E-09	7.91E-07
GI_21914880-S	LGMN	10	-0.162	-0.0150	-5.79	9.04E-09	1.11E-06
Hs.149078-S	---	10	-0.159	-0.0170	-5.67	1.77E-08	2.04E-06
GI_32483415-S	NEFH	10	-0.158	-0.0142	-5.64	2.11E-08	2.39E-06
GI_14574565-I	AIF1	10	-0.155	-0.00907	-5.51	4.35E-08	4.64E-06
GI_42658673-S	LINC0096	10	-0.153	-0.0232	-5.46	5.81E-08	6.04E-06
GI_22748696-S	C12orf45	10	-0.150	-0.00498	-5.33	1.16E-07	1.14E-05
GI_45580689-S	CLEC4C	10	-0.150	-0.0235	-5.32	1.20E-07	1.16E-05
GI_5803120-S	PDIA5	10	-0.144	-0.00764	-5.12	3.53E-07	3.04E-05
GI_31652260-S	MYBL2	10	-0.142	-0.0184	-5.04	5.35E-07	4.39E-05
GI_30179901-S	SOX4	10	-0.141	-0.00500	-5.02	6.07E-07	4.94E-05
GI_37539476-S	PPM1J	10	-0.141	-0.0112	-5.00	6.52E-07	5.27E-05
GI_31542664-S	LRRK36	10	-0.141	-0.0238	-5.00	6.63E-07	5.32E-05
GI_5803026-S	IFI44L	10	-0.140	-0.0107	-4.97	7.52E-07	5.93E-05
GI_18490989-S	MX1	10	-0.139	-0.00639	-4.93	9.41E-07	7.21E-05
GI_4826697-S	DNASE1L3	10	-0.138	-0.0102	-4.90	1.08E-06	8.10E-05
GI_42661292-S	SCD	10	-0.138	-0.0221	-4.90	1.09E-06	8.18E-05
Hs.458273-S	MT1L	10	0.128	0.00845	4.52	6.64E-06	0.000401
GI_17149847-S	FKBP5	10	-0.127	-0.00427	-4.48	7.97E-06	0.000475
Hs.203697-S	---	10	-0.125	-0.00765	-4.45	9.49E-06	0.000554
GI_25014108-S	C11orf31	10	-0.126	-0.00245	-4.43	1.05E-05	0.000607
GI_39930600-S	ALKB7	10	-0.124	-0.00220	-4.38	1.30E-05	0.000729
GI_32313609-S	USP18	10	-0.122	-0.0128	-4.34	1.52E-05	0.000836
GI_11496992-S	PARP3	10	0.121	0.00580	4.30	1.83E-05	0.000972
GI_22050996-S	PALD1	10	-0.121	-0.0174	-4.30	1.84E-05	0.000975
GI_34486095-S	RPL28	10	-0.121	-0.00324	-4.29	1.93E-05	0.00102
GI_11386142-S	SERPINF2	10	-0.119	-0.0168	-4.23	2.47E-05	0.00124
GI_20143965-A	KIF23	10	-0.118	-0.0106	-4.20	2.85E-05	0.00140
GI_69122445-S	CD3EAP	10	-0.118	-0.00747	-4.18	3.12E-05	0.00151
GI_20302170-A	TLR9	10	-0.118	-0.0112	-4.18	3.18E-05	0.00153
GI_29171688-S	LILRA4	10	-0.112	-0.0205	-3.98	7.26E-05	0.00303
GI_21914861-A	CECR5	10	-0.113	-0.00254	-3.97	7.52E-05	0.00312
Hs.125087-S	IFI44L	10	-0.111	-0.0189	-3.93	9.01E-05	0.00363
GI_4504584-S	IFT1	10	-0.111	-0.0114	-3.93	9.08E-05	0.00365
GI_4505672-S	PDE6G	10	-0.110	-0.00936	-3.91	9.62E-05	0.00382
GI_24041025-S	NETO2	10	-0.110	-0.0163	-3.90	0.000100	0.00396
GI_9951914-S	AHCY	10	-0.110	-0.00227	-3.86	0.000120	0.00459
GI_22538815-S	CCL8	10	-0.108	-0.0184	-3.84	0.000129	0.00486
GI_4758893-S	PET112	10	-0.108	-0.00687	-3.81	0.000146	0.00538
GI_4506812-S	SCN9A	10	-0.106	-0.0171	-3.77	0.000170	0.00610
GI_31542717-S	ECHDC3	10	-0.106	-0.0152	-3.75	0.000182	0.00648
GI_20336295-S	DDX28	10	-0.105	-0.00275	-3.72	0.000209	0.00720
GI_14150184-S	ZBED3	10	-0.103	-0.00898	-3.66	0.000264	0.00876
GI_37541363-S	RSL1D1	10	-0.104	-0.00402	-3.66	0.000265	0.00879
GI_7706082-S	C1RL	10	0.103	0.00273	3.62	0.000306	0.00988
GI_21361309-S	IFI44	10	-0.101	-0.00549	-3.57	0.000374	0.0116
GI_4557436-S	CDC20	10	-0.100	-0.0127	-3.53	0.000425	0.0128
GI_16418460-S	TOP1MT	10	-0.100	-0.00656	-3.53	0.000431	0.0129
GI_34303916-S	FOXRED2	10	-0.0990	-0.00863	-3.50	0.000478	0.0141
GI_38570053-S	LYRM4	10	-0.0971	-0.0120	-3.43	0.000616	0.0173
GI_13162281-S	STS	10	0.0960	0.00453	3.39	0.000713	0.0194
GI_17921981-S	COX10	10	-0.0961	-0.00300	-3.39	0.000725	0.0197
GI_25952086-S	KCN45	10	-0.0945	-0.0148	-3.34	0.000860	0.0225
GI_42734367-S	DPH6	10	-0.0943	-0.00704	-3.33	0.000880	0.0228
GI_34147519-S	STX6	10	0.0943	0.00417	3.33	0.000889	0.0230
GI_44890060-S	PPIB	10	-0.0946	-0.00193	-3.33	0.000905	0.0233

GI_37547044-S	C1orf228	10	-0.0933	-0.00753	-3.30	0.001006	0.0253
GI_27735126-S	SLC35F3	10	-0.0932	-0.0151	-3.30	0.001008	0.0254
GI_16950627-I	AP1S1	10	0.0919	0.00511	3.25	0.001204	0.0292
GI_17025229-S	KCNK17	10	-0.0917	-0.0159	-3.24	0.001216	0.0293
GI_26787980-A	IL15RA	10	0.0900	0.0119	3.18	0.001506	0.0347
GI_7669493-A	GCDH	10	-0.0898	-0.00502	-3.17	0.001542	0.0354
GI_31342325-S	NMNT3	10	-0.0892	-0.00661	-3.15	0.001656	0.0375
GI_4557342-S	ALDH7A1	10	-0.0884	-0.0109	-3.12	0.001831	0.0404
GI_27881483-S	ZC3H7B	10	0.0883	0.0109	3.12	0.001844	0.0406
GI_21040270-S	NLRP7	10	-0.0879	-0.00992	-3.11	0.001938	0.0422
GI_4759305-S	LINTA	10	0.0877	0.0126	3.10	0.001984	0.0431
GI_13775237-S	PLVAP	10	-0.0869	-0.00800	-3.07	0.002187	0.0464
GI_41352698-S	WARS2	10	-0.0866	-0.00442	-3.06	0.002267	0.0477
GI_16306577-A	FBXL6	10	0.0862	0.00427	3.04	0.002386	0.0495
GI_41281388-S	NRCAM	11	-0.381	-0.0687	-14.5	3.37E-44	3.98E-40
GI_38564321-S	ZNF154	11	-0.326	-0.0258	-12.2	3.37E-32	1.59E-28
GI_23308576-S	PHGDH	11	-0.291	-0.0241	-10.7	1.46E-25	3.00E-22
GI_4503664-S	FBLN2	11	-0.277	-0.0283	-10.2	2.23E-23	3.40E-20
GI_14589910-A	MMP28	11	-0.247	-0.0389	-8.96	1.16E-18	9.13E-16
GI_29747011-S	PLEKHG4	11	-0.242	-0.0450	-8.79	5.02E-18	3.44E-15
GI_22749362-S	FBXO15	11	-0.229	-0.0379	-8.26	3.57E-16	1.92E-13
GI_15011978-A	ARHGEF4	11	-0.225	-0.0398	-8.11	1.19E-15	5.98E-13
GI_21389428-S	TMIGD2	11	-0.217	-0.0114	-7.83	1.06E-14	4.49E-12
GI_37549771-S	TTC24	11	-0.217	-0.0317	-7.82	1.15E-14	4.83E-12
GI_14165275-S	C2orf40	11	-0.216	-0.0298	-7.77	1.61E-14	6.29E-12
GI_10863910-S	SPINK2	11	-0.212	-0.0357	-7.66	3.86E-14	1.43E-11
GI_28144896-A	AK5	11	-0.212	-0.0359	-7.65	4.02E-14	1.46E-11
GI_38788425-S	NOG	11	-0.204	-0.0335	-7.34	3.75E-13	1.17E-10
Hs.500643-S	RNF157-AS1	11	-0.202	-0.0230	-7.27	6.54E-13	1.94E-10
GI_31377628-S	CPA5	11	-0.202	-0.0338	-7.25	7.22E-13	2.12E-10
hmm3032-S	---	11	-0.201	-0.0312	-7.23	8.71E-13	2.51E-10
GI_7110714-S	SEC14L2	11	-0.200	-0.0318	-7.19	1.13E-12	3.18E-10
GI_19743835-S	TARBP1	11	-0.200	-0.00658	-7.17	1.29E-12	3.55E-10
GI_34304373-S	CDK5R1	11	-0.200	-0.00924	-7.17	1.32E-12	3.60E-10
GI_42658866-S	MTUS1	11	-0.199	-0.0316	-7.14	1.56E-12	4.12E-10
GI_37552330-S	ZFR2	11	-0.185	-0.0266	-6.61	5.68E-11	1.12E-08
GI_4502798-S	CHAD	11	-0.181	-0.0169	-6.48	1.29E-10	2.36E-08
GI_4505854-S	PLAG1	11	-0.181	-0.0186	-6.47	1.38E-10	2.52E-08
GI_8051576-A	ABCG1	11	-0.179	-0.00959	-6.39	2.31E-10	3.94E-08
GI_37540666-S	GPR125	11	-0.178	-0.0237	-6.35	2.99E-10	5.02E-08
GI_29789280-S	TSPYL5	11	-0.177	-0.0240	-6.33	3.42E-10	5.62E-08
GI_34147323-S	SERPINE2	11	-0.176	-0.0266	-6.29	4.44E-10	7.13E-08
GI_34419632-S	ZNF135	11	-0.171	-0.0274	-6.11	1.31E-09	1.91E-07
GI_34222164-S	ZNF502	11	-0.168	-0.0172	-5.98	2.87E-09	3.89E-07
GI_16933556-S	DCHS1	11	-0.167	-0.0267	-5.96	3.22E-09	4.34E-07
Hs.449572-S	---	11	-0.162	-0.0313	-5.78	9.29E-09	1.14E-06
GI_18593550-S	---	11	-0.161	-0.0135	-5.73	1.26E-08	1.51E-06
GI_17975754-I	MSL3	11	-0.160	-0.0310	-5.66	1.91E-08	2.17E-06
GI_32698741-S	CACHD1	11	-0.156	-0.0239	-5.54	3.60E-08	3.90E-06
hmm35424-S	---	11	-0.155	-0.0239	-5.51	4.43E-08	4.71E-06
GI_37540914-S	HYKK	11	-0.154	-0.0180	-5.47	5.36E-08	5.64E-06
GI_37540696-S	ROBO3	11	-0.153	-0.00941	-5.46	5.60E-08	5.86E-06
GI_14249635-S	TOX2	11	-0.153	-0.0269	-5.46	5.85E-08	6.07E-06
GI_30153083-S	---	11	-0.153	-0.0242	-5.45	6.14E-08	6.34E-06
GI_32528300-S	EPHB4	11	-0.152	-0.0121	-5.41	7.71E-08	7.82E-06
GI_21389548-S	PSMA8	11	-0.151	-0.0241	-5.38	9.08E-08	9.09E-06
GI_18597568-S	---	11	-0.150	-0.0233	-5.32	1.20E-07	1.16E-05
GI_39932584-S	STOX1	11	-0.144	-0.0235	-5.14	3.19E-07	2.78E-05
GI_30794499-S	KDM1A	11	-0.144	-0.00226	-5.06	4.72E-07	3.91E-05
GI_37574602-S	ZNF256	11	-0.140	-0.00953	-4.98	7.15E-07	5.69E-05
Hs.191828-S	---	11	-0.140	-0.0149	-4.96	7.93E-07	6.23E-05
Hs.293510-S	---	11	-0.137	-0.0258	-4.88	1.20E-06	8.89E-05
GI_11641230-S	EDAR	11	-0.137	-0.00845	-4.85	1.40E-06	0.000102
GI_38566701-S	ZNF285	11	-0.136	-0.0160	-4.83	1.52E-06	0.000108
Hs.289062-S	---	11	-0.136	-0.0159	-4.83	1.53E-06	0.000108
GI_13435360-A	DSC1	11	-0.135	-0.0228	-4.79	1.83E-06	0.000127
GI_27886606-A	PTK7	11	-0.134	-0.0198	-4.77	2.06E-06	0.000142
GI_31543612-S	SCML1	11	-0.134	-0.0120	-4.77	2.08E-06	0.000143
GI_40788000-I	SPRY1	11	-0.133	-0.0105	-4.71	2.71E-06	0.000180
GI_37546955-S	DNAH6	11	-0.132	-0.0110	-4.70	2.94E-06	0.000195
GI_19923369-S	KDM5B	11	-0.133	-0.00335	-4.70	2.96E-06	0.000196
GI_29171718-A	GPLD1	11	-0.131	-0.0203	-4.67	3.40E-06	0.000222
GI_31377838-S	ZNF606	11	-0.131	-0.0213	-4.64	3.84E-06	0.000248
Hs.158943-S	LOC100131289	11	-0.130	-0.0199	-4.62	4.26E-06	0.000270
GI_20558478-S	---	11	0.129	0.0184	4.59	4.96E-06	0.000308
GI_21284386-I	ABLIM1	11	-0.129	-0.0178	-4.58	5.23E-06	0.000323
GI_44889961-A	STMN1	11	-0.127	-0.00613	-4.52	6.90E-06	0.000416
GI_24307966-S	SRGAP3	11	-0.126	-0.0193	-4.47	8.72E-06	0.000516
hmm10289-S	---	11	-0.126	-0.0190	-4.46	8.78E-06	0.000519
GI_42661702-S	---	11	-0.125	-0.0229	-4.45	9.50E-06	0.000554
GI_27481523-S	FLJ37453	11	-0.124	-0.00402	-4.40	1.17E-05	0.000671
Hs.170303-S	---	11	-0.123	-0.0205	-4.37	1.37E-05	0.000763
Hs.450384-S	NPM1	11	-0.123	-0.0124	-4.36	1.42E-05	0.000787
GI_37546364-S	METTL1	11	-0.123	-0.00544	-4.35	1.45E-05	0.000803
Hs.5855-S	LOC100288152	11	-0.123	-0.0132	-4.35	1.46E-05	0.000804
hmm22840-S	FLYWCH1	11	-0.122	-0.0199	-4.34	1.54E-05	0.000843
Hs.302274-S	---	11	0.122	0.0111	4.33	1.64E-05	0.000888

GI_10092690-S	TJP3	11	0.122	0.00868	4.32	1.66E-05	0.000897
GI_27734858-S	RNF175	11	-0.122	-0.0209	-4.32	1.68E-05	0.000906
hmm10292-S	---	11	-0.122	-0.0202	-4.32	1.71E-05	0.000916
GI_14043043-A	CCR9	11	-0.122	-0.00607	-4.31	1.73E-05	0.000930
GI_7262383-A	KLRC1	11	-0.121	-0.0185	-4.31	1.78E-05	0.000950
hmm13194-S	MTHFD2L	11	-0.121	-0.0111	-4.28	1.97E-05	0.00104
GI_31542938-S	HPGD	11	-0.120	-0.0189	-4.27	2.15E-05	0.00111
GI_41327765-A	ARMCX2	11	-0.119	-0.00972	-4.22	2.58E-05	0.00129
GI_37542865-S	---	11	-0.119	-0.0169	-4.22	2.59E-05	0.00129
GI_22059218-S	KLHL14	11	-0.119	-0.0214	-4.22	2.66E-05	0.00132
GI_37545966-S	YLPM1	11	-0.120	-0.00196	-4.20	2.89E-05	0.00142
GI_24308244-S	RMI2	11	-0.118	-0.0126	-4.18	3.07E-05	0.00149
GI_32307162-A	AKT3	11	0.117	0.0192	4.16	3.33E-05	0.00159
GI_31652245-I	TNFRSF19	11	-0.117	-0.0167	-4.15	3.49E-05	0.00165
GI_42544176-S	CR2	11	-0.117	-0.0139	-4.14	3.67E-05	0.00172
Hs.443284-S	---	11	-0.117	-0.00675	-4.14	3.69E-05	0.00173
Hs.483404-S	---	11	-0.116	-0.0190	-4.13	3.93E-05	0.00180
GI_5031560-S	GPA33	11	-0.116	-0.0152	-4.12	3.98E-05	0.00183
GI_23065549-S	GSTM2	11	-0.116	-0.00538	-4.10	4.37E-05	0.00198
GI_37059768-S	LRRC34	11	-0.116	-0.0132	-4.10	4.41E-05	0.00200
hmm20898-S	---	11	0.115	0.0189	4.09	4.53E-05	0.00205
GI_31542705-S	PUS7	11	-0.115	-0.0181	-4.09	4.56E-05	0.00206
GI_26051274-S	KCNMB4	11	-0.115	-0.0203	-4.07	4.90E-05	0.00219
GI_21536348-A	ASIC1	11	-0.114	-0.0129	-4.05	5.35E-05	0.00235
GI_41406063-S	MYH10	11	-0.114	-0.0126	-4.03	5.93E-05	0.00257
Hs.27373-S	FAM174B	11	-0.113	-0.0165	-4.01	6.33E-05	0.00273
GI_37655176-S	ZNF415	11	-0.113	-0.0190	-4.00	6.70E-05	0.00285
GI_38570100-A	TBC1D8B	11	0.113	0.0161	3.99	7.10E-05	0.00299
Hs.483054-S	---	11	-0.112	-0.0127	-3.96	7.90E-05	0.00326
GI_20357538-A	ATP6V1G2	11	-0.111	-0.0189	-3.95	8.25E-05	0.00337
GI_29746868-S	---	11	-0.111	-0.0149	-3.94	8.76E-05	0.00354
GI_32967299-A	C1QTNF6	11	-0.111	-0.0186	-3.93	9.12E-05	0.00366
GI_7705754-S	PLLP	11	-0.111	-0.0107	-3.92	9.26E-05	0.00371
GI_42659932-S	---	11	-0.110	-0.00933	-3.90	0.000100	0.00394
GI_37620211-S	---	11	-0.110	-0.0188	-3.90	0.000102	0.00401
Hs.325015-S	---	11	-0.110	-0.0188	-3.88	0.000110	0.00427
GI_44680142-I	SLC23A1	11	-0.109	-0.0132	-3.87	0.000116	0.00444
GI_4505612-S	PAWR	11	-0.109	-0.0163	-3.86	0.000119	0.00455
Hs.462423-S	---	11	-0.108	-0.0112	-3.84	0.000129	0.00486
GI_7657464-S	PODXL2	11	-0.108	-0.0124	-3.84	0.000130	0.00489
GI_21071045-A	SMARCA1	11	-0.107	-0.0160	-3.80	0.000153	0.00559
GI_21396476-A	MEOX1	11	0.107	0.00913	3.79	0.000158	0.00573
GI_38455419-S	RCAN3	11	-0.107	-0.00670	-3.78	0.000166	0.00599
GI_42656307-S	EML6	11	-0.106	-0.0157	-3.76	0.000177	0.00631
Hs.506072-S	LOC100506548	11	-0.106	-0.00467	-3.76	0.000180	0.00641
GI_4502408-S	BICD1	11	-0.106	-0.00469	-3.75	0.000189	0.00665
GI_15451873-I	B3GALNT1	11	-0.105	-0.0158	-3.71	0.000218	0.00749
GI_45243513-A	ABC9	11	-0.105	-0.00836	-3.71	0.000219	0.00752
GI_42544116-I	ENOSF1	11	-0.104	-0.00738	-3.70	0.000229	0.00780
GI_37546893-S	MTA3	11	-0.104	-0.00832	-3.68	0.000245	0.00828
GI_8923455-A	ANKMY1	11	0.104	0.0157	3.66	0.000258	0.00860
GI_5453622-S	CNKS1	11	-0.103	-0.0117	-3.66	0.000260	0.00864
GI_21361365-S	IFRD2	11	-0.104	-0.00282	-3.66	0.000268	0.00886
GI_17437334-S	RPLP1	11	-0.103	-0.00346	-3.65	0.000268	0.00887
GI_7661883-S	HELZ	11	-0.104	-0.00202	-3.65	0.000271	0.00893
GI_31317254-S	NLGN2	11	-0.103	-0.0167	-3.65	0.000278	0.00914
hmm23789-S	---	11	-0.103	-0.0142	-3.63	0.000297	0.00967
GI_31542742-S	EFHC2	11	-0.102	-0.00957	-3.63	0.000300	0.00973
GI_14211906-S	ZNF347	11	-0.102	-0.0161	-3.63	0.000300	0.00974
GI_4757845-S	BCL9	11	-0.102	-0.0168	-3.61	0.000313	0.0101
Hs.135647-S	RPP40	11	-0.102	-0.0152	-3.61	0.000314	0.0101
GI_4759059-I	ZFYVE9	11	-0.102	-0.0154	-3.61	0.000320	0.0103
GI_33598967-S	LMO7	11	-0.102	-0.0157	-3.60	0.000327	0.0105
GI_34447228-S	STX16	11	-0.102	-0.00309	-3.58	0.000351	0.0110
hmm10299-S	---	11	-0.101	-0.0161	-3.58	0.000355	0.0111
GI_10938017-S	CCNB2	11	-0.101	-0.0126	-3.58	0.000360	0.0112
GI_18860901-S	PTPRK	11	-0.101	-0.0175	-3.57	0.000376	0.0116
GI_42660906-S	SYCE1L	11	-0.100	-0.00695	-3.55	0.000404	0.0123
GI_31341922-S	MB21D2	11	0.100	0.00865	3.55	0.000406	0.0123
GI_27262656-I	---	11	-0.100	-0.00544	-3.54	0.000415	0.0125
GI_34147389-S	TMEM121	11	-0.100	-0.0118	-3.53	0.000430	0.0129
Hs.445751-S	---	11	-0.0992	-0.0117	-3.51	0.000466	0.0138
Hs.205722-S	---	11	-0.0984	-0.00911	-3.48	0.000520	0.0151
GI_31317245-A	IL24	11	-0.0981	-0.0120	-3.47	0.000537	0.0155
GI_34916035-S	JAKMIP3	11	0.0980	0.0155	3.47	0.000544	0.0157
GI_23308524-S	MORC2-AS1	11	-0.0979	-0.0104	-3.46	0.000553	0.0159
GI_6042201-A	MME	11	-0.0978	-0.0149	-3.46	0.000558	0.0160
GI_24307904-S	SPON1	11	-0.0977	-0.0152	-3.46	0.000565	0.0162
GI_5730010-S	RFPL2	11	0.0974	0.0134	3.45	0.000589	0.0167
GI_21426832-S	RBML1	11	-0.0965	-0.0131	-3.41	0.000661	0.0183
GI_19913405-S	TOP2A	11	-0.0960	-0.0175	-3.40	0.000705	0.0193
Hs.146747-S	---	11	0.0959	0.0110	3.39	0.000715	0.0195
Hs.474412-S	---	11	-0.0958	-0.0138	-3.39	0.000726	0.0197
GI_34147386-S	EFHD1	11	-0.0958	-0.0145	-3.39	0.000729	0.0198
GI_4504012-S	GLDC	11	-0.0957	-0.0175	-3.39	0.000732	0.0198
GI_38455384-S	LAMP3	11	-0.0957	-0.0161	-3.38	0.000734	0.0198
GI_23397571-S	KLHL34	11	-0.0956	-0.0138	-3.38	0.000744	0.0200

GI_20514779-A	SPPL2B	11	-0.0955	-0.0145	-3.38	0.000757	0.0203
Hs.289587-S	USP3-AS1	11	-0.0951	-0.0149	-3.36	0.000791	0.0211
GI_13435144-S	CLUAP1	11	-0.0951	-0.00849	-3.36	0.000799	0.0213
GI_38604072-S	C5orf42	11	-0.0949	-0.0128	-3.36	0.000816	0.0216
GI_5729898-S	KLRAP1	11	0.0948	0.0111	3.35	0.000826	0.0218
GI_28373095-S	ST8SIA1	11	0.0946	0.0136	3.35	0.000841	0.0221
Hs.482647-S	---	11	-0.0943	-0.0159	-3.34	0.000878	0.0228
GI_4501912-S	ADAM23	11	0.0943	0.0114	3.33	0.000881	0.0228
GI_31341815-S	FLJ38379	11	-0.0943	-0.00627	-3.33	0.000887	0.0230
Hs.497310-S	---	11	-0.0941	-0.0110	-3.33	0.000904	0.0233
GI_34303922-S	TRMT10A	11	-0.0939	-0.0136	-3.32	0.000921	0.0237
GI_6677928-S	SH3BGR	11	-0.0939	-0.0143	-3.32	0.000925	0.0237
GI_21361284-S	RCL1	11	-0.0937	-0.00697	-3.31	0.000947	0.0242
Hs.423319-S	---	11	-0.0936	-0.0119	-3.31	0.000957	0.0244
GI_31377724-S	ZNF462	11	-0.0936	-0.0110	-3.31	0.000964	0.0246
GI_33624847-I	SYNE2	11	0.0934	0.0137	3.30	0.000983	0.0249
GI_24308068-S	ZNF521	11	-0.0934	-0.0105	-3.30	0.000989	0.0250
GI_27499706-S	FGF14-AS2	11	-0.0924	-0.0121	-3.27	0.001121	0.0276
Hs.483398-S	---	11	-0.0923	-0.00780	-3.26	0.001135	0.0279
GI_10518496-S	DLL1	11	-0.0920	-0.00799	-3.25	0.001178	0.0287
GI_31377649-S	TMEM25	11	-0.0919	-0.0140	-3.25	0.001183	0.0288
GI_42656192-S	---	11	-0.0918	-0.0172	-3.25	0.001198	0.0291
GI_5730105-S	CXCR6	11	-0.0912	-0.0118	-3.22	0.001300	0.0309
GI_16554580-S	COL5A2	11	-0.0910	-0.0137	-3.22	0.001322	0.0312
GI_9845497-S	LAMC1	11	-0.0909	-0.00979	-3.21	0.001340	0.0316
GI_20336252-I	---	11	-0.0908	-0.00644	-3.21	0.001360	0.0320
GI_15890083-S	COL4A4	11	-0.0905	-0.0129	-3.20	0.001415	0.0330
hmm3484-S	SNHG10	11	-0.0905	-0.00399	-3.19	0.001434	0.0334
GI_10346128-S	DDX43	11	-0.0902	-0.0156	-3.19	0.001468	0.0340
GI_24308377-S	TUBGCP5	11	-0.0900	-0.0142	-3.18	0.001505	0.0347
GI_19923649-S	ZNF607	11	-0.0898	-0.00510	-3.17	0.001543	0.0354
GI_44680155-S	ALG10	11	-0.0896	-0.0140	-3.17	0.001577	0.0360
GI_4503602-S	ESR1	11	-0.0895	-0.0131	-3.17	0.001586	0.0362
GI_42661099-S	TMEM220	11	-0.0894	-0.00879	-3.16	0.001610	0.0366
GI_22538425-A	TRAF3IP2	11	-0.0893	-0.00477	-3.15	0.001652	0.0374
Hs.495177-S	---	11	-0.0890	-0.00502	-3.14	0.001707	0.0383
GI_29540546-A	TRO	11	-0.0889	-0.0150	-3.14	0.001711	0.0384
GI_7657336-S	MLH3	11	-0.0887	-0.0125	-3.13	0.001760	0.0393
GI_14249703-S	RERG	11	-0.0886	-0.00786	-3.13	0.001772	0.0395
GI_42657343-S	---	11	-0.0886	-0.0113	-3.13	0.001773	0.0395
GI_37550176-S	ZNF608	11	-0.0886	-0.0139	-3.13	0.001785	0.0396
GI_18491007-S	CYP2J2	11	-0.0886	-0.0135	-3.13	0.001788	0.0397
GI_45238856-S	---	11	-0.0885	-0.0131	-3.13	0.001793	0.0397
GI_35493986-I	UBE2I	11	-0.0883	-0.00955	-3.12	0.001838	0.0406
GI_29294636-A	MEST	11	-0.0882	-0.0114	-3.12	0.001869	0.0411
hmm28640-S	PLEKHM3	11	-0.0882	-0.0137	-3.12	0.001871	0.0411
Hs.469464-S	---	11	-0.0881	-0.00690	-3.11	0.001889	0.0414
Hs.448493-S	---	11	-0.0881	-0.0140	-3.11	0.001895	0.0415
GI_4505896-S	PLS1	11	-0.0880	-0.0134	-3.11	0.001908	0.0417
GI_37547050-S	ZSWIM5	11	0.0878	0.0124	3.10	0.001969	0.0428
GI_37559987-S	---	11	-0.0877	-0.0140	-3.10	0.001986	0.0431
Hs.427578-S	---	11	-0.0877	-0.0128	-3.10	0.001988	0.0431
GI_4557694-S	KIT	11	-0.0869	-0.0132	-3.07	0.002176	0.0462
GI_38348259-S	KANK3	11	-0.0867	-0.00679	-3.06	0.002232	0.0471
Hs.444093-S	DBT	11	-0.0865	-0.0139	-3.06	0.002293	0.0481
GI_39725694-S	CRIP1	12	0.232	0.00997	8.39	1.33E-16	7.51E-14
GI_4504374-S	CFH	12	0.226	0.0298	8.18	6.78E-16	3.52E-13
GI_18375640-S	BATF	12	0.202	0.00682	7.24	7.87E-13	2.30E-10
GI_38016201-S	SATB2	12	0.199	0.0305	7.15	1.52E-12	4.04E-10
GI_16418432-S	ALPK2	12	0.196	0.0260	7.03	3.39E-12	8.44E-10
Hs.408284-S	ZBTB20-AS1	12	0.193	0.0132	6.93	6.53E-12	1.56E-09
GI_36054181-S	REG4	12	-0.184	-0.0157	-6.59	6.37E-11	1.23E-08
GI_4501882-S	ACTA2	12	0.180	0.00720	6.43	1.80E-10	3.20E-08
GI_37555873-S	---	12	-0.158	-0.00498	-5.63	2.23E-08	2.51E-06
GI_24497541-S	HOXC5	12	0.156	0.0212	5.56	3.30E-08	3.61E-06
GI_13376815-S	CXXC4	12	0.154	0.0167	5.50	4.63E-08	4.91E-06
GI_37595568-S	CLEC11A	12	-0.151	-0.00540	-5.37	9.27E-08	9.25E-06
GI_12621915-S	---	12	0.150	0.0309	5.32	1.20E-07	1.16E-05
GI_4504216-S	GUCY2D	12	-0.149	-0.0111	-5.31	1.28E-07	1.21E-05
GI_31542985-S	ITLN1	12	0.147	0.0118	5.22	2.13E-07	1.95E-05
GI_10092600-S	EIF4G3	12	0.146	0.00299	5.15	3.09E-07	2.71E-05
GI_11545796-A	FAM129A	12	0.144	0.00466	5.12	3.45E-07	2.99E-05
Hs.203743-S	---	12	-0.144	-0.0146	-5.10	3.83E-07	3.27E-05
GI_31341099-S	RNF207	12	0.141	0.00727	4.99	6.77E-07	5.43E-05
Hs.483737-S	---	12	0.140	0.0206	4.96	8.01E-07	6.27E-05
GI_4505948-S	POMC	12	-0.139	-0.00542	-4.93	9.26E-07	7.15E-05
GI_24119161-S	CD70	12	0.138	0.0176	4.91	1.02E-06	7.75E-05
GI_10835156-S	IGFBP2	12	0.138	0.0225	4.91	1.06E-06	7.99E-05
GI_21361999-S	TNIP3	12	0.136	0.00820	4.85	1.42E-06	0.000103
GI_27499434-S	PPFIBP2	12	-0.136	-0.00343	-4.83	1.55E-06	0.000109
GI_19923620-S	HS3B7	12	0.130	0.0189	4.63	4.01E-06	0.000256
GI_37552339-S	KDM4B	12	-0.130	-0.00242	-4.59	4.79E-06	0.000299
GI_31543399-S	PIAS3	12	0.129	0.00287	4.55	5.91E-06	0.000361
GI_32967310-S	EPHA2	12	-0.128	-0.00632	-4.54	6.05E-06	0.000368
GI_40316916-S	PCSK4	12	-0.126	-0.0189	-4.47	8.45E-06	0.000502
GI_34222372-S	SPNS3	12	-0.125	-0.00506	-4.42	1.08E-05	0.000622
GI_27363487-S	C1QC	12	0.122	0.0203	4.34	1.51E-05	0.000829

hmm30425-S	---	12	-0.122	-0.0176	-4.31	1.76E-05	0.000942
GI_31377717-S	<b>GREM2</b>	12	0.120	0.0182	4.27	2.13E-05	0.00111
GI_35038563-S	<b>KIAA0922</b>	12	-0.121	-0.00249	-4.27	2.15E-05	0.00111
GI_29171761-S	<b>GSC</b>	12	0.120	0.0188	4.26	2.21E-05	0.00114
hmm18872-S	---	12	0.118	0.0107	4.19	3.01E-05	0.00146
GI_24430211-S	<b>IL23R</b>	12	-0.117	-0.0153	-4.16	3.33E-05	0.00159
Hs.473110-S	---	12	0.118	0.00809	4.16	3.33E-05	0.00159
GI_34147619-S	<b>EHD4</b>	12	0.118	0.00234	4.14	3.71E-05	0.00173
GI_38027945-S	<b>COPS6</b>	12	0.118	0.00186	4.13	3.83E-05	0.00178
GI_22208962-S	<b>ASB2</b>	12	0.116	0.00667	4.11	4.25E-05	0.00194
hmm26735-S	<b>SOGA1</b>	12	-0.116	-0.00880	-4.10	4.41E-05	0.00200
Hs.464549-S	---	12	0.115	0.0135	4.08	4.74E-05	0.00213
GI_12545403-S	<b>ICAM5</b>	12	0.115	0.00510	4.07	5.09E-05	0.00225
GI_5729809-S	<b>EBP</b>	12	0.113	0.00469	4.01	6.53E-05	0.00279
GI_30148676-S	<b>FAR2P3</b>	12	0.113	0.0163	4.00	6.77E-05	0.00288
GI_34303933-S	<b>C19orf18</b>	12	-0.113	-0.00793	-3.99	7.13E-05	0.00299
GI_10567815-I	<b>GNAO1</b>	12	0.112	0.0129	3.98	7.27E-05	0.00303
GI_37538413-S	<b>MYO1G</b>	12	0.112	0.00460	3.97	7.57E-05	0.00314
Hs.520721-S	---	12	0.112	0.0167	3.96	8.04E-05	0.00330
GI_4505042-S	<b>LTF</b>	12	0.111	0.0268	3.94	8.63E-05	0.00350
GI_19224662-S	<b>TCEAL2</b>	12	0.111	0.0131	3.93	8.98E-05	0.00362
GI_31341724-S	<b>C1orf110</b>	12	0.111	0.0166	3.93	9.04E-05	0.00364
GI_5016087-S	<b>ACTA1</b>	12	0.110	0.0133	3.90	0.000101	0.00398
GI_37546892-S	<b>PKDC</b>	12	-0.109	-0.0102	-3.88	0.000111	0.00429
GI_45007001-S	<b>CERS6</b>	12	-0.109	-0.00406	-3.87	0.000114	0.00439
GI_44917611-S	<b>KIF1C</b>	12	0.109	0.00419	3.87	0.000117	0.00446
GI_42822890-S	<b>MIEN1</b>	12	0.110	0.00224	3.86	0.000120	0.00456
GI_4503752-I	<b>FLT4</b>	12	-0.109	-0.00287	-3.83	0.000135	0.00505
GI_24308353-S	<b>C16orf45</b>	12	0.108	0.00391	3.82	0.000140	0.00518
GI_4503954-S	<b>BLOC1S1</b>	12	0.108	0.00296	3.81	0.000144	0.00533
Hs.493281-S	---	12	-0.108	-0.00906	-3.81	0.000145	0.00538
hmm24546-S	<b>PRSS57</b>	12	0.107	0.0179	3.80	0.000153	0.00558
Hs.501419-S	---	12	-0.107	-0.0118	-3.79	0.000155	0.00566
GI_24497529-I	---	12	0.107	0.00440	3.78	0.000162	0.00584
GI_21704278-A	<b>JAG2</b>	12	0.106	0.0173	3.75	0.000184	0.00653
Hs.511682-S	---	12	0.106	0.0114	3.75	0.000185	0.00655
GI_40288196-S	<b>GATA6</b>	12	0.106	0.0151	3.74	0.000196	0.00687
GI_37540292-S	<b>FAM221B</b>	12	-0.105	-0.0114	-3.73	0.000197	0.00689
GI_4507686-S	<b>TRPC3</b>	12	0.105	0.00654	3.73	0.000199	0.00694
hmm21427-S	---	12	0.105	0.0140	3.70	0.000222	0.00760
GI_19743853-A	<b>DCN</b>	12	-0.104	-0.0133	-3.70	0.000229	0.00780
GI_8922406-S	<b>FIGN</b>	12	-0.104	-0.0148	-3.67	0.000251	0.00845
GI_4504542-S	<b>HTR3A</b>	12	-0.104	-0.0133	-3.67	0.000252	0.00847
hmm20063-S	---	12	0.104	0.0101	3.67	0.000254	0.00852
GI_31543182-S	---	12	-0.103	-0.0154	-3.64	0.000287	0.00937
GI_37537711-S	<b>EPB41L4A</b>	12	0.102	0.0128	3.61	0.000317	0.0102
GI_38093656-S	<b>GPRIN3</b>	12	0.102	0.00346	3.61	0.000322	0.0103
GI_29746633-S	<b>SLC35E4</b>	12	0.102	0.00633	3.60	0.000331	0.0106
hmm19284-S	---	12	-0.101	-0.0144	-3.59	0.000348	0.0110
Hs.463395-S	---	12	0.101	0.0137	3.58	0.000351	0.0110
Hs.368200-S	---	12	0.101	0.0133	3.57	0.000368	0.0114
GI_7662177-S	---	12	0.101	0.00595	3.57	0.000369	0.0114
Hs.276341-S	---	12	-0.101	-0.00838	-3.57	0.000375	0.0116
GI_38176293-S	<b>ANKDD1A</b>	12	0.101	0.00621	3.57	0.000376	0.0116
GI_27498471-S	<b>ZSCAN23</b>	12	0.101	0.00565	3.56	0.000388	0.0119
hmm34835-S	---	12	-0.100	-0.0126	-3.53	0.000426	0.0128
hmm4390-S	---	12	0.100	0.0146	3.52	0.000439	0.0131
GI_7662101-S	<b>LRRTM2</b>	12	-0.094	-0.0150	-3.52	0.000451	0.0134
GI_27436900-S	<b>MRPL12</b>	12	-0.095	-0.00209	-3.50	0.000483	0.0142
GI_27482674-S	<b>PROSER2-AS1</b>	12	0.0989	0.00774	3.50	0.000485	0.0142
Hs.519917-S	---	12	0.0990	0.00440	3.50	0.000487	0.0142
Hs.503601-S	---	12	0.0987	0.0174	3.49	0.000496	0.0145
GI_42476154-S	<b>PTMS</b>	12	0.0989	0.00369	3.49	0.000498	0.0145
hmm24798-S	---	12	0.0984	0.0150	3.48	0.000513	0.0149
GI_20535873-S	---	12	0.0984	0.0140	3.48	0.000519	0.0151
GI_42658224-S	<b>VWDE</b>	12	0.0978	0.0135	3.46	0.000559	0.0160
Hs.58509-S	<b>LOC100506388</b>	12	-0.0977	-0.0148	-3.46	0.000565	0.0162
GI_20536598-S	<b>LOC100506405</b>	12	-0.0975	-0.0147	-3.45	0.000584	0.0166
GI_31982944-S	<b>SLC5A10</b>	12	0.0973	0.0111	3.44	0.000597	0.0169
Hs.469893-S	---	12	0.0972	0.0129	3.44	0.000602	0.0169
GI_37563645-S	<b>MIA</b>	12	0.0972	0.0106	3.44	0.000602	0.0169
GI_21327676-S	<b>HLA-B</b>	12	0.0975	0.00320	3.44	0.000602	0.0169
GI_21166383-A	<b>HEPH</b>	12	0.0972	0.00599	3.44	0.000612	0.0172
hmm19899-S	---	12	0.0979	0.00168	3.43	0.000616	0.0173
GI_7669552-S	<b>VCP</b>	12	0.0979	0.00143	3.42	0.000641	0.0179
GI_42476034-S	<b>FAM20A</b>	12	0.0966	0.0149	3.42	0.000657	0.0182
GI_42659240-S	<b>SNX30</b>	12	0.0965	0.0157	3.41	0.000662	0.0183
GI_42476062-S	<b>PXDC1</b>	12	0.0964	0.00877	3.41	0.000669	0.0185
Hs.374128-S	---	12	0.0964	0.00947	3.41	0.000674	0.0185
Hs.484809-S	---	12	-0.0963	-0.0118	-3.41	0.000680	0.0187
GI_21361986-A	<b>TMTC1</b>	12	0.0963	0.0146	3.41	0.000680	0.0187
GI_4505840-S	<b>PKP1</b>	12	0.0962	0.0158	3.40	0.000687	0.0188
GI_22749242-S	<b>C1orf177</b>	12	0.0962	0.0103	3.40	0.000689	0.0189
Hs.492837-S	---	12	0.0958	0.0113	3.39	0.000721	0.0196
GI_9845523-S	<b>EGR2</b>	12	0.0958	0.00953	3.39	0.000729	0.0198
GI_11119429-S	<b>TSKS</b>	12	-0.0957	-0.0144	-3.39	0.000730	0.0198
Hs.454935-S	---	12	0.0958	0.00498	3.39	0.000731	0.0198

Hs.444774-S	---	12	0.0956	0.00700	3.38	0.000743	0.0200
GI_37574713-S	CAMSAP3	12	-0.0950	-0.00853	-3.36	0.000801	0.0213
hmm34749-S	---	12	0.0950	0.00771	3.36	0.000805	0.0213
GI_21536459-S	MAP3K5	12	0.0949	0.00283	3.35	0.000838	0.0220
GI_42656660-S	---	12	-0.0948	-0.00452	-3.35	0.000839	0.0220
GI_38679925-S	CERCAM	12	0.0946	0.00979	3.35	0.000847	0.0222
GI_27894286-A	PHF7	12	0.0946	0.00487	3.34	0.000849	0.0222
GI_15451871-S	B3GALT2	12	-0.0944	-0.0130	-3.34	0.000865	0.0225
Hs.507256-S	---	12	0.0944	0.0147	3.34	0.000869	0.0226
GI_29788761-S	DNTT	12	-0.0942	-0.0125	-3.33	0.000887	0.0230
Hs.378091-S	---	12	0.0942	0.0151	3.33	0.000893	0.0231
GI_37552466-S	---	12	0.0942	0.0156	3.33	0.000894	0.0231
GI_12621916-S	---	12	0.0939	0.0169	3.32	0.000921	0.0237
GI_36054149-S	RIMS4	12	0.0939	0.0123	3.32	0.000924	0.0237
GI_2319981-S	RNF112	12	0.0938	0.00393	3.31	0.000955	0.0244
GI_19923712-A	BNIPL	12	-0.0934	-0.00477	-3.30	0.000991	0.0250
GI_40789088-S	NTAN1	12	0.0935	0.00306	3.30	0.001002	0.0253
Hs.498522-S	---	12	-0.0932	-0.0122	-3.30	0.001004	0.0253
Hs.482834-S	---	12	0.0932	0.0139	3.29	0.001013	0.0255
GI_37539105-S	MGC72080	12	-0.0937	-0.00196	-3.29	0.001015	0.0255
GI_18490994-A	MRV1	12	0.0930	0.0117	3.29	0.001040	0.0260
Hs.463570-S	---	12	0.0930	0.0104	3.29	0.001042	0.0261
Hs.83346-S	---	12	-0.0929	-0.00971	-3.28	0.001050	0.0262
GI_5031882-S	LOXL1	12	0.0928	0.0124	3.28	0.001061	0.0264
GI_10518505-A	F8	12	0.0922	0.00691	3.26	0.001150	0.0282
GI_34916041-S	ESPNL	12	-0.0921	-0.0126	-3.26	0.001156	0.0283
GI_29568104-S	---	12	-0.0921	-0.00585	-3.25	0.001172	0.0286
GI_13569896-S	SHCBP1L	12	0.0919	0.0140	3.25	0.001192	0.0289
GI_27734902-S	ZNF584	12	-0.0917	-0.0143	-3.24	0.001220	0.0294
Hs.475556-S	---	12	-0.0917	-0.00715	-3.24	0.001224	0.0295
GI_28916690-A	MUC1	12	0.0916	0.0132	3.24	0.001228	0.0296
GI_23238209-A	ARPC2	12	0.0921	0.00177	3.23	0.001251	0.0300
Hs.445547-S	---	12	0.0915	0.00859	3.23	0.001252	0.0300
GI_39725713-S	ALG3	12	-0.0916	-0.00290	-3.23	0.001262	0.0302
hmm22123-S	---	12	-0.0914	-0.0111	-3.23	0.001270	0.0303
Hs.385594-S	---	12	-0.0913	-0.0142	-3.23	0.001273	0.0304
Hs.220971-S	---	12	0.0912	0.00613	3.22	0.001300	0.0309
hmm33438-S	---	12	-0.0911	-0.00901	-3.22	0.001309	0.0310
hmm30955-S	---	12	0.0908	0.00416	3.21	0.001373	0.0322
hmm36387-S	---	12	-0.0907	-0.00903	-3.21	0.001377	0.0323
GI_16306540-S	CDH9	12	0.0907	0.00719	3.21	0.001377	0.0323
Hs.490862-S	---	12	0.0905	0.00885	3.20	0.001418	0.0331
GI_15011976-S	ARHGEF16	12	0.0904	0.0124	3.20	0.001433	0.0333
GI_41208742-S	BLOC1S3	12	-0.0904	-0.0144	-3.19	0.001437	0.0334
Hs.514920-S	---	12	0.0903	0.00475	3.19	0.001457	0.0338
hmm20684-S	SLC22A20	12	0.0900	0.0108	3.18	0.001503	0.0347
GI_13376565-S	C3orf36	12	0.0900	0.0118	3.18	0.001506	0.0347
GI_42662756-S	---	12	0.0898	0.0136	3.17	0.001545	0.0354
Hs.459502-S	---	12	0.0897	0.0114	3.17	0.001553	0.0355
GI_23957699-S	ZNF114	12	-0.0896	-0.00842	-3.17	0.001576	0.0360
GI_4557632-S	GRID2	12	-0.0894	-0.0139	-3.16	0.001608	0.0366
GI_39777598-I	TGM2	12	0.0893	0.0106	3.16	0.001630	0.0370
Hs.152466-S	---	12	0.0893	0.00647	3.15	0.001649	0.0374
GI_37548655-S	OLFML2B	12	0.0893	0.00558	3.15	0.001652	0.0374
GI_23503296-S	PRSS35	12	-0.0892	-0.0104	-3.15	0.001656	0.0375
GI_42657574-S	C6orf52	12	-0.0893	-0.00371	-3.15	0.001663	0.0375
GI_27478827-S	---	12	0.0892	0.0133	3.15	0.001662	0.0375
GI_34147486-A	POFUT2	12	0.0895	0.00211	3.15	0.001680	0.0379
GI_41222692-S	---	12	0.0888	0.0140	3.14	0.001741	0.0390
Hs.525142-S	---	12	0.0888	0.0135	3.14	0.001743	0.0390
GI_9257200-S	CALY	12	0.0888	0.00790	3.14	0.001742	0.0390
GI_37546156-S	GLOD5	12	0.0888	0.0136	3.14	0.001745	0.0390
GI_34222229-S	FAM163A	12	-0.0887	-0.0129	-3.13	0.001761	0.0393
GI_27484966-S	---	12	0.0887	0.0136	3.13	0.001765	0.0393
GI_21314673-S	ERRFI1	12	0.0887	0.00359	3.13	0.001784	0.0396
GI_29550920-I	---	12	0.0886	0.00415	3.13	0.001792	0.0397
GI_29734567-S	---	12	0.0883	0.0121	3.12	0.001841	0.0406
GI_13376049-S	BMP8A	12	-0.0881	-0.0107	-3.11	0.001884	0.0414
GI_34222307-S	TPBG	12	0.0881	0.0135	3.11	0.001899	0.0416
Hs.127491-S	---	12	0.0879	0.0102	3.11	0.001935	0.0422
Hs.473220-S	---	12	0.0879	0.0100	3.11	0.001935	0.0422
GI_38327641-S	WDR55	12	0.0885	0.00167	3.11	0.001934	0.0422
GI_13129141-S	DHX58	12	-0.0882	-0.00194	-3.10	0.001962	0.0427
GI_21450823-S	DACT3	12	-0.0878	-0.00810	-3.10	0.001964	0.0427
GI_42734318-S	DCLRE1A	12	0.0878	0.00308	3.10	0.001993	0.0432
Hs.310697-S	---	12	0.0877	0.00679	3.10	0.001995	0.0432
GI_29743461-S	---	12	0.0875	0.00866	3.09	0.002031	0.0439
hmm19462-S	---	12	0.0874	0.00896	3.09	0.002057	0.0443
GI_5453709-S	LASP1	12	0.0877	0.00231	3.09	0.002068	0.0445
GI_40255082-S	SPTSSB	12	-0.0874	-0.00420	-3.09	0.002073	0.0446
Hs.81889-S	---	12	0.0873	0.0121	3.08	0.002088	0.0448
GI_40254477-S	SLC1A2	12	0.0873	0.00581	3.08	0.002095	0.0449
GI_29747632-S	---	12	0.0872	0.00865	3.08	0.002114	0.0452
hmm23603-S	---	12	-0.0871	-0.0110	-3.08	0.002122	0.0453
GI_17402913-A	WNT16	12	0.0872	0.00415	3.08	0.002126	0.0454
GI_27477711-S	LOC100505685	12	0.0871	0.00433	3.08	0.002145	0.0457
Hs.270801-S	---	12	0.0869	0.00899	3.07	0.002179	0.0463

hmm21666-S	---	12	-0.0869	-0.00823	-3.07	0.002180	0.0463
GI_15208653-S	DGCR6	12	0.0871	0.00273	3.07	0.002185	0.0463
Hs.500574-S	---	12	-0.0868	-0.00839	-3.07	0.002202	0.0466
Hs.396516-S	---	12	-0.0867	-0.0111	-3.07	0.002221	0.0469
hmm25481-S	---	12	-0.0868	-0.00482	-3.07	0.002223	0.0470
GI_18379345-S	SORCS3	12	0.0867	0.0126	3.06	0.002232	0.0471
GI_20482378-S	OR5B21	12	-0.0867	-0.0124	-3.06	0.002242	0.0473
Hs.373509-S	---	12	0.0866	0.0130	3.06	0.002253	0.0475
GI_18201908-A	VCAM1	12	0.0864	0.0139	3.05	0.002311	0.0484
Hs.490304-S	---	12	0.0863	0.0129	3.05	0.002334	0.0487
GI_31543061-S	TMEM45B	12	0.0863	0.00968	3.05	0.002354	0.0490
GI_11496969-S	ADH7	12	-0.0863	-0.00584	-3.05	0.002363	0.0492
Hs.127566-S	---	12	0.0862	0.0119	3.05	0.002369	0.0493
GI_20143915-I	TTN	12	-0.0862	-0.0126	-3.04	0.002379	0.0494
GI_9910361-S	SEMA3G	12	0.0862	0.0120	3.04	0.002378	0.0494
GI_19923110-S	IGFBP3	13	0.399	0.0370	15.3	9.8E-49	2.34E-44
GI_31377588-S	SYT11	13	0.361	0.0112	13.6	2.73E-39	2.58E-35
GI_5032234-S	RCAN2	13	0.351	0.0623	13.2	2.77E-37	1.87E-33
GI_21389504-S	JAKMIP1	13	0.311	0.0228	11.5	3.90E-29	1.42E-25
GI_5360215-I	IDS	13	0.298	0.00652	10.9	1.11E-26	2.77E-23
Hs.355618-S	MIAT	13	0.294	0.0143	10.8	3.81E-26	8.58E-23
GI_41149833-S	LINC00944	13	0.286	0.0141	10.5	9.21E-25	1.61E-21
GI_38348363-S	MXRA7	13	0.274	0.0148	10.0	9.26E-23	1.25E-19
GI_15718681-S	LAG3	13	0.271	0.0174	9.90	2.81E-22	3.41E-19
GI_31543092-S	GLB1L2	13	0.266	0.0150	9.72	1.41E-21	1.56E-18
GI_6996017-S	MSC	13	0.264	0.0205	9.63	3.25E-21	3.33E-18
GI_38569483-S	KIF21A	13	0.257	0.0104	9.34	4.14E-20	3.69E-17
GI_33356156-S	APOBEC3H	13	0.249	0.0409	9.04	6.13E-19	4.99E-16
GI_34147604-S	OPTN	13	0.245	0.00638	8.86	2.81E-18	2.07E-15
GI_22749032-S	MANEAL	13	0.244	0.0380	8.85	2.86E-18	2.08E-15
GI_4885266-S	GF11	13	0.243	0.0124	8.80	4.34E-18	3.06E-15
GI_21450644-S	TTC16	13	0.242	0.0206	8.79	4.92E-18	3.42E-15
GI_7662169-S	NUAK1	13	0.233	0.0333	8.45	8.21E-17	4.91E-14
hmm2566-S	LINC00944	13	0.228	0.0405	8.24	4.18E-16	2.20E-13
GI_14670372-A	PCBP4	13	0.223	0.0116	8.06	1.83E-15	8.99E-13
GI_16905508-A	B3GAT1	13	0.222	0.0285	8.03	2.29E-15	1.10E-12
Hs.11594-S	---	13	0.221	0.0117	7.97	3.63E-15	1.67E-12
GI_5453735-S	MAF	13	0.220	0.00839	7.92	5.13E-15	2.31E-12
hmm30181-S	TNIP3	13	0.219	0.0326	7.88	6.89E-15	3.02E-12
GI_24308074-S	RAB11FIP5	13	0.218	0.0152	7.88	7.32E-15	3.18E-12
GI_27848424-S	PATL2	13	0.216	0.0314	7.77	1.60E-14	6.29E-12
GI_27597087-S	CYB561	13	0.215	0.0105	7.74	1.99E-14	7.66E-12
GI_4826845-S	MYO6	13	0.215	0.0389	7.74	2.10E-14	8.00E-12
GI_5174402-S	CACNA2D2	13	0.209	0.0127	7.52	1.06E-13	3.75E-11
GI_37550187-S	C5orf56	13	0.205	0.00473	7.33	4.25E-13	1.31E-10
GI_37550554-S	ZBTB38	13	0.198	0.0104	7.09	2.26E-12	5.87E-10
GI_22538813-S	CCL5	13	0.197	0.0111	7.08	2.49E-12	6.39E-10
GI_42659320-S	---	13	0.196	0.00723	7.04	3.19E-12	8.06E-10
Hs.293917-S	---	13	0.192	0.0171	6.90	8.03E-12	1.88E-09
GI_21070797-A	PAM	13	0.192	0.00454	6.85	1.17E-11	2.64E-09
GI_24308397-S	TMEM116	13	0.191	0.00629	6.84	1.22E-11	2.73E-09
GI_13569955-S	ARPC5L	13	0.191	0.00517	6.82	1.44E-11	3.19E-09
GI_42657283-S	C5orf56	13	0.189	0.00601	6.77	1.96E-11	4.30E-09
GI_4506520-S	RGS9	13	0.182	0.0227	6.52	1.01E-10	1.86E-08
GI_21361441-S	C18orf8	13	0.183	0.00256	6.45	1.61E-10	2.91E-08
GI_21361572-S	CHN1	13	0.179	0.0252	6.41	2.02E-10	3.53E-08
GI_5453624-S	C1orf61	13	0.179	0.0161	6.41	2.09E-10	3.64E-08
GI_22325374-A	EDARADD	13	0.178	0.0187	6.37	2.63E-10	4.45E-08
GI_24307908-S	RALGDS	13	0.178	0.00938	6.36	2.90E-10	4.87E-08
Hs.513794-S	---	13	0.177	0.0310	6.35	3.05E-10	5.10E-08
hmm19468-S	---	13	0.177	0.0107	6.34	3.28E-10	5.41E-08
HS.243596-S	KATNAL1	13	0.175	0.00765	6.25	5.52E-10	8.71E-08
GI_33946273-A	PRDM1	13	0.175	0.00824	6.25	5.59E-10	8.75E-08
GI_4502686-S	CD84	13	0.174	0.00670	6.21	7.34E-10	1.12E-07
GI_4501848-S	ABC A3	13	0.173	0.0113	6.18	8.75E-10	1.31E-07
GI_37549797-S	FCRL6	13	0.172	0.0163	6.15	1.03E-09	1.53E-07
GI_31377630-S	GBP5	13	0.172	0.00670	6.15	1.05E-09	1.56E-07
GI_18860903-S	PTPRM	13	0.170	0.0324	6.08	1.61E-09	2.33E-07
GI_4506374-S	RAB7L1	13	0.169	0.00498	6.00	2.55E-09	3.56E-07
GI_18579257-S	---	13	0.165	0.0249	5.89	4.90E-09	6.41E-07
GI_41872576-S	RFTN1	13	0.166	0.00300	5.89	5.00E-09	6.52E-07
GI_13376859-S	SLC35G2	13	0.165	0.0250	5.89	5.10E-09	6.60E-07
GI_4503928-S	GATA3	13	0.165	0.00707	5.88	5.14E-09	6.62E-07
GI_22749528-S	C17orf66	13	0.165	0.0162	5.88	5.26E-09	6.77E-07
GI_21359902-S	HDGFRP3	13	0.163	0.0103	5.81	7.90E-09	9.86E-07
GI_37059743-S	PIP4K2C	13	0.164	0.00318	5.81	8.11E-09	1.00E-06
GI_34303927-S	ATP1A3	13	0.162	0.00962	5.79	8.92E-09	1.10E-06
GI_7706110-S	CD320	13	0.160	0.00605	5.71	1.42E-08	1.68E-06
GI_41406088-S	SOX13	13	0.160	0.0134	5.70	1.45E-08	1.72E-06
Hs.517064-S	---	13	0.160	0.00845	5.69	1.55E-08	1.82E-06
GI_13399303-S	APOBEC3G	13	0.160	0.00563	5.69	1.56E-08	1.82E-06
hmm15467-S	---	13	0.159	0.00849	5.66	1.84E-08	2.11E-06
GI_25121959-S	PTCH1	13	0.157	0.00826	5.60	2.64E-08	2.95E-06
GI_6466447-S	DSTN	13	0.158	0.00366	5.59	2.73E-08	3.03E-06
GI_22749050-S	---	13	0.157	0.00875	5.58	3.02E-08	3.32E-06
GI_28559030-A	IL5RA	13	0.150	0.0214	5.36	1.00E-07	9.90E-06
GI_42661316-S	---	13	0.150	0.00868	5.33	1.18E-07	1.14E-05

GI_28376647-S	---	13	0.150	0.0120	5.32	1.21E-07	1.16E-05
GI_37595540-A	TRIM69	13	0.149	0.00717	5.31	1.32E-07	1.26E-05
GI_22748764-S	CLDND2	13	0.148	0.0254	5.28	1.54E-07	1.44E-05
GI_37540072-S	MCOLN2	13	0.148	0.0139	5.27	1.59E-07	1.49E-05
GI_16418372-S	---	13	0.147	0.0143	5.22	2.10E-07	1.93E-05
GI_34335276-S	PPP1R16B	13	0.146	0.00380	5.18	2.60E-07	2.31E-05
GI_31341110-S	TIGIT	13	0.144	0.0211	5.12	3.49E-07	3.02E-05
GI_7662301-S	TBKBP1	13	0.143	0.0129	5.10	3.99E-07	3.38E-05
GI_21237760-S	CD81	13	0.144	0.00317	5.09	4.13E-07	3.48E-05
GI_31324542-S	CAMK2N1	13	0.142	0.0158	5.06	4.89E-07	4.03E-05
Hs.442319-S	---	13	0.142	0.0229	5.05	5.10E-07	4.19E-05
GI_21389384-S	RHEBL1	13	0.141	0.00670	5.02	5.94E-07	4.84E-05
GI_22749520-S	GK5	13	0.139	0.00814	4.94	8.75E-07	6.79E-05
GI_19923492-S	PLEKH5	13	0.139	0.0107	4.93	9.28E-07	7.15E-05
GI_37543871-S	DNAH10	13	0.138	0.0227	4.90	1.11E-06	8.32E-05
GI_41146823-S	---	13	0.136	0.0197	4.84	1.49E-06	0.000106
GI_4557248-S	ADA	13	0.137	0.00271	4.84	1.49E-06	0.000106
GI_24497439-A	IL12RB1	13	0.135	0.0117	4.81	1.71E-06	0.000119
GI_37550189-S	SEPT8	13	0.134	0.0212	4.77	2.07E-06	0.000142
GI_27478592-S	---	13	0.133	0.00507	4.71	2.75E-06	0.000183
GI_33946273-I	PRDM1	13	0.132	0.00693	4.70	2.89E-06	0.000192
GI_40254903-S	CASZ1	13	0.132	0.00735	4.68	3.21E-06	0.000210
GI_8922178-S	STYK1	13	0.131	0.0179	4.65	3.62E-06	0.000235
GI_42716310-S	ARNTL	13	0.131	0.00288	4.63	4.02E-06	0.000256
GI_31377810-S	LSS	13	0.131	0.00558	4.63	4.06E-06	0.000259
GI_11386198-S	PVR3L	13	0.130	0.0224	4.61	4.50E-06	0.000283
GI_13518027-S	BFSP1	13	0.129	0.0141	4.58	5.16E-06	0.000319
GI_13540544-S	ZBP1	13	0.129	0.00466	4.57	5.27E-06	0.000325
Hs.374140-S	---	13	0.127	0.0153	4.51	7.06E-06	0.000424
GI_42544245-S	SEPW1	13	0.127	0.00251	4.46	8.84E-06	0.000521
GI_29731922-S	CEP78	13	0.125	0.00666	4.44	9.87E-06	0.000575
GI_22095346-S	CADM1	13	0.124	0.0164	4.40	1.17E-05	0.000671
GI_23957707-S	LPCAT4	13	0.123	0.00349	4.36	1.40E-05	0.000775
GI_7662357-S	ENPP4	13	0.123	0.00616	4.35	1.49E-05	0.000822
GI_33187364-S	EIF5A2	13	0.121	0.00511	4.28	1.98E-05	0.00104
GI_34222262-S	ITPR1PL1	13	0.120	0.00751	4.26	2.24E-05	0.00114
GI_38455386-S	ENPP5	13	0.119	0.0194	4.21	2.71E-05	0.00134
GI_8051633-S	RARRES3	13	0.119	0.00384	4.20	2.84E-05	0.00139
GI_22779931-A	SYNE1	13	0.118	0.00356	4.19	3.05E-05	0.00148
GI_37551767-S	TMEM181	13	0.118	0.00471	4.16	3.36E-05	0.00160
GI_34147575-S	IL32	13	0.117	0.00588	4.13	3.87E-05	0.00179
Hs.515625-S	---	13	0.116	0.0126	4.13	3.92E-05	0.00180
GI_19743812-I	ITGB1	13	0.115	0.00415	4.08	4.76E-05	0.00213
GI_8922070-S	ZNF821	13	0.115	0.00580	4.08	4.89E-05	0.00218
GI_12408645-S	CAPN2	13	0.115	0.00337	4.07	4.99E-05	0.00222
GI_18104977-S	PTPN1	13	0.115	0.00258	4.07	4.99E-05	0.00222
GI_13376227-S	HDAC11	13	0.115	0.0129	4.07	5.07E-05	0.00225
GI_25121986-S	NCAPH	13	0.113	0.0184	4.01	6.31E-05	0.00272
GI_22749146-S	SH3RF2	13	0.112	0.0174	3.96	7.96E-05	0.00328
GI_42661849-S	PRSS57	13	0.112	0.0164	3.95	8.11E-05	0.00332
GI_18105053-S	KIFAP3	13	0.112	0.00343	3.95	8.27E-05	0.00337
GI_21361404-S	RGS17	13	0.111	0.0186	3.94	8.62E-05	0.00350
GI_24797159-S	TAP1	13	0.111	0.00230	3.92	9.17E-05	0.00368
GI_44917605-S	NAPB	13	0.111	0.00323	3.91	9.75E-05	0.00386
GI_4504884-I	KLRC3	13	0.108	0.00780	3.84	0.000129	0.00487
GI_22748722-S	ACOT4	13	0.108	0.0168	3.81	0.000145	0.00537
GI_29736110-S	LINC00239	13	0.107	0.0145	3.80	0.000153	0.00558
GI_34335234-A	CORO2A	13	0.107	0.0104	3.80	0.000153	0.00558
GI_10835046-S	SGCE	13	0.107	0.0152	3.79	0.000157	0.00570
GI_13375645-S	LRFN3	13	0.107	0.0130	3.78	0.000164	0.00590
GI_4758913-S	LITAF	13	0.106	0.00486	3.76	0.000178	0.00633
GI_20270354-S	GALM	13	0.106	0.00607	3.75	0.000182	0.00647
GI_21464103-S	YWHAQ	13	0.106	0.00314	3.75	0.000185	0.00655
GI_32189374-S	SGCB	13	0.105	0.0127	3.72	0.000205	0.00711
GI_24371267-S	NAP1L5	13	0.105	0.00544	3.70	0.000222	0.00760
GI_31542523-S	VOPP1	13	0.105	0.00287	3.69	0.000231	0.00787
GI_21361293-S	KLRG1	13	0.104	0.00565	3.68	0.000242	0.00819
GI_4885170-S	MAMLD1	13	0.104	0.0125	3.68	0.000246	0.00830
GI_42661179-S	TBKBP1	13	0.104	0.00675	3.67	0.000254	0.00852
GI_22547143-A	FBXO32	13	0.102	0.00373	3.60	0.000332	0.0106
GI_31542788-S	EPHX4	13	0.102	0.00647	3.60	0.000335	0.0106
Hs.23853-S	ZBTB38	13	0.100	0.0138	3.54	0.000412	0.0125
GI_40538791-S	NIP7	13	0.0990	0.00441	3.50	0.000486	0.0142
GI_31377534-S	---	13	0.0989	0.00176	3.47	0.000536	0.0155
GI_41281572-S	BAHD1	13	0.0963	0.00235	3.39	0.000720	0.0196
GI_22054273-S	TMEM244	13	0.0947	0.0116	3.35	0.000831	0.0219
Hs.8882-S	GPR68	13	0.0938	0.00721	3.32	0.000934	0.0239
GI_42656068-S	---	13	0.0938	0.00416	3.31	0.000947	0.0242
GI_38327616-S	SLAMF6	13	0.0928	0.00365	3.28	0.001081	0.0268
GI_24586683-A	SYNM	13	0.0921	0.0123	3.26	0.001159	0.0283
GI_37059782-S	NINL	13	0.0920	0.00761	3.25	0.001175	0.0286
GI_29171703-A	MAGED2	13	0.0911	0.00143	3.19	0.001477	0.0342
GI_40805101-S	ZNF276	13	0.0897	0.00258	3.16	0.001606	0.0366
GI_34147355-S	NABP2	13	0.0894	0.00401	3.16	0.001631	0.0370
GI_10863920-S	DLG3	13	0.0888	0.0127	3.14	0.001726	0.0387
GI_4557328-S	FASLG	13	0.0885	0.0111	3.13	0.001802	0.0399
GI_33624872-A	SYNE2	13	0.0881	0.0139	3.11	0.001887	0.0414

GI_31563332-A	<b>AKAP13</b>	13	0.0890	0.00133	3.11	0.001910	0.0417
GI_25952146-A	<b>TNFSF14</b>	13	0.0879	0.00452	3.11	0.001943	0.0423
hmm31250-S	<b>GRPEL2</b>	13	0.0871	0.00396	3.07	0.002151	0.0458
GI_42658956-S	<b>TOX</b>	13	0.0860	0.0125	3.04	0.002409	0.0499
GI_13929470-S	<b>B4GALT5</b>	14	0.287	0.00645	10.5	8.67E-25	1.58E-21
GI_31377551-S	<b>RAP2A</b>	14	0.227	0.00769	8.18	7.17E-16	3.69E-13
GI_4502280-S	<b>ATP1B3</b>	14	0.189	0.00427	6.74	2.44E-11	5.24E-09
GI_23510430-A	<b>FAS</b>	14	0.187	0.00806	6.68	3.52E-11	7.34E-09
GI_42660339-S	---	14	0.181	0.00357	6.43	1.82E-10	3.23E-08
GI_22129777-S	<b>SRXN1</b>	14	0.176	0.00543	6.29	4.26E-10	6.87E-08
GI_19743892-I	<b>TADA3</b>	14	0.177	0.00283	6.25	5.58E-10	8.75E-08
GI_31881629-S	<b>PTGER2</b>	14	0.175	0.00665	6.25	5.67E-10	8.83E-08
GI_9845514-I	<b>S100A4</b>	14	0.170	0.00570	6.08	1.63E-09	2.34E-07
GI_6006015-S	<b>LGALS1</b>	14	0.168	0.00573	5.99	2.76E-09	3.76E-07
GI_6006040-S	<b>SLC25A20</b>	14	0.166	0.00507	5.90	4.70E-09	6.17E-07
GI_7705703-S	<b>GSTK1</b>	14	0.157	0.00260	5.53	3.97E-08	4.25E-06
GI_5729985-S	<b>POP4</b>	14	0.156	0.00220	5.47	5.44E-08	5.71E-06
GI_31742486-S	<b>KIF3B</b>	14	0.152	0.00227	5.35	1.06E-07	1.04E-05
GI_20986530-A	<b>MAPK1</b>	14	0.149	0.00328	5.28	1.52E-07	1.43E-05
GI_32455253-A	<b>CERS2</b>	14	0.148	0.00229	5.21	2.23E-07	2.02E-05
GI_21264579-S	<b>TSPAN2</b>	14	0.146	0.00229	5.20	2.35E-07	2.13E-05
GI_20986528-I	<b>MAPK1</b>	14	0.147	0.00244	5.19	2.48E-07	2.22E-05
GI_30023852-S	<b>MTSS1</b>	14	0.146	0.00527	5.17	2.68E-07	2.38E-05
GI_41406049-S	<b>DOK2</b>	14	0.145	0.00512	5.16	2.81E-07	2.48E-05
GI_19743895-A	<b>TADA3</b>	14	0.146	0.00328	5.16	2.89E-07	2.55E-05
GI_41222100-S	<b>DPY19L1</b>	14	0.145	0.00475	5.13	3.31E-07	2.88E-05
GI_19743818-A	<b>ITGB1</b>	14	0.143	0.00679	5.08	4.37E-07	3.65E-05
GI_4758013-S	<b>CMKLRI</b>	14	0.142	0.00876	5.03	5.51E-07	4.50E-05
GI_10835138-S	<b>FCGR3B</b>	14	0.140	0.00877	4.96	8.12E-07	6.33E-05
GI_5901975-S	<b>PLA2G16</b>	14	0.139	0.00507	4.93	9.41E-07	7.21E-05
GI_14589848-S	<b>GNGT2</b>	14	0.138	0.0130	4.91	1.05E-06	7.98E-05
GI_24475653-S	<b>PROK2</b>	14	0.137	0.00917	4.86	1.31E-06	9.62E-05
GI_10835237-S	<b>IFITM2</b>	14	0.136	0.00514	4.83	1.52E-06	0.000108
GI_21361584-S	<b>PALLD</b>	14	0.134	0.0130	4.76	2.20E-06	0.000150
GI_40254972-S	<b>PRR5L</b>	14	0.133	0.0115	4.74	2.38E-06	0.000160
GI_20986530-I	<b>MAPK1</b>	14	0.131	0.00254	4.62	4.33E-06	0.000274
GI_6005957-S	<b>VSIG4</b>	14	0.129	0.0128	4.56	5.54E-06	0.000339
GI_4557504-S	<b>CYBA</b>	14	0.124	0.00268	4.37	1.33E-05	0.000742
GI_5454165-S	<b>VT1B</b>	14	0.122	0.00271	4.29	1.94E-05	0.00103
GI_15812191-S	<b>FBXO6</b>	14	0.121	0.00678	4.28	2.01E-05	0.00105
GI_5174428-S	<b>ACAA2</b>	14	0.121	0.00319	4.28	2.04E-05	0.00107
GI_21361911-S	<b>DNAJC1</b>	14	0.120	0.00335	4.23	2.51E-05	0.00126
GI_31982935-S	<b>SGPL1</b>	14	0.119	0.00281	4.22	2.66E-05	0.00132
GI_38679886-A	<b>SRI</b>	14	0.120	0.00264	4.22	2.67E-05	0.00132
GI_31542585-S	<b>EIF4EBP2</b>	14	0.119	0.00209	4.18	3.15E-05	0.00152
GI_22538439-I	<b>CTSC</b>	14	0.118	0.00340	4.16	3.41E-05	0.00162
GI_24797070-S	<b>HLA-E</b>	14	0.116	0.00298	4.09	4.54E-05	0.00205
GI_41055203-A	<b>KLC1</b>	14	0.115	0.00228	4.04	5.77E-05	0.00251
GI_27883865-S	<b>RIC8A</b>	14	0.114	0.00289	4.03	5.80E-05	0.00252
GI_38683837-S	<b>CD47</b>	14	0.113	0.00334	3.99	6.86E-05	0.00291
GI_4809272-S	<b>ANXA4</b>	14	0.112	0.00293	3.95	8.09E-05	0.00332
GI_20357549-S	<b>TMEM50A</b>	14	0.111	0.00302	3.92	9.31E-05	0.00372
Hs.273124-S	---	14	0.111	0.0172	3.91	9.55E-05	0.00380
GI_40254883-S	<b>SSH1</b>	14	0.108	0.00472	3.84	0.000131	0.00493
GI_38570088-S	<b>RCBTB2</b>	14	0.108	0.00460	3.83	0.000134	0.00500
GI_4557830-S	<b>PCBD1</b>	14	0.108	0.00329	3.83	0.000136	0.00506
GI_28872747-S	<b>HIST3H2A</b>	14	0.106	0.0137	3.74	0.000190	0.00669
GI_42660445-S	---	14	0.106	0.00325	3.73	0.000197	0.00689
GI_4503536-S	<b>EIF4EBP3</b>	14	-0.105	-0.00502	-3.71	0.000216	0.00742
GI_14141194-S	<b>SDF2</b>	14	0.105	0.00186	3.69	0.000237	0.00803
GI_31543395-S	<b>PGAM1</b>	14	0.102	0.00329	3.61	0.000321	0.0103
GI_29736248-S	<b>GNG2</b>	14	0.102	0.00492	3.60	0.000331	0.0106
GI_3422257-S	<b>UFD1L</b>	14	0.102	0.00193	3.58	0.000355	0.0111
GI_13236586-S	<b>TMEM43</b>	14	0.102	0.00193	3.57	0.000367	0.0114
GI_17978490-I	<b>CD97</b>	14	0.100	0.0119	3.56	0.000391	0.0120
GI_31377633-S	<b>GBP4</b>	14	0.101	0.00320	3.55	0.000396	0.0121
GI_20127456-S	<b>GYG1</b>	14	0.101	0.00196	3.55	0.000403	0.0123
GI_21687150-S	<b>SLC25A43</b>	14	0.100	0.00335	3.54	0.000414	0.0125
GI_22265328-S	<b>CRADD</b>	14	0.0991	0.00503	3.50	0.000475	0.0140
GI_4502676-S	<b>CD58</b>	14	0.0991	0.00400	3.50	0.000482	0.0141
GI_22538439-A	<b>CTSC</b>	14	0.0978	0.00336	3.45	0.000574	0.0164
GI_38524617-S	<b>FMNL2</b>	14	0.0973	0.0170	3.44	0.000598	0.0169
GI_4503020-S	<b>CPT1A</b>	14	0.0957	0.0138	3.38	0.000734	0.0198
GI_25777679-I	<b>RASSF1</b>	14	0.0957	0.0125	3.38	0.000738	0.0199
GI_13775601-A	<b>SIRT2</b>	14	0.0955	0.00616	3.38	0.000757	0.0203
GI_31543813-S	<b>TMSB10</b>	14	0.0960	0.00155	3.36	0.000800	0.0213
GI_4757755-S	<b>ANXA2</b>	14	0.0953	0.00222	3.35	0.000823	0.0218
GI_30089943-I	---	14	0.0945	0.00256	3.33	0.000892	0.0231
GI_37541953-S	---	14	0.0942	0.0146	3.33	0.000894	0.0231
GI_7705816-S	<b>ZNF706</b>	14	-0.0937	-0.00228	-3.30	0.000997	0.0251
GI_32967275-A	<b>UBE2A</b>	14	0.0938	0.00167	3.29	0.001034	0.0259
GI_7706157-S	<b>PLAC8</b>	14	-0.0930	-0.00351	-3.28	0.001056	0.0263
GI_17986259-A	<b>MYL6</b>	14	0.0933	0.00154	3.27	0.001114	0.0275
GI_34916047-S	<b>TMTC1</b>	14	0.0922	0.0115	3.26	0.001150	0.0282
GI_42518069-S	<b>TJP2</b>	14	0.0921	0.00460	3.25	0.001166	0.0285
GI_4507310-S	<b>SUPT4H1</b>	14	0.0925	0.00217	3.25	0.001167	0.0285
GI_30149745-S	<b>SHISA4</b>	14	0.0918	0.0107	3.24	0.001208	0.0292

GI_17572806-S	<b>ROPN1L</b>	14	0.0917	0.00883	3.24	0.001215	0.0293
GI_20336472-I	<b>BCL7B</b>	14	0.0911	0.00498	3.22	0.001316	0.0311
GI_19923135-S	<b>CX3CR1</b>	14	0.0904	0.00676	3.20	0.001426	0.0332
GI_13129033-S	<b>AHNAK</b>	14	0.0902	0.0114	3.19	0.001463	0.0339
GI_4502100-S	<b>ANXA1</b>	14	0.0899	0.00407	3.17	0.001538	0.0353
GI_4505670-S	<b>PDE6D</b>	14	0.0900	0.00193	3.17	0.001587	0.0362
GI_23110994-A	<b>MS4A4A</b>	14	0.0894	0.0142	3.16	0.001620	0.0368
GI_22538438-I	<b>CTSC</b>	14	0.0892	0.00287	3.15	0.001699	0.0382
hmm3151-S	<b>FAM17A1</b>	14	0.0885	0.00677	3.13	0.001807	0.0400
GI_20561649-S	<b>ZNF319</b>	14	0.0880	0.00336	3.10	0.001951	0.0425
GI_22538474-S	<b>UBB</b>	14	0.0880	0.00183	3.09	0.002040	0.0440
GI_4557885-S	<b>ITGB2</b>	14	0.0878	0.00216	3.09	0.002053	0.0443
GI_7662289-S	<b>IQSEC1</b>	14	0.0875	0.00322	3.09	0.002067	0.0445
GI_34222336-S	<b>C3orf14</b>	14	0.0874	0.00472	3.08	0.002082	0.0447
hmm36544-S	<b>NHSL2</b>	14	0.0865	0.0123	3.06	0.002285	0.0480
GI_31543149-S	<b>MFS5D</b>	14	0.0867	0.00257	3.05	0.002309	0.0484
GI_4885526-A	<b>SH2D3C</b>	14	0.0865	0.00254	3.05	0.002352	0.0490
GI_14249149-S	<b>SSBP4</b>	15	0.306	0.00591	11.2	5.81E-28	1.83E-24
GI_32454742-S	<b>SESN2</b>	15	0.222	0.00761	7.99	3.06E-15	1.42E-12
GI_4502848-S	<b>TBCB</b>	15	0.210	0.00284	7.44	1.88E-13	6.20E-11
GI_9910391-S	<b>AGPAT4</b>	15	0.206	0.00780	7.41	2.39E-13	7.65E-11
GI_7662347-S	<b>MLXIP</b>	15	-0.203	-0.00462	-7.26	6.67E-13	1.97E-10
GI_4503744-S	<b>FLNA</b>	15	0.199	0.00474	7.12	1.88E-12	4.91E-10
GI_4557252-S	<b>ADAM8</b>	15	0.198	0.00432	7.09	2.30E-12	5.93E-10
GI_5453861-S	<b>PDE4A</b>	15	0.187	0.00580	6.69	3.39E-11	7.09E-09
GI_45433498-S	<b>ZDHHC18</b>	15	0.187	0.00377	6.67	3.95E-11	8.11E-09
GI_10880123-A	<b>CYTH2</b>	15	0.187	0.00372	6.65	4.38E-11	8.96E-09
GI_30240931-S	<b>EHD1</b>	15	0.185	0.00385	6.59	6.37E-11	1.23E-08
GI_4504756-S	<b>ITGAL</b>	15	0.180	0.00546	6.43	1.79E-10	3.19E-08
GI_22779872-S	<b>FAM89B</b>	15	0.180	0.00444	6.40	2.15E-10	3.72E-08
GI_31543430-S	<b>PPP1CA</b>	15	0.176	0.00328	6.24	6.13E-10	9.47E-08
GI_13194196-S	<b>KIF13B</b>	15	0.176	0.00293	6.23	6.19E-10	9.53E-08
GI_22547178-S	<b>TRPV2</b>	15	0.173	0.00473	6.18	8.69E-10	1.30E-07
GI_42734309-S	<b>FAM53B</b>	15	0.171	0.00530	6.10	1.43E-09	2.08E-07
GI_24430213-S	<b>IL10RA</b>	15	0.169	0.00321	5.99	2.79E-09	3.79E-07
GI_4503554-S	<b>ELF4</b>	15	0.166	0.00341	5.88	5.13E-09	6.62E-07
GI_22547192-A	---	15	0.157	0.00342	5.56	3.38E-08	3.68E-06
GI_21312133-S	<b>MED15</b>	15	0.154	0.00365	5.46	5.74E-08	5.98E-06
GI_21735617-A	<b>APOL1</b>	15	0.153	0.00420	5.43	6.60E-08	6.79E-06
GI_38679906-S	<b>TPRG1L</b>	15	0.154	0.00270	5.43	6.73E-08	6.89E-06
GI_34147645-S	<b>PLOD3</b>	15	0.150	0.00354	5.33	1.16E-07	1.14E-05
GI_37552547-S	<b>MAST3</b>	15	0.148	0.00306	5.25	1.79E-07	1.66E-05
GI_34452697-S	<b>ACTN4</b>	15	0.148	0.00358	5.24	1.86E-07	1.71E-05
GI_40254469-S	<b>SPN</b>	15	0.146	0.00485	5.18	2.54E-07	2.27E-05
GI_7705876-S	<b>HN1</b>	15	0.144	0.00508	5.13	3.43E-07	2.98E-05
GI_37550526-S	<b>HEG1</b>	15	0.143	0.00606	5.07	4.60E-07	3.82E-05
GI_31543175-S	<b>FAM134A</b>	15	0.143	0.00306	5.07	4.63E-07	3.83E-05
GI_17978488-A	<b>CD97</b>	15	0.141	0.00571	4.99	6.80E-07	5.44E-05
GI_41281560-S	<b>C12orf1</b>	15	0.141	0.00259	4.96	7.85E-07	6.18E-05
GI_38373674-A	<b>RAPGEF1</b>	15	0.140	0.00385	4.96	8.10E-07	6.32E-05
GI_38016920-S	<b>RAB35</b>	15	0.139	0.00216	4.89	1.12E-06	8.33E-05
GI_13929468-S	<b>B4GALT3</b>	15	0.138	0.00272	4.88	1.18E-06	8.76E-05
GI_5453959-S	<b>RABAC1</b>	15	0.138	0.00271	4.88	1.20E-06	8.89E-05
GI_31341881-S	<b>C6orf1</b>	15	0.139	0.00199	4.87	1.25E-06	9.19E-05
GI_4502564-S	<b>CAPNS1</b>	15	0.137	0.00430	4.85	1.39E-06	0.000102
GI_4753160-S	<b>GTF3C1</b>	15	0.137	0.00406	4.85	1.40E-06	0.000102
GI_22538458-S	<b>NCOA1</b>	15	0.137	0.00298	4.85	1.41E-06	0.000103
GI_30795206-S	<b>PPP2R5B</b>	15	0.135	0.00322	4.79	1.90E-06	0.000131
GI_34452731-S	<b>PREX1</b>	15	0.134	0.00273	4.72	2.67E-06	0.000178
GI_4885060-S	<b>AKT1</b>	15	0.131	0.00320	4.65	3.68E-06	0.000238
GI_28178831-S	<b>IDH2</b>	15	0.128	0.00254	4.53	6.50E-06	0.000395
GI_37551220-S	<b>ZSWIM8</b>	15	0.126	0.00243	4.45	9.27E-06	0.000543
GI_42734435-S	<b>EFHD2</b>	15	0.125	0.00483	4.43	1.01E-05	0.000586
GI_22547113-S	<b>MRPL10</b>	15	0.125	0.00350	4.41	1.11E-05	0.000640
GI_20302162-S	<b>PIP4K2A</b>	15	0.125	0.00325	4.41	1.12E-05	0.000642
GI_10947033-S	<b>MXD4</b>	15	0.125	0.00268	4.40	1.19E-05	0.000677
GI_20336261-S	<b>GGA1</b>	15	0.124	0.00305	4.39	1.23E-05	0.000695
GI_6006019-S	<b>MAD2L2</b>	15	0.124	0.00451	4.39	1.24E-05	0.000703
GI_5174578-S	<b>FOXO4</b>	15	0.122	0.00363	4.33	1.64E-05	0.000888
GI_19387853-S	<b>NTNG2</b>	15	0.122	0.00473	4.32	1.67E-05	0.000899
GI_22907038-S	<b>APOBEC3C</b>	15	0.122	0.00419	4.32	1.70E-05	0.000916
GI_34147566-S	<b>GUK1</b>	15	0.121	0.00246	4.27	2.13E-05	0.00111
GI_5031962-S	<b>STUB1</b>	15	0.121	0.00248	4.27	2.14E-05	0.00111
GI_7706468-S	<b>KLF2</b>	15	0.120	0.00468	4.25	2.25E-05	0.00115
GI_39777595-S	<b>TGIF2</b>	15	-0.120	-0.00237	-4.24	2.35E-05	0.00119
GI_31543978-S	<b>ZBTB16</b>	15	-0.119	-0.00613	-4.22	2.67E-05	0.00132
GI_7549806-S	<b>FBXW2</b>	15	0.119	0.00305	4.19	3.03E-05	0.00147
GI_34304384-S	<b>YKT6</b>	15	0.120	0.00154	4.18	3.13E-05	0.00151
GI_31742531-S	<b>DIAPH1</b>	15	0.118	0.00209	4.17	3.31E-05	0.00159
GI_4557468-S	<b>AP2B1</b>	15	0.118	0.00311	4.15	3.50E-05	0.00166
GI_32483393-A	<b>CLTB</b>	15	0.117	0.00266	4.13	3.89E-05	0.00180
GI_4826975-S	<b>RCE1</b>	15	0.116	0.00297	4.08	4.83E-05	0.00216
GI_27894367-S	<b>NOTCH1</b>	15	0.115	0.00281	4.07	4.99E-05	0.00222
GI_24308106-S	<b>SZRD1</b>	15	0.115	0.00290	4.06	5.14E-05	0.00227
GI_39995073-A	<b>CDKN2D</b>	15	0.114	0.00387	4.05	5.55E-05	0.00243
GI_21361093-S	<b>IKBKG</b>	15	0.115	0.00187	4.02	6.07E-05	0.00263
GI_31083143-A	<b>AXIN1</b>	15	0.114	0.00253	4.01	6.56E-05	0.00280

GI_8923476-S	<b>TMEM160</b>	15	0.113	0.00231	3.99	6.89E-05	0.00292
GI_4505904-S	<b>PMM1</b>	15	0.113	0.00341	3.99	7.05E-05	0.00297
GI_7706342-S	<b>FAM96B</b>	15	0.114	0.00166	3.98	7.39E-05	0.00308
GI_39725676-S	<b>NUCB1</b>	15	0.112	0.00316	3.96	8.01E-05	0.00330
GI_32171185-S	<b>BCAP31</b>	15	0.112	0.00197	3.95	8.43E-05	0.00342
GI_39725675-S	<b>CDK2AP2</b>	15	0.111	0.00336	3.94	8.64E-05	0.00350
GI_6552331-S	<b>FLOT1</b>	15	0.112	0.00183	3.93	9.11E-05	0.00366
GI_34147718-S	<b>ZNF688</b>	15	0.111	0.00315	3.91	9.64E-05	0.00382
GI_5454109-S	<b>TESK1</b>	15	0.111	0.00246	3.90	9.95E-05	0.00393
GI_4507840-S	<b>UQCRC1</b>	15	0.110	0.00201	3.88	0.000110	0.00425
GI_4502896-S	<b>CLPTM1</b>	15	0.110	0.00249	3.88	0.000112	0.00431
GI_19923916-S	<b>SHKBP1</b>	15	0.109	0.00349	3.86	0.000118	0.00451
GI_25286702-S	<b>KIAA2013</b>	15	0.110	0.00164	3.85	0.000125	0.00474
GI_21361780-S	<b>MAP7D1</b>	15	0.109	0.00203	3.84	0.000129	0.00487
GI_24475860-S	<b>PHPT1</b>	15	0.109	0.00199	3.84	0.000131	0.00492
GI_11321629-S	<b>NR1H2</b>	15	0.109	0.00214	3.82	0.000138	0.00512
GI_34147606-S	<b>CNPPD1</b>	15	0.108	0.00211	3.78	0.000162	0.00585
GI_21361508-S	---	15	0.107	0.00181	3.76	0.000181	0.00643
GI_9910203-S	---	15	0.106	0.00326	3.75	0.000184	0.00653
GI_4557552-S	<b>EMD</b>	15	0.106	0.00291	3.75	0.000189	0.00665
GI_34147601-S	<b>ARHGDIA</b>	15	0.106	0.00290	3.74	0.000192	0.00675
GI_7657045-S	<b>UBE2S</b>	15	0.106	0.00349	3.74	0.000193	0.00678
GI_21361484-S	<b>TBC1D10B</b>	15	0.106	0.00288	3.73	0.000198	0.00693
GI_7662409-S	<b>SBN02</b>	15	0.105	0.00419	3.72	0.000205	0.00712
GI_38372922-A	<b>BSG</b>	15	0.105	0.00324	3.72	0.000205	0.00712
GI_10864068-S	<b>TMEM8A</b>	15	0.104	0.00343	3.67	0.000253	0.00848
GI_32481208-A	<b>MAPKAPK2</b>	15	0.104	0.00235	3.67	0.000254	0.00852
GI_40068460-S	<b>TWF2</b>	15	0.104	0.00297	3.67	0.000257	0.00858
GI_14149701-S	<b>RNF167</b>	15	0.104	0.00278	3.66	0.000258	0.00860
GI_37552347-S	<b>GPR108</b>	15	0.104	0.00196	3.65	0.000270	0.00893
GI_13259507-A	<b>DCTN1</b>	15	0.104	0.00230	3.65	0.000274	0.00901
GI_23397652-S	<b>PIGT</b>	15	0.104	0.00201	3.64	0.000283	0.00926
GI_31543199-S	<b>TMUB1</b>	15	0.103	0.00285	3.62	0.000301	0.00975
GI_40254968-S	<b>NUDT18</b>	15	0.102	0.00300	3.62	0.000312	0.0101
GI_23110949-S	<b>CTSD</b>	15	0.102	0.00345	3.61	0.000319	0.0102
GI_27544940-S	<b>MYO1F</b>	15	0.102	0.00345	3.59	0.000345	0.0109
GI_38455425-S	<b>CITED4</b>	15	-0.101	-0.00342	-3.58	0.000354	0.0111
GI_38016942-S	<b>ORAI1</b>	15	0.101	0.00376	3.58	0.000361	0.0113
GI_4758925-S	<b>PITPNM1</b>	15	0.101	0.00358	3.55	0.000398	0.0122
GI_38570148-S	<b>WWC3</b>	15	0.101	0.00205	3.55	0.000404	0.0123
GI_37537720-S	<b>B3GALT6</b>	15	-0.101	-0.00205	-3.55	0.000405	0.0123
GI_14149741-S	<b>CALCOCO1</b>	15	0.100	0.00276	3.54	0.000421	0.0127
GI_14917108-S	<b>AP2M1</b>	15	0.101	0.00199	3.54	0.000421	0.0127
GI_37546496-S	<b>SSU72</b>	15	0.0985	0.00217	3.47	0.000543	0.0157
GI_4557258-S	<b>ADCY9</b>	15	0.0977	0.00531	3.45	0.000575	0.0164
GI_41281455-S	<b>RAB11FIP3</b>	15	0.0971	0.00245	3.42	0.000641	0.0179
GI_892347-S	<b>TMEM39B</b>	15	-0.0972	-0.00177	-3.41	0.000664	0.0184
GI_12408655-S	<b>CAPN1</b>	15	0.0964	0.00199	3.39	0.000724	0.0197
GI_33636765-S	<b>LHP</b>	15	-0.0957	-0.00203	-3.37	0.000788	0.0210
GI_6005793-S	<b>PRAF2</b>	15	0.0949	0.00340	3.35	0.000833	0.0219
GI_34353250-A	<b>DLGAP4</b>	15	0.0949	0.00261	3.35	0.000847	0.0222
GI_4507102-S	<b>SNAPC2</b>	15	0.0947	0.00256	3.34	0.000865	0.0225
GI_42476331-S	<b>SH3BGRL3</b>	15	0.0944	0.00454	3.34	0.000873	0.0227
GI_23510449-S	<b>MPST</b>	15	0.0940	0.00343	3.32	0.000930	0.0238
GI_4507508-S	<b>TIMP1</b>	15	0.0939	0.00517	3.32	0.000936	0.0240
GI_33356147-S	<b>FMNL1</b>	15	0.0939	0.00265	3.31	0.000954	0.0244
GI_14249553-S	<b>SPRYD3</b>	15	0.0939	0.00257	3.31	0.000965	0.0246
GI_23397668-S	<b>ARPC4</b>	15	0.0940	0.00219	3.31	0.000968	0.0246
GI_4504196-S	<b>GTF2F1</b>	15	0.0933	0.00221	3.29	0.001046	0.0261
GI_21361267-S	<b>TNIP1</b>	15	0.0931	0.00190	3.27	0.001104	0.0273
GI_4506026-S	<b>PPP4C</b>	15	0.0928	0.00237	3.27	0.001112	0.0275
GI_16753213-S	<b>PFN1</b>	15	0.0930	0.00180	3.27	0.001115	0.0275
GI_24307876-S	<b>POR</b>	15	0.0925	0.00309	3.26	0.001130	0.0278
GI_18201904-S	<b>GPI</b>	15	0.0926	0.00200	3.26	0.001153	0.0283
GI_16357476-S	<b>CDC34</b>	15	0.0915	0.00287	3.23	0.001284	0.0306
GI_7669500-S	<b>LAMP1</b>	15	0.0919	0.00168	3.22	0.001297	0.0309
GI_6912247-S	<b>DNPEP</b>	15	0.0913	0.00261	3.22	0.001319	0.0312
GI_45333920-S	<b>ASB8</b>	15	0.0911	0.00264	3.21	0.001349	0.0318
GI_38146105-S	<b>SLC52A2</b>	15	0.0910	0.00300	3.21	0.001365	0.0321
GI_22095348-S	<b>WDT1</b>	15	0.0909	0.00236	3.20	0.001398	0.0327
GI_40018625-S	<b>MOB3A</b>	15	0.0907	0.00212	3.19	0.001455	0.0338
GI_4504750-S	<b>ITGA5</b>	15	0.0905	0.00243	3.19	0.001462	0.0339
GI_20127505-S	<b>PMVK</b>	15	0.0905	0.00209	3.18	0.001491	0.0345
GI_31377621-S	<b>DEDD2</b>	15	0.0897	0.00195	3.15	0.001654	0.0374
GI_33859747-S	<b>CENPBD1P1</b>	15	0.0891	0.00519	3.15	0.001681	0.0379
GI_23943871-S	<b>SMAP2</b>	15	-0.0896	-0.00171	-3.14	0.001707	0.0383
GI_19718752-S	<b>BAP1</b>	15	0.0889	0.00270	3.14	0.001757	0.0392
GI_13569961-S	<b>RAB1B</b>	15	0.0880	0.00411	3.11	0.001931	0.0422
GI_24475655-S	<b>FBXW4</b>	15	0.0882	0.00173	3.10	0.001995	0.0432
GI_21703709-S	<b>SHISA5</b>	15	0.0881	0.00190	3.10	0.002002	0.0433
GI_17105397-I	<b>WDR1</b>	15	0.0875	0.00273	3.09	0.002072	0.0446
GI_4507204-S	<b>SRF</b>	15	0.0874	0.00239	3.08	0.002124	0.0454
GI_11345483-S	<b>ZFAND3</b>	15	0.0869	0.00210	3.06	0.002282	0.0480
GI_40538727-S	<b>PLEKHM1</b>	15	0.0865	0.00234	3.04	0.002377	0.0494
GI_32307157-S	<b>AGAP3</b>	15	0.0864	0.00237	3.04	0.002398	0.0497
GI_18375627-A	<b>PRRC2A</b>	15	0.0866	0.00180	3.04	0.002408	0.0499
GI_4507544-S	<b>GPR137B</b>	16	0.297	0.00669	10.9	1.90E-26	4.50E-23

GI_31543930-S	VAMP5	16	0.226	0.00557	8.13	1.05E-15	5.32E-13
GI_7705752-S	C1Q1A	16	0.214	0.0134	7.70	2.82E-14	1.06E-11
GI_34335231-S	CKB	16	0.210	0.0108	7.54	8.90E-14	3.17E-11
GI_34222243-S	RHOC	16	0.209	0.00744	7.51	1.11E-13	3.88E-11
GI_27735072-S	CYP4F22	16	0.208	0.0301	7.50	1.20E-13	4.16E-11
GI_42716282-S	USB1	16	0.206	0.00291	7.31	4.65E-13	1.42E-10
GI_4557440-S	CDKN1C	16	0.193	0.0118	6.92	7.03E-12	1.67E-09
GI_42476319-S	SUSD1	16	0.189	0.00418	6.75	2.24E-11	4.88E-09
GI_38016929-A	OASL	16	0.186	0.00793	6.65	4.39E-11	8.96E-09
GI_14165470-S	CDC42EP4	16	0.177	0.00614	6.31	3.83E-10	6.24E-08
GI_22202618-A	CTSL	16	0.175	0.0117	6.27	5.02E-10	7.97E-08
GI_31543214-S	MT2A	16	0.175	0.00560	6.26	5.35E-10	8.47E-08
GI_32698963-S	VMO1	16	0.174	0.0236	6.22	6.63E-10	1.02E-07
GI_11038661-S	C1QB	16	0.174	0.0152	6.21	7.11E-10	1.08E-07
GI_22049497-S	LYPD2	16	0.173	0.0113	6.18	8.60E-10	1.29E-07
GI_38679953-A	ABR	16	0.169	0.00310	6.00	2.64E-09	3.64E-07
GI_33620766-S	SCARB1	16	-0.167	-0.00540	-5.94	3.78E-09	5.02E-07
GI_30157733-S	--	16	0.166	0.00819	5.92	4.16E-09	5.51E-07
GI_8923562-S	TESC	16	0.160	0.00433	5.70	1.52E-08	1.79E-06
GI_13775223-S	APH1B	16	0.160	0.00327	5.68	1.68E-08	1.94E-06
GI_34328936-S	CD63	16	0.158	0.00480	5.61	2.54E-08	2.84E-06
GI_45387924-S	LYPD2	16	0.156	0.0124	5.57	3.05E-08	3.35E-06
GI_34485718-S	E2F2	16	0.156	0.00549	5.55	3.43E-08	3.73E-06
GI_4504436-S	HMOX1	16	0.154	0.00528	5.46	5.66E-08	5.91E-06
GI_18087856-S	UBE2F	16	0.153	0.00284	5.42	7.08E-08	7.20E-06
GI_31543384-S	PCYT1A	16	0.149	0.00440	5.28	1.54E-07	1.44E-05
GI_33457315-S	PLEKHO2	16	0.148	0.00514	5.27	1.62E-07	1.51E-05
GI_8924245-S	BATF3	16	0.146	0.00526	5.19	2.40E-07	2.16E-05
GI_12545400-A	ICAM4	16	0.145	0.00699	5.17	2.76E-07	2.44E-05
GI_42658645-S	--	16	0.143	0.00337	5.06	4.80E-07	3.96E-05
GI_42476329-S	SFTP2D	16	0.141	0.0100	5.00	6.55E-07	5.29E-05
GI_26787979-A	IL15	16	0.138	0.00370	4.90	1.10E-06	8.29E-05
GI_32307143-S	PLOD1	16	0.136	0.00428	4.82	1.65E-06	0.000115
GI_7706275-A	TPPP3	16	0.134	0.00653	4.77	2.10E-06	0.000144
GI_19913411-A	MVP	16	0.133	0.00342	4.69	2.97E-06	0.000196
GI_40807488-S	EMR1	16	0.132	0.00448	4.66	3.48E-06	0.000227
GI_4757913-S	CASP5	16	0.131	0.00466	4.63	3.96E-06	0.000255
GI_21071009-S	TCN2	16	0.131	0.00536	4.63	3.98E-06	0.000256
GI_4557384-S	C3	16	0.127	0.00635	4.50	7.60E-06	0.000456
GI_20127497-S	RRAS	16	0.126	0.00563	4.48	8.00E-06	0.000476
GI_33636716-S	FAM214B	16	0.126	0.00481	4.46	8.79E-06	0.000519
GI_29337288-S	AB13	16	0.126	0.00338	4.46	9.04E-06	0.000533
GI_9910341-S	SLAMF8	16	0.124	0.00651	4.38	1.27E-05	0.000717
GI_42490763-S	ELOVL1	16	0.124	0.00219	4.37	1.34E-05	0.000751
GI_23238227-S	CHST7	16	0.123	0.00383	4.35	1.50E-05	0.000826
GI_31541779-S	CYB561D2	16	0.123	0.00193	4.32	1.66E-05	0.000898
GI_23312365-S	TNFRSF1B	16	0.121	0.00271	4.27	2.11E-05	0.00110
GI_27754203-S	--	16	0.119	0.00350	4.21	2.72E-05	0.00134
GI_19923143-S	MYD88	16	0.119	0.00254	4.18	3.06E-05	0.00148
GI_8923465-S	TMEM127	16	0.118	0.00278	4.15	3.55E-05	0.00168
GI_31543450-S	PRELID1	16	0.118	0.00251	4.15	3.60E-05	0.00170
GI_20127596-S	HES4	16	0.116	0.00825	4.11	4.29E-05	0.00196
GI_19923781-S	LILRB1	16	0.114	0.00410	4.02	6.20E-05	0.00268
GI_31542755-S	PAQR4	16	0.113	0.00314	3.97	7.48E-05	0.00311
GI_34147574-S	HTATIP2	16	0.113	0.00215	3.96	7.93E-05	0.00327
GI_4758085-S	CSRP1	16	0.112	0.00211	3.96	8.06E-05	0.00331
GI_39725697-S	CALHM2	16	0.112	0.00366	3.95	8.22E-05	0.00336
GI_13236578-S	SLC27A3	16	0.111	0.00423	3.94	8.72E-05	0.00353
GI_38327597-I	RGS12	16	0.111	0.00489	3.93	9.09E-05	0.00365
GI_29648312-S	ASPHD2	16	0.111	0.00239	3.92	9.31E-05	0.00372
GI_23110999-S	MSA47	16	0.109	0.00517	3.84	0.000129	0.00487
GI_7662125-S	SIPA1L1	16	0.108	0.00245	3.79	0.000159	0.00575
HS.284257-S	--	16	0.105	0.0174	3.73	0.000202	0.00702
GI_7661727-S	LAMTOR2	16	0.106	0.00181	3.72	0.000207	0.00716
GI_19718758-A	MYOF	16	0.105	0.00372	3.69	0.000230	0.00783
GI_28872795-S	CEBPB	16	0.103	0.00585	3.63	0.000298	0.00969
GI_4502792-S	CEACAM3	16	0.102	0.0123	3.61	0.000314	0.0101
GI_24797075-S	HLA-DPB1	16	0.103	0.00200	3.61	0.000325	0.0104
GI_4505020-S	LRPAP1	16	0.102	0.00198	3.58	0.000356	0.0111
GI_21314629-S	C3AR1	16	0.101	0.00602	3.56	0.000382	0.0118
GI_11545764-S	CXCL16	16	0.101	0.00346	3.56	0.000391	0.0120
GI_32895366-I	LILRA5	16	0.0991	0.00525	3.50	0.000476	0.0140
GI_13376321-S	--	16	0.0991	0.00489	3.50	0.000480	0.0141
GI_23510436-A	TNFRSF8	16	0.0980	0.00396	3.46	0.000556	0.0160
GI_6031195-S	PLAGL2	16	0.0977	0.00331	3.45	0.000583	0.0166
GI_4758069-S	PTGDR2	16	0.0974	0.00555	3.44	0.000591	0.0167
GI_16579887-S	FBP1	16	0.0964	0.00354	3.40	0.000688	0.0188
GI_41393564-S	ITPK1	16	0.0962	0.00295	3.39	0.000708	0.0193
GI_7710155-S	WARS	16	0.0956	0.00429	3.38	0.000756	0.0203
GI_23110923-S	PSMB10	16	0.0964	0.00150	3.37	0.000761	0.0204
GI_20357564-S	CSTB	16	0.0954	0.00182	3.35	0.000833	0.0219
GI_34147669-S	SLC39A1	16	0.0948	0.00318	3.34	0.000849	0.0222
HS.501087-S	--	16	0.0946	0.00838	3.34	0.000851	0.0223
GI_38372936-A	CHMP2A	16	0.0952	0.00136	3.32	0.000918	0.0236
GI_22907051-S	ARPC1A	16	0.0956	0.00116	3.32	0.000921	0.0237
GI_9938031-S	SLC2A6	16	0.0938	0.00283	3.31	0.000962	0.0245
GI_37549554-S	--	16	0.0933	0.0145	3.30	0.000994	0.0251

GI_39930526-S	TNNT1	16	0.0932	0.0126	3.30	0.001012	0.0254
GI_4809285-A	IRF7	16	-0.0934	-0.00317	-3.29	0.001016	0.0255
GI_21314780-S	NEURL1	16	0.0921	0.00826	3.26	0.001164	0.0284
GI_5729827-S	TRAFD1	16	0.0924	0.00183	3.25	0.001199	0.0291
GI_20986498-A	MAPK7	16	0.0921	0.00250	3.24	0.001209	0.0292
GI_32189356-S	MRAS	16	0.0917	0.00468	3.24	0.001232	0.0296
GI_27477265-S	FAM212B	16	0.0913	0.00334	3.22	0.001302	0.0309
GI_6912517-S	ACOT9	16	0.0909	0.00307	3.21	0.001379	0.0323
Hs.136355-S	---	16	0.0906	0.0118	3.20	0.001388	0.0325
GI_5032056-S	S100A11	16	0.0908	0.00307	3.20	0.001403	0.0328
GI_11995467-S	IFITM3	16	0.0901	0.00354	3.18	0.001505	0.0347
GI_4885234-S	FGR	16	0.0903	0.00209	3.18	0.001524	0.0350
GI_42822885-S	---	16	0.0893	0.00452	3.15	0.001653	0.0374
GI_30179906-A	PILRA	16	0.0894	0.00317	3.15	0.001657	0.0375
GI_4507868-S	VASP	16	0.0898	0.00170	3.15	0.001659	0.0375
GI_21389496-S	CCDC12	16	0.0900	0.00135	3.15	0.001695	0.0382
GI_38044287-A	GSN	16	0.0889	0.00289	3.13	0.001765	0.0393
GI_42542393-S	LPCAT3	16	0.0878	0.00173	3.08	0.002102	0.0450
GI_37540588-S	C4orf48	16	0.0869	0.00314	3.07	0.002214	0.0468
GI_10835170-S	IFNG	17	0.301	0.0167	11.1	2.55E-27	7.11E-24
GI_27436944-I	LMNA	17	0.205	0.0128	7.36	3.27E-13	1.02E-10
GI_13899218-S	GABARAPL1	17	0.201	0.00859	7.20	1.05E-12	2.99E-10
GI_5360207-A	IDS	17	0.200	0.00601	7.18	1.23E-12	3.39E-10
GI_27436944-A	LMNA	17	0.184	0.0132	6.58	6.73E-11	1.29E-08
GI_31880337-S	TUBA1C	17	0.181	0.00375	6.44	1.71E-10	3.06E-08
GI_15812223-A	TRERF1	17	0.180	0.00466	6.41	2.12E-10	3.67E-08
GI_12707565-S	DUSP5	17	0.169	0.00689	6.01	2.42E-09	3.41E-07
GI_5174516-S	SMAD7	17	0.166	0.0106	5.94	3.72E-09	4.95E-07
GI_34328908-A	DUSP4	17	0.163	0.0127	5.83	7.16E-09	8.99E-07
GI_4504720-S	IRF1	17	0.163	0.00639	5.80	8.17E-09	1.01E-06
GI_42657338-S	---	17	0.162	0.00627	5.77	9.86E-09	1.20E-06
GI_4503298-S	BHLHE40	17	0.154	0.00698	5.49	4.95E-08	5.23E-06
GI_4507728-S	TUBB2A	17	0.154	0.00945	5.49	4.98E-08	5.25E-06
GI_19743904-A	RORA	17	0.149	0.00629	5.28	1.50E-07	1.41E-05
GI_13699866-S	MAP1LC3B	17	0.145	0.00418	5.14	3.15E-07	2.75E-05
GI_17978496-A	CDKN1A	17	0.144	0.00671	5.13	3.34E-07	2.90E-05
GI_7019524-S	SERTAD1	17	0.143	0.00633	5.09	4.21E-07	3.53E-05
GI_31343528-S	CCDC71L	17	0.140	0.00435	4.98	7.19E-07	5.71E-05
GI_28416425-I	ZNF655	17	0.141	0.00239	4.98	7.44E-07	5.88E-05
GI_37542672-S	---	17	0.138	0.00409	4.89	1.12E-06	8.33E-05
GI_4758211-S	DUSP8	17	0.138	0.00573	4.89	1.13E-06	8.46E-05
GI_40254960-S	DERL1	17	0.135	0.00331	4.77	2.06E-06	0.000142
GI_22027510-A	CDC44	17	0.131	0.00394	4.63	3.99E-06	0.000256
GI_37655156-S	KLF6	17	0.130	0.00598	4.60	4.63E-06	0.000291
GI_38201674-S	SDC4	17	0.125	0.0163	4.42	1.07E-05	0.000621
GI_14249657-S	MIR22HG	17	0.124	0.00494	4.40	1.15E-05	0.000659
GI_4885516-S	NFIL3	17	0.124	0.00553	4.40	1.19E-05	0.000677
GI_38327528-I	INSIG1	17	0.121	0.00547	4.29	1.88E-05	0.000999
GI_34577058-S	PLIN2	17	0.121	0.00468	4.29	1.93E-05	0.00102
GI_15718683-S	SERTAD3	17	0.121	0.00348	4.27	2.09E-05	0.00109
GI_4505878-S	PLEK	17	0.118	0.00496	4.19	2.98E-05	0.00145
GI_34147356-S	DDA1	17	0.118	0.00277	4.18	3.16E-05	0.00152
GI_22035666-S	TOB1	17	0.118	0.00317	4.17	3.32E-05	0.00159
GI_4501944-S	ADM	17	0.117	0.00912	4.15	3.55E-05	0.00168
GI_40018632-S	IDI1	17	0.113	0.00260	3.99	6.90E-05	0.00292
GI_18087854-S	DYNLL2	17	0.113	0.00409	3.99	6.97E-05	0.00295
GI_30206033-S	SLC35B2	17	0.113	0.00337	3.99	6.99E-05	0.00295
GI_17986282-S	TUBA1A	17	0.112	0.00450	3.95	8.11E-05	0.00332
GI_20149649-S	CHST11	17	0.111	0.00440	3.92	9.42E-05	0.00375
GI_15812192-S	FBXO7	17	0.111	0.00209	3.91	9.87E-05	0.00390
GI_4505460-S	ENC1	17	0.110	0.00390	3.89	0.000106	0.00413
GI_4504156-S	CXCL3	17	0.110	0.0102	3.89	0.000107	0.00416
GI_10835118-S	MYO5A	17	0.110	0.00280	3.88	0.000111	0.00428
GI_4503412-S	HBEFG	17	0.110	0.00719	3.88	0.000111	0.00429
GI_45439368-S	IER5	17	0.109	0.00455	3.85	0.000123	0.00469
GI_5729764-S	CGRRF1	17	0.106	0.00359	3.75	0.000185	0.00655
GI_31543823-S	TREM1	17	0.106	0.00522	3.74	0.000192	0.00676
GI_14574570-S	BCL2A1	17	0.106	0.00559	3.74	0.000193	0.00678
GI_38524593-S	TIPARP	17	0.105	0.00432	3.73	0.000200	0.00699
GI_34147657-S	DDIT3	17	0.106	0.00374	3.73	0.000201	0.00701
GI_34787408-S	RALGAPB	17	0.106	0.00276	3.72	0.000205	0.00712
GI_42656231-S	---	17	0.105	0.00315	3.72	0.000209	0.00720
GI_28872721-S	BTG3	17	0.105	0.00587	3.70	0.000223	0.00761
GI_30156248-S	---	17	0.104	0.00627	3.69	0.000236	0.00801
GI_29745613-S	TP53INP2	17	0.103	0.0177	3.65	0.000272	0.00896
GI_42658610-S	LINC-PINT	17	0.103	0.00362	3.64	0.000282	0.00924
GI_31317226-S	EGR1	17	0.103	0.00816	3.63	0.000291	0.00949
GI_4885332-S	FFAR2	17	0.102	0.00673	3.63	0.000300	0.00973
GI_31652256-S	MAFB	17	0.102	0.00616	3.62	0.000305	0.00988
GI_39725640-S	AKIRIN2	17	0.102	0.00260	3.61	0.000318	0.0102
GI_39930484-S	SLC25A25	17	0.102	0.00206	3.60	0.000333	0.0106
GI_25952110-S	TNF	17	0.101	0.0115	3.58	0.000354	0.0111
GI_28373098-A	ST8SIA4	17	0.101	0.00465	3.56	0.000381	0.0117
GI_27597060-S	UBR2	17	0.101	0.00207	3.55	0.000396	0.0121
GI_38327530-A	INSIG1	17	0.0992	0.00316	3.50	0.000480	0.0141
GI_5174460-S	HCAR3	17	0.0988	0.00844	3.49	0.000494	0.0144
GI_21362043-S	C9orf89	17	0.0985	0.00224	3.47	0.000546	0.0157

GI_32698821-S	ZFAND2A	17	0.0978	0.00291	3.45	0.000582	0.0166
GI_34147366-S	MAPKAP1	17	0.0974	0.00151	3.41	0.000670	0.0185
GI_31377612-S	MYADM	17	0.0966	0.00351	3.41	0.000671	0.0185
GI_34222319-S	JOSD1	17	0.0959	0.00283	3.38	0.000738	0.0199
GI_27735130-S	FAM117B	17	-0.0957	-0.00333	-3.38	0.000754	0.0203
GI_27485722-S	LOC284454	17	0.0951	0.00742	3.36	0.000799	0.0213
GI_21361192-S	CD44	17	0.0945	0.00285	3.33	0.000886	0.0229
GI_37539752-S	---	17	0.0937	0.00264	3.30	0.000985	0.0249
hmm23840-S	---	17	0.0915	0.00446	3.23	0.001257	0.0301
GI_20336474-A	BCL7B	17	0.0912	0.00256	3.22	0.001337	0.0315
GI_39930398-S	TP53INP2	17	0.0910	0.00647	3.21	0.001340	0.0316
GI_27886537-I	ATP2A2	17	0.0903	0.00246	3.18	0.001495	0.0345
GI_40807461-S	GZF1	17	0.0898	0.00652	3.17	0.001549	0.0355
GI_32171174-S	BUD31	17	0.0891	0.00227	3.14	0.001745	0.0390
GI_21040323-A	BCL6	17	0.0885	0.00394	3.13	0.001813	0.0401
GI_10835186-S	SOD2	17	0.0882	0.00366	3.11	0.001900	0.0416
GI_21071004-S	PHLDA2	17	0.0876	0.0171	3.10	0.001998	0.0433
GI_31542687-S	COQ10B	17	0.0880	0.00214	3.10	0.001999	0.0433
GI_22035597-S	MAP3K8	17	0.0875	0.00371	3.09	0.002046	0.0441
GI_40788016-S	TRIB1	17	0.0874	0.00410	3.09	0.002081	0.0447
GI_8923223-A	LRRKIP2	17	0.0870	0.00200	3.06	0.002253	0.0475
GI_31377584-S	SPATA2L	17	0.0865	0.00276	3.05	0.002355	0.0490
GI_34147050-S	GDPD5	18	0.302	0.00988	11.1	2.15E-27	6.36E-24
GI_4505036-S	LTPB4	18	0.281	0.00692	10.3	9.44E-24	1.49E-20
GI_18375661-A	PTPN7	18	0.253	0.00699	9.18	1.80E-19	1.52E-16
hmm525-S	SFXN3	18	0.209	0.00429	7.47	1.53E-13	5.21E-11
GI_24497439-I	IL12RB1	18	0.206	0.00561	7.39	2.72E-13	8.63E-11
GI_4758173-S	DMPK	18	0.195	0.00784	6.99	4.50E-12	1.11E-09
GI_31542746-S	COMTD1	18	0.171	0.00433	6.08	1.62E-09	2.34E-07
GI_14165459-A	NARF	18	0.170	0.00353	6.02	2.23E-09	3.17E-07
GI_30749197-A	FBXW5	18	0.168	0.00376	5.96	3.30E-09	4.43E-07
GI_45356148-S	TSPAN17	18	0.165	0.00473	5.87	5.56E-09	7.08E-07
GI_34335254-S	DCTN2	18	0.167	0.00193	5.83	6.99E-09	8.80E-07
GI_24497621-S	TRIM11	18	0.163	0.00449	5.81	7.99E-09	9.94E-07
GI_30794221-S	BTBD6	18	0.164	0.00283	5.79	8.78E-09	1.08E-06
GI_34147369-S	TNIP2	18	0.160	0.00357	5.68	1.64E-08	1.91E-06
GI_24476008-S	RHBDD2	18	0.159	0.00469	5.66	1.89E-08	2.16E-06
GI_31343485-S	RNF166	18	0.159	0.00418	5.65	1.95E-08	2.20E-06
GI_20070295-S	RNPPEPL1	18	0.157	0.00363	5.57	3.13E-08	3.43E-06
GI_37552316-S	MIDN	18	0.151	0.00512	5.37	9.27E-08	9.25E-06
GI_13112053-S	FGFRL1	18	0.151	0.00550	5.36	1.00E-07	9.90E-06
GI_30151609-S	PHF19	18	0.146	0.00319	5.18	2.57E-07	2.29E-05
GI_20070291-S	CHST12	18	0.144	0.00511	5.12	3.45E-07	2.99E-05
GI_4757805-S	VPS9D1	18	0.144	0.00510	5.10	3.98E-07	3.38E-05
GI_27734692-S	C14orf80	18	0.143	0.00431	5.09	4.19E-07	3.52E-05
GI_42741656-A	---	18	0.139	0.00366	4.94	8.91E-07	6.88E-05
GI_4506138-S	CHMP1A	18	0.139	0.00302	4.91	1.03E-06	7.80E-05
GI_20544181-S	WDR13	18	0.136	0.00241	4.81	1.70E-06	0.000119
GI_34147672-S	ST6GALNAC6	18	0.135	0.00458	4.79	1.85E-06	0.000128
GI_38488711-S	TANGO2	18	0.135	0.00310	4.77	2.06E-06	0.000142
GI_38016939-S	MON1B	18	0.135	0.00272	4.75	2.27E-06	0.000154
GI_22091444-S	GFRα2	18	0.134	0.00586	4.75	2.29E-06	0.000155
GI_5803022-S	LMAN2	18	0.134	0.00299	4.74	2.39E-06	0.000161
GI_11321627-S	CTRC	18	0.133	0.00929	4.72	2.57E-06	0.000172
GI_34147603-S	STX4	18	0.132	0.00209	4.63	4.09E-06	0.000260
GI_4505492-S	OGDH	18	0.131	0.00324	4.63	4.13E-06	0.000262
GI_42661328-S	FAM19B	18	0.130	0.00462	4.62	4.14E-06	0.000262
GI_8922332-S	PLEKHJ1	18	0.131	0.00267	4.61	4.34E-06	0.000274
GI_32528285-S	ACOT7	18	0.130	0.00441	4.59	4.79E-06	0.000299
GI_19923461-S	PHF21A	18	0.131	0.00183	4.59	4.89E-06	0.000304
GI_39725688-S	TUBB4B	18	0.129	0.00426	4.57	5.34E-06	0.000329
GI_40353752-S	---	18	0.127	0.00296	4.49	7.61E-06	0.000456
GI_7019374-S	FHOD1	18	0.127	0.00263	4.47	8.53E-06	0.000505
GI_34594668-S	MOB2	18	0.123	0.00245	4.33	1.59E-05	0.000867
GI_10092596-S	MCOLN1	18	0.122	0.00343	4.31	1.77E-05	0.000945
GI_38679901-S	TMEM44	18	0.121	0.00477	4.28	1.99E-05	0.00105
GI_2319980-S	WIFP2	18	0.121	0.00247	4.26	2.15E-05	0.00111
GI_40353205-S	C6orf106	18	0.120	0.00335	4.26	2.22E-05	0.00114
GI_21686972-S	---	18	0.120	0.00445	4.25	2.26E-05	0.00115
GI_4505304-S	MYL5	18	-0.120	-0.00351	-4.24	2.39E-05	0.00121
GI_19924146-A	TCIRG1	18	0.120	0.00425	4.23	2.47E-05	0.00124
GI_40255030-S	GSDMD	18	0.120	0.00234	4.23	2.52E-05	0.00126
GI_29789109-S	TMCC3	18	0.119	0.00376	4.22	2.57E-05	0.00129
GI_41872473-S	ETV6	18	0.119	0.00394	4.22	2.61E-05	0.00130
GI_7662489-S	PPP6R1	18	0.119	0.00289	4.22	2.64E-05	0.00131
GI_40549452-S	ZBTB7A	18	0.119	0.00550	4.22	2.68E-05	0.00132
GI_42476122-S	RUSC1	18	0.119	0.00200	4.18	3.13E-05	0.00151
GI_5031816-S	KATNB1	18	0.118	0.00224	4.14	3.71E-05	0.00173
GI_4504222-S	GUSB	18	0.118	0.00205	4.13	3.83E-05	0.00178
GI_16753217-S	PURA	18	0.117	0.00250	4.13	3.89E-05	0.00180
GI_34147470-S	VPS26B	18	0.116	0.00243	4.09	4.68E-05	0.00210
GI_17978482-A	VPS16	18	0.115	0.00327	4.06	5.13E-05	0.00227
GI_20070341-S	TMEM62	18	0.115	0.00199	4.04	5.60E-05	0.00244
GI_34147460-S	TMBIM1	18	0.114	0.00236	4.01	6.53E-05	0.00279
GI_41872428-S	TRPC4AP	18	0.113	0.00198	3.98	7.21E-05	0.00302
GI_8051619-A	LIMK2	18	0.113	0.00296	3.98	7.38E-05	0.00308
GI_41350328-S	MFN2	18	0.112	0.00356	3.95	8.41E-05	0.00342

GI_37541410-S	KIAA0556	18	0.111	0.00242	3.92	9.40E-05	0.00375
GI_33469950-A	RABGGTA	18	0.111	0.00216	3.91	9.60E-05	0.00382
GI_16445440-S	TRIM26	18	0.111	0.00242	3.90	0.000101	0.00396
GI_42734322-S	ZSWIM8	18	0.110	0.00260	3.88	0.000109	0.00425
GI_42662295-S	---	18	0.107	0.00396	3.79	0.000157	0.00570
GI_5902089-S	SLC2A3	18	0.106	0.00445	3.76	0.000177	0.00631
GI_34147526-S	TP53I13	18	0.106	0.00391	3.75	0.000183	0.00648
GI_20336247-S	PCSK7	18	0.107	0.00228	3.75	0.000182	0.00648
GI_4505288-S	MVD	18	0.104	0.00569	3.67	0.000257	0.00858
GI_45269143-A	KEAP1	18	0.104	0.00205	3.65	0.000271	0.00894
GI_37655182-S	NDRG1	18	0.104	0.00187	3.64	0.000289	0.00944
GI_34996490-S	TMEM219	18	0.103	0.00236	3.63	0.000291	0.00948
GI_26787987-S	MICB	18	0.103	0.00202	3.63	0.000291	0.00949
GI_39995085-S	SLC8B1	18	-0.103	-0.00245	-3.62	0.000305	0.00986
GI_40254958-S	ATG9A	18	0.102	0.00341	3.62	0.000307	0.00993
GI_5174700-S	STK10	18	0.103	0.00221	3.62	0.000308	0.00995
GI_9951921-S	CIB1	18	0.102	0.00303	3.60	0.000329	0.0105
GI_24431972-S	CC2D1A	18	0.102	0.00286	3.60	0.000333	0.0106
GI_14211539-S	MOV10	18	0.102	0.00233	3.60	0.000336	0.0107
GI_31542324-S	CROT	18	0.102	0.00319	3.60	0.000336	0.0107
GI_45504354-S	MUSTN1	18	0.102	0.00339	3.59	0.000348	0.0110
GI_41350332-S	TBCD	18	0.101	0.00313	3.58	0.000362	0.0113
GI_39573729-S	---	18	0.101	0.00223	3.57	0.000369	0.0114
GI_31742506-A	UPP1	18	0.101	0.00335	3.57	0.000377	0.0116
GI_21361550-S	SLC4A2	18	0.101	0.00253	3.57	0.000377	0.0117
GI_37555948-S	SLC9A8	18	0.101	0.00216	3.56	0.000381	0.0117
GI_4504036-S	GNA11	18	-0.101	-0.00312	-3.56	0.000385	0.0118
GI_37541022-S	ATG2A	18	0.101	0.00331	3.55	0.000395	0.0121
GI_4755141-S	INPPL1	18	0.101	0.00263	3.55	0.000397	0.0121
GI_42544225-S	VPS18	18	0.101	0.00308	3.55	0.000402	0.0123
GI_11141876-S	SIGIRR	18	0.100	0.00312	3.54	0.000421	0.0127
GI_39930540-S	C9orf142	18	0.100	0.00299	3.52	0.000447	0.0133
GI_4507996-S	ZBTB17	18	0.100	0.00264	3.51	0.000462	0.0137
GI_5901987-S	WDR45	18	0.100	0.00193	3.50	0.000477	0.0141
GI_8670549-S	CYTH4	18	0.0993	0.00236	3.50	0.000484	0.0142
GI_29725606-I	UNC45A	18	0.0988	0.00218	3.48	0.000524	0.0152
GI_7019332-S	NRPB1	18	0.0983	0.00224	3.46	0.000556	0.0160
GI_33286441-S	BCORL1	18	0.0979	0.00322	3.45	0.000569	0.0163
GI_5921998-A	DYRK1B	18	0.0977	0.00294	3.45	0.000586	0.0166
GI_7382489-S	DGAT1	18	0.0979	0.00236	3.45	0.000587	0.0166
GI_20336278-A	SLC26A6	18	0.0968	0.00233	3.41	0.000673	0.0185
GI_31543298-S	PNPLA6	18	0.0965	0.00296	3.41	0.000682	0.0187
GI_29743268-S	TBC1D25	18	0.0965	0.00221	3.40	0.000704	0.0193
GI_4557478-A	CLK3	18	0.0961	0.00207	3.38	0.000744	0.0200
GI_4826947-S	PRKX	18	0.0962	0.00173	3.37	0.000763	0.0204
GI_34147725-A	SHC1	18	0.0969	0.00119	3.37	0.000778	0.0208
GI_14917110-S	AP4M1	18	0.0955	0.00227	3.36	0.000800	0.0213
GI_4885270-A	---	18	0.0947	0.00316	3.34	0.000859	0.0224
GI_45505128-S	TAOK2	18	0.0947	0.00272	3.34	0.000867	0.0226
GI_31543177-S	PRR14	18	0.0931	0.00174	3.27	0.001107	0.0274
GI_38327637-S	CREB3	18	0.0927	0.00214	3.26	0.001141	0.0280
GI_17017983-S	CDK9	18	0.0924	0.00200	3.25	0.001184	0.0288
GI_20149644-S	SARS2	18	-0.0918	-0.00216	-3.23	0.001269	0.0303
GI_31541963-S	ASL	18	0.0914	0.00252	3.22	0.001306	0.0310
GI_13899252-S	UCK1	18	0.0916	0.00173	3.22	0.001334	0.0315
GI_24432005-S	RHBDF2	18	0.0913	0.00196	3.21	0.001358	0.0319
GI_17865806-S	VPS4A	18	0.0906	0.00164	3.18	0.001515	0.0348
GI_20544143-A	CSNK1D	18	0.0904	0.00169	3.17	0.001555	0.0356
Hs.149165-S	---	18	0.0897	0.00287	3.16	0.001596	0.0364
GI_42476168-S	PAF1	18	0.0892	0.00259	3.15	0.001698	0.0382
GI_38146093-S	MED16	18	0.0891	0.00325	3.14	0.001714	0.0385
GI_13375689-S	CORO7	18	0.0893	0.00211	3.14	0.001727	0.0387
GI_4759179-A	STK19	18	0.0891	0.00187	3.13	0.001792	0.0397
GI_39930532-S	PPM1J	18	-0.0886	-0.00281	-3.12	0.001832	0.0404
GI_37547065-S	CC2D1B	18	0.0874	0.00294	3.08	0.002103	0.0450
GI_13994299-S	TMEM120A	18	0.0873	0.00235	3.08	0.002149	0.0457
GI_14141169-S	MTA2	18	0.0877	0.00162	3.08	0.002148	0.0457
GI_13129143-S	NDUFAF5	18	0.0870	0.00332	3.07	0.002198	0.0466
GI_38045930-S	RNF122	18	0.0866	0.00281	3.05	0.002316	0.0485
GI_33519471-S	NDUFB7	18	0.0872	0.00139	3.05	0.002328	0.0486
GI_31542869-S	GZMH	19	0.345	0.0223	12.9	6.49E-36	3.84E-32
GI_21687176-S	RASGEF1A	19	0.284	0.00877	10.4	2.08E-24	3.40E-21
GI_29729547-S	---	19	0.269	0.0107	9.80	6.57E-22	7.66E-19
GI_22538469-S	EOMES	19	0.260	0.0113	9.48	1.26E-20	1.19E-17
GI_40788019-S	C1orf21	19	0.252	0.00960	9.14	2.55E-19	2.11E-16
GI_29336036-S	PDZD4	19	0.242	0.0117	8.79	5.09E-18	3.44E-15
GI_30149753-S	LGR6	19	0.238	0.0102	8.63	1.87E-17	1.19E-14
GI_41327713-S	APMAP	19	0.239	0.00554	8.62	2.04E-17	1.28E-14
GI_41584199-S	GPR56	19	0.232	0.0129	8.40	1.18E-16	6.79E-14
GI_4758679-S	LLGL2	19	0.228	0.00932	8.24	4.18E-16	2.20E-13
GI_34147563-S	SLC1A7	19	0.221	0.0190	7.99	3.04E-15	1.42E-12
GI_33946290-S	LPCAT1	19	0.222	0.00543	7.99	3.01E-15	1.42E-12
GI_8923627-S	TTC38	19	0.216	0.00739	7.77	1.60E-14	6.29E-12
GI_20127481-S	NKG7	19	0.212	0.0106	7.65	4.15E-14	1.50E-11
GI_7108345-I	GNLY	19	0.208	0.0102	7.46	1.60E-13	5.40E-11
GI_24475870-S	GPR114	19	0.207	0.00616	7.44	1.94E-13	6.37E-11
GI_38788121-S	PRSS23	19	0.206	0.0152	7.41	2.35E-13	7.57E-11

GI_20302138-S	CST7	19	0.205	0.0110	7.38	2.90E-13	9.14E-11
GI_45446739-S	ABCA2	19	0.200	0.00927	7.18	1.20E-12	3.34E-10
GI_27484425-S	SYTL3	19	0.200	0.00642	7.16	1.41E-12	3.83E-10
GI_15451788-S	PDGFRB	19	0.199	0.0196	7.15	1.43E-12	3.85E-10
GI_31543022-S	FGFBP2	19	0.199	0.0113	7.14	1.59E-12	4.18E-10
GI_15718673-S	ADRB2	19	0.195	0.00763	6.98	4.79E-12	1.16E-09
GI_18079322-S	GAB3	19	0.192	0.00606	6.87	1.01E-11	2.32E-09
GI_39930402-S	LGR6	19	0.191	0.0104	6.86	1.11E-11	2.50E-09
GI_32698959-S	LINC00469	19	0.188	0.0119	6.74	2.39E-11	5.17E-09
GI_16506819-S	COLGALT2	19	0.187	0.00944	6.70	3.19E-11	6.73E-09
GI_32307116-A	PPP2R2B	19	0.184	0.0122	6.59	6.47E-11	1.24E-08
GI_4507470-S	TGFBR3	19	0.184	0.00887	6.57	7.48E-11	1.42E-08
GI_22035608-A	OSBPL5	19	0.175	0.00811	6.25	5.64E-10	8.80E-08
GI_42656914-S	DTHD1	19	0.173	0.00999	6.19	7.96E-10	1.21E-07
GI_24429585-S	---	19	0.173	0.00809	6.18	8.72E-10	1.30E-07
GI_7108343-A	GNLY	19	0.172	0.0102	6.13	1.19E-09	1.74E-07
GI_22748812-S	FCRLB	19	0.170	0.00538	6.05	1.96E-09	2.81E-07
GI_38372914-S	EVA1C	19	0.168	0.00709	6.00	2.57E-09	3.57E-07
GI_38505192-S	PTGDS	19	0.167	0.0108	5.95	3.40E-09	4.55E-07
GI_37542486-S	TSEN54	19	0.164	0.00470	5.84	6.50E-09	8.19E-07
GI_38016906-A	STOM	19	0.162	0.00564	5.76	1.09E-08	1.32E-06
GI_25777679-A	RASSF1	19	0.160	0.00467	5.69	1.55E-08	1.82E-06
GI_18141314-S	S1PR5	19	0.154	0.00881	5.47	5.36E-08	5.64E-06
GI_31543620-S	SH2D2A	19	0.151	0.00699	5.38	9.07E-08	9.09E-06
GI_37539470-S	DTHD1	19	0.151	0.00828	5.36	9.68E-08	9.59E-06
GI_18860909-A	SNTB2	19	0.150	0.00425	5.32	1.24E-07	1.19E-05
GI_38202210-S	GNPTAB	19	0.145	0.00322	5.12	3.54E-07	3.04E-05
GI_7108343-I	GNLY	19	0.143	0.00853	5.10	3.98E-07	3.38E-05
GI_15451920-A	PDGFD	19	0.140	0.00664	4.98	7.35E-07	5.82E-05
GI_6996012-S	GZMA	19	0.138	0.00739	4.91	1.03E-06	7.80E-05
GI_4757917-S	RUNX3	19	0.137	0.00579	4.84	1.43E-06	0.000103
GI_21955169-I	SSBP3	19	0.137	0.00352	4.84	1.43E-06	0.000103
GI_32483414-S	GZMB	19	0.136	0.00775	4.84	1.46E-06	0.000105
GI_19923571-S	SLAMF7	19	0.136	0.00528	4.83	1.51E-06	0.000108
GI_19913391-A	RGS3	19	0.136	0.00367	4.82	1.64E-06	0.000115
GI_7706528-S	CD244	19	0.135	0.00370	4.80	1.81E-06	0.000126
GI_7669497-I	KLRD1	19	0.134	0.00643	4.74	2.36E-06	0.000159
GI_14249307-S	PYROXD2	19	0.133	0.00428	4.73	2.51E-06	0.000169
GI_4759139-S	SLC9A3R1	19	0.129	0.00570	4.57	5.44E-06	0.000334
GI_4758955-S	BZRAP1	19	0.128	0.00479	4.53	6.59E-06	0.000399
GI_23110963-S	CTSW	19	0.126	0.00596	4.47	8.47E-06	0.000503
GI_21618332-S	STAT4	19	0.124	0.00351	4.39	1.25E-05	0.000706
GI_21450843-A	MATK	19	0.124	0.00466	4.38	1.30E-05	0.000731
GI_42734326-S	RAP1GAP2	19	0.122	0.00449	4.33	1.63E-05	0.000887
GI_31341948-S	PRSS30P	19	0.122	0.00673	4.32	1.67E-05	0.000899
Hs.147489-S	--	19	0.122	0.00699	4.31	1.78E-05	0.000951
GI_4504878-S	KLRB1	19	-0.117	-0.00649	-4.13	3.90E-05	0.00180
GI_40549458-S	YPEL1	19	0.115	0.00511	4.07	5.01E-05	0.00223
GI_17402874-I	COL6A2	19	0.114	0.00526	4.05	5.43E-05	0.00238
GI_32130537-S	CD7	19	-0.114	-0.00506	-4.05	5.46E-05	0.00239
GI_37551990-S	SIGLEC17P	19	0.113	0.00496	3.99	7.12E-05	0.00299
GI_40254807-S	PRF1	19	0.112	0.00646	3.96	7.87E-05	0.00325
GI_34147599-S	CD99	19	0.110	0.00297	3.87	0.000115	0.00442
GI_11968153-S	KIR2DL5A	19	0.105	0.00735	3.73	0.000202	0.00701
GI_31343330-S	RAB37	19	0.104	0.00256	3.68	0.000245	0.00828
GI_5902003-S	MMP23B	19	0.104	0.00410	3.66	0.000258	0.00860
GI_18604602-S	NCAM1	19	0.102	0.00462	3.59	0.000346	0.0109
GI_7019440-S	KIR3DL1	19	0.101	0.00635	3.56	0.000390	0.0120
GI_28466996-S	DLG5	19	0.0994	0.00535	3.51	0.000459	0.0136
GI_7657272-S	KIR2DL2	19	0.0979	0.00615	3.46	0.000553	0.0159
GI_29171679-S	CXCR1	19	0.0974	0.00977	3.45	0.000587	0.0166
GI_7705573-S	KLRF1	19	0.0965	0.00491	3.41	0.000671	0.0185
GI_21264586-A	HOPX	19	0.0936	0.00579	3.31	0.000965	0.0246
GI_38505191-S	PTGDR	19	0.0904	0.00585	3.19	0.001435	0.0334
GI_27477087-S	IL18RAP	19	-0.0879	-0.00456	-3.11	0.001941	0.0423
GI_23592225-S	KIR3DL3	19	0.0875	0.0174	3.09	0.002030	0.0439
GI_4506344-S	PXN	19	0.0875	0.00201	3.08	0.002139	0.0456
GI_6031164-S	F2R	20	0.209	0.0113	7.50	1.18E-13	4.12E-11
GI_19923320-S	KIFC3	20	0.185	0.0284	6.62	5.35E-11	1.07E-08
GI_17149840-A	FKBP1B	20	0.166	0.0148	5.92	4.23E-09	5.59E-07
GI_13376724-S	CCDC92	20	0.143	0.00445	5.08	4.41E-07	3.67E-05
GI_10938005-S	SLC10A3	20	0.138	0.00613	4.91	1.01E-06	7.72E-05
GI_21464102-S	YWHAH	20	0.133	0.00409	4.72	2.57E-06	0.000172
GI_34328914-A	CD151	20	0.127	0.00525	4.49	7.87E-06	0.000470
GI_13027798-S	MMP1	20	0.123	0.0203	4.36	1.40E-05	0.000775
GI_5031940-S	NFIB	20	0.121	0.00873	4.31	1.79E-05	0.000951
GI_45505152-S	NCKAP1	20	0.121	0.00630	4.29	1.89E-05	0.00100
GI_9955969-A	ABCC3	20	0.120	0.00767	4.26	2.24E-05	0.00114
GI_11761623-I	ST7	20	0.119	0.00394	4.20	2.85E-05	0.00140
GI_41152089-S	PDZK1IP1	20	0.117	0.0116	4.16	3.34E-05	0.00159
GI_41393552-S	MGLL	20	0.117	0.00602	4.14	3.76E-05	0.00175
GI_21237762-S	CD9	20	0.117	0.00625	4.13	3.81E-05	0.00177
GI_6552326-A	CYB5R3	20	0.116	0.00396	4.10	4.36E-05	0.00198
GI_15451935-I	CDC14B	20	0.114	0.00891	4.05	5.53E-05	0.00242
GI_12025669-S	ACTN1	20	-0.113	-0.00518	-4.01	6.51E-05	0.00279
GI_16753232-S	TLN1	20	0.113	0.00359	4.00	6.63E-05	0.00282
GI_20070329-S	ZFYVE21	20	0.112	0.00386	3.97	7.67E-05	0.00318

GI_41872613-S	CXCL5	20	0.112	0.00915	3.95	8.13E-05	0.00333
GI_4506116-S	PROS1	20	0.107	0.0103	3.80	0.000151	0.00552
GI_4759181-S	STX1A	20	0.108	0.00446	3.80	0.000151	0.00552
GI_31342330-S	TREML1	20	0.105	0.00606	3.73	0.000199	0.00694
GI_19923444-A	ATL1	20	0.105	0.00631	3.71	0.000213	0.00734
GI_6006009-S	ITGA2B	20	0.104	0.00807	3.69	0.000232	0.00790
GI_20336333-A	BCL2L1	20	0.104	0.00376	3.67	0.000254	0.00852
GI_31563525-S	SLC24A3	20	0.101	0.0158	3.58	0.000359	0.0112
GI_24430131-S	WBP2	20	0.101	0.00375	3.56	0.000379	0.0117
GI_38570041-S	CLDN5	20	0.101	0.00572	3.56	0.000391	0.0120
GI_21237780-S	WASF3	20	0.0979	0.00943	3.46	0.000552	0.0159
GI_29745993-S	ENDOD1	20	0.0976	0.00437	3.45	0.000581	0.0165
GI_45269134-S	GP1BA	20	0.0973	0.00912	3.44	0.000595	0.0168
GI_6031196-S	SELP	20	0.0968	0.00742	3.42	0.000643	0.0179
GI_4557676-S	ITGB3	20	0.0967	0.00771	3.42	0.000646	0.0180
GI_8922813-S	TMEM140	20	0.0953	0.00402	3.37	0.000785	0.0209
GI_42657580-S	CASC15	20	-0.0935	-0.0129	-3.31	0.000969	0.0246
GI_31543081-S	MARCH2	20	0.0929	0.00311	3.28	0.001080	0.0268
GI_34147679-S	TGFB111	20	0.0924	0.0152	3.27	0.001117	0.0275
GI_24432051-S	SPOCD1	20	0.0919	0.0154	3.25	0.001192	0.0289
GI_11184225-S	RGS10	20	-0.0917	-0.00236	-3.23	0.001278	0.0305
GI_4507356-S	TAGLN2	20	0.0912	0.00452	3.22	0.001310	0.0310
GI_31563523-A	MYL9	20	0.0888	0.0114	3.14	0.001734	0.0388
GI_11761623-A	ST7	20	0.0889	0.00362	3.14	0.001734	0.0388
GI_14456712-S	HBO1	20	0.0881	0.00825	3.12	0.001881	0.0413
GI_13775195-S	TSPAN9	20	0.0863	0.00605	3.05	0.002355	0.0490

List of 2,285 transcript identified in the SAFHS dataset for which their expression is significantly correlated to chronological age (moderated t-test: adjusted  $p \leq 0.05$ ). 1,143 transcripts were positively correlated to increase in age (red) and 1,142 transcripts negatively correlated to age (blue). For each transcript, its probeset identifier, its HUGO gene symbol and its association with age are given. The membership of the transcript in the twenty modules (M1 to M20) forming the BioAge is indicated in the column 'Module'.

**Supplementary Table 3b. Pathway enrichment analysis in the twenty BioAge modules**

Module 1	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	B_CELL_DEVELOPMENT	0.125	4.37E-06	0.00162	HLA-DQB,C079A,C019,C079B
Pathway	ALTERED_T_CELL_AND_B_CELL_SIGNALING_IN_RHEUMATOID_ARTHRITIS	0.0595	9.77E-06	0.00182	TNFRSF17,HLA-DQB,TNFRSF13B,C079A,C079B
Pathway	PRIMARY_IMMUNE_RESPONSE_SIGNALING	0.0851	2.09E-05	0.00259	IQLS,NFRSF13B,C079A,C019
Pathway	PICK_SIGNALING_IN_B_LYMPHOCYTES	0.0293	0.00019	0.00303	C022,C079A,C019,C079B
Pathway	B_CELL_RECEPtors_SIGNALING	0.0274	0.00199	0.125	C022,C079A,C019,C079B
Pathway	ROLE_OF_NFAT_IN_REGULATION_OF_THE_IMMUNE_RESPONSE	0.0209	0.00449	0.278	HLA-DQB,C079A,GNG7,C079B
Pathway	APRIL_SIGNALING	0.0203	0.00410	0.307	C079A,C019,C079B
Pathway	PTNSK_SIGNALING	0.0244	0.00969	0.354	C022,C079A,C079B
Pathway	SYSTEMIC_LUPUS_ERYTHEMATOSUS_SIGNALING	0.0244	0.00969	0.354	C022,C079A,C079B
Pathway	B_CELL_FACTORS_SIGNALING	0.0247	0.0099	0.375	TNFRSF17,TNFRSF13B
Pathway	FCGMAMMAR SIGNALING IN B LYMPHOCYTES	0.0253	0.0339	0.683	C079A,C079B
Pathway	COMMUNICATION_BETWEEN_INNATE_AND_ADAPTIVE_IMMUNE_CELLS	0.0231	0.0378	0.725	TNFRSF17,TNFRSF13B
Pathway	Cell_Signaling_by_Growth_Factors				
Pathway	THYROID_CANCER_SIGNALING	0.0465	0.0105	0.354	TCF4,TCF3
Pathway	OVARIAN_CANCER_SIGNALING	0.0201	0.0196	0.497	TCF4,E2F5,TCF3
Pathway	HUMAN_ESC_CELL_PLURIPOTENCY	0.0184	0.0244	0.577	TCF4,TCF3,TCF9
Pathway	WNT_BETA-CATENIN_SIGNALING	0.0180	0.0247	0.577	TCF4,LEL1,TCF3
Pathway	BASEL_CELL_CARCINOMA_SIGNALING	0.0286	0.0264	0.655	TCF4,TCF3
Pathway	ROLE_OF_WNT_IN_REGULATING_PATHOGENESIS_OF_INFLUENZA	0.0267	0.0360	0.685	TCF4,TCF3
Pathway	ACUTE_myeloid_leukemia_SIGNALING	0.0263	0.0360	0.683	TCF4,TCF3
Pathway	FACTORS_PROMOTING_CARDIOGENESIS_IN_VERTEBRATES	0.0227	0.0469	0.725	TCF4,TCF3
Pathway	MOLECULAR_MECHANISMS_OF_CANCER	0.0109	0.0469	0.725	TCF4,E2F5,GNG7,TCF3
Module 2	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Protein_Ester_Hydrolyase				
Pathway	GRANZYME_A_SIGNALING	0.118	0.00993	0.860	APEX1,SET
Pathway	AMINOSUGARS_METABOLISM	0.0441	0.0140	1.00	APEX1,PDE3B,PDE7A
Pathway	RELAYING_SIGNALING	0.0292	0.0198	1.00	APEX1,PDE3B,RNLRN,PDE7A
Pathway	Valine_Catleotide_Pathway				
Pathway	VALINE,LEUCINE_AND_ISOLEUCINE_DEGRADATION	0.0667	0.00976	0.182	MCE6E,HADH,BCKDHB,ALDH6A1
Pathway	INOSITOL_METABOLISM	0.200	0.0369	1.00	ALDH6A1
Pathway	Others				
Pathway	PURINE_METABOLISM	0.0307	0.00981	0.182	PAICS,PRAT,PDE3B,PDE7A,KATNA1,BCKDHB,ATP6V1G1,CLPX
Pathway	AMINOPHOSPHONATE_METABOLISM	0.0509	0.0115	1.00	BCKDHB,PGN
Pathway	GLUTAMATE_METABOLISM	0.0571	0.0279	1.00	ALDH6A1,PPAT
Module 3	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	MYC_LeFT_Signaling				
Pathway	ROLE_OF_MACROPHAGES_FIBROBLASTS_AND_ENDOTHELIAL_CELLS_IN_RHEUMATOID_ARTHRITIS	0.0243	0.00273	0.974	LEF1,ELM4,MYC,TRAF5,CAMK4,LTB,PRKCA
Pathway	PROSTATE_CANCER_SIGNALING	0.0195	0.0168	0.974	POEM,FLJ1001,LEF1,PDX6B,CAMK4,PRKCA
Pathway	GLIOBLASTOMA_MULTIFORME_SIGNALING	0.0295	0.0173	0.974	LEF1,JGP1,RLMNC,FOXO1
Pathway	SMALL_CELL_LUNG_CANCER_SIGNALING	0.0319	0.0285	0.974	MYC,TRAF6,FHT
Pathway	THYROID_CANCER_SIGNALING	0.0465	0.0377	0.974	LEL1,MYC,TRAF6
Pathway	GLIOMA_SIGNALING	0.0275	0.0386	0.974	IGF1R,CAMK4,PRKCA
Pathway	ENDOMETRIUM_CANCER_SIGNALING	0.0386	0.0477	0.974	LEF1,MYC,PRKCA
Pathway	Others				
Pathway	RHOA_SIGNALING	0.0370	0.00974	0.974	IGF1R,RAFGEF8,SEPT8,EPHA1
Pathway	ALTERED_T_CELL_AND_B_CELL_SIGNALING_IN_RHEUMATOID_ARTHRITIS	0.0357	0.0196	0.974	L23A,C028,LTB
Pathway	T_CELL_RECEPtor_SIGNALING	0.0294	0.0369	0.974	TKK,CAMK4,CD28
Pathway	CROSSTALK_BETWEEN_DENDRITIC_CELLS_AND_NATURAL_KILLER_CELLS	0.0286	0.0352	0.974	CORT,C028,LTB
Module 4	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Cellular_Metabolism				
Pathway	BETA-ALANINE_METABOLISM	0.0435	0.00987	1.00	HIBCH,ACADM
Pathway	PROLINE_ALANINE_METABOLISM	0.0281	0.0127	1.00	HIBCH,ACADM
Pathway	VALINE,LEUCINE_AND_ISOLEUCINE_DEGRADATION	0.0333	0.0145	1.00	HIBCH,ACADM
Pathway	FATTY_ACID_METABOLISM	0.0198	0.0397	1.00	ACSL5,ACADM
Pathway	Carbohydrate_Metabolism				
Pathway	EIF2_SIGNALING	0.0238	0.0273	1.00	ATM,EIF2S2
Pathway	VEGF_SIGNALING	0.0238	0.0279	1.00	ATM,EIF2S2
Pathway	TR_XRR_ACTIVATION	0.0253	0.0365	1.00	ATM,EIF2S2,XRR
Pathway	P53_SIGNALING	0.0215	0.0359	1.00	ATM,GNL3
Pathway	DNA_DOUBLE-STRAND_BREAK_REPAIR_BY_HOMOLOGOUS_RECOMBINATION	0.0667	0.0456	1.00	ATM
Pathway	DNA_DOUBLE-STRAND_BREAK_REPAIR_BY_NON-HOMOLOGOUS-END_JOINING	0.0667	0.0456	1.00	ATM
Pathway	Others				
Pathway	CLEavage_and_polyadenylation_of_PRE-mRNA	0.167	0.00958	0.219	WDR33,CPSF3
Pathway	AMINOACYL_tRNA_BIOSYNTHESIS	0.0571	0.00909	0.948	IARS,EPRS
Pathway	VALINE,LEUCINE_AND_ISOLEUCINE_BIOSYNTHESIS	0.0599	0.0337	1.00	IARS
Module 5	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	P53_SIGNALING	0.0323	0.00322	1.00	COK4,PLA4L1,SIRT1
Module 6	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	T-cell_Receptor_Signaling				
Pathway	T-cell_Receptor_Signaling	0.0853	0.00193	0.203	TRADD,TNFRSF25,TRAF1
Pathway	ROLE_OF_MACROPHAGES_FIBROBLASTS_AND_ENDOTHELIAL_CELLS_IN_RHEUMATOID_ARTHRITIS	0.0208	0.00496	0.465	TCF7,PKC3D,PLCG1
Pathway	MACROPHAGE_SIGNALING	0.0195	0.00753	0.465	PLCG1,PKC3D,PLCG1
Pathway	LEPTIN_SIGNALING_IN_OBESITY	0.0411	0.00753	0.465	PLCG1,PKC3D,PLCG1
Pathway	HER2_SIGNALING_IN_BREAST_CANCER	0.0398	0.00875	0.465	PLCG1,PKC3D,PLCG1
Pathway	HER3_SIGNALING_VIA_ENDOCYTIC_PATHWAYS	0.0331	0.0154	0.536	PLGB1,PKC3D,PLCG1
Pathway	CTLA4_SIGNALING_IN_CYTOTOXIC_T_LYMPHOCYTES	0.0319	0.0168	0.536	PLGB1,PKC3D,PLCG1
Pathway	HMGBl_SIGNALING	0.0318	0.0190	0.536	KAT2A,PKC3D,AGER
Pathway	NEUROPATHIC_PAIN_SIGNALING_IN_DORSAL_HORN_NEURONS	0.0300	0.0179	0.536	PLCD1,PKC3D,PLCG1
Pathway	T_CELL_SIGNALING_IN_DORSAL_HORN_NEURONS	0.0280	0.0219	0.536	PLCD1,PKC3D,PLCG1
Pathway	SPHINGOSINE-1-PHOSPHATE_SIGNALING	0.0279	0.0226	0.536	PLCD1,PKC3D,PLCG1
Pathway	FAK_SIGNALING	0.0271	0.0242	0.536	PLCD1,PKC3D,PLCG1
Pathway	IGF1_SIGNALING_IN_T_HELPER_CELLS	0.0270	0.0242	0.536	PLCD1,PKC3D,ZAP70
Pathway	14-3-3-MEDIATED_SIGNALING	0.0269	0.0259	0.536	PLCD1,PKC3D,PLCG1
Pathway	EGF_SIGNALING	0.0430	0.0275	0.536	PLCD1,PKC3D,PLCG1
Pathway	P2Y_PURINIC_RECECTOR_SIGNALING_PATHWAY	0.0262	0.0289	0.536	PLCD1,PKC3D,PLCG1
Pathway	CD28_SIGNALING_IN_T_HELPER_CELLS	0.0246	0.0302	0.536	PLCD1,PKC3D,PLCG1,ZAP70
Pathway	PT059K_SIGNALING	0.0244	0.0315	0.536	PLCD1,PKC3D,PLCG1
Pathway	LYMphotoxin_alpha_beta_RECECTOR_SIGNALING	0.0268	0.0363	0.536	PLCD1,PKC3D,PLCG1
Pathway	THROMBOPOIETIN_SIGNALING	0.0364	0.0384	0.536	PLCD1,PKC3D,PLCG1
Pathway	INOSITOL_PHOSPHATE_METABOLISM	0.0226	0.0384	0.536	PLCD1,PKC3D,PLCG1
Pathway	PIK3CA_SIGNALING_IN_MACROPHAGES	0.0222	0.0385	0.536	PLCD1,PKC3D,PLCG1
Pathway	DEATH_RECEPtor_SIGNALING	0.0323	0.0476	0.536	TRADD,TNFRSF25
Pathway	INDUCTION_OF_APOPTOSIS_BY_HIV1	0.0317	0.0490	0.536	TRADD,TRAF1
Pathway	Others				
Pathway	ASSEMBLY_OF_RNA_POLYMERASE_I_COMPLEX	0.222	0.00109	0.203	POLR1C,TAF1C
Pathway	PYrimidine_METABOLISM	0.0222	0.0399	0.536	POLR1C,POLD2,POLR3C
Module 7	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Protein_Caspase_Precipitation				
Pathway	RIboFLAVIN_METABOLISM	0.118	0.00043	0.842	DUSP1,PTPRJ
Pathway	FRUCTOSE_AND_MANNOSE_METABOLISM	0.0495	0.0281	0.323	DUSP1,PTPRJ
Pathway	AMINO_ACID_METABOLISM	0.0286	0.0342	0.323	DUSP1,PTPRJ
Pathway	SPHINGYLIPID_METABOLISM	0.0266	0.00985	0.623	DUSP1,PTPRJ
Pathway	Nicotinate_and_nicotinamide_METABOLISM	0.0268	0.0125	0.775	DUSP1,PTPRJ
Pathway	Others				
Pathway	CYANOAMINO_ACID_METABOLISM	0.111	0.009453	0.842	FAAH,ASGR1
Module 8	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Antiviral_Responses				
Pathway	ROLE_OF_RIG1-LIKE_RECEPtors_IN_ANTIVIRAL_INNATE_IMMUNITY	0.0227	0.0318	1.00	MAVS
Pathway	ACTIVATION_OF_IFN_BY_CYTOSOLIC_Pattern_recognition_Receptors	0.0159	0.0453	1.00	MAVS
Module 9	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Fatty_Acid_Biosynthesis				
Pathway	FATTY_ACID_BIOSYNTHESIS	0.200	0.00954	0.141	ACACA,FAAH
Pathway	LKG1_SIGNALING	0.0441	0.0269	0.458	PEPKA,ACACA,FAAH
Pathway	AMPK_SIGNALING	0.0247	0.00964	0.458	PEPKA,ACACA,FAAH,PRKAB1
Pathway	TR_XRR_ACTIVATION	0.0349	0.00795	0.458	PEPKA,ACACA,FAAH
Pathway	PENTOSE_PHOSPHONATE_PATHWAY	0.0657	0.01770	0.458	PEPKA,ADOC
Pathway	FRUCTOSE_6-phosphate_MANNOSE_METABOLISM	0.0465	0.0174	0.458	PEPKA,ADOC
Pathway	INOSITOL_METABOLISM	0.200	0.0234	0.875	ALDOC
Pathway	PYRUVATE_METABOLISM	0.0324	0.0334	1.00	HAGH,ACACA
Pathway	PRAS40_PKA_Ralpha_PKA_ACTIVATION	0.0169	0.0383	1.00	NFKB1,FAAH,PRKAB1
Module 10	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Lysine_Tryptophan_Metabolism	0.0273	0.0180	1.00	GCDH,ALDH7A1,WARS2
Pathway	TRYPTOPHAN_METABOLISM	0.0339	0.0361	1.00	GCDH,ALDH7A1
Pathway	LYSINE_DEGRADATION				
Pathway	MITOTIC_ROLES_OF_POLO-LIKE_KINASE	0.0517	0.00306	1.00	PRML1,KIF23,CDC20
Pathway	INTERFERON_SIGNALING	0.0606	0.0121	1.00	MX1,IFI1
Pathway	LXR_RXR_ACTIVATION	0.0294	0.0467	1.00	SCD,SREBF1
Module 11	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Glycosphingolipid_Biosynthesis				
Pathway	GLYCOSPHINGOLIPID_BIOSYNTHESIS_-GLOBOSERIES	0.0952	0.0178	1.00	B3GALT1,STBS1A
Pathway	GLYCOSPHINGOLIPID_BIOSYNTHESIS_-GANGLIOSERIES	0.0833	0.0229	1.00	STBS1A,DBT
Pathway	GLYCOSYLATION_SERINE_AN_THREONINE_METABOLISM	0.0448	0.0279	1.00	PHGDH,GLCD,DBT
Pathway	Others				
Pathway	PXR_RXR_ACTIVATION	0.0441	0.0290	1.00	AKT1,GSTM2,ABC89
Module 12	Pathway	Ratio	nominal p-value	adjusted p-value	Intersect
Pathway	Adherens_Jell_Mobility				
Pathway	RHOA_SIGNALING	0.0370	0.0124	1.00	ACTA2,ACTA1,ARPC2,TTN
Pathway	CAVEOLAR-MEDIATED_ENDOCYTOSIS_SIGNALING	0.0417	0.0221	1.00	ACTA2,ACTA1,HLA-B
Pathway	REGULATED_BY_MITOCHONDRIAL_MOBILITY_BY_RXR	0.0383	0.0240	1.00	ACTA2,ACTA1,HLA-B
Pathway	VEGF_SIGNALING	0.0353	0.0340	1.00	ACTA2,ACTA1,HLA-B
Pathway	VIRUS_ENTRY_VIA_ENDOCYTIC_PATHWAYS	0.0337	0.0362	1.00	ACTA2,ACTA1,HLA-B
Pathway	FOOD_AND_BIOR_MEDICAL_PHAGOCYTOSIS_IN_MACROPHAGES_AND_MONOCYTES	0.0328	0.0415	1.00	ACTA2,ACTA1,HLA-B
Pathway	MECHANISMS_OF_VIRAL_EXIT_FROM_HOST_CELLS	0.0500	0.0449	1.00	ACTA2,ACTA1

Legend  
■ Genes negatively correlated to age  
■ Genes positively correlated to age

Module 13					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
RHOA_SIGNALING	0.0278	0.0345	1.00	ARPC1L,PIP4K2C,SEPT8	
PRIMARY_IMMUNODEFICIENCY_SIGNALING	0.0426	0.0458	1.00	ADATAP1	
Module 14					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
Cell_Motility	0.0388	0.00316	0.637	MARP1,ITGB1,ELF4,EPB2,ELF4,EPB2,ITGB2	
CDC42_SIGNALING	0.0316	0.00747	0.637	MARP1,ITGB1,ELA,EMYL6,ITGB2	
ACTIN_CYTOSKELETON_SIGNALING	0.0262	0.00856	0.637	MARP1,ITGB1,SSH1,TMSB10,MYL6,ITGB2	
PKA_SIGNALING	0.0304	0.0124	0.637	MARP1,ITGB1,TMSB10,MYL6,ITGB2	
ILK_SIGNALING	0.0276	0.0193	0.637	MARP1,ITGB1,TMSB10,MYL6,ITGB2	
PHOSPHOLIPASE_C_SIGNALING	0.0233	0.0140	0.637	MARP1,ITGB1,NGN2,MLY6,AHAK,ITGB2	
LEUKOCYTE_EXTRAVASATION_SIGNALING	0.0203	0.0148	0.637	MARP1,ITGB1,NGN2,MLY6,ITGB2	
AGRN_INTERACTIONS_AT_NEUROMUSCULAR_JUNCTION	0.0448	0.0153	0.637	MARP1,ITGB1,ITGB2	
EPHRIN_RECECTOR_SIGNALING	0.0258	0.0171	0.637	MARP1,ITGB1,NGN2,ITGB2,SH2D3C	
INTERFERON_SIGNALING	0.0258	0.0171	0.637	MARP1,ITGB1,TSHZ2,ITGB1,ITGB2	
NF-KAPPAB_ACTIVATION_BY_VIRUSES	0.0400	0.0206	0.697	MARP1,ITGB1,ITGB2	
INHIBITION_OF_ANGIOGENESIS_BY_TSP1	0.0606	0.0273	0.846	MARP1,CDA7	
Module 15					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
Integrin_Signaling	0.0464	0.00073	0.102	ITGB1,PPR1CA,ACTN4,RAPEF1,CAPNS1,AKT1,CAPN1,ARPC4,ITGA5	
VIRUS_ENTRY_VIA_ENDOCYTIC_PATHWAYS	0.0674	0.00549	0.102	FLNA,ITGB1,AP2B1,CLTB,AP2M1,ITGB3	
REGULATION_OF_ACTIN-BASED_MOTILITY_BY_RHO	0.0602	0.00269	0.333	PPR1CA,PI4KA,ARHGEF2,ARPC4,PNF1	
CTLA4-INDUCED_INHIBITION_OF_T-LYMPHOCYTES	0.0523	0.00455	0.333	PPR1CA,PI4KA,ARHGEF2,ARPC4,PNF1	
ACTIN_CYTOSKELETON_SIGNALING	0.0349	0.00468	0.361	ITGB1,PPR1CA,ACTN4,PIRK2,DIAPH1,ARPC4,PNF1,ITGB5	
FAK_SIGNALING	0.0459	0.00867	0.459	ITGB1,CAPNS1,AKT1,CAPN1,ITGB5	
OVEREXPRESSED_ENDOCYTOSIS_SIGNALING	0.0582	0.00585	0.459	ITGB1,CAPNS1,AKT1,CAPN1,ITGB5	
ERK_MAPK_SIGNALING	0.0333	0.0105	0.459	ITGB1,PPR1CA,ELF4,RAPEF1,PP2R5B,ITGB5,SRF	
NF-KAPPAB_ACTIVATION_BY_VIRUSES	0.0533	0.0111	0.459	ITGB1,AKT1,JAK2,ITGB5	
HUMAN_VIRUS_INVASIVENESS_SIGNALING	0.0534	0.0124	0.459	ITGB1,AKT1,JAK2,MAP3K1,CTSD,CAPN1	
PTEN_SIGNALING	0.0382	0.0180	0.569	ITGB1,AKT1,FOXP1,JAK2,ITGB5	
AMYLOID_PROCESSING	0.0600	0.0202	0.579	CAPNS1,AKT1,CAPN1	
PIK3_AKT_SIGNALING	0.0509	0.0165	0.606	ITGB1,AKT1,CDKN1A,CEBPB,ITGB5	
EPHRIN_RECECTOR_SIGNALING	0.0309	0.0250	0.620	ITGB1,RAPEF1,AKT1,AXIN1,ARPC4,ITGB5	
CLATHRIN-MEDIATED_ENDOCYTOSIS_SIGNALING	0.0318	0.0387	0.831	AP2B1,CLTB,AP2M1,ARPC4,ITGB5	
HYPOXIA_SIGNALING_IN_THE_CARDIOVASCULAR_SYSTEM	0.0462	0.0399	0.857	AKT1,UBED2,CCDC4	
ANGIOPOEITIN_SIGNALING	0.0448	0.0430	0.857	AKT1,UBED2,THP1	
Others					
CDK5_SIGNALING	0.0460	0.0106	0.859	PPR1CA,PP2R5B,ADY9,CAPN1	
RAR_ACTIVATION	0.0301	0.0438	0.859	NCOR1,AKT1,ZBTB16,MARK2,KADYC9	
Module 16					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
Inflammatory_Responses	0.0445	4.7E-06	0.00176	C1Q10,CD44,HMOX1,C3,RRAS,TNFRSF1B,MYD88,CEBPB,MRS	
ACUTE_PHASE_RESPONSE_SIGNALING	0.0798	2.7E-05	0.00176	CD44,CEBPB,CLM29,CMR1,IRF7	
ROLE_OF_Pattern_recognition_receptors_in_recognition_of_bacteria_and_viruses	0.114	0.00019	0.197	C1Q10,C3,CMR1	
COMPLEMENT_SYSTEM	0.0882	0.00248	0.227	MT2A,RRAS,MRS	
IL-6_SIGNALING	0.0471	0.00848	0.227	MT2A,RRAS,MRS	
CHOLECYSTOKININ_GASTRIN-MEDIATED_SIGNALING	0.0444	0.00962	0.316	RRHO,RRAS,MAPK7,MRS	
FCGAMMA_RECEPTOR-MEDIATED_PHAGOCYTOSIS_IN_MACROPHAGES_AND_MONOCYTES	0.0444	0.00967	0.316	HMOX1,ARPC4,FGFR,MRS	
HMOX_SIGNALING	0.0423	0.00960	0.316	RRHO,RRAS,MAPK7,MRS	
ENDOTHELIN-1_SIGNALING	0.0305	0.00984	0.316	RRHO,RRAS,MAPK7,MRS	
GLIOMA_INVASIVENESS_SIGNALING	0.0526	0.0105	0.390	RRHO,RRAS,MRS	
ERK5_SIGNALING	0.0492	0.0126	0.408	RRHO,RRAS,MAPK7,MRS	
ROLE_OF_CD40L_IN_GAMMAc_CYTOKINE_SIGNALING	0.0482	0.0126	0.408	RRHO,RRAS,MAPK7,MRS	
IL-15_SIGNALING	0.0469	0.0144	0.411	I15,RRAS,MRS	
IL-8_SIGNALING	0.0270	0.0165	0.414	RRHO,HHMOX1,I15,CEBPB,MRS	
INTERFERON_SIGNALING	0.0202	0.0165	0.414	RRHO,HHMOX1,I15,CEBPB,MRS	
PROLACTIN_SIGNALING	0.0411	0.0204	0.441	RRAS,CEBPB,MRS	
IL-17_SIGNALING	0.0400	0.0211	0.441	RRAS,CEBPB,MRS	
LPS-MEDIATED_INHIBITION_OF_RXR_FUNCTION	0.0325	0.0238	0.441	RRAS,TNFRSF1B,MRS	
CERAMIDE_SIGNALING	0.0375	0.0259	0.441	RRAS,TNFRSF1B,MRS	
NRF2-MEDIATED_OXIDATIVE_STRESS_RESPONSE	0.0237	0.0266	0.441	SCARB1,HMOX1,RRAS,MAPK7,MRS	
ROLE_OF_CD40L_IN_FIBROBLASTS_AND_ENDOTHELIAL CELLS_IN_RHEUMATOID_ARTHRITIS	0.0280	0.0270	0.441	RRHO,HHMOX1,RRAS,MRS	
MTOR_SIGNALING	0.0366	0.0276	0.441	RRAS,TNFRSF1B,MRS	
REGULATION_OF_CITRIBASED_MOTILITY_BY_RHO	0.0261	0.0285	0.441	RRAS,TNFRSF1B,MRS	
NON-SMAD_CELL_LUNG_CANCER_SIGNALING	0.0393	0.0303	0.441	RRAS,TNFRSF1B,MRS	
GLIOBLASTOMA_MULTI-FORME_SIGNALING	0.0286	0.0306	0.441	RRHO,CE2F2,RRAS,MRS	
GERM_CELL-SERTOCELL_CELL_JUNCTION_SIGNALING	0.0255	0.0363	0.475	RRHO,RRAS,MRS,GSN	
NE-KINASE_SIGNALING	0.0252	0.0363	0.475	RRHO,RRAS,MRS,GSN	
APOPTOSIS_SIGNALING	0.0323	0.0371	0.475	RRAS,TNFRSF1B,MRS	
CHRONIC_MYELOID_LEUKEMIA_SIGNALING	0.0313	0.0413	0.512	E2F2,RRAS,MRS	
MELANOMA_SIGNALING	0.0478	0.0444	0.512	E2F2,RRAS,MRS	
PROSTATE_CANCER_SIGNALING	0.0303	0.0445	0.512	E2F2,RRAS,MRS	
THYROID_CANCER_SIGNALING	0.0469	0.0463	0.512	RRAS,MRS	
HIF1ALPHA_SIGNALING	0.0297	0.0468	0.512	RRAS,MAPK7,MRS	
Module 17					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
Type_I_Interferon_Signaling	0.250	0.00109	0.365	CXL3,TNF	
AIRWAY_PATHOLOGY_IN_CHRONIC_DESTRUCTIVE_PULMONARY_DISEASE	0.0690	0.00448	0.365	CD44,CEBPB,ITGB1,ITGB2,ITGB3	
ROLE_OF_Pattern_recognition_receptors_in_recognition_of_bacteria_and_viruses	0.0318	0.00265	0.365	TUBA1C,TUBB2A,TUBA1A,TNF,MAP3K8	
IL-12_SIGNALING	0.0364	0.00500	0.366	ITGB1,IRF1,TNF,MAP3K8	
CD40_SIGNALING	0.0351	0.00504	0.396	TUBA1C,TUBB2A,TUBA1A,TNF	
RETROGRADE_APOTOPSIS_APOTOPSIS_SIGNALING	0.0360	0.00539	0.396	ITGB1,IRF1,TNF,MAP3K8	
DISTINCT_REGULATION_OF_CYTOKINE_PRODUCTION_IN_INTESTINAL_EPITHELIAL_CELLS_BY_IL-17A_AND_-17B	0.0833	0.0100	0.488	INFN,INFN	
HEPATIC_FIBROSIS--HEPATIC_STELLATE_CELL_ACTIVATION	0.0286	0.0116	0.488	INFN,SMAD2,CXL3,TNF	
T_HIF1A_DURING_OXYGEN_DEPRIVATION	0.0170	0.0118	0.488	INFN,SMAD2,CXL3,TNF	
ROLE_OF_HYPERCYTOKINEMIA_HYPERCHOLESTERolemia_IN_THE_PATHOGENESIS_OF_INFLUENZA	0.0645	0.0164	0.518	INFN,IRF1,TNF,MAP3K8	
PRODUCTION_OF_NITRO_OXIDE_AND_REACTIVE_OXYGEN_SPECIES_IN_MACROPHAGES	0.0258	0.0167	0.518	INFN,IRF1,TNF,MAP3K8	
INTERFERON_SIGNALING	0.0260	0.0170	0.518	INFN,IRF1,TNF,MAP3K8	
APOTOPSIS_SIGNALING	0.0326	0.0204	0.542	LMNA,BCL2A1,TNF	
AIRWAY_INFLAMMATION_IN_ASTHMA	0.250	0.0265	0.628	TNF	
ROLE_OF_CD40L_IN_AESTHMA	0.0463	0.0274	0.628	TNF	
MSF1-IRON_SIGNALING_PATHWAY	0.0455	0.0318	0.667	INFN,TNF	
BREAST_CANCER_REGULATION_BY_STAT1MM	0.0205	0.0340	0.667	TUBA1C,TUBB2A,CDKN1A,TUBA1A	
TYPE_I_DIADESES_MELLITUS_SIGNALING	0.0263	0.0365	0.667	INFN,TNF	
GRANULOMA_DISEASE_SIGNALING	0.0420	0.0369	0.667	INFN,TNF	
TREM1_SIGNALING	0.0377	0.0447	0.791	TREM1,TNF	
Others					
B_CELL_Receptor_SIGNALING	0.0274	0.0134	0.998	BCL2A1,EGR1,BCL6,MAP3K8	
Module 18					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
Tyrosine_Kinases_Activity	0.0376	0.00194	0.682	DMPK1,LMK2,NPP1,PRK1,CSNK1D	
INOSITOL_PHOSPHATE_METABOLISM	0.0417	0.00377	0.701	DMPK1,LMK2,PRK1,CSNK1D	
CREB_Signaling	0.0273	0.0374	1.00	MYL5,LMK1,SHC1,CREB3	
PAK_SIGNALING	0.0209	0.0406	1.00	LMK2,GNAT1,SHC1,CREB3	
EPHRIN_RECECTOR_SIGNALING	0.0800	0.0121	1.00	FGR1L,GUSB	
GLYCOSAMINOGLYCAN_DEGRADATION	0.0645	0.0168	1.00	CREB3,CSNK1D	
CIRCADIAN_RHYTHM_SIGNALING	0.0244	0.0494	1.00	STX4,APP1,SHC1	
INSULIN_Receptor_SIGNALING	0.0351	0.0483	1.00	PTGDS,PTGDS	
Module 19					
Pathway	Ratio	nominal p-value	adjusted p-value	p-value	Intersect
T-cell_and_Natural_Killer_Cell_Mediated_Cytolysis	0.125	0.00426	0.447	CD4B,PRF1	
GRANZYME_B_SIGNALING	0.119	0.00426	0.447	CD4B,PRF1	
TUMORICIDAL_FUNCTION_OF_HERATIC_NATURAL_KILLER_CELLS	0.0833	0.00949	0.706	GZMB,PRF1	
GRAFT-VERSUS-HOST_DISEASE_SIGNALING	0.0424	0.0344	1.00	GZMB,PRF1	
INTERFERON_SIGNALING	0.0377	0.0350	1.00	GZMB,PRF1	
ROLE_OF_CD40L_IN_CANCER	0.0206	0.00678	0.319	ACTN1,TNF,ITGB2,ITGB3	
COAGULATION_SYSTEM	0.0571	0.00847	0.319	F2S,PROS1	
ERK_MAPK_SIGNALING	0.0191	0.00879	0.319	YWHAH,TNF,ITGB2,ITGB3	
FAK_SIGNALING	0.0271	0.01086	0.319	YWHAH,TNF,ITGB2,ITGB3	
PAK_SIGNALING	0.0273	0.00921	0.319	ITGB2,ITGB3,MYL9	
IL-17A_SIGNALING_IN_FIBROBLASTS	0.0541	0.00943	0.319	MAP1,CXCL5	
RAC_SIGNALING	0.0236	0.01536	0.422	NCAP1,ITGB2,ITGB3	
IL-17A_IN_ARTHRITIS	0.0393	0.02089	0.422	NCAP1,ITGB2,ITGB3	
GLIOMA_INVASIVENESS_SIGNALING	0.0351	0.0215	0.572	F2R,ITGB3	
CDC42_SIGNALING	0.0190	0.0243	0.602	ITGB2,ITGB3,MYL9	
Arteritis_Pathology_in_Chronic_Obstructive_Pulmonary_Disease	0.123	0.0277	0.737	ITGB2,ITGB3	
CAVEOLAR-MEDIATED-ENDOCYTOSIS_SIGNALING	0.0271	0.0333	0.728	ITGB2,ITGB3	
LEUKOCYTE_EXTRAVASATION_SIGNALING	0.0161	0.0334	0.774	MAP1,ACTN1,CDLN5	
ATHEROSCLEROSIS_SIGNALING	0.0235	0.0450	0.838	ACTN1,BCL2L	
VEGF_SIGNALING	0.0235	0.0450	0.838	ACTN1,BCL2L	

List of 250 pathways from the Ingenuity canonical pathway database significantly enriched among genes correlated to age (Fisher's exact test:  $p < 0.05$ ). For each module of the BioAge, the list of pathways and the list of genes overlapping with those pathways are given. Pathways of a same BioAge module that overlapped (Jaccard index  $\geq 0.25$ ) were regrouped and assigned a same biological function. Genes positively correlated to increases in age are indicated in red and genes negatively correlated to age are indicated in blue.

Supplementary Table 4a. List of genes differentially expressed between HBV vaccine responders and poor-responders

ProbeSet ID	Gene Symbol	Accession Number	log2 Fold-Change	t-statistic	nominal p-value	adjusted p-value
merck-DB369182_s_at	<b>IGHGT</b>	B020949	0.495	4.33	3.03e-06	1.00
merck-NM_005143_s_at	<b>HP_HPR</b>	NM_005143 NM_001126102 NM_02095	-0.693	4.22	5.77e-05	1.00
merck-CR693799_s_at		CR593799	-0.264	-4.68	9.62e-05	1.00
merck-ENST00000341460_at	<b>SYDE2</b>	NM_032184	-0.244	-4.06	0.000193	1.00
merck-HS20061246_at		--	-0.244	-4.01	0.000124	1.00
merck-CR617832_s_at	<b>CD20</b>	NM_152866 NM_021950	0.593	3.99	0.000133	1.00
merck-ENST00000378777_x_at		DI0145728	-0.820	-3.92	0.000169	1.00
merck-AK023762_at	<b>SPTBN1</b>	NM_003128	0.254	3.89	0.000187	1.00
merck-ENST00000355534_s_at	<b>KIF18B</b>	BC04263	-0.259	-3.89	0.000187	1.00
merck-ENST00000378777_at		--	-0.831	-3.89	0.000192	1.00
merck2-CD517369_s_at	<b>SPTBN1</b>	NM_003128	0.284	3.83	0.000230	1.00
merck2-AK093024_at	<b>BANK1</b>	NM_017935 NM_001083907 NM_00112	0.515	3.76	0.000299	1.00
merck-BX537613_at		BX537613	0.289	3.76	0.000299	1.00
merck-ENST00000372057_s_at	<b>AMMECR1</b>	NM_015365 NM_001025580 NM_00117	0.222	3.73	0.000332	1.00
merck2-NM_152867_s_at	<b>CD20</b>	NM_152866 NM_021950	0.472	3.71	0.000351	1.00
merck-NM_014399_at	<b>TPSPAN13</b>	NM_014399	0.461	3.71	0.000358	1.00
merck2-BC031039_at	<b>EFHCC2</b>	NM_025184	0.302	3.69	0.000374	1.00
merck-BC027917_s_at	<b>DEFA1 DEFA1B DEFA3</b>	NM_004084 NM_001042500 NM_00521	-0.565	-3.69	0.000382	1.00
merck2-NM_001042500_s_at		--	-0.595	-3.67	0.000400	1.00
merck-NM_0143942_s_at	<b>TARM1</b>	NM_001135686	-0.253	-3.62	0.000405	1.00
merck2-ENST00000376463_at		--	0.322	3.61	0.000501	1.00
merck2-AK225575_at	<b>LRRK1</b>	OR612105	0.325	3.57	0.000562	1.00
merck-NM_175870_at	<b>ICHIV5-78</b>	NM_024662	-0.215	-3.57	0.000566	1.00
merck2-BX647990_at	<b>RASGRP3</b>	BC02792	0.402	3.56	0.000595	1.00
merck-CB410700_at		NM_001139488 NM_170672 NM_01537	0.345	3.55	0.000605	1.00
merck-NM_025184_s_at		AC136424	0.259	3.55	0.000614	1.00
merck-CA447901_at	<b>EFHC2</b>	NM_025184	0.322	3.54	0.000637	1.00
merck2-NM_032738_at	<b>FORLA</b>	--	0.481	3.53	0.000644	1.00
merck-HCT1764595_x_at		NM_001164866 NM_032738 NM_00118	0.480	3.50	0.000727	1.00
merck-NM_001813_at		NG_027989	-0.230	-3.49	0.000738	1.00
merck-ENST00000316124_at	<b>CENPE</b>	NM_001813	-0.306	-3.49	0.000740	1.00
merck-LT1834_at	<b>LOC439914</b>	AK094364	-0.263	-3.49	0.000740	1.00
merck-NM_030764_s_at		AY166681	-0.276	-3.48	0.000772	1.00
merck-AK094902_at	<b>FORL2</b>	NM_030764	0.393	3.47	0.000795	1.00
merck2-AM180330_s_at		AK094902	-0.235	-3.46	0.000818	1.00
merck2-BX503020_at	<b>BLNK</b>	NM_013314 NM_00114094	0.285	3.46	0.000821	1.00
merck2-ENST0000036131_at	<b>PDE12</b>	NM_177966	-0.247	-3.45	0.000840	1.00
merck-NM_0177966_s_at		BC048131	0.389	3.45	0.000848	1.00
merck-NM_0177967_s_at	<b>RPS4Y2</b>	NM_00139667	-0.365	-3.44	0.000882	1.00
merck-NM_0177970_s_at	<b>OSBPL10</b>	NM_017784 NM_001174060	0.557	3.43	0.000890	1.00
merck-NM_023738_at	<b>FORLA</b>	NM_001164866 NM_032738 NM_00118	0.458	3.43	0.000916	1.00
merck-ENST00000308013_at	<b>SNAPC3</b>	BC03603	0.236	3.42	0.000939	1.00
merck-AK097083_at		NR_024433	0.426	3.42	0.000940	1.00
merck-NM_021963_at	<b>NAP1L2</b>	NM_021963	0.405	3.41	0.000953	1.00
merck-NM_006235_at	<b>POU2AF1</b>	NM_006235	0.395	3.39	0.00102	1.00
merck-NM_032539_at	<b>SLTR2K</b>	NM_032539	0.389	3.38	0.00106	1.00
merck-AK096733_at	<b>LOC729603</b>	NR_03288	-0.244	-3.38	0.00106	1.00
merck-AK094141_s_at	<b>ZMAT1</b>	NM_001011657 NR_036431	0.332	3.37	0.00109	1.00
merck-NM_001925_at	<b>DEFA4</b>	NM_001925	-1.10	-3.37	0.00110	1.00
merck2-NM_021950_at	<b>CD20</b>	NM_152866 NM_021950	0.596	3.37	0.00110	1.00
merck-NM_001911_at	<b>CTSG</b>	NM_001911	-0.740	-3.37	0.00111	1.00
merck2-AI382268_at	<b>BACH2</b>	NM_001170794	0.247	3.36	0.00113	1.00
merck-NM_014888_at	<b>FAM3C</b>	NM_014888 NM_001040020	0.426	3.35	0.00118	1.00
merck2-AK025965_at	<b>BOD1L</b>	NM_148894	-0.205	-3.34	0.00123	1.00
merck-NM_0027777_at	<b>PRTN3</b>	NM_002777	-0.282	-3.33	0.00124	1.00
merck-AK092549_s_at	<b>STRBP</b>	NM_0118387 NM_001171137 NR_03323	0.285	3.33	0.00125	1.00
merck-ENST00000373502_at	<b>CHIC1</b>	NM_001039840	0.246	3.33	0.00125	1.00
merck-BX641093_at		BC035211	0.210	3.31	0.00134	1.00
merck-NM_061026590_at	<b>AMMECR1</b>	--	-0.211	-3.31	0.00134	1.00
merck-XM_067085_s_at		NM_015365 NM_001025580 NM_00117	0.182	3.30	0.00139	1.00
merck2-M52449_at	<b>NAAA</b>	--	-0.297	-3.30	0.00139	1.00
merck-AW613529_at	<b>TCPCN2</b>	NM_001042402	-0.243	-3.29	0.00140	1.00
merck2-N48311_at	<b>SSPN</b>	NM_005086 NM_001135823	-0.215	-3.28	0.00145	1.00
merck-NM_005346_s_at	<b>HSPA1B</b>	NM_005346	0.305	3.28	0.00147	1.00
merck-NM_0020993_at	<b>BCL7A</b>	NM_020993 NM_00124808	0.295	3.27	0.00149	1.00
merck-NM_000475_at	<b>NR081</b>	NM_000475	-0.216	-3.27	0.00150	1.00
merck-NM_032226_s_at	<b>ZCHC7</b>	NM_032226	0.220	3.27	0.00151	1.00
merck-L17326_at		L17326	-0.299	-3.27	0.00153	1.00
merck-AK128305_s_at	<b>LOC100132741 FLJ46446</b>	AK126424	0.396	3.26	0.00155	1.00
merck2-AF343666_at		--	0.264	3.26	0.00157	1.00
merck-B071811_s_at	<b>LOC390940</b>	NM_001193621 NM_001193622	-0.257	-3.26	0.00158	1.00
merck-NM_017570_s_at	<b>OPLAH</b>	NM_017570	-0.257	-3.26	0.00159	1.00
merck2-AK090917_s_at	<b>TMEM47</b>	NM_0313442	0.368	3.25	0.00159	1.00
merck-NM_01659_at	<b>NUDT11</b>	NM_01659	0.431	3.25	0.00160	1.00
merck-AV56278_at	<b>ANGPT1</b>	NM_004675	0.256	3.24	0.00165	1.00
merck2-BX641479_at	<b>PRICKLE1</b>	NM_153022 NM_001144881 NM_00114	0.259	3.24	0.00168	1.00
merck-XM_941446_at	<b>CDCD42B</b>	NM_001144872	-0.200	-3.23	0.00170	1.00
merck-CR607463_at	<b>INO80</b>	XR_109139 XR_109140 XR_11345 XR	-0.216	-3.22	0.00175	1.00
merck-AK097582_s_at		NM_017553	-0.219	-3.22	0.00179	1.00
merck-ENST00000329990_at		AF090528	-0.237	-3.21	0.00183	1.00
merck2-AK092411_at		AK092411	-0.201	-3.21	0.00184	1.00
merck2-NM_021034_x_at	<b>IFITM3</b>	NM_021034	-0.560	-3.20	0.00188	1.00
merck-AV138288_at		--	-0.210	-3.19	0.00195	1.00
merck-NM_000939_at	<b>POMC</b>	NM_001035256 NM_000939	-0.266	-3.18	0.00199	1.00
merck-NM_001040084_s_at	<b>ANXA8BL ANXA8BL ANXA8</b>	NM_001098845 NM_001630 NM_00104	-0.294	-3.18	0.00199	1.00
merck2-AI125130_at		Z03H13	-0.238	-3.18	0.00202	1.00
merck-NM_032452_at	<b>JPH4</b>	NM_015070	-0.208	-3.18	0.00202	1.00
merck-NM_021722_at	<b>ADAM22</b>	NM_032452 NM_021722 NM_016351	0.224	3.17	0.00206	1.00
merck-NM_004847_at	<b>AIF1</b>	NM_004847	-0.326	-3.17	0.00209	1.00
merck-NM_000601_at	<b>HGF</b>	NM_000601 NM_001010932	-0.324	-3.16	0.00210	1.00
merck-A125255_s_at	<b>LOC404266</b>	NM_033202 NR_033202 NR_033203	-0.138	-3.16	0.00211	1.00
merck-A12021111_s_at	<b>KPN46</b>	NM_012316	-0.231	-3.16	0.00212	1.00
merck-A200717_s_at	<b>CUD20</b>	NM_152866 NM_021950	0.427	3.15	0.00216	1.00
merck-XM_615559_at		--	0.208	3.15	0.00219	1.00
merck-BX648376_s_at	<b>CD300E</b>	NM_181449	-0.226	-3.15	0.00220	1.00
merck-AK123284_s_at	<b>DMXL2</b>	NM_001174116 NM_015263 NM_00117	-0.253	-3.15	0.00220	1.00
merck-ENST00000377058_at	<b>Cxorf24</b>	BC025179	0.295	3.15	0.00222	1.00
merck-BMT24616_at		--	0.253	3.15	0.00222	1.00
merck-NM_000017_at	<b>ACADS</b>	NM_000017	-0.184	-3.15	0.00223	1.00
merck-NM_004673_at	<b>ANGPT1</b>	NM_004673	0.285	3.14	0.00224	1.00
merck-NM_004022_at	<b>DMD</b>	NM_004022 NM_004014 NM_004013 N	0.544	3.14	0.00228	1.00
merck-NM_058186_NM_206964_at	<b>FAMB8</b>	NM_058186_NM_206964	-0.471	-3.14	0.00228	1.00
merck-AF143311_at		AF143311	-0.181	-3.13	0.00236	1.00
merck-ALB33646_at	<b>LOC285084</b>	ALB33646	-0.165	-3.12	0.00240	1.00
merck-AF086013_at		AF086013	0.153	3.12	0.00240	1.00
merck-NM_941499_at		AC007244	-0.315	-3.12	0.00242	1.00
merck-NM_002483_at	<b>CEACAM6</b>	NM_002483	-0.685	-3.12	0.00242	1.00
merck2-BX641138_at	<b>RAB30</b>	BX641138	0.276	3.12	0.00243	1.00
merck-NM_198519_at		XM_002343118 XM_003119510 XM_00	0.294	3.11	0.00246	1.00
merck-NM_061516_at		--	-0.201	-3.11	0.00247	1.00
merck-BX648375_s_at	<b>ADA2P</b>	NM_018404	-0.233	-3.10	0.00254	1.00
merck-X51691_s_at	<b>XIST</b>	NM_001554	1.97	3.10	0.00254	1.00
merck-NM_170672_s_at	<b>RASGRP3</b>	NM_001139488 NM_170672 NM_01537	0.302	3.10	0.00254	1.00
merck2-AK092049_at	<b>CLCN5</b>	NM_001127899 NM_001127899 NM_00	0.250	3.10	0.00259	1.00
merck-U54771_s_at	<b>BIRC3</b>	NM_001165	0.232	3.09	0.00261	1.00
merck-NM_001005287_x_at	<b>OF2A1 OR2A42</b>	NM_001005287 NM_001001802	0.282	3.09	0.00263	1.00
merck-ENST00000379910_x_at		AF47336	0.641	3.09	0.00265	1.00
merck2-BF804746_at	<b>SUPT6H</b>	NM_003170	-0.237	-3.09	0.00268	1.00
merck2-AB011420_at	<b>STK17A</b>	NM_004760	0.447	3.08	0.00269	1.00
merck-NM_175080_at	<b>P2RX5</b>	NM_002561 NM_175080 NM_00120451	0.360	3.08	0.00270	1.00
merck-BC046476_at		XR_109593 XR_112345 XR_115626	0.239	3.08	0.00272	1.00
merck2-BC033178_x_at		--	0.413	3.08	0.00274	1.00
merck-AF379636_x_at	<b>NEBPF10 NEBPF14 NBPF15 NBPF16</b>	NM_001039703 NM_015383 NM_00117	-0.193	-3.08	0.00275	1.00
merck-ENST00000338882_at		AK127146	0.264	3.07	0.00281	

merck-AK025659_at	...	AK025659	0.296	3.06	0.00294	1.00
merck-BB058573_at	...	AC231081	-0.201	3.06	0.00294	1.00
merck2-BC046197_at	CXorf23	NM_198279	0.182	3.05	0.00296	1.00
merck2-AK129777_x_at	HPR	NM_020995	-0.156	-3.05	0.00298	1.00
merck-AK024667_at	CD22	...	0.654	3.05	0.00300	1.00
merck-NM_194251_at	GPR151	AK026467	0.229	3.05	0.00302	1.00
merck2-BF435813_at	...	NM_194251	-0.182	-3.04	0.00304	1.00
merck-AK054860_at	XIST	...	0.288	3.04	0.00310	1.00
merck-AL079282_at	...	NR_001564	0.593	3.03	0.00314	1.00
merck2-NM_139013_at	MAPK14	AL079282	-0.203	-3.03	0.00318	1.00
merck-AK095945_s_at	...	NM_001315_NM_139012_NM_139013_N	0.182	3.03	0.00319	1.00
merck-NM_032458_at	PHF6	AK095945	0.266	3.03	0.00320	1.00
merck2-AY172957_x_at	...	NM_001015877_NM_032458	0.645	3.02	0.00328	1.00
merck-NM_033446_s_at	FAM125B	...	-0.283	-3.02	0.00328	1.00
merck2-AK096690_at	FORL1	NM_033446	0.540	3.02	0.00328	1.00
merck-NM_001816_at	CEACAM8	NM_052938_NM_001159397_NM_00115	-0.063	-3.01	0.00366	1.00
merck2-NM_001807_x_at	...	...	0.630	3.01	0.00337	1.00
merck2-BG041570_at	TRPM2	...	-0.239	-3.01	0.00337	1.00
merck2-AA602431_at	...	AC02041111	0.203	3.01	0.00340	1.00
merck-NM_021034_x_at	IFTM3	NM_021034	-0.567	-3.01	0.00341	1.00
merck-AF379833_x_at	NBPF10_NBPF14_NBPF15_NBPF16_NBPF17	NM_001039703_NM_015383_NM_00117	-0.189	3.00	0.00344	1.00
merck2-BM983732_at	XIST	NR_001564	2.29	3.00	0.00344	1.00
merck-HCT225573_at	...	...	0.284	3.00	0.00346	1.00
merck-NM_002526_at	NT5E	NM_002526	0.508	3.00	0.00351	1.00
merck-BM547816_at	LIX1	NM_153234	0.266	2.99	0.00357	1.00
merck-NM_006885_at	ZFH3X	NM_006885_NM_001164766	-0.168	-2.99	0.00358	1.00
merck2-BC117447_at	SMARCA1	NM_030699_NM_139035	0.285	2.98	0.00364	1.00
merck-AF119866_at	...	AF119866	0.196	2.98	0.00366	1.00
merck2-NM_001816_at	CEACAM8	NM_001816	-0.809	-2.98	0.00367	1.00
merck2-AF035036_x_at	...	U07539	0.336	2.98	0.00372	1.00
merck-NM_175886_at	PRPS1L1	NM_175886	-0.159	-2.97	0.00374	1.00
merck2-X56198_at	XIST	NR_001564	1.37	2.97	0.00379	1.00
merck-BX649112_s_at	COBL1	BX649112	0.209	2.97	0.00381	1.00
merck-NM_018125_at	ARHGEF10L	NM_018125_NM_001011722	-0.216	-2.97	0.00384	1.00
merck-BG042383_s_at	...	AL355520	0.245	2.96	0.00390	1.00
merck-BG042383_x_at	RPS4Y_RPS4Y2	...	-0.36	-2.96	0.00390	1.00
merck-XM_038941_at	...	NG_024796	0.430	2.96	0.00393	1.00
merck-NM_015884_at	MTPS2	NM_015884	0.168	2.96	0.00396	1.00
merck-NM_014760_at	DLGAP5	NM_014760_NM_001146015	-0.249	-2.95	0.00397	1.00
merck-BX505106_at	BBST	NM_176824_NM_018190	-0.176	-2.95	0.00398	1.00
merck-AV658731_at	...	97168	2.12	2.95	0.00403	1.00
merck-NM_012471_at	TRPC5	NM_012471	0.177	2.95	0.00405	1.00
merck-NM_032591_at	SLC9A7	NM_032591	0.227	2.94	0.00415	1.00
merck-CR749383_at	XIST	NR_001564	2.34	2.94	0.00418	1.00
merck-XM_942050_at	...	NG_008685	-0.122	-2.94	0.00418	1.00
merck-NM_004469_at	FIGF_PIR-FIGF	NM_004469_NR_037859	0.301	2.94	0.00418	1.00
merck-NM_006777_at	ZBTB33	NM_001184742_NM_006777	0.165	2.93	0.00423	1.00
merck2-AF00985_at	DDX3Y	NM_001122665_NM_004660	-0.998	-2.93	0.00425	1.00
merck-NM_001972_at	ELANE	NM_001972	-0.628	-2.93	0.00425	1.00
merck-AA322245_s_at	...	AC010969	-0.299	-2.93	0.00426	1.00
merck-NM_001947_s_at	DUSP7	NM_001947	-0.186	-2.93	0.00426	1.00
merck-NM_014562_at	OTX1	NM_014562_NM_001199770	-0.191	-2.93	0.00427	1.00
merck-AF009585_s_at	...	BX641058	-0.36	-2.92	0.00433	1.00
merck-NM_016831_at	CLU	NM_001831_NM_203339_NM_00117113	0.159	2.92	0.00436	1.00
merck-BX640620_x_at	...	...	0.500	2.92	0.00437	1.00
merck-BI461644_at	MEX3C	NM_016626	-0.144	-2.92	0.00439	1.00
merck-AK92185_s_at	...	BC032890	0.307	2.92	0.00445	1.00
merck2-EL947810_at	DHR54L2	AY920361	-0.292	-2.91	0.00449	1.00
merck2-NM_001007_x_at	...	...	0.0973	2.91	0.00450	1.00
merck-NM_000071_s_at	CBS	NM_000071_NM_001178008	-0.239	-2.91	0.00454	1.00
merck-NM_032451_at	SPIRE2	NM_032451	-0.160	-2.90	0.00461	1.00
merck-NM_152633_at	FANCB	NM_001018113_NM_152633	0.337	2.90	0.00461	1.00
merck-NM_005401_at	PTPN14	NM_005401	-0.184	-2.90	0.00469	1.00
merck-ENST00000371256_at	GRIA3	NM_007325_NM_000682	0.326	2.90	0.00471	1.00
merck-BG04624_at	...	...	-0.181	-2.89	0.00474	1.00
merck-NM_017666_at	ZNF280C	NM_017666	0.246	2.89	0.00477	1.00
merck-BX16938_at	ZFY-AS1	XR_109785_XR_115519	-0.321	-2.89	0.00479	1.00
merck-BC033940_at	...	...	-0.264	-2.89	0.00481	1.00
merck-BX464612_s_at	ASNS	NM_133436_NM_001673_NM_183356_N	0.210	2.89	0.00486	1.00
merck2-AK027592_at	...	...	0.274	2.88	0.00492	1.00
merck-AV65938_at	FORL1	NM_052825	0.541	2.88	0.00497	1.00
merck-ENST000003688180_at	...	...	0.327	2.88	0.00498	1.00
merck-BF755897_at	...	NM_007064	0.215	2.88	0.00500	1.00
merck-AK093134_x_at	MYO5B	NM_001008467	0.148	2.87	0.00503	1.00
merck-AK095793_at	PRKXP1	AK095793	0.434	2.87	0.00503	1.00
merck-AK095430_at	...	AK095439	0.375	2.87	0.00503	1.00
merck2-BC036314_at	...	...	-0.566	-2.87	0.00516	1.00
merck2-BX092881_at	...	AC091821	0.257	2.86	0.00520	1.00
merck-NM_152339_at	SPATA2L	NM_152339	-0.211	-2.86	0.00520	1.00
merck-NM_181332_at	NLGN4X	NM_027472_NM_181332	0.470	2.86	0.00521	1.00
merck-BC005248_at	EIP1AY	NM_004681	-1.94	-2.86	0.00525	1.00
merck-AK173776_at	DKFZD434L192	NM_026929	-0.167	-2.86	0.00525	1.00
merck-NM_023068_s_at	SIGLEC1	NM_023068	-0.709	-2.86	0.00525	1.00
merck-NM_004653_at	KDM5D	NM_001146705_NM_004653_NM_00114	-1.50	-2.86	0.00527	1.00
merck2-BC016381_x_at	...	...	0.575	2.86	0.00528	1.00
merck2-DA322541_at	DMXL2	NM_001174116_NM_015263_NM_00117	-0.260	-2.86	0.00528	1.00
merck-BF799396_s_at	HEATR8 HEATR8-TTC4	NM_001039464_NR_026782_NR_03763	-0.229	-2.85	0.00532	1.00
merck2-NM_016529_at	ATP8B1	NM_016529	-0.169	-2.85	0.00534	1.00
merck2-AT192171_a_at	...	EPB41L4A	-0.240	-2.85	0.00536	1.00
merck2-NM_001008_at	...	NM_022140	-0.207	-2.85	0.00537	1.00
merck2-CP454965_at	...	...	0.207	2.85	0.00545	1.00
merck-Z26649_at	GPM6B	NM_001001938_NM_005278_NM_001010	0.378	2.85	0.00545	1.00
merck-NM_006983_at	PLCB3	NM_00932_NM_001184883	-0.196	-2.85	0.00545	1.00
merck2-BE382874_a_at	...	NM_000893	0.209	2.85	0.00546	1.00
merck2-AF068846_at	...	...	-0.182	-2.84	0.00549	1.00
merck2-AL699751_at	...	...	0.0843	2.84	0.00552	1.00
merck-Y09442_s_at	AGPS	CR616022	0.182	2.84	0.00553	1.00
merck-AI658826_at	EIP1AY	NM_036599	-0.167	-2.84	0.00554	1.00
merck2-ENST00000375217_at	UBR4	NM_046481	-1.84	-2.84	0.00554	1.00
merck-AK125225_at	ATP8B3	NM_020765	-0.242	-2.84	0.00554	1.00
merck-XM_926024_x_at	...	BC033179	-0.217	-2.84	0.00556	1.00
merck-NM_002167_s_at	ID3	NG_022676	0.132	2.84	0.00556	1.00
merck-HCT16404472_x_at	...	NM_002167	0.291	2.84	0.00558	1.00
merck-ENST00000386060_at	...	...	-0.143	-2.84	0.00558	1.00
merck2-NM_058171_s_at	TCEANC	BC020995	0.230	2.84	0.00561	1.00
merck-AK057671_at	INGX	NR_002226	0.371	2.83	0.00577	1.00
merck-AK050669_at	...	AC030314	0.493	2.83	0.00578	1.00
merck-NM_00100837_x_at	SMARCA1	NM_000839_NM_139035	0.279	2.82	0.00589	1.00
merck-NM_001948_s_at	KUHL2022	NM_001008357	0.382	2.82	0.00592	1.00
merck-NM_021938_x_at	CTSB	NM_0019818_NM_147780_NM_147781_N	-0.197	-2.82	0.00596	1.00
merck-NM_001003688_at	HLA-DRB4 LOC100509582	NM_021983_XM_003120275_XM_00312	-1.77	-2.82	0.00599	1.00
merck-RREB1	...	NM_001003699_NM_001168344_NM_00	-0.147	-2.82	0.00599	1.00
merck-AF173474_at	...	...	0.283	2.82	0.005991	1.00
merck-AF069138_at	...	...	0.164	2.82	0.005992	1.00
merck-AK074226_at	...	...	-0.198	-2.82	0.005995	1.00
merck2-AI664170_at	SENP5	NM_152699	-0.218	-2.81	0.005997	1.00
merck-NM_000408_s_at	GPD2	NM_001083112_NM_000408	-0.169	-2.81	0.005998	1.00
merck2-BC040939_at	LOC386758	NM_037159_NR_037160_NR_037161	0.179	2.81	0.00602	1.00
merck-NM_001725_at	BPI	NM_001725_XM_002345420	-0.703	-2.81	0.00602	1.00
merck2-NM_138450_at	ARL11	NM_138450	-0.294	-2.81	0.00604	1.00
merck-NM_030639_at	BHLHBP9	NM_001142524_NM_030639_NM_00114	0.419	2.81	0.00605	1.00
merck-NM_002547_at	OPHN1	NM_002547	0.322	2.81	0.00606	1.00
merck-NM_022003_at	FYD6	NM_022003_NM_001168481_NM_00116	-0.345	-2.81	0.00610	1.00
merck-NM_004619_at	...	...	0.169	2.81	0.00610	1.00
merck-ENST00000311191_s_at	TRAF5	...	0.276	2.80	0.00614	1.00
merck-NM_001164213_at	LRCH1	...	0.138	2.80	0.00621	1.00
merck-AK097140_at	BCORP1	NM_033732_NR_002923	-0.317	-2.80	0.00626	1.00
merck-ENST00000350088_at	KAT6B	NM_012350	0.143	2.80	0.00629	1.00
merck-CR93697_at	PLSCR1	NM_021105	-0.322	-2.79	0.00633	1.00

merck-R08351_s_at	---	NG_029798	-0.166	-2.79	0.00635	1.00	
merck-NM_152751_at	CXorf58	NM_152761 NM_001169574	0.341	-2.79	0.00637	1.00	
merck-L932191_s_at	---	AL932181	0.219	-2.79	0.00638	1.00	
merck-G36912_at	EIF1AX	NM_001412	0.406	-2.79	0.00639	1.00	
merck2-BC089400_at	MAPTD2	AF266850	-0.201	-2.79	0.00639	1.00	
merck2-NM_015187_at	SEL1L3	NM_015187	0.287	-2.79	0.00640	1.00	
merck2-ENST00000368925_at	---	AL050350	-0.232	-2.79	0.00640	1.00	
merck2-NM_018387_at	STRBP	NM_018387 NM_001171137 NR_03323	0.249	-2.79	0.00641	1.00	
merck2-AM393028_a_at	STRBP	NM_018387 NM_001171137 NR_03323	0.294	-2.79	0.00645	1.00	
merck2-CR621041_at	FRA10A1C	NM_145246	0.168	-2.78	0.00653	1.00	
merck-NM_004660_at	DDX3Y	NM_001122656 NM_004660	-1.82	-2.78	0.00653	1.00	
merck2-AK126502_at	TRAP5	NM_004619 NM_145759 NM_00103391	0.280	-2.78	0.00654	1.00	
merck-AK123757_a_at	EBF1	NM_024007	0.350	-2.78	0.00657	1.00	
merck-NM_016877_at	---	NG_011791	0.185	-2.78	0.00657	1.00	
merck-NM_001040077_x_at	---	---	0.504	-2.78	0.00663	1.00	
merck-NM_001040077_x_at	LOC143866	NC_026987	-0.171	-2.77	0.00664	1.00	
merck-NM_017432_at	TCONS	NM_013492	-0.174	-2.77	0.00678	1.00	
merck-NM_002575_at	SERPINB2	NM_001149818 NM_002575	-0.021	-2.77	0.00681	1.00	
merck-CG117058_at	CDCD160	NM_001101357	0.837	-2.77	0.00682	1.00	
merck-BG069446_at	RNF185	BC017302	0.155	-2.77	0.00685	1.00	
merck2-NM_017463_s_at	---	---	0.533	-2.76	0.00690	1.00	
merck-NM_001165_at	BIRC3	NM_001165 NM_182962	0.293	-2.76	0.00692	1.00	
merck-NM_004654_at	USP9Y	NM_004654	-1.47	-2.76	0.00693	1.00	
merck-BF115658_a_at	ITGB3	NM_000212	-0.256	-2.76	0.00693	1.00	
merck-NM_145802_at	SEPT6	NM_145800 NM_145802	0.278	-2.76	0.00694	1.00	
merck-NM_152732_at	RSPH9	NM_152732 NM_001193341	-0.336	-2.76	0.00695	1.00	
merck-NM_031438_at	NUDT12	NM_031438	-0.283	-2.76	0.00700	1.00	
merck-AK056310_a_at	ZAK	NM_133646	-0.167	-2.76	0.00702	1.00	
merck2-NM_007071_x_at	HHLA3	NM_001031693 NM_001036646 NR_02	0.180	-2.76	0.00704	1.00	
merck-NM_032024_a_at	C10or111	NM_032024	-0.218	-2.76	0.00704	1.00	
merck2-AK024285_at	STRBP	NM_018387 NM_001171137 NR_03323	0.260	-2.76	0.00704	1.00	
merck-BX847065_x_at	PGBD2	BX647065	-0.180	-2.76	0.00705	1.00	
merck2-AV694034_at	---	X06096	-0.132	-2.76	0.00705	1.00	
merck-NM_004297_at	GNA14	NM_004297	-0.103	-2.76	0.00706	1.00	
merck-NM_006084_at	IRF9	NM_006084	-0.209	-2.76	0.00706	1.00	
merck-NM_014332_s_at	---	NM_016539 NM_001193285	-0.195	-2.75	0.00706	1.00	
merck-NM_014332_s_at	SIRT16	NM_014343	0.290	-2.75	0.00708	1.00	
merck-CF123890_at	SNMPX	---	-0.141	-2.75	0.00709	1.00	
merck-NM_183399_at	---	TMEM44	---	0.224	-2.75	0.00717	1.00
merck-A168166_s_at	NCRNA0185	NM_001544	-0.513	-2.75	0.00717	1.00	
merck-NM_005449_at	FAM13	NM_005449 NM_001142473 NM_00119	0.243	-2.75	0.00719	1.00	
merck-BX470592_at	SRDSA1P1	NR_028597	0.160	-2.75	0.00721	1.00	
merck-NM_007281_at	SCRG1	NM_007281	-0.276	-2.75	0.00725	1.00	
merck-A747306_at	BCL11A	NM_022893	0.236	-2.74	0.00727	1.00	
merck2-NM_152909_at	ZNF548	NM_001172773 NM_152909	0.207	-2.74	0.00730	1.00	
merck-NM_173512_s_at	SLC38A11	NM_001199148 NM_173512	0.276	-2.74	0.00732	1.00	
merck-NM_001039933_s_at	CD79B	NM_000626 NM_021602 NM_00103993	0.325	-2.74	0.00735	1.00	
merck-NM_174951_at	FAM9A	NM_001171186 NM_174951	0.282	-2.74	0.00739	1.00	
merck2-BC005008_at	CEACAM6	NM_002483	-0.653	-2.74	0.00739	1.00	
merck2-NM_001015001_s_at	---	---	-0.277	-2.74	0.00740	1.00	
merck-NM_032576_s_at	TXLNG2P	NM_032576	-1.20	-2.74	0.00741	1.00	
merck-BX15310_at	---	AC109927	-0.177	-2.74	0.00742	1.00	
merck-AK02442_s_at	NDUFA4L2	NM_0010142	-0.182	-2.74	0.00743	1.00	
merck-AK02441_s_at	---	AIK05614	-0.208	-2.73	0.00748	1.00	
merck-AK095064_at	---	AIK05614	-0.120	-2.73	0.00751	1.00	
merck2-NM_182680_at	UTY	NM_182660 NM_182659 NM_007125	-0.895	-2.73	0.00751	1.00	
merck-BI491675_at	---	AF249931	0.377	-2.73	0.00753	1.00	
merck-AK022993_at	CD79A	XR_112926 XR_113938	0.164	-2.73	0.00753	1.00	
merck-ENST00000354256_a_at	TTYT10	NR_001542	-0.669	-2.73	0.00756	1.00	
merck-AF085872_at	---	AF085872	0.183	-2.73	0.00758	1.00	
merck-NM_006922_at	SCNSA	NM_006922 NM_001081676 NM_001040	0.402	-2.73	0.00762	1.00	
merck-CT1841255_1_at	---	---	-0.172	-2.73	0.00763	1.00	
merck2-AA62265_at	LOC100507718 LOC100509457	XM_003119326 XM_003120269 XM_00	-0.222	-2.73	0.00764	1.00	
merck2-NM_003624_at	ZNF442	NM_030824	0.196	-2.73	0.00765	1.00	
merck2-NM_182660_x_at	UTY	NM_182660 NM_182659 NM_007125	-0.530	-2.73	0.00768	1.00	
merck2-NM_199334_at	THR8	NM_199334	-0.245	-2.72	0.00769	1.00	
merck-AL049449_at	GAB1	NM_207123 NM_002039	-0.196	-2.72	0.00770	1.00	
merck-AK054601_at	---	AK054601	-0.149	-2.72	0.00772	1.00	
merck-AB209628_at	HLA-DQA1	AB209628	1.02	-2.72	0.00780	1.00	
merck-NM_006418_at	OLFM4	NM_006418	-0.923	-2.72	0.00784	1.00	
merck-NM_013639_at	UNC5A	NM_013639	-0.174	-2.71	0.00792	1.00	
merck-NM_015969_at	ZWYNND10	NM_015969	-0.167	-2.71	0.00794	1.00	
merck2-AF08542_at	SLC6A5	NM_0042411	-0.165	-2.71	0.00795	1.00	
merck-AK093002_at	---	AK093002	-0.133	-2.71	0.00800	1.00	
merck-ENST00000381046_at	LOC554174	BC019388	0.194	-2.71	0.00804	1.00	
merck-AW075799_at	P2RY2	NG_016249	0.266	-2.71	0.00807	1.00	
merck-CDE43907_at	---	NM_176072 NM_002564 NM_176071	-0.203	-2.71	0.00810	1.00	
merck-NM_006754_at	SYPL1	---	0.159	-2.71	0.00812	1.00	
merck-BX648887_at	---	---	0.195	-2.70	0.00813	1.00	
merck-CD559455_at	ANK3	XM_006754 NM_182715	-0.196	-2.70	0.00814	1.00	
merck-BC021710_a_at	DD11	NM_001001711	0.232	-2.70	0.00816	1.00	
merck-AK097122_at	---	AK097122	-0.181	-2.70	0.00817	1.00	
merck2-R368868_at	---	---	0.206	-2.70	0.00823	1.00	
merck2-BF026299_at	---	---	-0.188	-2.70	0.00826	1.00	
merck2-BG291982_at	---	---	-0.149	-2.70	0.00830	1.00	
merck2-BC014958_at	STAP1	---	0.164	-2.70	0.00833	1.00	
merck-NM_025040_at	ZNF614	NM_025040	0.332	-2.69	0.00840	1.00	
merck-NM_016507_at	EGFL6	NM_016507 NM_001167890	-0.174	-2.69	0.00847	1.00	
merck-CD559455_at	---	---	-0.165	-2.69	0.00853	1.00	
merck2-CB147449_at	CDCA23E2	NM_0020240 NM_001038702	0.140	-2.69	0.00853	1.00	
merck-NM_02914_x_at	SNORD6A SNORD6B	NR_002914 NM_003050	-0.131	-2.69	0.00859	1.00	
merck-NM_015210_at	CDCC165	NM_015210	-0.147	-2.68	0.00862	1.00	
merck-BU681761_at	KDM5C	EF613277	0.482	-2.68	0.00871	1.00	
merck-NM_001700_at	AZU1	NM_001700	-0.374	-2.68	0.00875	1.00	
merck-BX97821_at	AC241513	AC241513	0.199	-2.68	0.00876	1.00	
merck-ENST00000216255_a_at	---	---	-0.157	-2.68	0.00878	1.00	
merck2-AV575038_at	FAIM3	NM_005449 NM_001142473 NM_00119	0.228	-2.68	0.00883	1.00	
merck2-CR749861_x_at	---	---	0.367	-2.68	0.00883	1.00	
merck-NM_152693_at	LINC00246A LINC00246B	NR_026595 NR_026594	0.233	-2.67	0.00888	1.00	
merck-NM_003611_at	OFD1	NM_003611	0.255	-2.67	0.00889	1.00	
merck-ENST0000228838_at	---	NG_024785	-0.741	-2.67	0.00891	1.00	
merck2-BU149471_x_at	ANKRD11	NM_013275	-0.172	-2.67	0.00892	1.00	
merck-AK055261_at	CTTNBP2NL	NM_018704	-0.189	-2.67	0.00893	1.00	
merck2-BQ440490_at	HAUS2	NM_018097 NM_001130447	-0.179	-2.67	0.00898	1.00	
merck-BC000212_a_at	GTFC32	NM_001521 NM_001035521	-0.160	-2.67	0.00902	1.00	
merck2-CB0068526_at	FAM3C	NM_014886 NM_00104020	0.387	-2.67	0.00905	1.00	
merck-NM_000000000374922_at	LOC550643	BX537532	0.361	-2.67	0.00906	1.00	
merck-NM_017449_at	---	AC008783	0.200	-2.67	0.00907	1.00	
merck-NM_006879_at	EPHB2	---	-0.240	-2.66	0.00913	1.00	
merck-NM_017449_at	MLR1P	---	-0.143	-2.66	0.00914	1.00	
merck-NM_138737_s_at	HEPH	NM_138737 NM_014799 NM_00113086	0.200	-2.66	0.00916	1.00	
merck-CR749861_x_at	IGHG2	BX640623	0.337	-2.66	0.00918	1.00	
merck2-BQ428957_at	---	---	0.154	-2.66	0.00920	1.00	
merck-BQ043399_a_at	ETV6	---	-0.198	-2.66	0.00922	1.00	
merck-NM_002758_at	MAP2K6	NM_002758	-0.177	-2.66	0.00925	1.00	
merck-M34181_a_at	PRKACB	NM_182948 NM_002731	0.181	-2.66	0.00926	1.00	
merck-NM_172107_a_at	KCNQ2	NM_172107 NM_172106 NM_004518 N	-0.163	-2.66	0.00930	1.00	
merck-NM_017633_s_at	FAM46A	NM_017633	-0.163	-2.66	0.00931	1.00	
merck2-DA409317_s_at	APLP2	NM_001642 NM_00112276 NM_00114	-0.312	-2.66	0.00931	1.00	
merck-ENST00000265384_s_at	TJP2	NM_001170630	-0.211	-2.66	0.00932	1.00	
merck2-BQ880108_at	---	---	-0.175	-2.66	0.00933	1.00	
merck2-BQ033623_a_at	UNC93B1	---	-0.170	-2.65	0.00935	1.00	
merck2-BQ011013706_at	PLINS	NM_001013706	-0.220	-2.65	0.00936	1.00	
merck2-AA26176_at	---	AL109753	0.608	-2.65	0.00937	1.00	
merck-A074020_at	AC004056	AC004056	0.225	-2.65	0.00942	1.00	
merck-BU684866_at	EF445041	EF445041	0.153	-2.65	0.00942	1.00	

merck-AF087061_at			-0.236	-2.65	0.00943	1.00
merck-NM_020905_at	KLHL14	NM_020805	0.415	-2.65	0.00943	1.00
merck-NM_001747_at	CAPC	NM_001747	-0.231	-2.65	0.00944	1.00
merck-NM_017935_at	BANK1	NM_017935 NM_001083907 NM_00112	0.534	-2.65	0.00945	1.00
merck-BM98631_at		NG_008408	-0.180	-2.65	0.00954	1.00
merck2-DB33082_at			-0.375	-2.65	0.00957	1.00
merck-NM_003629_at	PIK3R3	NM_003629 NM_001114172	-0.260	-2.64	0.00961	1.00
merck-L06755_x_at		--	0.159	-2.64	0.00962	1.00
merck2-CN38991_at	METTL8	NM_024770	0.214	-2.64	0.00963	1.00
merck2-AA148029_at	PODXL	NM_001018111 NM_005397	0.178	-2.64	0.00966	1.00
merck-BX57145_a_at	NPHP1	NM_000272 NM_207181 NM_00112817	0.198	-2.64	0.00967	1.00
merck2-NM_001728_at	BPI	NM_001725 XM_002345420	-0.650	-2.64	0.00970	1.00
merck2-H00590_at	RRA2	NM_012250 NM_001102669 NM_00117	0.209	-2.64	0.00970	1.00
merck2-BC128082_s_at	EDARADD	NM_145861 NM_080738	0.186	-2.64	0.00977	1.00
merck2-BC022823_x_at		AFO47230	0.535	-2.64	0.00978	1.00
merck-XM_942068_x_at	UNC93B1	NM_030930	-0.141	-2.64	0.00979	1.00
merck-BD10154_s_at	NOTCH2 NOTCH2NL	NM_024008 NM_001200001 NM_2034	-0.202	-2.64	0.00989	1.00
merck-NM_017908_at	SPPN1	NM_006108	0.239	-2.64	0.00991	1.00
merck-NM_015284_at	SZT2	NM_005284	-0.151	-2.63	0.00987	1.00
merck-AK227525_x_at	ZNF518B	NM_053042	0.167	-2.63	0.00988	1.00
merck2-BC021419_x_at	CD40	NM_001280 NM_152854	0.269	-2.63	0.00989	1.00
merck-BX18195_x_at		AL033376	-0.232	-2.63	0.00990	1.00
merck-NM_003436_at	ZNF135	NM_007134 NM_003436 NM_00116452	0.252	-2.63	0.00991	1.00
merck-ENST00000382751_at	URB1	NM_014825	-0.145	-2.63	0.00991	1.00
merck-NM_006559_at	KHDBBS1	NM_006559	0.125	-2.63	0.00995	1.00
merck2-EF553520_at	CD109	NM_13493 NM_001159587 NM_00115	-0.207	-2.63	0.00996	1.00
merck-NM_173217_s_at	ST6GAL1	NM_173216 NM_003032 NM_173217	0.154	-2.63	0.00997	1.00
merck-NM_133325_a_at	PHF10	NM_018288 NM_133325	0.161	-2.63	0.00999	1.00
merck-BX648323_s_at	XIST	NR_001564	0.575	-2.63	0.0100	1.00
merck-NM_006847_at	LILRB4	BC026309	-0.207	-2.63	0.0101	1.00
merck2-NM_004258_at	CD101	NM_004258	-0.264	-2.63	0.0101	1.00
merck-NM_0040202_at	TMSB4Y	NM_004202	-0.687	-2.62	0.0101	1.00
merck-NM_001020216_at	H2BPWT	NM_001002916	-0.137	-2.62	0.0102	1.00
merck-NM_004473_at	FOXE1	NM_004473	0.173	-2.62	0.0102	1.00
merck-NM_013314_at	BLNK	NM_013314 NM_001114094	0.286	-2.62	0.0102	1.00
merck-NM_000111_at	SLC26A3	NM_000111	-0.196	-2.62	0.0102	1.00
merck2-NM_0089672_at	HEPLH1	NM_00108672	0.316	-2.62	0.0102	1.00
merck-D499164_at	FAM114A1	NM_138399 NR_033290	-0.255	-2.62	0.0103	1.00
merck-AF088183_at		BX649817	-0.0992	-2.62	0.0103	1.00
merck-AK22240_at		AK022249	0.402	-2.62	0.0104	1.00
merck2-AL833915_at	TDRD9	NM_153046	-0.293	-2.62	0.0104	1.00
merck-AK123875_s_at	MEG3	AK123878	-0.153	-2.62	0.0104	1.00
merck-BC032026_at		BC032026	0.299	-2.61	0.0105	1.00
merck-AF527832_a_at		NR_0015456	-0.226	-2.61	0.0105	1.00
merck-NM_005564_at	LCN2	NM_005564	-0.700	-2.61	0.0106	1.00
merck-IC176747_at		NG_010722	-0.144	-2.61	0.0106	1.00
merck-AK94711_at		AK094711	0.167	-2.61	0.0106	1.00
merck2-AK022858_at	WDR3	NM_006784	0.143	-2.61	0.0106	1.00
merck2-BG939621_a_at	C2orf430	NM_001009923 NM_001009924 NM_01	0.138	-2.61	0.0107	1.00
merck2-BX648896_at	C4orf40	NM_214711	-0.138	-2.60	0.0107	1.00
merck-ENST00000355899_at	PLS3	NM_005032 NM_001136025 NM_00117	0.247	-2.60	0.0107	1.00
merck-NM_052820_a_at	CORO2A	NM_003389 NM_052820	-0.211	-2.60	0.0108	1.00
merck-NM_001040021_at	CD14	NM_000591 NM_001040021 NM_00117	-0.175	-2.60	0.0108	1.00
merck2-AK008585_at	MALT1	NM_000855 NM_173844	0.186	-2.60	0.0108	1.00
merck-ENST0000035888_a_at	MAD2L1	NM_002588	-0.231	-2.60	0.0109	1.00
merck2-V2V_OKF7_at		NC_01346	-0.114	-2.60	0.0109	1.00
merck-AK933947_s_at	STRBP	NM_018337 NM_001171137 NR_03323	0.269	-2.60	0.0109	1.00
merck-ENST00000308604_s_at	LOC541471 LINC00152	NR_015395 NR_024373 NR_024204 NI	-0.152	-2.60	0.0109	1.00
merck-NM_006789_at	MYOT	NM_006790 NM_001135940	0.225	-2.60	0.0109	1.00
merck-BE048584_at		--	-0.220	-2.60	0.0109	1.00
merck-NM_014246_at	CELSR1	NM_014246	0.229	-2.60	0.0109	1.00
merck2-ENST00000392099_x_at		AF043589	0.284	-2.59	0.0110	1.00
merck-NM_000443_at	ABC4B	NM_000443 NM_018849 NM_018850	0.254	-2.59	0.0110	1.00
merck2-BC002710_at	KLK10	NM_002776 NM_145888 NM_0010775	-0.125	-2.59	0.0111	1.00
merck-NM_032714_at	INF2	NM_032714	-0.196	-2.59	0.0111	1.00
merck-BC041882_at		CR626222	0.232	-2.59	0.0112	1.00
merck-NM_002285_at	AFF3	NM_002285 NM_001025108	0.375	-2.59	0.0112	1.00
merck-CAB43851_a_at	NEURL	NM_004210	-0.187	-2.59	0.0112	1.00
merck-AW613711_at		--	0.141	-2.59	0.0113	1.00
merck-AW635608_at		--	-0.140	-2.58	0.0113	1.00
merck-NM_021763_at	EDAA2R	NM_001199688 NM_001199689 NM_00	0.364	-2.58	0.0114	1.00
merck2-BC020710_at		--	-0.249	-2.58	0.0114	1.00
merck-NM_032714_at	PKIG	NM_181805 NM_007066 NM_181804	0.226	-2.58	0.0114	1.00
merck2-AW62377_s_at		--	-0.136	-2.58	0.0114	1.00
merck-AK946554_at	TXLNG2P	AL823883	-0.028	-2.58	0.0115	1.00
merck-NM_031409_at		AF454829	-0.162	-2.58	0.0115	1.00
merck-BX5133_at	CCR6	NM_004637 NM_031409	0.248	-2.58	0.0116	1.00
merck-BF174540_x_at		--	-0.153	-2.57	0.0116	1.00
merck-NM_000367_at	IGHM	AK090464	0.164	-2.57	0.0116	1.00
merck2-CB957115_s_at	TPMT	NM_000367	-0.156	-2.57	0.0117	1.00
merck-BD1592_a_at		--	-0.131	-2.57	0.0117	1.00
merck-NM_005146_at	PTER	NM_001001484 NM_030664	0.187	-2.57	0.0117	1.00
merck-NM_022872_at	SART1	NM_005146	-0.220	-2.57	0.0117	1.00
merck2-NM_001005852_at	IF16	NM_002038 NM_022872 NM_022873	-0.431	-2.57	0.0118	1.00
merck-BE933112_x_at	TXLNG2P	NM_0010050582	-1.30	-2.57	0.0118	1.00
merck-NM_006781_at	PRKY	Y15801	-0.216	-2.57	0.0118	1.00
merck2-CK821126_at		NM_006781	-0.122	-2.57	0.0119	1.00
merck-CDE24674_a_at		PRKY	0.213	-2.57	0.0119	1.00
merck-DAG1644_at		--	-0.127	-2.56	0.0120	1.00
merck2-CMV_LU_E4_at		--	-0.119	-2.56	0.0120	1.00
merck-NM_032551_s_at	KISS1R	NM_032551	-0.260	-2.56	0.0121	1.00
merck-NM_002343_s_at	LTF	NM_002343 NM_001199149	-0.723	-2.56	0.0121	1.00
merck-NM_013943_at	CLIC4	NM_013943	0.170	-2.56	0.0121	1.00
merck-NM_004345_at	CAMP	NM_004345	-0.423	-2.56	0.0122	1.00
merck2-NM_004681_at	EIF1AY	NM_004681	-1.16	-2.56	0.0122	1.00
merck-NM_006573_s_at	TNFSF13B	NM_006573 NM_001145645	-0.175	-2.56	0.0122	1.00
merck2-BC130370_at	SERPINB11	NM_080475	0.131	-2.56	0.0122	1.00
merck-BE819416_at		--	0.149	-2.56	0.0122	1.00
merck-NM_182922_s_at	HEATR3	NM_182922	-0.167	-2.56	0.0122	1.00
merck-NM_014689_at	DOCK10	NM_014689	0.148	-2.55	0.0122	1.00
merck2-BX538322_at	FGF6	NM_018351	-0.209	-2.55	0.0123	1.00
merck2-BC150285_a_at	MYO10	NM_012334	-0.171	-2.55	0.0123	1.00
merck-ENST00000282333_s_at	ZNF837	NM_001129730 NM_138466	0.165	-2.55	0.0123	1.00
merck-AK28852_a_at		AK128852	-0.118	-2.55	0.0123	1.00
merck-BQ314506_at		--	-0.197	-2.55	0.0123	1.00
merck-NM_039250_at	C5orf65	NM_001161546	-0.141	-2.55	0.0124	1.00
merck-NM_018813_at	MRE11A	NM_005591 NM_005590	-0.136	-2.55	0.0124	1.00
merck2-NM_138995_at	NETO1	NM_138995	-0.109	-2.55	0.0124	1.00
merck-NM_07050_at		--	-0.150	-2.55	0.0124	1.00
merck-NM_022636_x_at		--	-0.212	-2.55	0.0124	1.00
merck-NM_016541_at	NTNG2	NM_032636	-0.207	-2.55	0.0124	1.00
merck2-NM_025152_a_at	GNG13	NM_016541	0.116	-2.55	0.0125	1.00
merck2-AK001584_a_at	NUBPL	NM_025152 NM_001201573 NM_0012	0.175	-2.55	0.0125	1.00
merck2-L34717_at	SPON1	NM_006108	0.221	-2.55	0.0125	1.00
merck-BF511462_a_at		L34717	0.354	-2.55	0.0125	1.00
merck-BF511462_a_at		AK091759	0.213	-2.55	0.0125	1.00
merck-AW656598_at		--	-0.173	-2.55	0.0125	1.00
merck-NM_005429_at	VEGFC	NM_005429	-0.181	-2.55	0.0125	1.00
merck-NM_032117_at	MND1	NM_032117	-0.232	-2.55	0.0126	1.00
merck2-CF135398_at	PINK3AP1	NM_152309	-0.220	-2.55	0.0126	1.00
merck-BG756002_at		--	-0.125	-2.55	0.0126	1.00
merck-NM_052847_s_at	GNG7	NM_052847	0.170	-2.54	0.0126	1.00
merck2-BX107845_at		AL031319	0.256	-2.54	0.0126	1.00
merck2-F01509_at	LIX1	NM_153234	0.170	-2.54	0.0126	1.00
merck-NM_198480_at	ZNF615	NM_001199324 NM_198480	0.170	-2.54	0.0126	1.00
merck2-AI752656_at		--	-0.217	-2.54	0.0126	1.00
merck2-AF097709_at	HTRA1	NM_002775	-0.191	-2.54	0.0127	1.00

merck-HSC00296490_at	---	---	-0.168	-2.54	0.0127	1.00
merck-ENST00000294993_at	---	AK023372	-0.146	-2.54	0.0127	1.00
merck-NM_002123_x_at	LOC100293977	XM_002120273 XM_001714067 XM_00	0.810	-2.54	0.0127	1.00
merck-A671847_s_at	---	AC07845	0.216	-2.54	0.0128	1.00
merck-AK130568_a_at	---	AK130566	-0.249	-2.54	0.0128	1.00
merck-A1952248_a_at	VHL	NM_000551 NM_198156	-0.165	-2.54	0.0128	1.00
merck-A181369_g_at	---	AC093873	-0.133	-2.54	0.0128	1.00
merck-NM_001011658_at	TRAPPC2	NM_001011658 NM_014563 NM_00112	0.188	-2.54	0.0128	1.00
merck-NM_001029884_at	PLEKHG1	NM_001029884	0.288	-2.54	0.0128	1.00
merck-ENST00000328474_at	EIF4B	AF119854	0.147	-2.54	0.0129	1.00
merck-CB164481_at	---	AC131182	-0.322	-2.53	0.0129	1.00
merck-BC067869_at	---	XR_113304	0.235	-2.53	0.0129	1.00
merck-ENST00000334516_a_at	KDM6A	NM_021140	0.297	-2.53	0.0129	1.00
merck-R70164_at	---	---	-0.232	-2.53	0.0130	1.00
merck-2_NN_001098825_at	TMEM91	NM_001042595 NM_001098825	-0.143	-2.53	0.0130	1.00
merck-BF891877_at	---	---	-0.140	-2.53	0.0130	1.00
merck-A1212532_at	---	---	-0.176	-2.53	0.0131	1.00
merck-NM_00102247_at	ANAPC11	NM_001002244 NM_016476 NM_00100	-0.161	-2.53	0.0131	1.00
merck-BE220084_at	---	AF057280	-0.203	-2.53	0.0131	1.00
merck-NM_0029192_at	SGCE	NM_001009401 NM_003919 NM_00105	0.262	-2.53	0.0132	1.00
merck-NM_0034558_at	NOTCH2NL	NM_203498	-0.204	-2.53	0.0132	1.00
merck-BF109132_at	---	AL355796	-0.153	-2.53	0.0132	1.00
merck2-BX391618_a_at	PLSCR1	NM_21105	-0.284	-2.53	0.0133	1.00
merck-BF594635_s_at	PAQR5	NM_001104554 NM_017705	-0.135	-2.52	0.0133	1.00
merck-NM_001025463_at	LOC284751	NR_034124	-0.191	-2.52	0.0133	1.00
merck2-NM_0064061_at	CRISP3	NM_0060561 NM_001190986	-0.607	-2.52	0.0133	1.00
merck-BC034402_a_at	RBM47	NM_001098634 NM_019027	-0.295	-2.52	0.0134	1.00
merck-BC22825_x_at	---	---	0.412	-2.52	0.0134	1.00
merck-XM_927287_s_at	---	AC008783	0.249	-2.52	0.0134	1.00
merck-XM_930134_x_at	---	---	-0.132	-2.52	0.0134	1.00
merck-NM_144622_at	---	---	-0.135	-2.52	0.0134	1.00
merck-BM79084_s_at	ATRX	NM_000489 NM_138270	0.160	-2.52	0.0134	1.00
merck-ENST00000326985_s_at	RBMY1A1 RBMY1B RBMY1D RBMY1E	NM_005058 NM_001006121 NM_0010	-0.149	-2.52	0.0134	1.00
merck-NM_0042568_at	CD101	NM_004258	-0.215	-2.52	0.0134	1.00
merck-AK125162_at	---	AK125162	0.130	-2.52	0.0135	1.00
merck-NM_001039900_at	---	AK130368	0.479	-2.52	0.0135	1.00
merck-2_B2C067869_at	---	---	-0.231	-2.52	0.0136	1.00
merck-NM_001040700_x_at	---	B031259	0.357	-2.52	0.0136	1.00
merck-NM_022831_a_at	AIDA	NM_022831	0.160	-2.51	0.0137	1.00
merck-NM_001024074_at	HMMT	NM_001024074	-0.310	-2.51	0.0137	1.00
merck-NM_175726_at	ILSRA	NM_005854 NM_175726	-0.159	-2.51	0.0137	1.00
merck2-NM_018538_a_at	ERMAP	NM_01017922 NM_018538	-0.243	-2.51	0.0137	1.00
merck-NM_0240095_at	---	---	0.236	-2.51	0.0137	1.00
merck-CX782565_s_at	NAAA	NM_014435 NM_001042402	-0.229	-2.51	0.0138	1.00
merck-NM_018081_s_at	WRAP53	NM_018081 NM_001143990 NM_00114	-0.226	-2.51	0.0138	1.00
merck-U92981_at	---	U92981	0.299	-2.51	0.0138	1.00
merck-AK90784_s_at	DNM1L	NM_012062 NM_012063 NM_005690	0.129	-2.51	0.0138	1.00
merck2-CB241297_at	---	---	0.286	-2.51	0.0138	1.00
merck2-BQ006166_s_at	---	---	-0.208	-2.51	0.0139	1.00
merck2-BC026213_at	FBXW11	NM_033645 NM_033644 NM_012300	0.101	-2.51	0.0139	1.00
merck-ENST00000299550_at	TRIM66	NM_014818	-0.303	-2.51	0.0139	1.00
merck-AF532230_a_at	TTTY3 TTYT3B	NR_001524 NR_002176	-0.165	-2.51	0.0139	1.00
merck2-AL833067_at	---	AL833067	0.154	-2.51	0.0140	1.00
merck2-AN447152_a_at	FAM172A	NM_032042 NM_001163417 NM_00116	0.149	-2.50	0.0140	1.00
merck2-NM_001037501_s_at	---	---	-0.119	-2.50	0.0140	1.00
merck-AK000215_a_at	PGPEP1	NM_017712	-0.197	-2.50	0.0140	1.00
merck-AF198685_s_at	BPFSC1	NM_026763	-0.124	-2.50	0.0141	1.00
merck-BE567163_at	---	---	-0.124	-2.50	0.0141	1.00
merck-A37054_a_at	FGD4	NM_139241	-0.227	-2.50	0.0141	1.00
merck-NM_138441_s_at	MB21D1	NM_138441	-0.211	-2.50	0.0141	1.00
merck-ENST00000382880_x_at	EF589510	EFS89510	0.415	-2.50	0.0141	1.00
merck-AF442151_a_at	RSAD2	NM_080657	-0.658	-2.50	0.0142	1.00
merck-ENST00000327008_x_at	SSX2	BC103663	0.392	-2.50	0.0142	1.00
merck-AK133123_a_at	ADCY9	NM_001116	-0.179	-2.50	0.0142	1.00
merck-AA44735_at	---	---	0.186	-2.50	0.0142	1.00
merck-IC1648089_3_at	---	NG_005626	-0.128	-2.50	0.0142	1.00
merck-NM_002578_at	PAK3	NM_001128166 NM_002578 NM_00112	0.636	-2.50	0.0143	1.00
merck2-AK093852_at	LTF	NM_002343 NM_001199149	-0.725	-2.50	0.0143	1.00
merck-AK128024_a_at	---	AV598347	-1.17	-2.50	0.0143	1.00
merck-NM_152909_at	ZNF548	NM_001172773 NM_152909	0.181	-2.50	0.0143	1.00
merck-NM_001016868_at	---	AK125858	0.263	-2.50	0.0144	1.00
merck-BP572159_at	---	---	-0.116	-2.49	0.0144	1.00
merck-NM_0004444_at	AXIN2	NM_004655	0.265	-2.49	0.0144	1.00
merck2-NM_004883_at	TP53I3	NM_004981 NM_147184	-0.274	-2.49	0.0144	1.00
merck-NM_926634_at	RABL3	NM_173825	0.198	-2.49	0.0144	1.00
merck-NM_032178_at	SLC7A6OS	NM_032178	0.220	-2.49	0.0145	1.00
merck-NM_013378_at	VRPREB3	NM_013378	0.407	-2.49	0.0145	1.00
merck-NM_788445_a_at	---	AL363589	0.269	-2.49	0.0145	1.00
merck-NM_145450_at	C1orf85	NM_144580	-0.286	-2.49	0.0145	1.00
merck-NM_004240_at	TRIP10	NM_004240	-0.194	-2.49	0.0145	1.00
merck-ENST00000296491_at	---	---	-0.125	-2.49	0.0145	1.00
merck2-AA448172_at	---	AC127512	-0.223	-2.49	0.0146	1.00
merck-BC057761_a_at	CCDC149	NM_173463 NM_001130726	-0.381	-2.49	0.0146	1.00
merck-ENST00000378271_a_at	DCLRE1C	NM_001033855 NM_022487 NM_00105	-0.116	-2.49	0.0146	1.00
merck2-B1266526_x_at	RPSX	NM_001007	0.0996	-2.49	0.0146	1.00
merck-NM_000444_a_at	AR	NM_000444 NM_001011645	0.306	-2.49	0.0146	1.00
merck-NM_152497_at	STMN1	NM_001145454	-0.221	-2.49	0.0147	1.00
merck2-AK128466_at	---	AK128466	0.157	-2.49	0.0147	1.00
merck-AK026286_at	---	AK026286	-0.228	-2.49	0.0147	1.00
merck-BX500576_at	---	---	-0.183	-2.48	0.0148	1.00
merck-ENST00000340515_at	FAM160A1	NM_001109977	0.153	-2.48	0.0148	1.00
merck-BE726286_at	---	---	-0.215	-2.48	0.0148	1.00
merck-AK20777_x_at	---	---	0.520	-2.48	0.0148	1.00
merck-NM_198472_at	C10orf125	NM_01098483 NM_198472	-0.193	-2.48	0.0149	1.00
merck-BX20480_at	PTN	NM_028225	-0.173	-2.48	0.0149	1.00
merck-NR_003209_x_at	SNORD9	NR_003209	-0.195	-2.48	0.0149	1.00
merck2-NM_012334_at	MYO10	NM_012334	-0.140	-2.48	0.0149	1.00
merck2-BM974460_at	---	XR_110882 XR_113132 XR_114149	0.228	-2.48	0.0150	1.00
merck-ENST0000031267_at	---	AF399356	-0.180	-2.48	0.0150	1.00
merck-ENST00000229824_at	---	---	-0.208	-2.48	0.0150	1.00
merck-AJ519332_x_at	---	---	-0.125	-2.48	0.0150	1.00
merck-NM_182659_a_at	UTY	NM_182659 NM_007125	-0.612	-2.48	0.0150	1.00
merck-NM_003282_at	TNNI2	NM_003282 NM_001145829 NM_00112	-0.279	-2.48	0.0150	1.00
merck-NM_001567_s_at	INPP1L	NM_001567	-0.192	-2.48	0.0151	1.00
merck2-CMV_UL35_at	---	---	-0.132	-2.48	0.0151	1.00
merck2-AK057023_at	---	XR_109384 XR_111701 XR_115104	-0.152	-2.48	0.0151	1.00
merck-AK027209_at	---	AK027209	-0.200	-2.47	0.0151	1.00
merck-AK027205_at	---	AK074046	-0.215	-2.47	0.0152	1.00
merck-NM_144718_at	SPICE1	NM_144718	0.152	-2.47	0.0152	1.00
merck-BZ070258_at	TRPC5	AB209258	0.340	-2.47	0.0152	1.00
merck2-BC0011819_at	DDX3X	NM_001356 NM_001193416 NM_00119	0.166	-2.47	0.0152	1.00
merck-NM_377230_at	---	AC203597	-0.202	-2.47	0.0152	1.00
merck-BG016126_at	---	BC016126	0.162	-2.47	0.0153	1.00
merck-NM_001835_at	CLTC1	NM_007098 NM_001835	-0.287	-2.47	0.0153	1.00
merck-NM_182538_at	SPNS3	NM_182538	-0.292	-2.47	0.0153	1.00
merck2-DQ892282_at	SAP30	NM_003864	-0.171	-2.47	0.0153	1.00
merck2-DN19376_at	ZC3H13	NM_015070	-0.194	-2.47	0.0153	1.00
merck-ENST00000206681_at	---	---	0.340	-2.47	0.0153	1.00
merck-ENST00000375169_at	WNK3	NM_020922 NM_001002838	0.475	-2.47	0.0153	1.00
merck-NM_003121_at	SPIB	NM_003121	0.357	-2.47	0.0153	1.00
merck-BG02226_a_at	HLA-DOB	NM_002120	0.217	-2.47	0.0154	1.00
merck-BG033178_x_at	---	AY869727	0.539	-2.47	0.0154	1.00
merck2-BP196448_at	---	---	-0.189	-2.47	0.0154	1.00
merck-AK07440_at	---	AK07440	0.221	-2.47	0.0154	1.00
merck2-BI002574_at	TADA2A	NM_001488 NM_133439 NM_0011661	-0.135	-2.47	0.0155	1.00
merck-BP081926_at	NPHP1	NM_000272 NM_207181 NM_00112817	0.185	-2.47	0.0155	1.00
merck2-ENST00000302686_at	---	---	-0.108	-2.47	0.0155	1.00
merck2-BPNT1	NM_006085	NM_020704 NM_001134336	0.141	-2.47	0.0155	1.00
merck-DR432803_at	FAM40B	NM_020704 NM_001134336	-0.136	-2.47	0.0155	1.00

merck-AF086222_at		AF086222	-0.145	-2.47	0.0155	1.00
merck2-AL833454_at	SPXN5	AL833454	-0.174	-2.47	0.0155	1.00
merck-AW138771_2_at	TRIM66	NM_014918	-0.124	-2.46	0.0166	1.00
merck2-AC400595_at	CLEC7A	NM_197947_NM_197948	-0.217	-2.46	0.0166	1.00
merck-NM_000256_at	MVBP3	NM_000256	-0.198	-2.46	0.0166	1.00
merck2-CA438250_at	PARM1	NM_015393	0.206	-2.46	0.0156	1.00
merck-BE698821_at	USP27X	NM_001145073	0.245	-2.46	0.0157	1.00
merck-NM_014048_at	MKL2	NM_014048	0.209	-2.46	0.0157	1.00
merck-AF070581_a_at		AF070581	0.309	-2.46	0.0157	1.00
merck2-BE698843_x_at	USP24	NM_015306	-0.226	-2.46	0.0157	1.00
merck2-VZV_OKA_O67_up_at		--	-0.127	-2.46	0.0157	1.00
merck-NM_207468_at	FAM177B	NM_207468	0.326	-2.46	0.0157	1.00
merck-AJ420434_at	NRARP	NM_0010043454	-0.181	-2.46	0.0158	1.00
merck2-NN_00101982_x_at	AFMID	NM_001145526_NM_001010982	-0.160	-2.46	0.0158	1.00
merck-NM_004951_at	GPR183	NM_004951	0.260	-2.46	0.0159	1.00
merck-NM_005362_s_at	MAGEA3 MAGEA6	NM_005362_NM_005363_NM_175868	0.244	-2.46	0.0159	1.00
merck-NM_175617_at	MT1E	NM_175617	-0.158	-2.46	0.0159	1.00
merck-AK258457_at		AK025987	-0.182	-2.46	0.0159	1.00
merck-NM_496962_x_at		NR_033933	0.203	-2.46	0.0159	1.00
merck2-Ran_G3P10_s_at	LOC653075	--	0.103	-2.46	0.0160	1.00
merck-NM_021821_at	MRPS35	NM_021821_NM_001190864	0.161	-2.45	0.0160	1.00
merck-Config6529_RC_at		--	-0.144	-2.45	0.0160	1.00
merck2-AW814840_x_at		--	0.103	-2.45	0.0161	1.00
merck2-NM_017940_s_at		--	-0.111	-2.45	0.0161	1.00
merck-ENST00000378670_a_at	UQCRO	NM_014402	-0.207	-2.45	0.0161	1.00
merck-BC047330_at		--	0.152	-2.45	0.0161	1.00
merck2-BE464047_at	ALDOB	NM_000035	0.203	-2.45	0.0162	1.00
merck-NM_001400_at	S1PR1	NM_001400	0.203	-2.45	0.0162	1.00
merck-AW973537_at		NG_015661	0.393	-2.45	0.0163	1.00
merck-AF086064_at		--	0.212	-2.45	0.0163	1.00
merck2-AK123319_at	NETO1	NM_138966	0.179	-2.45	0.0163	1.00
merck-HCT1643393_2_at		--	-0.110	-2.45	0.0163	1.00
merck-NM_203287_x_at	PSG11	NM_002785_NM_203287_NM_00111341	0.130	-2.45	0.0163	1.00
merck2-NM_001931_at	DLAT	NM_001931	0.247	-2.45	0.0163	1.00
merck-X03068_x_at	HLA-QOB1	NM_002123_XM_003119997_XM_00312	0.938	-2.45	0.0164	1.00
merck-BC016381_x_at	IGHG1	Y17857	0.488	-2.45	0.0164	1.00
merck-ENST00000378925_s_at	WWC2	NM_024949	-0.167	-2.45	0.0164	1.00
merck-NM_0148939_at	RUSC2	NM_001135999_NM_014806	-0.142	-2.45	0.0164	1.00
merck-BG95162_at		--	0.129	-2.44	0.0164	1.00
merck2-NM_017817_at	RAB20	NM_017817	-0.298	-2.44	0.0164	1.00
merck2-AT379636_s_at		--	-0.109	-2.44	0.0164	1.00
merck-AK74192_at		AK074192	-0.204	-2.44	0.0164	1.00
merck-AK130615_at		AK130615	0.171	-2.44	0.0164	1.00
merck-ENST00000326237_at	LOC442075	XR_11003_XR_112457_XR_113459	0.141	-2.44	0.0164	1.00
merck-BC043572_at	LOC339874	BC043572	-0.251	-2.44	0.0165	1.00
merck-NM_001821_at	CHML	NM_01821	0.273	-2.44	0.0166	1.00
merck-NM_001572_at	IRF7	NM_001572_NM_004029_NM_004031	-0.321	-2.44	0.0166	1.00
merck-NM_138439_at	FLYWCH2	NM_138439_NM_001124499_NM_00114	-0.138	-2.44	0.0167	1.00
merck-CB962149_at		AL132795	0.212	-2.44	0.0167	1.00
merck-HCT1651059_3_at		NG_001122	-0.122	-2.44	0.0168	1.00
merck-NM_001017923_at	C14orf28	NM_001017923	0.182	-2.44	0.0168	1.00
merck-AL544754_a_at	LGALS3BP	NM_005567	-0.180	-2.44	0.0168	1.00
merck-NM_002852_at	PTX3	NM_002852	-0.202	-2.44	0.0168	1.00
merck2-AW8128123_at	SNCSA	NM_006922_NM_001081676_NM_00108	0.170	-2.44	0.0168	1.00
merck-ENST00000326274_at		AU000367	-0.120	-2.44	0.0168	1.00
merck-AK173562_at		U10116	-0.230	-2.43	0.0168	1.00
merck-NM_024506_at	GLB1L	NM_024506	-0.362	-2.43	0.0169	1.00
merck-XM_291763_s_at	EIF3L	NM_016091	0.126	-2.43	0.0169	1.00
merck2-AI659225_at		AL627402	0.190	-2.43	0.0169	1.00
merck-NM_032880_at	IGSF21	NM_032880	-0.139	-2.43	0.0169	1.00
merck2-L37307_x_at		U07546	0.343	-2.43	0.0170	1.00
merck-NM_003770_at	KRT37	NM_003770	-0.119	-2.43	0.0171	1.00
merck-BX091412_at		AL772392	0.430	-2.43	0.0171	1.00
merck2-BG959880_at		--	-0.160	-2.43	0.0171	1.00
merck-AF024541_a_at	AFF1	NM_001166693_NM_005935	-0.178	-2.43	0.0171	1.00
merck-ENST00000329684_a_at	TTYT8 TTYT8B	NR_001533_NR_003591	-0.389	-2.43	0.0171	1.00
merck-NM_004065_at	CDR1	NM_004065	0.532	-2.43	0.0171	1.00
merck-NM_201437_at	TCEA1	NM_0067556_NM_201437	0.149	-2.43	0.0171	1.00
merck-NM_005160_at	BMI1 COMM3-BMI1	NM_005180_NM_001204062	0.223	-2.43	0.0171	1.00
merck-NM_005296_at	LPAR4	NM_005296	0.654	-2.43	0.0171	1.00
merck-CR93684_a_at		NM_007125	-0.738	-2.43	0.0171	1.00
merck-NM_024222_at	APOO	NM_024122_NR_026545	0.275	-2.43	0.0171	1.00
merck-AK173561_at		AK173561	-0.161	-2.43	0.0172	1.00
merck2-NM_002493_at	CEACAM6	NM_002493	-0.556	-2.43	0.0172	1.00
merck2-BX473738_x_at	TNPQ	NM_002270_NM_153188	-0.0898	-2.43	0.0172	1.00
merck-NM_152785_at	GCET2	NM_152785_NM_001190259_NM_00119	0.212	-2.43	0.0172	1.00
merck-NM_006061_at	CRISP3	NM_006061_NM_001190886	-0.579	-2.42	0.0173	1.00
merck2-BC0213329_a_at	DPP4	NM_001935	0.192	-2.42	0.0173	1.00
merck-RQ022384_at		BC022384	-0.216	-2.42	0.0173	1.00
merck-NM_002760_at	PRKY	NR_028062	-0.546	-2.42	0.0173	1.00
merck-DAB1672_a_at	BANK1	NM_017935_NM_001083907_NM_00112	0.310	-2.42	0.0174	1.00
merck-NM_001804_at	CDX1	NM_001804	-0.154	-2.42	0.0174	1.00
merck2-BU147541_at	BUB3	NM_004725	0.160	-2.42	0.0174	1.00
merck-NM_001013722_at	TNRCC18	AY129022	-0.177	-2.42	0.0174	1.00
merck-NM_001969_at	EVX1	NM_001989	-0.153	-2.42	0.0175	1.00
merck-NM_203504_s_at	G3BP2	NM_203505_NM_012297_NM_203504	0.149	-2.42	0.0175	1.00
merck2-BM740515_at	PRR11	NM_018304	-0.164	-2.42	0.0175	1.00
merck2-AI278965_at		--	-0.241	-2.42	0.0176	1.00
merck-Hsa-miR-507_x_at	MIR507	NR_003234	0.182	-2.42	0.0176	1.00
merck-NM_001715_at	BLK	NM_001715	0.244	-2.42	0.0176	1.00
merck-NM_000051_at	ATM	NM_000051	0.175	-2.42	0.0176	1.00
merck-AK19870_at		AL035417	-0.150	-2.42	0.0176	1.00
merck-AF19870_at		AF19870	-0.190	-2.42	0.0176	1.00
merck2-AB033049_at		NM_020337_NM_001167882	-0.214	-2.42	0.0176	1.00
merck2-BQ185231_at		NM_001039590_NM_001039591	0.214	-2.42	0.0176	1.00
merck2-AF379635_s_at		--	-0.105	-2.42	0.0177	1.00
merck-NM_015267_at	TMEM194A	NM_001130963_NM_015257	0.181	-2.42	0.0177	1.00
merck-NM_032955_at	KBTBD8	NM_032955	0.245	-2.41	0.0177	1.00
merck2-DAB29519_a_at	ZC3H13	NM_015070	-0.191	-2.41	0.0178	1.00
merck-NM_007362_at	NCBP2	NM_007362_NM_001042540	0.175	-2.41	0.0178	1.00
merck2-NM_139290_at	ANGPT1	BC029406	-0.147	-2.41	0.0178	1.00
merck-ENST00000361688_at		--	-0.132	-2.41	0.0179	1.00
merck-ENST00000357972_at	SYTL5	NM_138780_NM_001163335_NM_00116	0.253	-2.41	0.0179	1.00
merck-AK098425_s_at		AK098425	0.169	-2.41	0.0179	1.00
merck2-NM_018555_at	ZNF331	NM_018555_NM_001079906_NM_00107	0.171	-2.41	0.0179	1.00
merck2-BG56231_at		--	-0.118	-2.41	0.0179	1.00
merck-AK055048_at		AK055048	0.271	-2.41	0.0179	1.00
merck-NM_002002_at	FOER2	NM_002002	0.296	-2.41	0.0179	1.00
merck-NM_0017455_at	ARHGEF3	NM_001128615_NM_001128616_NM_001	0.172	-2.41	0.0180	1.00
merck-BQ022745_at		BC022745	0.447	-2.41	0.0180	1.00
merck-AY358864_at	GPN2	AY358864	-0.135	-2.41	0.0180	1.00
merck-NM_001014979_at		NM_001014979	-0.197	-2.41	0.0180	1.00
merck-AW11782_at		M90482	0.300	-2.41	0.0180	1.00
merck2-Z22965_s_at		--	0.232	-2.41	0.0180	1.00
merck-NM_032918_at	RERG	NM_032918_NM_001190726	0.105	-2.41	0.0180	1.00
merck-NM_007148_at	RNF112	NM_007148	-0.146	-2.41	0.0180	1.00
merck2-AK054757_at	TBCD	AK129619	-0.172	-2.41	0.0180	1.00
merck-BMB05635_at		--	0.112	-2.41	0.0180	1.00
merck-NC_0015226_ORF_1178_at		--	-0.0964	-2.41	0.0180	1.00
merck-NM_002003_at	FON1	NM_002003	-0.151	-2.41	0.0180	1.00
merck-NM_006669_s_at	LILRB1	NM_006669_NM_001081637_NM_00108	-0.186	-2.41	0.0181	1.00
merck-NM_001882_at	CRHBP	NM_001882	-0.170	-2.41	0.0181	1.00
merck-AAT73342_x_at		--	-0.138	-2.41	0.0181	1.00
merck-NM_000216_at	KAL1	NM_000216	-0.275	-2.40	0.0182	1.00
merck2-BQ16940_s_at		--	0.300	-2.40	0.0182	1.00
merck2-CAT748516_at	F04	NM_139241	-0.185	-2.40	0.0182	1.00
merck-NM_001037232_at		NM_001171979_NM_001037232	-0.100	-2.40	0.0183	1.00
merck-AF527833_a_at	POM121	NM_00153588_NM_00153588	-0.161	-2.40	0.0183	1.00
merck-AK123814_s_at	POM121 POM121C	NM_172020_NM_001099415	0.143	-2.40	0.0183	1.00

merck-NM_024820_a_at	DENND1A	NM_020946 NM_024820	-0.173	-2.40	0.0183	1.00
merck2-BX34325_at	PRR11	NM_018304	-0.181	-2.40	0.0184	1.00
merck2-KSHV_ORF4_at	SCD	NM_05063	-0.117	-2.40	0.0184	1.00
merck2-BU17430_a_at	PCBD2	NM_032151	-0.140	-2.40	0.0184	1.00
merck-ENST00000254908_s_at	AK127697	AK127697	-0.161	-2.40	0.0184	1.00
merck-AK127697_at	OSGIN1	NM_013370 NM_182980 NM_182981	-0.353	-2.40	0.0184	1.00
merck-NM_182980_at	AV534685	AV534685	-0.160	-2.40	0.0184	1.00
merck-AIB63735_at	SPPR2B	NM_001017418	-0.158	-2.40	0.0184	1.00
merck-NM_001017418_s_at	TRIM50	NM_178125	0.0899	-2.40	0.0184	1.00
merck2-NM_178125_at	CNCNB2	NM_004701	-0.133	-2.40	0.0184	1.00
merck-NM_004701_at	ODZ1	NM_001163278 NM_001163279 NM_01	-0.132	-2.40	0.0185	1.00
merck-AK055765_at	MYCL1	NM_001033081 NM_001033082	-0.182	-2.40	0.0186	1.00
merck-NM_001033081_s_at	MPO	AK057810	-0.165	-2.40	0.0186	1.00
merck-AK057810_at	---	NM_000250	-0.441	-2.40	0.0186	1.00
merck2-BP431382_at	---	---	0.198	-2.39	0.0186	1.00
merck-NM_003446_at	---	---	-0.133	-2.39	0.0186	1.00
merck-AK24877_s_at	---	---	-0.220	-2.39	0.0186	1.00
merck2-BX641171_at	AK024077	BX641171	0.344	-2.39	0.0187	1.00
merck2-BH19209_a_at	KUAA0226	NM_001145642 NM_014687	-0.123	-2.39	0.0187	1.00
merck2-AK25719_at	MAP2K6	NM_022519	-0.157	-2.39	0.0188	1.00
merck-NM_008669_a_at	SLC46A1	NM_080669	-0.155	-2.39	0.0188	1.00
merck-NC_001357_ORF_1185_at	---	---	-0.104	-2.39	0.0188	1.00
merck-NM_001040034_at	CD63	NM_001780 NM_001040034	-0.113	-2.39	0.0188	1.00
merck-NM_174902_a_at	LDRAD3	NM_174902	-0.147	-2.39	0.0189	1.00
merck-NM_133478_a_at	SLC45A5	NM_021196 NM_133478	0.156	-2.39	0.0189	1.00
merck2-BC005395_at	HDX5	NM_000613	-0.147	-2.39	0.0190	1.00
merck-AK833666_at	---	AL833666	-0.296	-2.39	0.0190	1.00
merck-XM_939116_a_at	CXorf48	NM_001031705 NM_017863	0.336	-2.39	0.0191	1.00
merck-XM_944971_at	AC068642	AC068642	-0.127	-2.38	0.0192	1.00
merck2-D26070_at	ITPR1	NM_001099952 NM_002222 NM_00116	-0.262	-2.38	0.0192	1.00
merck-AK056191_s_at	CAD	NM_004341	-0.168	-2.38	0.0192	1.00
merck2-BG035799_at	---	AK098043	-0.204	-2.38	0.0192	1.00
merck-AK098043_s_at	---	NM_181644	0.168	-2.38	0.0192	1.00
merck2-AK091896_at	MFSD4	NM_174901	0.312	-2.38	0.0193	1.00
merck2-NM_174901_at	FAM9C	NM_000613	-0.203	-2.38	0.0193	1.00
merck-AF060727_at	PLTP	NM_000613	-0.189	-2.38	0.0193	1.00
merck-AF060727_at	---	AF060727	0.189	-2.38	0.0193	1.00
merck2-BC072452_a_at	FAM107B	NM_031453	0.176	-2.38	0.0193	1.00
merck-AV55754_at	---	DQ314888	-0.172	-2.38	0.0194	1.00
merck-NM_017856_at	GEMIN8	NM_001042480 NM_001042479 NM_01	0.202	-2.38	0.0194	1.00
merck-NM_181780_at	BT1A	NM_181780 NM_001058357	0.266	-2.38	0.0194	1.00
merck-NM_011468_at	GAGE1	NM_001468 NM_00104663	0.215	-2.38	0.0194	1.00
merck-BM973820_s_at	ODFB3	NM_001014440	-0.245	-2.38	0.0194	1.00
merck-NM_0104686_at	OR2L2	NM_001040486	0.123	-2.38	0.0194	1.00
merck-DB317658_at	---	---	0.398	-2.38	0.0194	1.00
merck-BX22512_a_at	BRD7	NM_001173984 NM_013263	-0.168	-2.38	0.0195	1.00
merck2-CU103091_s_at	---	---	-0.297	-2.38	0.0196	1.00
merck2-U69611_at	ADAM17	NM_003183	-0.207	-2.38	0.0196	1.00
merck-BQ325657_at	---	AF017104	-0.209	-2.37	0.0196	1.00
merck-XM_939413_x_at	---	AL049641	0.600	-2.37	0.0196	1.00
merck2-BE855602_at	OR2A9P	NR_002157	0.294	-2.37	0.0197	1.00
merck-NM_017848_a_at	FAM120C	NM_017848	0.217	-2.37	0.0197	1.00
merck-AK055765_at	---	---	0.200	-2.37	0.0197	1.00
merck-AK056191_a_at	EPT1	NM_003505	0.169	-2.37	0.0198	1.00
merck-BC053651_at	MMP19	NM_022429	-0.176	-2.37	0.0198	1.00
merck-ENST00000334139_at	---	NG_005176	-0.149	-2.37	0.0198	1.00
merck2-A1283400_at	SPTB1N1	NM_178313	0.138	-2.37	0.0199	1.00
merck-NM_052873_at	IIFT43	NM_052873	0.155	-2.37	0.0199	1.00
merck-BC028005_at	GRASPOS	BC028005	-0.179	-2.37	0.0199	1.00
merck-AF060696_x_at	FAM102A	AL049365	0.170	-2.37	0.0199	1.00
merck-XM_069912_at	---	AC050482	-0.116	-2.37	0.0199	1.00
merck-BG755321_x_at	HLA-DRB3	NM_002124 NM_022555 XM_00312051	0.414	-2.37	0.0199	1.00
merck2-NM_152547_at	BTNL9	NM_152547	0.243	-2.37	0.0199	1.00
merck-XM_928469_s_at	---	AC006476	-0.162	-2.37	0.0199	1.00
merck-NM_181802_at	UBE2C	NM_007019 NM_181799 NM_181800 N	-0.249	-2.37	0.0199	1.00
merck-NM_032838_s_at	ZNF566	NM_001145345 NM_001145344 NM_03	0.214	-2.37	0.0200	1.00
merck-XM_940379_at	---	---	-0.161	-2.37	0.0200	1.00
merck-NM_001783_at	CD79A	NM_001783 NM_021601	0.380	-2.37	0.0200	1.00
merck-ENST00000330288_a_at	Cxorf69	NM_001163438	0.513	-2.37	0.0200	1.00
merck2-BX647088_at	SRM2	NM_016333	-0.250	-2.37	0.0201	1.00
merck-NM_020091_a_at	KCNJ2	NM_000891	-0.271	-2.37	0.0201	1.00
merck-ENST00000381635_at	---	---	-0.281	-2.36	0.0202	1.00
merck-AI042899_at	---	AL109611	-0.171	-2.36	0.0203	1.00
merck-BG285393_at	UTY	---	-0.143	-2.36	0.0203	1.00
merck-NM_007125_at	KUA09947	NM_007125	-1.09	-2.36	0.0203	1.00
merck-ENST00000296564_at	CASK	NM_015232	0.152	-2.36	0.0203	1.00
merck2-AF262405_at	FLJ46906	NM_003688 NM_001126054 NM_00112	0.235	-2.36	0.0204	1.00
merck-BC071813_s_at	WDR52	NM_001164496 NM_018338	0.219	-2.36	0.0204	1.00
merck-BT019764_at	LDHB	NM_002300 NM_001174097	0.145	-2.36	0.0204	1.00
merck-NM_014265_at	ADAM28	NM_014265	0.383	-2.36	0.0204	1.00
merck2-DB444113_at	ADAMTS2L	NM_014694 NM_001145320	-0.187	-2.36	0.0205	1.00
merck-NM_012415_at	RAD54B	NM_012415	-0.151	-2.36	0.0205	1.00
merck2-AB209968_at	CDC42BPA	NM_014826 NM_003607	-0.137	-2.36	0.0205	1.00
merck2-V2V_OKA_ORF8_at	---	NC_001348	-0.113	-2.36	0.0205	1.00
merck2-AL515981_at	NCLN	NM_020170	-0.200	-2.36	0.0205	1.00
merck-HCT13097_2_at	---	NG_010976	-0.138	-2.36	0.0206	1.00
merck2-BX212120_at	USP51	NM_201286	0.180	-2.36	0.0206	1.00
merck-NM_0000294525_at	PNPLA1	NM_173676 NM_001145716 NM_00114	-0.186	-2.36	0.0206	1.00
merck-NM_205949_s_at	FAM9B	NM_205849	0.384	-2.36	0.0206	1.00
merck-NM_050917_at	GPR62	NM_080817	0.216	-2.35	0.0206	1.00
merck2-R50740_at	---	---	0.109	-2.35	0.0207	1.00
merck-NM_012307_at	EPB41L3	---	-0.168	-2.35	0.0207	1.00
merck-NM_173695_at	Cxorf59	NM_173695	0.341	-2.35	0.0207	1.00
merck-NM_022351_at	NECAB1	NM_022351	-0.188	-2.35	0.0207	1.00
merck-DR001278_at	---	---	-0.391	-2.35	0.0207	1.00
merck-NM_004504_at	AGFG1	NM_001135187 NM_004504 NM_00113	-0.182	-2.35	0.0207	1.00
merck2-CB529222_at	---	---	0.111	-2.35	0.0207	1.00
merck-BX104821_at	---	CR603455	0.256	-2.35	0.0207	1.00
merck-NM_001040075_at	---	---	-0.125	-2.35	0.0207	1.00
merck-XM_371765_x_at	SLC36A1	---	0.325	-2.35	0.0207	1.00
merck2-NM_182272_at	TTC3	---	0.368	-2.35	0.0208	1.00
merck-NM_182274_at	PPAPDC1B	---	-0.199	-2.35	0.0208	1.00
merck2-AK058103_at	ADRBK2	NM_005160	0.242	-2.35	0.0209	1.00
merck-NM_032317_at	DNAJC30	NM_032317	0.240	-2.35	0.0209	1.00
merck2-AA262548_at	PAWR	NM_002583	-0.115	-2.35	0.0209	1.00
merck-NM_012113_at	CA14	NM_012113	-0.248	-2.35	0.0210	1.00
merck-NM_074683_at	SLC36A1	NM_078483	0.120	-2.35	0.0210	1.00
merck2-BM919836_at	TTC3	NM_003316 NM_001001894	0.088	-2.35	0.0210	1.00
merck-XM_371767_x_at	---	---	-0.213	-2.35	0.0210	1.00
merck2-CN343947_at	FKBP9 FKBP9L	NM_007270 NR_027339 NR_027340 N	-0.262	-2.35	0.0211	1.00
merck-NM_024330_at	FAM122B	NM_145284 NM_001166599 NM_00116	0.262	-2.35	0.0211	1.00
merck2-NM_138389_at	LEF1	NM_016269 NM_001130713 NM_00113	-0.158	-2.35	0.0211	1.00
merck-XM_065755_at	---	---	-0.117	-2.35	0.0211	1.00
merck2-CN343947_at	ZNF711	NM_021998	0.284	-2.35	0.0211	1.00
merck-NM_024330_at	SLC27A3	NM_024330	-0.213	-2.35	0.0211	1.00
merck2-NM_138389_at	FAM114A1	NM_138389 NR_03290	-0.141	-2.35	0.0211	1.00
merck-NM_173463_at	CDCD149	AL834257	-0.162	-2.35	0.0212	1.00
merck-NM_004397_at	DDX6	NM_004397	-0.191	-2.34	0.0212	1.00
merck2-D0892007_s_at	---	---	0.314	-2.34	0.0212	1.00
merck-NM_012108_at	STAP1	NM_012108	0.375	-2.34	0.0212	1.00
merck-DA736753_a_at	PRRC2C	NM_015172	-0.260	-2.34	0.0213	1.00
merck-XM_928495_at	TRIM67	CR610555	-0.101	-2.34	0.0213	1.00
merck-NM_00104342_at	---	NM_001004342	0.156	-2.34	0.0213	1.00
merck-R07431_s_at	---	---	-0.231	-2.34	0.0214	1.00
merck2-CF121504_a_at	C9orf86	NM_024748 NM_001173988 NM_00117	-0.186	-2.34	0.0214	1.00
merck-AK024080_a_at	TCP2A	NM_001067	-0.251	-2.34	0.0214	1.00
merck-NM_003813_at	ADAM21	NM_003813	0.240	-2.34	0.0214	1.00

merck-NCT1970811_at	---	AC114284	-0.122	-2.34	0.0214	1.00
merck-NM_005659_at	PURA	NM_005659	0.178	-2.34	0.0214	1.00
merck-BC035518_s_at	---	AL049423	0.117	-2.34	0.0214	1.00
merck2-AK056270_s_at	ST8SIA5	NM_013305	-0.146	-2.34	0.0214	1.00
merck-NM_033101_s_at	LGALS12	NM_001142535 NM_033101 NM_00114	-0.303	-2.34	0.0215	1.00
merck2-H12280_at	---	NG_005638	0.208	-2.34	0.0215	1.00
merck2-AA776845_at	---	---	-0.144	-2.34	0.0215	1.00
merck-NM_016139_x_at	CHCHD2	NM_016139	-0.102	-2.34	0.0215	1.00
merck-NM_012225_at	NUBP2	NM_012225	-0.167	-2.34	0.0216	1.00
merck-U23849_s_at	APP	NM_000484 NM_001204303 NM_20141	-0.157	-2.34	0.0216	1.00
merck-AK094945_at	LOC285500	AK094945	0.146	-2.34	0.0216	1.00
merck2-DT217746_at	ASRGL1	NM_001083926 NM_025080	-0.233	-2.34	0.0216	1.00
merck-NM_000950_at	PRRG1	NM_000950 NM_001142395 NM_00117	0.326	-2.34	0.0216	1.00
merck2-ENST00000390537_s_at	---	---	0.145	-2.34	0.0216	1.00
merck2-U72763_at	TNFRSF25	NM_148965 NM_003790 NM_148966 N	0.176	-2.34	0.0217	1.00
merck2-ENST00000379900_x_at	---	---	0.395	-2.34	0.0217	1.00
merck-NM_027412_at	H2AFY	NM_012412 NM_201436 NM_201516 N	-0.123	-2.34	0.0217	1.00
merck-NM_027431_at	PRKACB	NM_182948 NM_002731	0.201	-2.34	0.0217	1.00
merck-BU175235_at	PTGES3	NM_008601	0.0202	-2.34	0.0217	1.00
merck2-AA514236_at	---	CR616023	0.159	-2.34	0.0217	1.00
merck2-BG115561_at	ST8GALNAC4	NM_175039	-0.141	-2.33	0.0217	1.00
merck-ENST00000377163_at	MTR	AF399496	-0.128	-2.33	0.0217	1.00
merck2-NM_000254_a_at	ZFY	NM_000254	0.130	-2.33	0.0218	1.00
merck-AL137603_at	HEATRB1	NM_003411 NM_001145275 NM_00114	-0.678	-2.33	0.0218	1.00
merck-ENST00000327506_at	GFER	XM_001721240 XM_291007 XM_39370	0.124	-2.33	0.0218	1.00
merck-NM_005626_at	TBC1D16	NM_005626	-0.167	-2.33	0.0218	1.00
merck-NM_019020_s_at	YVHQA	NM_019020	-0.140	-2.33	0.0219	1.00
merck2-BG925373_x_at	STK11P	NM_006826	0.157	-2.33	0.0219	1.00
merck-NM_052902_at	CLPS	NM_052902	-0.217	-2.33	0.0219	1.00
merck-NM_001832_at	LOC399715	NM_001832	-0.114	-2.33	0.0219	1.00
merck-AK128185_at	SH3BGR	AK128185	-0.194	-2.33	0.0220	1.00
merck2-ENST00000380631_a_at	ZFX	NM_007341 NM_001001713	0.173	-2.33	0.0220	1.00
merck-X59739_at	ADD3	NM_003410 NM_001178084 NM_00117	0.249	-2.33	0.0220	1.00
merck-NM_019903_at	LOC100505759	NM_016824 NM_019903 NM_001121	0.218	-2.33	0.0221	1.00
merck2-AK123210_at	TROVE2	XR_110332_XR_111324_XR_114603	0.207	-2.33	0.0221	1.00
merck2-NM_198480_at	ZNF615	NM_001199324 NM_198480	0.166	-2.33	0.0222	1.00
merck-AK128185_at	---	NG_021571	-0.153	-2.33	0.0222	1.00
merck2-ENST00000380631_a_at	---	---	0.230	-2.33	0.0222	1.00
merck-X59739_at	---	---	-0.230	-2.32	0.0223	1.00
merck-AL082802_at	---	AL082802	-0.230	-2.32	0.0223	1.00
merck-AK02479_at	---	AK02479	0.216	-2.32	0.0223	1.00
merck-CR608003_s_at	YWHAE	NM_006761 NR_024058	-0.0586	-2.32	0.0223	1.00
merck-NM_002463_at	MX2	NM_002463	-0.171	-2.32	0.0223	1.00
merck-NM_003400_at	XPO1	NM_003400	0.181	-2.32	0.0223	1.00
merck2-NM_001042370_at	TR0VE2	NM_004600 NM_001173524 NM_03339	-0.128	-2.32	0.0223	1.00
merck-ENST000003686578_at	LOC39962	XR_109033_XR_111334_XR_114445	-0.114	-2.32	0.0223	1.00
merck2-AL136587_at	AGPAT5	NM_018361	0.211	-2.32	0.0224	1.00
merck-AK23967_at	---	AK023967	-0.216	-2.32	0.0224	1.00
merck-BX10054_at	---	AC009068	0.206	-2.32	0.0224	1.00
merck2-NM_144702_at	LRRC71	NM_144702	-0.152	-2.32	0.0225	1.00
merck2-BC019655_at	SNX22	NM_024798	0.302	-2.32	0.0225	1.00
merck-BG197227_at	---	NG_0082727	-0.146	-2.32	0.0225	1.00
merck-ENST00000298211_at	---	NG_022167	-0.209	-2.32	0.0225	1.00
merck-NM_032566_at	SPINK7	NM_032566	-0.119	-2.32	0.0225	1.00
merck2-BC019656_at	---	---	-0.186	-2.32	0.0226	1.00
merck2-BX380420_at	---	---	-0.186	-2.32	0.0226	1.00
merck2-BX380429_at	LARGE	NM_004737 NM_133642	0.144	-2.32	0.0226	1.00
merck2-NM_145060_a_at	SKA1	NM_001039535 NM_145060	-0.154	-2.32	0.0227	1.00
merck2-BC053226_at	---	---	-0.0772	-2.32	0.0227	1.00
merck-R02328_a_at	---	---	0.315	-2.32	0.0227	1.00
merck2-NM_001080851_s_at	C19orf12	---	0.214	-2.32	0.0227	1.00
merck2-AL548534_a_at	---	---	0.354	-2.32	0.0227	1.00
merck-AW77700_at	CXCR5	NM_001716 NM_032966	0.338	-2.32	0.0227	1.00
merck-NM_001716_at	---	AL034582	0.221	-2.32	0.0227	1.00
merck2-BG695979_at	IFI27	NM_001130080 NM_005532	-0.780	-2.32	0.0227	1.00
merck-NM_005532_at	CBLL1	NM_024814 NR_024199	0.175	-2.32	0.0227	1.00
merck-CR608275_at	SYT5	NM_003180	-0.131	-2.32	0.0228	1.00
merck-ENST00000339047_at	KIAA0825	NM_001145678	-0.261	-2.32	0.0228	1.00
merck2-DA49737_at	MED29	NM_017592	-0.203	-2.32	0.0228	1.00
merck2-M93449_at	NAAA	NM_014435 NM_001042402	-0.208	-2.32	0.0228	1.00
merck-AK262569_at	---	AP00274	0.200	-2.32	0.0228	1.00
merck-NM_00109925_a_at	C20orf30	NM_00109923 NM_00109924 NM_01	0.124	-2.31	0.0228	1.00
merck2-BC014349_at	---	AC006375	-0.268	-2.31	0.0229	1.00
merck2-BM1104070_at	PHILDA1	NM_006850	0.160	-2.31	0.0229	1.00
merck2-NM_021871_at	FGA	NM_021871	0.130	-2.31	0.0229	1.00
merck2-NM_001004196_at	CD200	NM_005944 NM_001004196	0.417	-2.31	0.0229	1.00
merck-NM_019045_at	WRD44	NM_019045 NM_001184965 NM_00118	0.160	-2.31	0.0229	1.00
merck-NM_019106_at	SEPT3	NM_145733 NM_019106	-0.139	-2.31	0.0230	1.00
merck-AK021556_at	KDM6A	AK021556	0.173	-2.31	0.0230	1.00
merck2-AF00992_a_at	---	NM_021140	0.298	-2.31	0.0230	1.00
merck-XM_032757_at	---	---	-0.143	-2.31	0.0230	1.00
merck-NM_012290_at	TLK1	NM_012290 NM_001136554 NM_00113	0.182	-2.31	0.0230	1.00
merck2-NM_001002275_at	FGFR2B	NM_004001 NM_001002273 NM_00102	0.289	-2.31	0.0230	1.00
merck-NM_012069_at	ATP1B4	NM_001142447 NM_012069	0.339	-2.31	0.0230	1.00
merck-NM_014294_at	TRAM1	NM_014294	0.172	-2.31	0.0231	1.00
merck2-BC0264028_at	TRIB2	NM_021643 NR_027303	0.165	-2.31	0.0231	1.00
merck2-NM_199440_s_at	---	AL049423	0.136	-2.31	0.0231	1.00
merck2-NM_020406_at	RAD51	NM_002875 NM_133487 NM_00116427	-0.162	-2.31	0.0232	1.00
merck-NM_00104070_at	STBD1	NM_003943	-0.190	-2.31	0.0232	1.00
merck2-BC014349_at	---	---	-0.103	-2.31	0.0232	1.00
merck2-BX380429_at	---	---	0.346	-2.31	0.0232	1.00
merck2-AF019612_at	ITGA9	BX647350	-0.265	-2.31	0.0232	1.00
merck2-AB008551_at	PAR4	NR_022010	-0.150	-2.31	0.0233	1.00
merck2-BC0264028_at	MED14	AF304448	0.189	-2.31	0.0233	1.00
merck2-NM_199440_s_at	---	---	-0.132	-2.31	0.0233	1.00
merck2-NM_020406_at	HSPD1	NM_002156 NM_199440	0.104	-2.31	0.0233	1.00
merck-NM_174937_at	CD177	NM_020406	-0.367	-2.31	0.0233	1.00
merck2-AW77700_at	TCERG1L	AL359390	-0.117	-2.31	0.0233	1.00
merck2-BC014349_at	---	---	0.196	-2.31	0.0234	1.00
merck2-BX380429_at	ZC3H13	NM_015070	-0.164	-2.31	0.0234	1.00
merck-NM_174939_s_at	LINC00301	NR_026946	-0.140	-2.30	0.0234	1.00
merck-NM_018075_s_at	ANO10	NM_018075	-0.168	-2.30	0.0234	1.00
merck2-DB293988_s_at	BAZ2A	NM_013449	-0.292	-2.30	0.0235	1.00
merck-NM_138799_at	MBOAT2	NM_138799	-0.190	-2.30	0.0235	1.00
merck-NM_139266_at	STAT1	NM_139266	-0.246	-2.30	0.0235	1.00
merck-AK127063_at	---	NM_145166	-0.222	-2.30	0.0235	1.00
merck2-BC0089428_at	ZBTB47	NM_001029884	0.190	-2.30	0.0236	1.00
merck-NM_080753_at	PLEKHG1	NM_0080753	0.170	-2.30	0.0236	1.00
merck-NM_0020726_at	WIFDC10A	NM_020726	-0.198	-2.30	0.0236	1.00
merck2-HSPD1_HSPD1_U150_at	NLN	---	-0.120	-2.30	0.0236	1.00
merck2-BC0184936_at	---	---	0.114	-2.30	0.0239	1.00
merck-NM_000487_at	PPP8C	---	-0.227	-2.30	0.0239	1.00
merck2-NM_172236_at	ARSA	---	0.124	-2.30	0.0239	1.00
merck-NM_001005182_at	POFUT1	NM_172236	-0.127	-2.29	0.0239	1.00
merck2-BG680395_at	OR6C1	NM_001005182	-0.127	-2.29	0.0239	1.00
merck-NM_0210447_s_at	---	---	0.114	-2.29	0.0239	1.00
merck-NM_174936_s_at	ZNF253	NM_0210447	0.246	-2.29	0.0239	1.00
merck-NM_174936_s_at	KUA2013	NM_174936	-0.137	-2.29	0.0239	1.00
merck-AL08200_at	C8orf71	NM_026772	-0.150	-2.29	0.0240	1.00
merck2-BC041844_at	RTTN1	BC041844	-0.196	-2.29	0.0240	1.00
merck2-BM2769668_at	---	---	0.225	-2.29	0.0240	1.00
merck-NM_003495_at	HIST1H4I	NM_003495	-0.135	-2.29	0.0240	1.00
merck-CR613437_at	---	CR613437	0.225	-2.29	0.0240	1.00
merck-BC037904_at	MGC42157	BC037904	-0.118	-2.29	0.0240	1.00
merck-AK098298_at	---	XR_104969	0.184	-2.29	0.0241	1.00
merck-NM_174935_at	SERINC2	XR_104969 NM_111770 XR_115168	-0.188	-2.29	0.0241	1.00
merck-ENST00000341231_at	---	NM_178865 NM_018565 NM_00119903	-0.173	-2.29	0.0242	1.00
merck-NM_153234_at	---	---	0.253	-2.29	0.0242	1.00
merck-NM_001346_at	LXK1	NM_153234	-0.233	-2.29	0.0242	1.00
merck2-BX647250_at	DQKG	NM_001346 NM_001080744 NM_001010	-0.180	-2.29	0.0242	1.00
merck2-BA22B_at	BA22B	BX647250	-0.160	-2.29	0.0242	1.00
merck2-BI461234_s_at	ALPL2	NM_001642 NM_001142276 NM_00114	-0.270	-2.29	0.0242	1.00

merck-NM_015441_at	OLFML2B	NM_015441	-0.161	-2.29	0.0242	1.00
merck-NM_174907_a_at	PPP4R2	NM_174907	-0.170	-2.29	0.0243	1.00
merck-NM_001080538_x_at	AKR1B15	NM_001080538	-0.138	-2.29	0.0243	1.00
merck-AK027161_at		AK027161	0.162	-2.29	0.0243	1.00
merck-BG01705_at	ZNF519	NM_145287	0.213	-2.29	0.0243	1.00
merck-BG051743_a_at	ZFP91_ZFP91-CNTF	NM_053023 NM_001197051_NR_02409	-0.196	-2.29	0.0243	1.00
merck-AA399109_at		NG_013090	0.241	-2.29	0.0243	1.00
merck-DB327110_at		AL121957	-0.081	-2.29	0.0243	1.00
merck2-HSV1_ORF_UL22_at		--	-0.120	-2.29	0.0243	1.00
merck-BC042959_at		XR_109831 XR_112669 XR_113670 XR	-0.122	-2.29	0.0244	1.00
merck2-AK092450_s_at	OR862	NM_001007249	-0.0947	-2.29	0.0244	1.00
merck2-AL080179_at	FAM75C1 FAM75C2	NM_001145124 NM_001166137	-0.253	-2.29	0.0244	1.00
merck-BG482636_at		--	-0.0965	-2.29	0.0244	1.00
merck-NM_023034_at	WHSC1L1	NM_023034	-0.111	-2.29	0.0244	1.00
merck2-BC009851_at	IGHM	BC009851	0.356	-2.29	0.0244	1.00
merck-ACT1937_at	INSIG1	NM_005542 NM_198336 NM_198337	0.146	-2.29	0.0245	1.00
merck2-CT1224080_at		AC211782	-0.125	-2.29	0.0245	1.00
merck-NM_198576_s_at	AGRN	NM_198576	-0.277	-2.29	0.0245	1.00
merck2-D423201_at		--	0.236	-2.29	0.0245	1.00
merck-AK024684_at		AK024684	0.180	-2.29	0.0245	1.00
merck-EK094450_s_at	LOC283143	NR_034148	-0.133	-2.29	0.0245	1.00
merck2-ENST00000331944_s_at		--	-0.165	-2.29	0.0246	1.00
merck-BM086633_at		--	-0.104	-2.28	0.0247	1.00
merck-NM_022368_at	PJA1	NM_145119 NM_001032396 NM_02236	0.154	-2.28	0.0247	1.00
merck2-DG535269_x_at		DQ535269	-0.162	-2.28	0.0247	1.00
merck-CB110906_x_at	MT2A	NM_005953	-0.263	-2.28	0.0247	1.00
merck2-BE144260_at		AY644470	-0.131	-2.28	0.0247	1.00
merck-NM_002417_at	MK167	NM_002417 NM_001145966	-0.197	-2.28	0.0247	1.00
merck-NM_015569_s_at	SAMD4A	NM_015589 NM_001161576 NM_00116	-0.209	-2.28	0.0248	1.00
merck-NM_00106121_s_at	RBMY1A1 RBMY1B RBMY1D RBMY1E	NM_005058 NM_001006121 NM_0010	-0.129	-2.28	0.0248	1.00
merck2-AA203536_at	CNB	NM_018941	0.128	-2.28	0.0248	1.00
merck-NM_003559_a_at	PIP4K2B	NM_003559	-0.161	-2.28	0.0248	1.00
merck2-D0893675_x_at	RIN1	NM_004292	-0.190	-2.28	0.0248	1.00
merck-NM_022375_at	OCLM	NM_022375 NM_001199906	-0.182	-2.28	0.0248	1.00
merck-NM_02308953_s_at	ABC511	NM_003742	0.133	-2.28	0.0249	1.00
merck2-AK023393_x_at	BUD15	NM_003743	0.230	-2.28	0.0249	1.00
merck-AK227787_at		NM_003744	0.200	-2.28	0.0249	1.00
merck-BM086634_at	ATP11C	NM_173994 NM_001010986	0.200	-2.28	0.0249	1.00
merck-BC111030_x_at	SPIRE2	NM_032451	-0.178	-2.28	0.0249	1.00
merck2-NM_198964_a_at	PTHLH	NM_002820 NM_198964	0.154	-2.28	0.0249	1.00
merck-NM_006939_at	SOS2	NM_006939	-0.174	-2.28	0.0249	1.00
merck2-AK126360_at		AK126360	0.194	-2.28	0.0250	1.00
merck-NM_016561_at	TMT5F3	NM_016551	-0.127	-2.28	0.0250	1.00
merck-Av690960_at		--	-0.120	-2.28	0.0250	1.00
merck-AK027787_at	SLC25A32	NM_037890	0.180	-2.28	0.0250	1.00
merck-BM086635_at		--	-0.132	-2.28	0.0251	1.00
merck-BX11278_at		AL441885	-0.127	-2.28	0.0251	1.00
merck2-AI377384_at		--	-0.108	-2.28	0.0251	1.00
merck2-ENST00000355476_at	RBPJ	NM_005349 NM_015874 NM_202383 N	-0.0934	-2.28	0.0251	1.00
merck-NM_016446_a_at	TMEM8B	NM_01042590 NM_001042589 NM_01'	-0.188	-2.28	0.0251	1.00
merck-NM_000880_at	IL7	NM_000880 NM_00119986 NM_00119	0.180	-2.28	0.0251	1.00
merck2-NM_001036645_x_at	HHLA3	NM_001036645	0.112	-2.28	0.0251	1.00
merck-NM_139214_s_at	TGIF2LX TGIF2LY	NM_138960 NM_139214	-0.0922	-2.28	0.0252	1.00
merck-BM086636_at		BOU39907	0.147	-2.28	0.0252	1.00
merck-BM086637_at		AK091012	0.234	-2.28	0.0252	1.00
merck-NM_023940_at	RASL11B	NM_023940	0.210	-2.27	0.0253	1.00
merck-AK056037_at	LOC100272217	NM_027440	-0.161	-2.27	0.0254	1.00
merck-XM_029289_at		AC149868	-0.136	-2.27	0.0254	1.00
merck2-BF667260_at	MTRR	NM_002454 NM_024010	0.219	-2.27	0.0254	1.00
merck-NM_002015_at	FOX1	NM_002015	0.142	-2.27	0.0254	1.00
merck2-CB999623_at	MLLT3	NM_004529	0.175	-2.27	0.0254	1.00
merck-BX647248_at	TKT	NM_001135055	-0.281	-2.27	0.0255	1.00
merck-BG064148_x_at	FAM95B1	NR_026759	-0.163	-2.27	0.0255	1.00
merck2-NM_194441_at	BTNSA1	NM_007048 NM_194441 NM_0011450C	-0.223	-2.27	0.0255	1.00
merck-NM_001037125_at	UNKL	NM_001037125	-0.185	-2.27	0.0256	1.00
merck-NM_001039876_at	C19orf46	NM_001039876	-0.153	-2.27	0.0256	1.00
merck-XM_029880_s_at	TLK2	NM_006852 NM_00112707 XR_11074:	-0.202	-2.27	0.0257	1.00
merck-NM_153446_at	B4GALT2	NM_153446 NM_001159387 NM_00115	-0.154	-2.27	0.0257	1.00
merck-AZ03478_at		--	-0.121	-2.27	0.0257	1.00
merck-NM_005101_at	ISG15	NM_005101	-0.426	-2.27	0.0258	1.00
merck-BM086638_at	CD163	NM_004246 NM_203416	-0.193	-2.27	0.0258	1.00
merck-NM_134701_at	ZNF18	NM_003740	0.183	-2.27	0.0258	1.00
merck-AK026263_at	SUCO38A1	NM_03074 NM_001077484	0.232	-2.27	0.0259	1.00
merck2-BU070752_x_at	OCO1D1	NM_01130059 NM_006856 NM_00113	0.125	-2.26	0.0259	1.00
merck-BG032432_x_at	ATF7	NM_01130059 NM_00112707 XR_11074:	-0.177	-2.26	0.0259	1.00
merck-NM_015093_at	TAB2	NM_015093	0.168	-2.26	0.0259	1.00
merck-R12375_x_at		AC016654	0.161	-2.26	0.0259	1.00
merck-NM_002655_at	PVR1L	NM_002855	-0.181	-2.26	0.0259	1.00
merck2-CK823615_a_at	FBLX16	NM_153350	0.171	-2.26	0.0260	1.00
merck2-ENST00000375401_at	KDM5C	NM_004187 NM_001146702	0.254	-2.26	0.0261	1.00
merck2-BC028370_at		--	-0.288	-2.26	0.0261	1.00
merck-NM_199171_at	PMEPA1	NM_020182 NM_199169 NM_199170 N	0.256	-2.26	0.0261	1.00
merck-NM_007052_at	NOX1	NM_007052 NM_013955	0.226	-2.26	0.0261	1.00
merck-BG119906_s_at	EIP2S3	NM_001415	0.105	-2.26	0.0261	1.00
merck-BQ575676_at		NG_005422	-0.164	-2.26	0.0261	1.00
merck-NM_153183_at	NUDT10	NM_153183	0.201	-2.26	0.0262	1.00
merck2-NM_001076675_at	ZNF626	NM_001076675	0.201	-2.26	0.0262	1.00
merck-AK128649_at	IGHM	NM_009461	0.391	-2.26	0.0262	1.00
merck2-BG027744_x_at	ABLM1	NM_002313 NM_001003407 NM_0010	0.161	-2.26	0.0263	1.00
merck-AK026262_x_at	CALML4	NM_033429 NM_001031733	-0.203	-2.26	0.0263	1.00
merck-AU13431_x_at		--	-0.116	-2.26	0.0263	1.00
merck-BM151304_x_at		--	-0.157	-2.26	0.0264	1.00
merck2-NM_181335_s_at		--	-0.191	-2.26	0.0264	1.00
merck-XM_377529_at		NG_021764	-0.110	-2.26	0.0264	1.00
merck-NM_001007526_s_at		--	-0.101	-2.26	0.0265	1.00
merck2-AK057887_at		AK057887	0.161	-2.25	0.0266	1.00
merck-BM086637_at		--	0.147	-2.25	0.0266	1.00
merck-NM_000983_at	RPL22	NM_000983	-0.117	-2.25	0.0266	1.00
merck-AK037136_at		--	-0.0933	-2.25	0.0266	1.00
merck-AK093292_at	LOC283501	AK093292	-0.130	-2.25	0.0266	1.00
merck-NM_139179_at	DAGLB	NM_139179 NM_001142936	-0.242	-2.25	0.0266	1.00
merck-BG035064_at		BC035064	-0.123	-2.25	0.0266	1.00
merck-NM_031297_s_at	RNF208	NM_031297	-0.144	-2.25	0.0266	1.00
merck2-D0890613_a_at	CH11	NM_001892 NM_001205201	0.202	-2.25	0.0266	1.00
merck-NM_004672_at	NKPAP1	NM_027131	0.140	-2.25	0.0267	1.00
merck-NM_003538_at	MAP3K6	NM_004672	-0.182	-2.25	0.0267	1.00
merck-BM086636_at	HIST1H4A	NM_003538	-0.157	-2.25	0.0267	1.00
merck-NM_01837893_at		--	-0.163	-2.25	0.0267	1.00
merck-NM_00100732_x_at		AL139120	-0.152	-2.25	0.0267	1.00
merck-BG030636_at		NM_001159747 NM_001001732	-0.136	-2.25	0.0268	1.00
merck-D0322012_x_at		BC030635	0.405	-2.25	0.0268	1.00
merck2-AK050202_at		--	0.120	-2.25	0.0269	1.00
merck2-CF131182_s_at	NAP1L1	NM_139207 NM_004537	0.112	-2.25	0.0269	1.00
merck-ENST00000327581_a_at		--	0.151	-2.25	0.0269	1.00
merck-NM_003202_at	NT5DC4	BC041437	-0.181	-2.25	0.0270	1.00
merck-NM_005480_at	TCF7	NM_003202 NM_201632 NM_00113485	0.161	-2.25	0.0270	1.00
merck-BC110370_at	TR0AP	NM_005480	-0.152	-2.25	0.0271	1.00
merck-CR595881_at	ABCBS5	NM_001163993	-0.0966	-2.25	0.0271	1.00
merck-AF116672_at		CR08336	-0.136	-2.25	0.0271	1.00
merck-BC020734_a_at	C8orf39	NM_027259	-0.140	-2.25	0.0271	1.00
merck2-AY356900_at	HPGDS	NM_014485	-0.194	-2.25	0.0271	1.00
merck-NM_006595_at	COCH	NM_001135058 NM_004086	0.327	-2.24	0.0272	1.00
merck-NM_006595_at	API5	NM_001142930 NM_006595 NM_00114	0.137	-2.24	0.0272	1.00
merck2-AY345857_x_at	WWP1	NM_007013	0.120	-2.24	0.0272	1.00
merck-XM_497480_at	ZNF667	NM_022103 NR_030740	0.119	-2.24	0.0272	1.00
merck2-AJ270695_at		--	0.158	-2.24	0.0272	1.00
merck2-AJ270695_at	BHLHE41	NM_030762	0.240	-2.24	0.0273	1.00
merck-U43677_at	FOAR	NM_002000 NM_133269 NM_133271 N	-0.205	-2.24	0.0273	1.00

merck2-NM_001042780_a_at	TNNNT3	NM_006757 NM_001042781 NM_00104	-0.180	-2.24	0.0273	1.00
merck2-AP370633_x_at	<b>NDP</b>	NM_000286	-0.111	-2.24	0.0273	1.00
merck2-NM_000286_a_at	<b>RSPH3</b>	NM_031924	0.268	-2.24	0.0275	1.00
merck2-AK057931_at	<b>LOC390760</b>	XN_001715760 XM_001717472 XM_00	-0.230	-2.24	0.0275	1.00
merck2-XM_938074_at	<b>TPM1</b>	NM_001018008	0.170	-2.24	0.0275	1.00
merck2-NM_001018008_at	---	---	-0.173	-2.24	0.0275	1.00
merck2-AK097071_Ls_at	<b>ENPP5</b>	NM_00334	0.334	-2.24	0.0275	1.00
merck2-NM_021572_a_at	<b>LOC100288675</b>	NM_021572	0.187	-2.24	0.0276	1.00
merck2-AF093744_at	<b>SMURF2</b>	AF093744	0.226	-2.24	0.0277	1.00
merck2-NM_022739_at	<b>GCM1</b>	NM_022739	0.170	-2.24	0.0277	1.00
merck2-CB242128_s_at	<b>OK3/SW-CL_36</b>	AC006287	0.146	-2.24	0.0277	1.00
merck2-NM_003643_at	<b>SKA1</b>	NM_003643	-0.252	-2.24	0.0277	1.00
merck2-ENST00000328798_at	<b>BAZ2B</b>	AB064670	-0.204	-2.24	0.0277	1.00
merck2-NM_001039535_at	---	NM_001039535 NM_145060	-0.185	-2.24	0.0277	1.00
merck2-BQ023373_at	<b>---</b>	NM_013450	-0.159	-2.24	0.0277	1.00
merck2-BQ052168_at	<b>---</b>	AL110203	0.172	-2.24	0.0277	1.00
merck2-BX48789_x_at	<b>---</b>	---	-0.131	-2.24	0.0277	1.00
merck2-AF093824_a_at	<b>---</b>	---	-0.123	-2.24	0.0278	1.00
merck2-NM_0050595_at	<b>SCD</b>	NM_005063	-0.167	-2.24	0.0278	1.00
merck2-ENST0000037990_X_at	<b>MTRN1A</b>	NM_005069	0.154	-2.24	0.0278	1.00
merck2-ENST0000037990_X_at	<b>CTAGE4 CTAGE9 CTAGE15P CTAGED</b>	XM_03120441	0.137	-2.24	0.0278	1.00
merck2-ENST00000344523_at	<b>CYP2E1</b>	AL354979	-0.212	-2.24	0.0278	1.00
merck2-NM_000773_at	<b>SYN2</b>	NM_000773	0.193	-2.23	0.0278	1.00
merck2-NM_133625_at	<b>KIAA0125</b>	NM_133625	-0.199	-2.23	0.0279	1.00
merck2-NM_014792_at	---	NR_026800	0.386	-2.23	0.0279	1.00
merck2-BE748225_at	---	---	0.147	-2.23	0.0279	1.00
merck2-CX752796_at	<b>LOC253842</b>	BC027988	-0.196	-2.23	0.0279	1.00
merck2-NM_198486_at	<b>RPLT1</b>	NM_198486	-0.181	-2.23	0.0280	1.00
merck2-NM_054108_s_at	<b>HRASL5</b>	NM_054108 NM_001146729 NM_00114	-0.134	-2.23	0.0280	1.00
merck2-NC_001357_ORF_1184_at	---	---	-0.120	-2.23	0.0280	1.00
merck2-A762342_at	<b>CASQ1</b>	AL953670	0.297	-2.23	0.0280	1.00
merck2-NM_001231_at	---	NM_001231	-0.139	-2.23	0.0280	1.00
merck2-NM_010404355_a_at	<b>XR_109778</b>	XR_113319 XR_115608	0.226	-2.23	0.0281	1.00
merck2-CR613436_s_at	<b>CR613436</b>	CR613436	0.410	-2.23	0.0281	1.00
merck2-BX648739_at	<b>BX648739</b>	BX648739	-0.112	-2.23	0.0281	1.00
merck2-BX648838_at	<b>U6QLN1</b>	NM_015138 NM_053067	0.151	-2.23	0.0281	1.00
merck2-BX648838_at	<b>CATSPERB</b>	NM_024764	0.233	-2.23	0.0281	1.00
merck2-ENST000002496668_at	---	UB49938	-0.152	-2.23	0.0281	1.00
merck2-NM_012470_a_at	<b>TNP03</b>	---	-0.172	-2.23	0.0281	1.00
merck2-NM_015296_at	<b>DOCK9</b>	NM_015296 NM_001130048	-0.161	-2.23	0.0281	1.00
merck2-HCT2454774_at	---	AC138657	0.263	-2.23	0.0281	1.00
merck2-AF054589_at	<b>MDFIC</b>	NM_001166345 NM_199072	0.137	-2.23	0.0282	1.00
merck2-BX104084_x_at	---	AC018688	0.263	-2.23	0.0282	1.00
merck2-AOY78405_s_at	<b>ABCC6 ABCC6P2</b>	NM_01079528 NR_023387	-0.0665	-2.23	0.0282	1.00
merck2-NM_012286_at	<b>MORF4L2</b>	NM_01142418 NM_001142426 NM_00	-0.222	-2.23	0.0282	1.00
merck2-AL117392_at	<b>CGGBP1</b>	NM_001008390 NM_003663 NM_00115	0.132	-2.23	0.0283	1.00
merck2-NM_207644_s_at	<b>C22orf36</b>	NM_207644	0.189	-2.23	0.0283	1.00
merck2-NM_030775_at	<b>WTNSB</b>	NM_032642 NM_030775	-0.169	-2.23	0.0284	1.00
merck2-ENST00000274705_at	<b>PDCD18</b>	NM_001261	0.226	-2.23	0.0284	1.00
merck2-BI829805_at	<b>---</b>	AL512410	0.183	-2.23	0.0284	1.00
merck2-NM_0068560_s_at	<b>IL24</b>	NM_0068560 NM_001185156 NM_00118	0.110	-2.23	0.0284	1.00
merck2-OB123303_s_at	<b>PLERHB1</b>	NM_0068560 NM_001185156 NM_00118	0.197	-2.23	0.0284	1.00
merck2-NM_029204_s_at	<b>EPSL1</b>	NM_021200 NM_001130034 NM_00113	0.233	-2.23	0.0284	1.00
merck2-NM_058174_s_at	<b>COLA2</b>	NM_133180 NM_017729	-0.177	-2.23	0.0284	1.00
merck2-BC201854_at	<b>SCCPDH</b>	NM_058175 NM_058174	-0.120	-2.23	0.0285	1.00
merck2-XM_929741_at	---	NM_016002	-0.192	-2.23	0.0285	1.00
merck2-AI924182_at	---	---	-0.124	-2.23	0.0285	1.00
merck2-NM_003141_at	<b>TRIM21</b>	---	-0.122	-2.23	0.0285	1.00
merck2-AY358811_at	<b>FGF18</b>	NM_003141	-0.163	-2.22	0.0286	1.00
merck2-NM_003011_at	<b>SET</b>	NM_003862	-0.148	-2.22	0.0286	1.00
merck2-AY099107_at	<b>SPICE1</b>	NM_001122821 NM_003011	0.0985	-2.22	0.0287	1.00
merck2-BX640705_at	<b>ZNF44</b>	NM_144718	0.133	-2.22	0.0287	1.00
merck2-AA032155_at	<b>LOC158572</b>	BX640705	0.174	-2.22	0.0287	1.00
merck2-BC062720_at	<b>HEATR5A</b>	NR_026742	0.182	-2.22	0.0287	1.00
merck2-CD703280_at	---	BC062720	-0.270	-2.22	0.0289	1.00
merck2-BG740130_at	---	---	0.435	-2.22	0.0289	1.00
merck2-AV692789_at	---	---	0.122	-2.22	0.0289	1.00
merck2-BM68558_at	<b>SART1</b>	AC096642	0.266	-2.22	0.0289	1.00
merck2-AF25530_at	<b>AHLIP5</b>	NM_005146	-0.150	-2.22	0.0289	1.00
merck2-BX103484_at	<b>TXLNG2P</b>	NM_006407	0.114	-2.22	0.0289	1.00
merck2-H175308_at	<b>CLEC2D</b>	NM_021200 NM_001130034 NM_00113	-0.512	-2.22	0.0289	1.00
merck2-ENST00000202098_x_at	<b>FCER1G</b>	NM_013269 NM_001004419 NM_00115	0.319	-2.22	0.0290	1.00
merck2-NM_0014108_at	<b>TIRAP</b>	NM_183372 NM_001101663 XM_00311	0.109	-2.22	0.0290	1.00
merck2-J267964_at	<b>MECOM</b>	NM_004106	0.0930	-2.22	0.0291	1.00
merck2-BC064047_s_at	<b>BTLA</b>	AJ207964	-0.205	-2.22	0.0291	1.00
merck2-NM_022462_at	<b>TBC1D9</b>	NM_031453	0.0994	-2.22	0.0291	1.00
merck2-NM_198881_at	<b>SLC16A10</b>	NM_015130	-0.409	-2.22	0.0292	1.00
merck2-BX103484_at	<b>---</b>	NM_018981	0.360	-2.22	0.0292	1.00
merck2-CD709967_x_at	<b>HSPA8</b>	---	-0.144	-2.21	0.0292	1.00
merck2-NM_001039661_s_at	<b>TIRAP</b>	NM_006596	0.168	-2.21	0.0292	1.00
merck2-NM_005241_at	<b>MECOM</b>	NM_001039661	-0.165	-2.21	0.0292	1.00
merck2-AJ717664_at	<b>BTLA</b>	NM_001105077 NM_005241 NM_00110	0.192	-2.21	0.0292	1.00
merck2-NM_015130_s_at	<b>TBC1D9</b>	NM_181780 NM_001085357	0.215	-2.21	0.0292	1.00
merck2-NM_018593_at	<b>SLC16A10</b>	NM_015130	0.215	-2.21	0.0293	1.00
merck2-XM_067021_at	<b>---</b>	NM_018593	0.266	-2.21	0.0293	1.00
merck2-CR611332_s_at	<b>PURA</b>	---	-0.124	-2.21	0.0293	1.00
merck2-BX647997_s_at	<b>MTMR2</b>	NM_005859	0.236	-2.21	0.0293	1.00
merck2-NM_002935_at	<b>RNASE3</b>	NM_016156 NM_201278 NM_201281 N	0.137	-2.21	0.0294	1.00
merck2-CR885745_s_at	<b>AGPAT4</b>	NM_020133	-0.491	-2.21	0.0294	1.00
merck2-DR0005753_at	<b>LHDH</b>	NM_023000 NM_001174097	-0.143	-2.21	0.0294	1.00
merck2-CX885474_x_at	<b>CDDC149</b>	NM_173493 NM_001130726	0.157	-2.21	0.0294	1.00
merck2-AK0223472_at	---	AK022171	-0.221	-2.21	0.0294	1.00
merck2-AK022171_at	---	AK022171	-0.163	-2.21	0.0294	1.00
merck2-BF374857_x_at	<b>---</b>	NG_021754	-0.134	-2.21	0.0295	1.00
merck2-BM310611_at	---	---	-0.107	-2.21	0.0295	1.00
merck2-AV243584_at	<b>AC005570</b>	AC005570	-0.163	-2.21	0.0296	1.00
merck2-NM_005094_s_at	<b>SLC27A4</b>	NM_005094	-0.155	-2.21	0.0296	1.00
merck2-ENST00000377260_at	<b>CTNNBIP1</b>	NM_020248 NM_001012329	-0.102	-2.21	0.0296	1.00
merck2-DB312486_s_at	<b>---</b>	NM_10885	-0.149	-2.21	0.0296	1.00
merck2-AU142077_at	<b>TLL3 ARPC4-TLL3</b>	NM_001025930 NM_001198793 NR_03	-0.170	-2.21	0.0297	1.00
merck2-AA12559_at	<b>WBP2NL</b>	NM_0193575	-0.145	-2.21	0.0297	1.00
merck2-NM_020897_at	<b>HCN3</b>	NM_020897	-0.188	-2.21	0.0297	1.00
merck2-BC071865_at	<b>LOX3</b>	NM_032603	-0.214	-2.21	0.0297	1.00
merck2-ENST00000360119_a_at	<b>NGN1</b>	NM_014932	0.186	-2.21	0.0297	1.00
merck2-DB312486_s_at	<b>NEK3</b>	AL833951	-0.203	-2.21	0.0298	1.00
merck2-NM_0059155_at	<b>MAFG</b>	NM_000569 NM_032711	-0.125	-2.21	0.0298	1.00
merck2-NM_005915_s_at	<b>SNORD1</b>	NM_0005735	0.160	-2.21	0.0298	1.00
merck2-NM_012289_x_at	<b>KIR3DL1</b>	NM_013239	-0.417	-2.21	0.0298	1.00
merck2-NM_152218_at	<b>LACC1</b>	NM_01128303 NM_153218	-0.175	-2.21	0.0298	1.00
merck2-CG65685_at	---	BX323660	-0.134	-2.21	0.0298	1.00
merck2-AF206941_a_at	<b>RSAD2</b>	NM_008657	0.523	-2.21	0.0299	1.00
merck2-AJ59666_at	---	AL359666	0.391	-2.21	0.0299	1.00
merck2-AB011175_at	<b>TBC1D4</b>	NM_014832	0.288	-2.21	0.0299	1.00
merck2-AK021707_at	---	AK027107	-0.153	-2.21	0.0299	1.00
merck2-CV420128_at	---	---	-0.196	-2.20	0.0299	1.00
merck2-NM_004019_at	<b>DMD</b>	NM_004019	0.305	-2.20	0.0300	1.00
merck2-ENST00000324446_a_at	<b>NCRNA00185</b>	NM_001544	-0.223	-2.20	0.0300	1.00
merck2-XM_93725_at	---	---	-0.145	-2.20	0.0300	1.00
merck2-NM_001024210_at	<b>S100A13</b>	NM_001024210 NM_005979 NM_00102	-0.204	-2.20	0.0300	1.00
merck2-AK125843_x_at	<b>SLC6A8 SLC6A10P</b>	NM_005629 NM_001142805 NM_00114	-0.312	-2.20	0.0301	1.00
merck2-NM_144689_at	<b>ZNF420</b>	NM_144689	0.232	-2.20	0.0301	1.00
merck2-AK024021_a_at	<b>C12orf23</b>	NM_152261	0.232	-2.20	0.0301	1.00
merck2-BQ379815_at	---	AK092386	-0.142	-2.20	0.0301	1.00
merck2-ENST000003255588_a_at	<b>PGAS PG4 PGA5</b>	NM_001079807 NM_001079808 NM_001	-0.361	-2.20	0.0301	1.00
merck2-AB209527_s_at	<b>HNRNPC</b>	NM_031314 NM_004500 NM_0010774	0.070	-2.20	0.0301	1.00
merck2-NM_00260						

merck2-BU166338_at	HNRNPA0	NM_006805	0.138	2.20	0.0302	1.00			
merck2-VZV_OKA_Q38_up_at	---	---	-0.0220	-2.20	0.0302	1.00			
merck2-BU166911_at	NUMA1	NM_006185	-0.241	-2.20	0.0302	1.00			
merck2-NM_080657_at	RSPAD2	NM_080657	-0.643	-2.20	0.0302	1.00			
merck-NM_031481_at	SLC25A18	NM_031481	-0.146	-2.20	0.0302	1.00			
merck2-ENST00000390243_at	---	AF490937	0.277	-2.20	0.0302	1.00			
merck2-ENST00000314053_at	---	AF116673	0.155	-2.20	0.0302	1.00			
merck2-AF244577_a_at	SLC17A5	NM_012434	-0.154	-2.20	0.0303	1.00			
merck2-BP271658_s_at	APLP2	NM_001642	-0.247	-2.20	0.0303	1.00			
merck2-M35296_at	ABL2	NM_007314	-0.05158	NM_0011360C	-0.157	-2.20	0.0303	1.00	
merck-NM_002961_s_at	S100A4	NM_002961	0.019554	-0.0677	-2.20	0.0304	1.00		
merck2-AY126464_at	PMEPA1	NM_020182	NM_199169	NM_199170	N	0.240	-2.20	0.0304	1.00
merck-NM_145040_at	PRKCDBP	NM_145040	-0.156	-2.20	0.0304	1.00			
merck2-BG674122_a_at	HLF	NM_002126	0.143	-2.20	0.0304	1.00			
merck-NM_000633_at	BCL2	NM_000633	0.155	-2.20	0.0304	1.00			
merck-BC013099_a_at	CABIN1	NM_001199281	NM_012295	NM_0012012C	-0.156	-2.20	0.0305	1.00	
merck2-CD125170_at	PREX2	NM_025170	0.265	-2.20	0.0305	1.00			
merck2-NM_006782_at	THO4	NM_006782	-0.138	-2.20	0.0305	1.00			
merck-A002890_a_at	ZNF704	NM_01033273	-0.124	-2.20	0.0305	1.00			
merck2-BG013871_at	TPT2_A51	NR_033711	NR_033710	NR_033709	NF	0.112	-2.20	0.0305	1.00
merck-NM_015129_at	SEPT6	NM_145799	NM_015129	0.206	-2.20	0.0306	1.00		
merck2-BC082765_at	TMEM8B	NM_001042590	NM_001042589	0.124	-2.20	0.0307	1.00		
merck-NM_001935_at	DPF4	NM_001935	0.230	-2.19	0.0307	1.00			
merck-NM_017762_at	---	---	-0.176	-2.19	0.0307	1.00			
merck2-ENST00000372183_a_at	EIP283	NM_020365	NM_001166588	-0.112	-2.19	0.0307	1.00		
merck-XM_926622_x_at	---	0.150	-2.19	0.0307	1.00				
merck2-AW51617_a_at	LOC146880	NR_027487	-0.150	-2.19	0.0308	1.00			
merck2-AL533240_at	TME166	NM_016127	0.174	-2.19	0.0308	1.00			
merck2-NM_003465_at	CHIT1	NM_003465	-0.271	-2.19	0.0308	1.00			
merck-XM_943972_at	AC074363	NM_003356	NM_022803	-0.0895	-2.19	0.0308	1.00		
merck2-NM_022803_at	UCP3	NM_013450	-0.150	-2.19	0.0308	1.00			
merck2-CMV_UL94_at	BAZ2B	NM_013450	-0.142	-2.19	0.0308	1.00			
merck2-AI399709_a_at	---	0.154	-2.19	0.0308	1.00				
merck2-ENST00000215935_x_at	---	0.125	-2.19	0.0309	1.00				
merck2-AK026568_x_at	---	0.0633	-2.19	0.0309	1.00				
merck-NM_001947030_at	NR2F2	NM_01145155	-0.138	-2.19	0.0309	1.00			
merck2-Q_000001_ORF_1085_at	---	0.102	-2.19	0.0309	1.00				
merck2-NM_039241_at	F0D4	NM_139241	-0.265	-2.19	0.0309	1.00			
merck-NM_052935_s_at	ACSM1	NM_052956	0.128	-2.19	0.0310	1.00			
merck-NM_032147_at	C16orf48	NM_032140	-0.127	-2.19	0.0310	1.00			
merck2-Y16708_X_at	Y16708	Y16708	-0.141	-2.19	0.0310	1.00			
merck-CDE672190_a_at	PLCE1	NM_016341	NM_001165979	-0.142	-2.19	0.0310	1.00		
merck2-CD709967_at	HSP98	AK310467	0.199	-2.19	0.0311	1.00			
merck-NM_00105961_at	RYK	NM_001005961	NM_002958	0.149	-2.19	0.0311	1.00		
merck-BC034591_at	LOC284648	NR_036490	-0.145	-2.19	0.0311	1.00			
merck-NM_021183_at	RAP2C	NM_021183	0.226	-2.19	0.0311	1.00			
merck-BC019877_at	BC019877	NM_021260	NM_178441	-0.126	-2.19	0.0311	1.00		
merck-AK027399_s_at	ZFYVE1	NM_031899	-0.170	-2.19	0.0311	1.00			
merck-NM_031899_at	ENAM	NM_031899	0.254	-2.19	0.0311	1.00			
merck2-CR595807_at	---	CR95807	0.308	-2.19	0.0311	1.00			
merck-AK130024_at	---	XM_03118742	XM_03119680	XM_00	0.152	-2.19	0.0311	1.00	
merck-A417759_a_at	LOC100505987	XR_10833	0.240	-2.19	0.0312	1.00			
merck2-AK027738_at	FOXP1	BX647682	0.127	-2.19	0.0312	1.00			
merck2-AK026121_at	TSEN2	NM_020365	NM_001145392	NM_00114	-0.167	-2.19	0.0312	1.00	
merck-NM_004850_a_at	ROCK2	NM_004850	-0.121	-2.19	0.0313	1.00			
merck-ENST00000309184_s_at	---	AJ494607	-0.0322	-2.19	0.0314	1.00			
merck-NM_004778_at	PTGRD2	NM_004778	-0.231	-2.18	0.0314	1.00			
merck-NM_199227_s_at	METAP1D	NM_199227	0.143	-2.18	0.0315	1.00			
merck-BC014494_a_at	---	BC014494	-0.143	-2.18	0.0315	1.00			
merck-AF130047_at	---	AF130047	-0.131	-2.18	0.0315	1.00			
merck2-AK124553_at	EML6	NM_001039753	0.265	-2.18	0.0315	1.00			
merck2-ENST0000376775_at	LOC72975	AK129559	0.284	-2.18	0.0315	1.00			
merck-BI905840_at	---	---	-0.117	-2.18	0.0315	1.00			
merck2-BX641100_at	---	---	-0.124	-2.18	0.0315	1.00			
merck-NM_080681_a_at	COL11A2	NM_080680	NM_080681	NM_080679	-0.151	-2.18	0.0315	1.00	
merck-ENST0000037258_at	METTL8	NM_024770	0.208	-2.18	0.0316	1.00			
merck2-AB209912_a_at	THBS1	NM_003246	-0.362	-2.18	0.0316	1.00			
merck-BX647131_at	RBMX	NM_001164803	0.173	-2.18	0.0316	1.00			
merck-BM666105_a_at	CUX1	NM_181552	NM_001202543	XR_-10885	-0.130	-2.18	0.0316	1.00	
merck2-BC018124_at	HSPH1	NM_006644	0.122	-2.18	0.0316	1.00			
merck2-AI003348_at	NMNAT2	NM_015039	NM_170706	-0.113	-2.18	0.0316	1.00		
merck2-AI000263850_a_at	TPD52	NM_001025252	NM_001025253	NM_00	0.289	-2.18	0.0317	1.00	
merck-AK131083_a_at	CHIT1	NM_003465	0.286	-2.18	0.0317	1.00			
merck2-AK128371_a_at	CD160	NM_007053	0.345	-2.18	0.0317	1.00			
merck-NM_00191777_at	CR2	NM_001006658	NM_001877	0.258	-2.18	0.0317	1.00		
merck2-BE035035_at	---	0.320	-2.18	0.0318	1.00				
merck2-NM_001007545_at	HEATR1	BC062442	-0.135	-2.18	0.0318	1.00			
merck-NM_013269_x_at	CLEC2D	NM_013269	NM_001004419	NM_00115	0.116	-2.18	0.0319	1.00	
merck2-ENST00000343315_s_at	TMPO	NM_00103283	NM_00103284	0.187	-2.18	0.0319	1.00		
merck2-BG119190_at	---	0.177	-2.18	0.0319	1.00				
merck-LB31948_at	AL831948	AL831948	-0.158	-2.18	0.0320	1.00			
merck-FB683837_at	---	-0.103	-2.18	0.0320	1.00				
merck2-AL137325_at	AL137325	AL035078	0.145	-2.18	0.0320	1.00			
merck-XM_945176_at	---	0.118	-2.18	0.0320	1.00				
merck2-VZV_OKA_ORF32_at	---	NC_001348	-0.0885	-2.18	0.0320	1.00			
merck2-VZV_OKA_ORF9_at	---	NC_001348	-0.132	-2.18	0.0320	1.00			
merck2-AK0209742_at	PARP9	NM_001146106	-0.292	-2.18	0.0321	1.00			
merck2-BX537545_a_at	---	BCX537545	0.185	-2.18	0.0321	1.00			
merck-CAA28475_a_at	AC018978	AC018978	-0.102	-2.18	0.0321	1.00			
merck2-AI00000359646_a_at	RBM12	NM_152147	NM_152838	NM_00119883	0.208	-2.18	0.0321	1.00	
merck-NM_152333_a_at	TAGAP	NM_152133	NM_054114	0.116	-2.18	0.0321	1.00		
merck-U16914_a_at	TPD52	NM_001025252	NM_001025253	NM_00	0.230	-2.18	0.0322	1.00	
merck-NM_152312_at	GVLTL1B	NM_152312	0.156	-2.18	0.0322	1.00			
merck-BX556317_a_at	MMP11	NM_005940	-0.149	-2.17	0.0322	1.00			
merck-NM_001004316_at	LEKR1	NM_001004316	0.195	-2.17	0.0322	1.00			
merck2-BG221875_at	LMQ3	NM_198217	-0.125	-2.17	0.0323	1.00			
merck2-AY254199_at	FAM129C	NM_173544	0.268	-2.17	0.0323	1.00			
merck-AF023476_s_at	ADAM12	NM_003474	-0.126	-2.17	0.0324	1.00			
merck-AW134779_at	AC040049	AC040049	-0.0980	-2.17	0.0325	1.00			
merck2-NM_015463_at	CNRIP1	NM_015463	-0.171	-2.17	0.0325	1.00			
merck2-BC043286_at	---	0.0934	-2.17	0.0325	1.00				
merck-ENST00000302464_a_at	UBE2L3	NM_003347	NR_028436	NR_028437	-0.0985	-2.17	0.0325	1.00	
merck-NM_002120_at	HLA-DOB	NM_002120	0.329	-2.17	0.0325	1.00			
merck-BG222187_x_at	HSFAP8	AB034951	0.138	-2.17	0.0326	1.00			
merck2-BC047864_a_at	APOL6	NM_030641	-0.219	-2.17	0.0326	1.00			
merck2-AL157459_at	CBX2	AL157459	-0.171	-2.17	0.0326	1.00			
merck2-BC045769_at	LOC339192	BC045769	-0.246	-2.17	0.0326	1.00			
merck2-BM666105_x_at	---	---	0.277	-2.17	0.0327	1.00			
merck-NM_104277_s_at	FRMD7	---	0.159	-2.17	0.0327	1.00			
merck2-Rots_P_sq_at	---	---	-0.128	-2.17	0.0327	1.00			
merck-AJ845164_c_at	---	0.0871	-2.17	0.0327	1.00				
merck2-ENST00000390351_x_at	LOC100507616	XR_110328	XR_111328	XR_114669	0.209	-2.17	0.0327	1.00	
merck-NM_173562_a_at	KCTD20	AF316870	0.364	-2.17	0.0327	1.00			
merck2-NM_001001802_s_at	---	NM_173562	-0.160	-2.17	0.0328	1.00			
merck2-XM_091890_a_at	---	---	0.245	-2.17	0.0328	1.00			
merck-XM_932886_at	ZNF320	NM_207333	0.265	-2.17	0.0328	1.00			
merck2-U52682_at	IRF4	AC079059	-0.134	-2.17	0.0328	1.00			
merck-NM_019063_at	EML4	NM_002460	NM_001195286	NR_03658	0.170	-2.17	0.0329	1.00	
merck-NM_030920_at	ANP32E	NM_030920	NM_0011145076	0.151	-2.17	0.0329	1.00		
merck-AL570146_s_at	---	AC013437	0.202	-2.17	0.0329	1.00			
merck-NM_024613_at	PLEKH2	NM_024613	0.180	-2.17	0.0329	1.00			
merck-NM_199169_a_at	MATR3	NM_199169	0.285	-2.17	0.0329	1.00			
merck2-AK093871_at	---	AK093871	0.152	-2.16	0.0330	1.00			
merck2-AK126816_at	KHDRBS1	NM_006559	-0.181	-2.16	0.0330	1.00			
merck-BM667995_at	---	---	0.109	-2.16	0.0330	1.00			
merck-BU55629_at	---	---	-0.129	-2.16	0.0330	1.00			
merck-HCT2293782_at	---	---	-0.115	-2.16	0.0330	1.00			
	---	AC013437	-0.243	-2.16	0.0330	1.00			

merck2-NM_030928_s_at	CDT1	NM_030928	-0.141	-2.16	0.0331	1.00
merck2-AV710073_at	---	---	-0.115	-2.16	0.0331	1.00
merck-B1562403_x_at	SCG3	NM_013243 NM_001165257	-0.120	-2.16	0.0331	1.00
merck-NM_0261407_s_at	PML	NM_033249 NM_002675 NM_033246	-0.208	-2.16	0.0331	1.00
merck-AL049349_x_at	---	AL049349	-0.148	-2.16	0.0331	1.00
merck-B059720_x_at	EIF1AX	AL832930	-0.201	-2.16	0.0331	1.00
merck-CR936744_x_at	---	XR_110598 KR_111540 XR_114879	0.174	-2.16	0.0331	1.00
merck-XM_936048_at	---	NG_006083	0.195	-2.16	0.0332	1.00
merck-BC040587_at	LSAMP-AS4	XR_108471 KR_112529 KR_113582	-0.107	-2.16	0.0332	1.00
merck-NM_032561_at	C22orf23	NM_032561	-0.125	-2.16	0.0332	1.00
merck-NM_004677_s_at	XKRY XKRY2	NM_004677 NM_001002906	-0.202	-2.16	0.0332	1.00
merck2-BX475081_at	---	CR933606	0.251	-2.16	0.0333	1.00
merck2-BX649160_a_at	BCLAF1	NM_014739 NM_001077440 NM_00107	0.205	-2.16	0.0333	1.00
merck2-NM_004682_a_at	PSIP1	NM_03322 NM_001128217	0.271	-2.16	0.0333	1.00
merck-BX647225_at	TLK2	NM_006852 NM_001112707	-0.103	-2.16	0.0333	1.00
merck2-BC029540_s_at	---	---	0.511	-2.16	0.0334	1.00
merck-NM_001867_at	TPD52L1	---	0.140	-2.16	0.0334	1.00
merck-NM_001822_s_at	---	NM_003287 NM_001003395 NM_0010	0.236	-2.16	0.0334	1.00
merck-BC096382_x_at	CHN1	NM_001822 NM_001025201	0.169	-2.16	0.0334	1.00
merck-B08439_x_at	SLC35G1	BC047102	-0.145	-2.16	0.0334	1.00
merck2-HS1-ORF_UL24_at	---	---	-0.149	-2.16	0.0334	1.00
merck-NM_173078_at	SLTRK4	---	0.260	-2.16	0.0334	1.00
merck-BC038745_at	---	XR_109649 KR_112123 KR_115346	0.151	-2.16	0.0335	1.00
merck-B036240_a_at	SEPT6	NM_145799 NM_015129	0.118	-2.16	0.0335	1.00
merck2-NM_001036646_a_at	HHLA3	NM_001031693 NM_001036645 NM_00	0.153	-2.16	0.0335	1.00
merck2-B1754652_x_at	SLC25A4	NM_001151	0.153	-2.16	0.0335	1.00
merck-BC065843_x_at	COL4A4	NM_000092	0.264	-2.16	0.0336	1.00
merck-ENST00000374750_s_at	GLBL13	NM_01080407	-0.136	-2.16	0.0336	1.00
merck-BC022040_at	---	---	0.241	-2.16	0.0336	1.00
merck-NM_024684_at	C11orf67	NM_024684	-0.177	-2.16	0.0336	1.00
merck-DB308208_at	AC05748	AC05748	0.274	-2.16	0.0336	1.00
merck-NM_005660_at	SLC35A2	NM_005660	-0.218	-2.16	0.0336	1.00
merck2-hcT18501821_at	BC098413	BC098413	0.146	-2.16	0.0337	1.00
merck-AK057576_at	AK057576	AK057576	-0.186	-2.16	0.0337	1.00
merck-ENST00000367962_a_at	FGR2B	NM_004001 NM_001002273 NM_0010	0.314	-2.16	0.0337	1.00
merck2-CR936789_at	FSD1L	CR936789	0.163	-2.16	0.0337	1.00
merck2-BG03632_x_at	---	0.160	-2.16	0.0337	1.00	
merck-BU685426_x_at	PSAP	NM_003632	-0.054	-2.16	0.0337	1.00
merck-DB443831_x_at	MUC20	NM_152673 NM_001098516	0.144	-2.16	0.0337	1.00
merck-NM_004568_s_at	---	---	0.127	-2.15	0.0338	1.00
merck-NM_018304_s_at	SERPINB6	NM_004568 NM_001195291	-0.160	-2.15	0.0338	1.00
merck-NM_144633_x_at	PRR11	PRR11	-0.147	-2.15	0.0338	1.00
merck-BP515552_x_at	KCNH8	NM_144633	0.327	-2.15	0.0339	1.00
merck-XM_497859_at	---	AL158062	0.195	-2.15	0.0339	1.00
merck-AK92172_at	---	---	-0.123	-2.15	0.0339	1.00
merck-AK26933_a_at	LOC286109	AK092172	-0.157	-2.15	0.0339	1.00
merck-ENST00000354314_at	EIF5	NM_0019669 NM_183004	0.144	-2.15	0.0339	1.00
merck2-BQ016861_at	---	---	-0.128	-2.15	0.0340	1.00
merck2-AI051196_a_at	AC240516	AC240516	0.124	-2.15	0.0340	1.00
merck-BQ77445_at	LRP1	NM_002332	-0.249	-2.15	0.0340	1.00
merck2-BC112087_at	---	---	-0.169	-2.15	0.0340	1.00
merck2-NM_152336_at	KCNE2	NM_172201	0.157	-2.15	0.0340	1.00
merck2-NM_152336_x_at	AGBL1	NM_152336	-0.121	-2.15	0.0340	1.00
merck-NM_001012715_at	---	---	0.154	-2.15	0.0340	1.00
merck-NM_001012715_at	RBP7	NM_029660	-0.214	-2.15	0.0341	1.00
merck-NM_015055_x_at	C9orf106	AK092580	-0.180	-2.15	0.0341	1.00
merck-NM_006626_x_at	SVAVP70	NM_015055	0.246	-2.15	0.0341	1.00
merck-AW541489_x_at	ZBTB6	NM_006626	0.150	-2.15	0.0341	1.00
merck-NM_005292_at	AFPB6	NM_002025 NM_001169122 NM_00116	-0.109	-2.15	0.0341	1.00
merck-NM_01091220_at	GPR18	NM_005292 NM_001098200	0.175	-2.15	0.0342	1.00
merck2-BF195886_at	HS3ST5	NM_153612	-0.123	-2.15	0.0343	1.00
merck2-AL538641_at	---	---	-0.138	-2.15	0.0343	1.00
merck-NM_0019563_s_at	TYMP	AL713980	0.356	-2.15	0.0343	1.00
merck-NM_138450_at	ARL11	NM_001113755 NM_001953 NM_00111	-0.211	-2.15	0.0343	1.00
merck2-NM_152440_at	C12orf66	NM_138450	-0.187	-2.15	0.0344	1.00
merck-NM_017567_at	NAGK	NM_152440	0.153	-2.15	0.0345	1.00
merck-AF520746_x_at	SDC4P	NM_017567	-0.170	-2.15	0.0345	1.00
merck2-BC002665_x_at	GM2A	NM_001580	-0.136	-2.15	0.0345	1.00
merck-NM_175068_at	---	NM_000405	-0.191	-2.15	0.0345	1.00
merck2-M27539_x_at	HLA-LOC10057703	NM_002116 XM_003119226 XM_00311'	-0.0725	-2.15	0.0345	1.00
merck-NM_020448_s_at	NIPAL3	NM_020448	0.125	-2.15	0.0345	1.00
merck2-AB5053_x_at	SERPINB6	NM_004568 NM_001195291	-0.173	-2.15	0.0346	1.00
merck-NM_001005373_at	LRP1	NM_138361 NM_001005373 NM_0010	-0.154	-2.15	0.0346	1.00
merck-U39114_x_at	---	---	0.195	-2.15	0.0346	1.00
merck-HCT1834993_x_at	AC123786	AC123786	-0.138	-2.15	0.0346	1.00
merck-NM_021049_x_at	---	NG_009747	-0.128	-2.14	0.0346	1.00
merck-ENST00000363687_a_at	MAGEAS	NM_021049	0.191	-2.14	0.0346	1.00
merck2-BC002665_x_at	CXorf41	NM_001169154 NM_173494	0.227	-2.14	0.0346	1.00
merck-NM_175068_at	KRT73	NM_175068	-0.278	-2.14	0.0346	1.00
merck-ENST00000376124_at	GDPD1	NM_182569 NM_001165993	0.186	-2.14	0.0347	1.00
merck2-AL049270_at	SLC5A12	NM_182569	-0.093	-2.14	0.0347	1.00
merck-AK091442_at	---	---	0.124	-2.14	0.0347	1.00
merck-BU688696_s_at	---	AK091442	-0.129	-2.14	0.0347	1.00
merck2-AL832977_s_at	---	---	0.224	-2.14	0.0347	1.00
merck-CR601230_x_at	---	---	-0.143	-2.14	0.0347	1.00
merck2-AK096708_at	EBF1	NM_024007	0.230	-2.14	0.0348	1.00
merck-AK055524_at	---	AL160398	0.145	-2.14	0.0348	1.00
merck2-AB52456_x_at	IL34	AK055524	-0.133	-2.14	0.0348	1.00
merck-AK055524_x_at	---	---	0.150	-2.14	0.0348	1.00
merck-XM_037466_x_at	LOC100130373	NM_152456 NM_001172771 NM_0011	-0.100	-2.14	0.0349	1.00
merck2-BG016561_at	---	AK090920	-0.193	-2.14	0.0349	1.00
merck2-BC018532_x_at	---	---	0.155	-2.14	0.0349	1.00
merck2-BE881201_x_at	---	---	0.311	-2.14	0.0350	1.00
merck2-AF515008_x_at	MOXD1	NM_015529	0.185	-2.14	0.0350	1.00
merck-XM_210737_x_at	---	---	-0.0811	-2.14	0.0350	1.00
merck2-AA738241_x_at	---	NG_009950	-0.179	-2.14	0.0350	1.00
merck2-XM_166279_x_at	LOC100506610	XR_110929 XR_113300 XR_115503	0.186	-2.14	0.0350	1.00
merck2-NM_005953_x_at	RSPPY1	AL834402	0.125	-2.14	0.0350	1.00
merck2-NM_138367_x_at	M72A	NM_005953	-0.226	-2.14	0.0350	1.00
merck2-NM_0207795_x_at	ZNF251	NM_138367	0.179	-2.14	0.0351	1.00
merck2-NM_0207795_x_at	---	---	0.168	-2.14	0.0351	1.00
merck2-AY1515008_x_at	TAF4B	NM_005640	0.197	-2.14	0.0351	1.00
merck2-NM_024318_x_at	LILRA6	NM_024318	-0.186	-2.14	0.0351	1.00
merck2-NM_145176_x_at	SLC2A12	NM_145176	0.215	-2.14	0.0351	1.00
merck-AK095773_x_at	---	AK095773	-0.212	-2.14	0.0352	1.00
merck-ENST00000250805_a_at	TTTY1 TTY1B	TTTY1 TTY1B	-0.246	-2.14	0.0352	1.00
merck-NM_020415_x_at	RETN	NM_020415 NM_001193374	-0.236	-2.14	0.0352	1.00
merck-NM_0010127_x_at	SPRY1	NM_0010127 NM_199327	0.248	-2.14	0.0352	1.00
merck2-AK027795_x_at	---	AIK027795	-0.189	-2.14	0.0352	1.00
merck2-NM_020107_x_at	---	NM_0202827	0.199	-2.14	0.0352	1.00
merck2-AY1515008_x_at	---	AY1515008	-0.0569	-2.14	0.0353	1.00
merck2-AA888002_x_at	ARHGEF37	NM_001001669	-0.138	-2.14	0.0353	1.00
merck2-BC040672_x_at	---	BC040672	0.117	-2.14	0.0353	1.00
merck2-BF061740_x_at	---	BC059952	-0.141	-2.14	0.0353	1.00
merck-NM_021949_x_at	ATP2B3	NM_021949 NM_001001344	0.126	-2.14	0.0353	1.00
merck2-BX11225_x_at	ANKRD36 ANKR36B LOC400986	NM_001164315 NM_025190 XM_00311	0.237	-2.14	0.0353	1.00
merck-NM_001024455_x_at	RGAG4	NM_001024455	-0.179	-2.14	0.0354	1.00
merck2-BX647215_x_at	---	BX647215	0.153	-2.14	0.0354	1.00
merck-NM_001987_x_at	ETV6	NM_001987	-0.100	-2.14	0.0354	1.00
merck-AF269286_x_at	---	AF269286	0.159	-2.13	0.0354	1.00
merck-NM_002959_at	SORT1	NM_002959	-0.188	-2.13	0.0354	1.00
merck2-BX410084_x_at	TPD52	NM_001025252 NM_001025253 NM_00	0.345	-2.13	0.0354	1.00
merck-ENST00000332111_x_at	---	NR_002163 NR_002822	-0.151	-2.13	0.0355	1.00
merck2-DG473380_x_at	---	---	0.351	-2.13	0.0355	1.00
merck2-BX410084_x_at	---	---	0.335	-2.13	0.0355	1.00
merck2-BX410084_x_at	FADH1	NM_001018104 NM_001142398	0.129	-2.13	0.0355	1.00
merck2-BX410084_x_at	RORA	NM_134281	0.335	-2.13	0.0355	1.00
merck2-BX410084_x_at	TSEN15	NM_052965 NM_001127394 NR_02334	0.117	-2.13	0.0355	1.00
merck2-BG71819_x_at	SLC20A2	NM_006749	-0.136	-2.13	0.0356	1.00

merck-AL832018_at	---	AL832018	0.520	2.13	0.0356	1.00
merck-NM_009794_at	MRPL39	NM_009794	0.146	2.13	0.0356	1.00
merck-NM_009332_at	HBZ	NM_009332	-0.438	2.13	0.0367	1.00
merck-NM_005902_at	SMAD3	NM_005902	0.132	2.13	0.0367	1.00
merck-BMS47659_at	---	---	-0.129	2.13	0.0357	1.00
merck-HCT1970787_1_at	---	---	-0.106	2.13	0.0358	1.00
merck-BIS19527_at	IKZF1	NM_006060	0.0933	2.13	0.0358	1.00
merck-NM_001039463_at	NEEN-AS1	XR_110470_XR_112069_XR_113334	-0.127	2.13	0.0358	1.00
merck-U16261_at	IL24	NM_006850_NM_001185156_NM_00118	0.179	2.13	0.0358	1.00
merck-AK055172_s_at	DLG5	NM_004747	-0.173	2.13	0.0358	1.00
merck-AL512683_s_at	SCRTR1	NM_031309	-0.0851	2.13	0.0358	1.00
merck-NM_020799_s_at	STAMBL1	NM_020799	0.193	2.13	0.0359	1.00
merck-NM_032211_at	LOXL4	NM_032211	-0.144	2.13	0.0359	1.00
merck-BF511680_at	AMOTL1	NM_130847	0.130	2.13	0.0359	1.00
merck-CA447088_at	VPS4B	NM_004869	0.153	2.13	0.0359	1.00
merck-NM_006805_at	HNRNPA0	NM_006805	0.142	2.13	0.0359	1.00
merck-EGF2584_s_at	---	AK055284	-0.114	2.13	0.0360	1.00
merck-ENST00002598824_x_at	TRHGP42	NM_152432	0.125	2.13	0.0360	1.00
merck-R98493_x_at	---	---	0.007	2.13	0.0360	1.00
merck-ENST00002685533_at	NUDT7	NM_001105663	0.165	2.13	0.0360	1.00
merck-NM_018334_at	LRRN3	NM_001099660_NM_001099658_NM_01	0.440	2.13	0.0360	1.00
merck-A192979_s_at	---	AK094098	0.125	2.13	0.0360	1.00
merck-AK002120_s_at	DCX	NM_00555_NM_178152_NM_178153_N	0.481	2.13	0.0361	1.00
merck-BC009795_at	TNFSF10	NM_003810_NM_001190942_NR_03399	-0.130	2.13	0.0361	1.00
merck-NM_00582_at	CD180	NM_005582	0.233	2.13	0.0361	1.00
merck-BC009467_at	LOC158960	BC009467	-0.137	2.13	0.0361	1.00
merck-NM_001963_at	EGF	NM_001963_NM_001178130_NM_00117	-0.281	2.13	0.0361	1.00
merck-DAG33754_a_at	CTTNA1	NM_001903	-0.141	2.13	0.0361	1.00
merck-T64550_a_at	KHDRBS1	NM_006559	0.106	2.13	0.0362	1.00
merck-NM_032121_s_at	MAGT1	NM_032121	0.166	2.13	0.0362	1.00
merck-NM_005036_at	PPARA	NM_001001928_NM_005036	-0.204	2.13	0.0362	1.00
merck-NM_014728_s_at	FRMPD4	NM_014728	0.151	2.13	0.0362	1.00
merck-AK055833_s_at	TRIM14	NM_014788	-0.169	2.13	0.0362	1.00
merck-CD653323_at	IGF1R	NM_000875	-0.131	2.12	0.0363	1.00
merck-HSV2_ORF_US11_s_at	---	---	-0.156	2.12	0.0363	1.00
merck-XM_93768_s_at	---	---	-0.121	2.12	0.0363	1.00
merck-XM_000000000265121_at	OQZS	NM_001000477	0.149	2.12	0.0364	1.00
merck-NM_173570_at	ZDDHC12	NM_173570	0.257	2.12	0.0364	1.00
merck-ENST0000276770_s_at	TTTY7_TTY7B	NM_001534_NR_003592	-0.141	2.12	0.0364	1.00
merck-BX649165_s_at	PSIP1	NM_03222_NM_001128217	0.249	2.12	0.0364	1.00
merck-NM_002862_at	PYGB	NM_02862	-0.176	2.12	0.0364	1.00
merck-BU602759_at	FLJ39051	NM_033839	-0.243	2.12	0.0365	1.00
merck-BG744599_at	---	---	0.0986	2.12	0.0365	1.00
merck-CR744385_at	CCNG1	AC206362	-0.103	2.12	0.0365	1.00
merck-NM_004069_at	---	NM_004060_NM_199246	0.190	2.12	0.0366	1.00
merck-CR590554_at	AY190101	AY190101	0.111	2.12	0.0366	1.00
merck-AK023738_at	CEP63	CR594785	0.246	2.12	0.0366	1.00
merck-AK123300_at	---	NM_001042384	-0.132	2.12	0.0366	1.00
merck-NM_152904_s_at	SPECC1	AK123300	-0.145	2.12	0.0366	1.00
merck-NM_007030_s_at	TPPP	NM_001033554_NM_001033555_NM_15	-0.158	2.12	0.0367	1.00
merck-NM_002332_at	LRP1	NM_007030	-0.109	2.12	0.0367	1.00
merck-NM_005753_at	MYB	NM_002332	-0.238	2.12	0.0367	1.00
merck-NM_01525585_s_at	---	NM_001130173_NM_005375_NM_00113	-0.155	2.12	0.0367	1.00
merck-XM_937687_s_at	---	---	-0.100	2.12	0.0367	1.00
merck-ENST0000259488_x_at	---	U07977	0.190	2.12	0.0368	1.00
merck-D45917_a_at	---	---	-0.270	2.12	0.0368	1.00
merck-ENST0000271011_a_at	TIMP3	---	0.350	2.12	0.0368	1.00
merck-XM_067107_a_at	SERBP1	NM_000362	-0.128	2.12	0.0368	1.00
merck-ENST000035100_a_at	---	NM_001018067_NM_001018068_NM_0C	0.129	2.12	0.0368	1.00
merck-ABHD2	AHBD2	---	-0.135	2.12	0.0368	1.00
merck-AL535184_a_at	RING1	NM_002931	-0.169	2.12	0.0368	1.00
merck-BC007782_at	IGLC1	BC007782	-0.133	2.12	0.0369	1.00
merck-XM_937489_at	---	---	0.335	2.12	0.0369	1.00
merck-AF150307_at	---	---	0.153	2.12	0.0369	1.00
merck-ENST00000371556_s_at	HSP90AB1	NM_007355_NR_036694	-0.171	2.12	0.0369	1.00
merck-AV648465_at	GPR112	---	0.143	2.12	0.0369	1.00
merck-NM_153834_at	---	---	-0.120	2.12	0.0369	1.00
merck-BF792861_at	---	---	0.338	2.12	0.0370	1.00
merck-AK057759_at	---	---	-0.103	2.12	0.0370	1.00
merck-DB567116_at	TMEM35	AK057759	0.175	2.12	0.0370	1.00
merck-NM_014832_s_at	MICAL2	NM_021637	0.0975	2.12	0.0370	1.00
merck-AV648460_s_at	SNAP23	NM_014832	-0.290	2.12	0.0370	1.00
merck-NM_007156_s_at	ZDXA_ZDXB	NM_0038225_NM_130798	-0.146	2.12	0.0370	1.00
merck-NM_025024_s_at	ASGR1	NM_007156_NM_007157	0.169	2.12	0.0370	1.00
merck-BU614044_at	---	---	-0.224	2.12	0.0371	1.00
merck-BC056887_s_at	FAM13B	---	-0.114	2.12	0.0371	1.00
merck-NM_007249_at	KLF12	NM_016603_NM_001101800_NM_00110	0.0940	2.12	0.0371	1.00
merck-NM_020780_at	PTCHD2	NM_007249	0.189	2.12	0.0371	1.00
merck-BE272644_s_at	FYTTD1	NM_020780	-0.120	2.12	0.0371	1.00
merck-NM_003440_at	---	---	0.131	2.11	0.0371	1.00
merck-NM_007540_at	ZNF140	NM_003440	0.197	2.11	0.0372	1.00
merck-NM_007105_at	SLC22A18AS	NG_007095	-0.143	2.11	0.0372	1.00
merck-HCT1782279_at	---	NM_007105	-0.180	2.11	0.0372	1.00
merck-ENST00000257541_at	GNA11	AF196997	0.186	2.11	0.0373	1.00
merck-NM_001771_at	CD22	NM_002067	-0.121	2.11	0.0373	1.00
merck-XM_926941_s_at	---	NM_001771_NM_001180599_NM_00118	0.298	2.11	0.0373	1.00
merck-NM_0207467_at	---	---	0.224	2.11	0.0373	1.00
merck-AK024851_at	C1orf220	NR_033186	0.152	2.11	0.0374	1.00
merck-AK024851_at	---	AK024851	-0.217	2.11	0.0374	1.00
merck-NM_001308_at	---	AK091308	0.152	2.11	0.0374	1.00
merck-NM_152425_at	---	---	-0.111	2.11	0.0374	1.00
merck-NM_052017_at	MID2	---	0.151	2.11	0.0374	1.00
merck-HCT1822253_1_at	---	AL301419	0.257	2.11	0.0375	1.00
merck-AI662445_at	---	NM_006291	-0.187	2.11	0.0375	1.00
merck-NM_058182_at	FAM165B	AY081143	0.142	2.11	0.0375	1.00
merck-BE551097_at	---	---	0.213	2.11	0.0375	1.00
merck-BF769669_at	---	---	-0.232	2.11	0.0375	1.00
merck-NM_002163_at	IRF8	NM_002163	0.153	2.11	0.0375	1.00
merck-NM_014639_at	TTC37	NM_014639	0.197	2.11	0.0376	1.00
merck-AF015041_a_at	NUMBL	NM_004756	-0.164	2.11	0.0376	1.00
merck-AB037837_s_at	CHD7	NM_017780	-0.168	2.11	0.0376	1.00
merck-BC047309_s_at	COL4A1	NM_001845	-0.103	2.11	0.0376	1.00
merck-XM_497647_at	---	---	-0.155	2.11	0.0376	1.00
merck-B0013763_at	NBLA00301	EU000854	-0.120	2.11	0.0376	1.00
merck-AK022557_at	---	AK022557	-0.177	2.11	0.0376	1.00
merck-NM_000391_at	TPP1	NM_000391	-0.135	2.11	0.0376	1.00
merck-NM_0003432_at	GCNT2	NM_145649	-0.156	2.11	0.0377	1.00
merck-ENST00000340858_a_at	ALKBH12P2	NM_0003432	0.123	2.11	0.0378	1.00
merck-NM_130489_at	JDP2	NM_130489_NM_001130547_NM_00113	-0.176	2.11	0.0378	1.00
merck-AK091280_at	FAM49A	NM_030797	-0.033	2.11	0.0378	1.00
merck-NM_015271_at	TRIM2	NM_015271_NM_001130067	0.177	2.11	0.0378	1.00
merck-NM_001010856_s_at	C12orf29	NM_001010856	-0.176	2.11	0.0378	1.00
merck-NM_01010854_s_at	PKM2	NM_001010854	0.228	2.11	0.0378	1.00
merck-NM_018553_s_at	C17orf85	NM_001114118_NM_018553	-0.0908	2.11	0.0379	1.00
merck-AK097996_at	---	AK097996	-0.152	2.11	0.0379	1.00
merck-AA077332_x_at	ATP5J2	NM_004898_NM_001003713_NM_0010	-0.174	2.11	0.0379	1.00
merck-NM_207292_at	MBNL1	NM_021038_NM_207292_NM_207293_N	0.156	2.11	0.0379	1.00
merck-BX648290_at	---	BX648290	-0.205	2.11	0.0379	1.00
merck-AY007155_at	LOC439949	NM_036502_NR_036503	0.200	2.11	0.0379	1.00
merck-AK097037_at	ZNF525	NM_036599	0.162	2.11	0.0380	1.00
merck-ENST00000370551_s_at	HS2ST1	NM_001134492	-0.158	2.10	0.0380	1.00
merck-NM_000137_at	FAH	NM_000137	-0.170	2.10	0.0380	1.00
merck-X4982_s_at	OR9A1P	X64982	0.144	2.10	0.0381	1.00
merck-NM_001211_at	BUB1B	NM_001211	-0.146	2.10	0.0381	1.00
merck-NM_016220_s_at	ZNF107	NM_016220_NM_001013746	0.395	2.10	0.0381	1.00
merck-AF036874_x_at	---	---	0.235	2.10	0.0381	1.00
merck-NM_003411_s_at	ZFY	NM_003411_NM_001145275_NM_00114	-0.592	2.10	0.0382	1.00
merck-NM_152407_at	GRPEL2	NM_152407	0.170	2.10	0.0382	1.00

merck-BQ042635_a_at	RBPJ	NM_005349 NM_015874 NM_203283 N	-0.101	-2.10	0.0382	1.00
merck-AW814940_at	—	—	0.0873	-2.10	0.0382	1.00
merck-BC023261_a_at	KIAA1609	NM_020947	-0.133	-2.10	0.0382	1.00
merck-R64384_a_at	—	AC019181	0.220	-2.10	0.0383	1.00
merck-CR624071_at	ATF1	NM_005171	0.259	-2.10	0.0383	1.00
merck2-AK22757_at	ITIH3	NM_002217	-0.127	-2.10	0.0383	1.00
merck-ENST00000312019_s_at	FLJ32790	XR_109256 XR_111642 XR_114919	-0.188	-2.10	0.0384	1.00
merck-ENST00000255513_a_at	PCDH19	NM_001105243 NM_020766 NM_00118	0.278	-2.10	0.0384	1.00
merck-AJ022645_at	—	—	0.185	-2.10	0.0384	1.00
merck2-BF439126_at	—	—	-0.101	-2.10	0.0384	1.00
merck-DA156101_a_at	TCERG1	NM_006706 NM_001040006	-0.124	-2.10	0.0385	1.00
merck2-CB853209_at	—	AK124776	0.143	-2.10	0.0385	1.00
merck-NM_181337_at	KAAG1	NM_181337	-0.106	-2.10	0.0385	1.00
merck-CDE87039_at	DNAH12	NM_178504 NM_198564	0.143	-2.10	0.0385	1.00
merck-NM_001003408_at	ABLM1	NM_002313 NM_001003407 NM_0010	0.140	-2.10	0.0386	1.00
merck-NM_020370_at	GPR84	NM_0020370	-0.275	-2.10	0.0386	1.00
merck-NM_0005168_at	OR52E8	NM_001005168	-0.101	-2.10	0.0387	1.00
merck-AZ21391_at	—	—	-0.200	-2.10	0.0387	1.00
merck-AK021317_at	XPR1	NM_004726 NM_001135669	-0.242	-2.0	0.0387	1.00
merck-NM_021637_at	TMEV35	NM_021637	0.141	-2.10	0.0387	1.00
merck-NM_000339_a_at	APOA1	NM_000339	-0.122	-2.10	0.0387	1.00
merck2-NM_000677_at	ADORA3	NM_000677	-0.323	-2.10	0.0387	1.00
merck-AK056597_s_at	OTUD4	NM_001102653	-0.161	-2.10	0.0388	1.00
merck-D79986_at	BCLAF1	NM_014739 NM_001077440 NM_0010	0.156	-2.10	0.0388	1.00
merck-BF028446_a_at	PEG10	NM_001040152 NM_001184961 NM_0C	0.199	-2.10	0.0389	1.00
merck-BC0112184_s_at	SNX27	NM_030918	-0.133	-2.10	0.0389	1.00
merck2-NM_021049_at	MAGEA5	NM_021049	0.322	-2.09	0.0389	1.00
merck-AK054953_at	LOC200830	AK054953	-0.133	-2.09	0.0389	1.00
merck-NM_006820_at	IF144L	NM_006820	-0.547	-2.09	0.0390	1.00
merck-NM_173571_s_at	CT47A1 CT47A10 CT47A11 CT47A2	NM_001080146 NM_001080137 NM_17	0.465	-2.09	0.0390	1.00
merck-BC040270_at	—	BC040270	0.121	-2.09	0.0390	1.00
merck-AF088050_x_at	AF088050	NM_0088050	-0.182	-2.09	0.0391	1.00
merck-BX640620_x_at	—	—	0.286	-2.09	0.0392	1.00
merck-XM_063329_at	—	—	-0.103	-2.09	0.0392	1.00
merck2-NM_001001668_at	ZNF470	NM_001001668	0.172	-2.09	0.0392	1.00
merck2-NM_0022485_at	GNG4	NM_001098722 NM_001098721 NM_0C	-0.131	-2.09	0.0392	1.00
merck-BG056160_s_at	—	—	0.143	-2.09	0.0392	1.00
merck-T92303_s_at	—	—	-0.003	-2.09	0.0393	1.00
merck-NM_001040647_at	CRCP	NM_0014478 NM_001040647 NM_0010	-0.136	-2.09	0.0393	1.00
merck-NM_144676_at	TMED6	NM_144676	-0.221	-2.09	0.0394	1.00
merck-US1708_s_at	—	—	-0.313	-2.09	0.0394	1.00
merck2-AA576524_at	TMEV66	NM_016127	0.101	-2.09	0.0394	1.00
merck2-BU175285_s_at	PTGES3	NM_006601	0.149	-2.09	0.0394	1.00
merck2-NM_039098_s_at	—	—	0.134	-2.09	0.0394	1.00
merck2-BM669527_at	—	—	0.147	-2.09	0.0394	1.00
merck-AK993152_s_at	CCDC91	NM_018318	0.185	-2.09	0.0394	1.00
merck-BC034812_at	—	XR_110131 XR_111394 XR_114702	0.236	-2.09	0.0395	1.00
merck-AF380424_at	DLEU2	NR_002612	-0.145	-2.09	0.0395	1.00
merck-AF086545_a_at	IF116	NM_005531	-0.140	-2.09	0.0395	1.00
merck-G36642_at	—	—	-0.137	-2.09	0.0396	1.00
merck-NM_198213_at	OASL	NM_003733 NM_198213	-0.354	-2.09	0.0396	1.00
merck-BC031864_at	LOC100507330	NM_110379 XR_111304 XR_114660	-0.130	-2.09	0.0396	1.00
merck2-BX648643_at	KDM5D	BX648643	-0.509	-2.09	0.0396	1.00
merck-BG183865_at	—	—	-0.746	-2.09	0.0396	1.00
merck2-NM_00109845_s_at	—	—	-0.003	-2.09	0.0396	1.00
merck-BF73267_at	—	—	0.132	-2.09	0.0397	1.00
merck-DB0881616_at	LARP4B	NM_015155	-0.145	-2.09	0.0397	1.00
merck-CA445256_at	—	—	-0.232	-2.09	0.0397	1.00
merck2-BC093952_at	CWC22	NM_020943	0.172	-2.09	0.0397	1.00
merck-BM57973_s_at	BAK1	NM_001188	-0.181	-2.09	0.0398	1.00
merck-L42806_at	—	L42806	0.170	-2.08	0.0398	1.00
merck2-NM_197954_at	CLEC7A	NM_197947 NM_022570 NM_197948 N	-0.232	-2.08	0.0398	1.00
merck-AF091236_x_at	SLC25A6	NM_0016336	0.120	-2.08	0.0399	1.00
merck-BG291729_at	—	BC008359	0.183	-2.08	0.0399	1.00
merck2-DA413429_at	LOC100127891	NM_108812 XR_110748 XR_113053 XR	0.0755	-2.08	0.0399	1.00
merck2-NM_173041_at	ICK	BC035807	-0.133	-2.08	0.0399	1.00
merck-CMV_UL85_at	—	—	-0.102	-2.08	0.0399	1.00
merck-NM_004521_s_at	KIF5B	NM_004521	0.128	-2.08	0.0399	1.00
merck-NM_024897_at	PAQR6	NM_024897 NM_198406	-0.143	-2.08	0.0400	1.00
merck-XN_062614_at	BN00483	NM_144521	-0.123	-2.08	0.0400	1.00
merck2-NM_172108_at	AK057018	NM_172107 NM_172106 NM_004518 N	-0.141	-2.08	0.0400	1.00
merck-AK057181_at	KCNQ2	AK057018	-0.135	-2.08	0.0401	1.00
merck-AK024332_at	—	AK024332	0.154	-2.08	0.0401	1.00
merck2-NM_001079530_at	—	—	-0.0224	-2.08	0.0401	1.00
merck2-BM763807_a_at	EXOSC3	NM_016042 NM_001002269	-0.127	-2.08	0.0401	1.00
merck-HCT197097_at	—	—	-0.154	-2.08	0.0401	1.00
merck-NM_016521_at	TFDP3	NM_016521	0.217	-2.08	0.0402	1.00
merck2-AY739713_at	TXLNG	NM_018360 NM_001168683	0.219	-2.08	0.0402	1.00
merck2-AY743663_at	C10orf46	NM_153810	-0.142	-2.08	0.0402	1.00
merck2-AA805639_at	CDT2	NM_001782	0.219	-2.08	0.0403	1.00
merck-AK095512_s_at	PALLD	NM_001166108 NM_016081 NM_00116	-0.136	-2.08	0.0403	1.00
merck-NM_205858_at	NMB	NM_021077 NM_205858	-0.196	-2.08	0.0403	1.00
merck-AA161183_at	—	—	-0.108	-2.08	0.0403	1.00
merck2-BQ004375_at	PSIP1	NM_03222 NM_001128217	0.177	-2.08	0.0403	1.00
merck2-BC0094375_at	VCAN	NM_004385 NM_001126336 NM_00116	-0.101	-2.08	0.0403	1.00
merck2-BC009180_at	MKK5	NM_018848 NM_170784	-0.210	-2.08	0.0404	1.00
merck2-AA806102_at	TTC39C	NM_001135959 NM_153211	0.121	-2.08	0.0404	1.00
merck-BF206970_at	—	—	-0.163	-2.08	0.0404	1.00
merck-NM_006979_a_at	SLC39A7	NM_006979 NM_001077516	-0.174	-2.08	0.0404	1.00
merck-NM_126533_at	—	NG_004959	-0.090	-2.08	0.0404	1.00
merck-NM_163333_at	SLC22A18	NM_022555 NM_183233	-0.217	-2.08	0.0405	1.00
merck-ENST0000074949_s_at	HUA-DQA1	NM_002122	0.577	-2.08	0.0405	1.00
merck-NM_007270_s_at	FKBP9 FKBP9L	NM_007270 NM_027339 NR_027334 N	-0.203	-2.08	0.0405	1.00
merck-CR624203_a_at	TLIE4	NM_007005	-0.149	-2.08	0.0406	1.00
merck-BX648430_s_at	—	AI130085	-0.115	-2.08	0.0406	1.00
merck2-AK094618_at	ZNF529	NM_027239	0.205	-2.08	0.0406	1.00
merck-CR608017_at	—	CR608017	0.287	-2.08	0.0407	1.00
merck-AB209420_at	MLLT4	NM_001040000	-0.0914	-2.08	0.0407	1.00
merck-AK024928_at	—	AK024928	0.178	-2.08	0.0407	1.00
merck-AK091285_at	AHR	NM_0016221	0.161	-2.08	0.0407	1.00
merck-NM_001621_s_at	—	—	-0.253	-2.07	0.0408	1.00
merck-EG385771_at	—	AL14062	-0.354	-2.07	0.0408	1.00
merck-EB387580_s_at	—	—	0.174	-2.07	0.0408	1.00
merck-NM_002185_a_at	ILTR	XR_109255 XR_113170 XR_114207	0.174	-2.07	0.0409	1.00
merck-NM_163201_s_at	HSP98	NM_002185	0.151	-2.07	0.0409	1.00
merck-NM_003309_at	TSPY1	NM_003309	0.128	-2.07	0.0409	1.00
merck2-BC040959_at	—	XR_109767 XR_115250	0.211	-2.07	0.0409	1.00
merck-NM_017509_at	KLK15	NM_138563 NM_138564 NM_017509	-0.150	-2.07	0.0409	1.00
merck-G30809_at	—	—	-0.141	-2.07	0.0410	1.00
merck-NM_013447_at	EMR2	NM_013447 NM_152916 NM_152917 N	-0.189	-2.07	0.0410	1.00
merck-NM_007888_at	DCK	NM_007888	0.201	-2.07	0.0410	1.00
merck-BU531790_at	—	—	-0.128	-2.07	0.0410	1.00
merck-NM_005642_at	TAFT	NM_005642	0.164	-2.07	0.0410	1.00
merck2-EB38744_at	ADD3	NM_016824 NM_019903 NM_001121	0.145	-2.07	0.0410	1.00
merck-NM_022719_at	DCCR14	NM_022719	-0.153	-2.07	0.0411	1.00
merck-NM_019117_at	KHL4	NM_019117	0.152	-2.07	0.0411	1.00
merck-DB294168_at	PPBP6	NM_001123355 NM_002721 NM_00112	0.0971	-2.07	0.0411	1.00
merck-NM_000593_at	PLXNB3	NM_000593 NM_001163257	-0.133	-2.07	0.0411	1.00
merck2-BI668895_at	CIMP	NM_198390 NM_030629	-0.189	-2.07	0.0412	1.00
merck-CR626250_at	SMARCE1	NM_003079	0.0877	-2.07	0.0412	1.00
merck-AK126280_at	IHD	BC063384	0.449	-2.07	0.0412	1.00

merck-M74777_a_at	DPP4	NM_0019395	0.239	2.07	0.0412	1.00
merck-NM_003369_at	UGT8	NM_001128174 NM_003360	0.110	2.07	0.0412	1.00
merck-NM_052945_at	TNFRSF13C	NM_052945	0.149	2.07	0.0412	1.00
merck-AY05981_at	SEPT6	NM_145709	0.170	2.07	0.0413	1.00
merck-AF4-25244_at	RAET1K	NR_204045	-0.0828	-2.07	0.0413	1.00
merck2-ENST00000367942_at	ATF6	NM_007348	-0.166	-2.07	0.0413	1.00
merck-NM_014883_a_at	FAM13A	NM_014883 NM_001015045	0.268	2.07	0.0413	1.00
merck-NM_016651_at	DACT1	NM_016651 NM_001079520	0.416	2.07	0.0413	1.00
merck-ENST00000377964_at	RECK	BC060806	-0.184	-2.07	0.0414	1.00
merck2-BX648519_at	ERP44	NM_015051	0.122	2.07	0.0414	1.00
merck-XM_929383_at	---	AC009492	-0.117	-2.07	0.0414	1.00
merck-ENST00000369655_at	---	XR_110456 XR_111116 XR_114431	-0.150	-2.07	0.0414	1.00
merck-BF977217_at	---	---	-0.0993	-2.07	0.0415	1.00
merck-NM_001004759_at	OR51T1	NM_001004759	-0.122	-2.07	0.0415	1.00
merck-BC047780_at	LOC100329109	NR_033248	-0.157	-2.07	0.0415	1.00
merck2-AF062248_at	ZBP1	AF062248	-0.117	-2.07	0.0416	1.00
merck-NM_032076_at	AKR7A3	NM_030776 NM_001160417 NM_00116	-0.205	-2.07	0.0416	1.00
merck-AO499409_at	CYP2C9	NM_000776 NM_001198853 NM_00119	-0.169	-2.07	0.0416	1.00
merck-BH769953_at	SELL13	NM_015167	-0.131	-2.07	0.0416	1.00
merck-XM_938748_at	---	---	0.178	2.07	0.0416	1.00
merck-A129830_s_at	RPL22	NM_0009893	0.147	2.07	0.0417	1.00
merck-BC015311_a_at	KIF9	NM_022342 NM_182902 NM_00113487	-0.119	-2.07	0.0417	1.00
merck-NM_152310_at	ELOV3L	NM_152310	-0.173	-2.06	0.0417	1.00
merck-AK128754_at	---	AK128754	0.119	2.06	0.0418	1.00
merck-BC060766_at	SLC2A14	AL832448	-0.104	-2.06	0.0418	1.00
merck-NM_001788_s_at	SEPT7	NM_001788 NM_001011553	0.112	2.06	0.0418	1.00
merck-NM_152751_s_at	BEND7	NM_152751	-0.134	-2.06	0.0419	1.00
merck2-NM_178153_at	DCX	NM_00555 NM_178152 NM_178153 N	0.345	2.06	0.0419	1.00
merck-ENST00000361066_a_at	GSTM3	NM_000849 NR_024537	0.243	2.06	0.0419	1.00
merck-BQ924201_at	---	---	-0.119	-2.06	0.0419	1.00
merck-T80060_s_at	---	NG_009055	-0.162	-2.06	0.0420	1.00
merck-NM_017681_s_at	NUP62CL	NM_017681 NR_033676	0.291	2.06	0.0420	1.00
merck-NM_021794_at	ADAM30	NM_021794	0.118	2.06	0.0420	1.00
merck2-BU147178_at	WDR6	NM_018031	0.150	2.06	0.0420	1.00
merck-ENST00000288425_at	BAHC1C	NM_001080519	-0.160	-2.06	0.0420	1.00
merck2-AK1742_a_at	---	NM_14499 NM_000172	-0.046	-2.06	0.0420	1.00
merck-NM_001037335_at	GNA1	NM_001003735 NM_033405	-0.175	-2.06	0.0420	1.00
merck-NM_007119_at	PRIC285	NM_007139 NM_152626	0.342	2.06	0.0420	1.00
merck-BC039434_at	ZNF92	BC039434	0.289	2.06	0.0420	1.00
merck2-BE06861_x_at	---	---	-0.136	-2.06	0.0420	1.00
merck-NM_002128_s_at	HMGBl	NM_002128	0.187	2.06	0.0421	1.00
merck-NM_014572_a_at	LATS2	NM_014572	-0.122	-2.06	0.0421	1.00
merck-NM_001040449_a_at	HLA-L	NR_027822	0.133	2.06	0.0421	1.00
merck2-BG385797_at	VPS53	NM_001128159	-0.167	-2.06	0.0421	1.00
merck-NM_001154_at	ANXA5	NM_001154	-0.111	-2.06	0.0421	1.00
merck-AK25286_at	---	AK025286	-0.176	-2.06	0.0421	1.00
merck2-ENST00000304187_x_at	---	---	0.234	2.06	0.0421	1.00
merck-AK131312_a_at	RCOR3	NM_001136223 NM_001136225 NM_01	-0.262	-2.06	0.0422	1.00
merck-NM_000419_at	ITGA2B	NM_000419	-0.445	-2.06	0.0422	1.00
merck2-BF979936_s_at	HEATR8 HEATR8-TRTC4	NM_001039464 NR_026782 NR_03764	-0.143	-2.06	0.0422	1.00
merck-NM_024549_s_at	TCTN1	NM_001082538 NM_001082537 NM_02	0.150	2.06	0.0423	1.00
merck-ENST00000372602_s_at	TMS15B	NM_194324	0.219	2.06	0.0423	1.00
merck2-ENST000003041873_a_at	PRDM7	NM_00098173 NM_052996	0.147	2.06	0.0423	1.00
merck2-NM_022893_at	BCL11A	NM_00098173 NM_052996	0.188	2.06	0.0424	1.00
merck-NM_01039036_at	PRPS2	NM_010390991 NM_002765	0.222	2.06	0.0424	1.00
merck2-BD786226_at	---	DQ786226	-0.131	-2.06	0.0425	1.00
merck2-BC051288_at	FUC4A2	NM_032020	-0.168	-2.06	0.0425	1.00
merck-NM_001040167_s_at	LFNG	NM_01040167 NM_00116355 NM_0C	-0.104	-2.06	0.0425	1.00
merck-NM_018275_s_at	C7orf43	NM_018275	-0.173	-2.06	0.0426	1.00
merck-NM_001010853_s_at	PMD2D	NM_01010853	0.229	2.06	0.0426	1.00
merck-NM_207005_at	USF1	NM_07122 NM_207005	-0.229	-2.06	0.0427	1.00
merck-BC012447_a_at	SP110	NM_004509 NM_004510 NM_080424 N	-0.119	-2.06	0.0427	1.00
merck-NM_005132_at	REC8	NM_005132 NM_01048205	-0.269	-2.06	0.0427	1.00
merck2-AB051826_at	RHOI	NM_021205	-0.160	-2.05	0.0428	1.00
merck2-BU603313_at	BCAS2	NM_005872	0.0930	2.05	0.0428	1.00
merck-NM_020417_at	TBX20	NM_01077653 NM_00116220	0.114	2.05	0.0428	1.00
merck-BQ957607_a_at	TNFAIP2	NM_006291	-0.255	-2.05	0.0428	1.00
merck2-hcT16407653_at	---	NG_010517	-0.134	-2.05	0.0428	1.00
merck-AF103907_a_at	PCAS	NR_015342	-0.121	-2.05	0.0428	1.00
merck2-BU196243_at	---	---	-0.116	-2.05	0.0429	1.00
merck-NM_005132_at	TMEM220	NM_001004313	0.124	2.05	0.0429	1.00
merck-AK127705_at	DLEU7	AK126830	-0.177	-2.05	0.0429	1.00
merck2-S976377_at	---	---	0.348	2.05	0.0430	1.00
merck2-BG536877_at	S1PR1	NM_001400	0.207	2.05	0.0430	1.00
merck-ENST00000325589_at	RABGAP1L	CR627374	0.113	2.05	0.0430	1.00
merck2-NM_205843_at	NPC	NM_005597 NM_205843	-0.113	-2.05	0.0430	1.00
merck2-BG745188_at	---	---	-0.118	-2.05	0.0430	1.00
merck2-D4660473_at	DQ069066	DQ069066	-0.155	-2.05	0.0431	1.00
merck2-AL832013_at	ANAPC1	AL832013	0.117	2.05	0.0431	1.00
merck-XM_929995_at	---	---	-0.0970	-2.05	0.0431	1.00
merck-NM_152578_at	FMR1NB	NM_152578	0.115	2.05	0.0431	1.00
merck2-DQ786227_at	---	DQ786327	0.209	2.05	0.0431	1.00
merck2-CB048235_at	---	---	0.133	2.05	0.0432	1.00
merck-ENST00000357931_a_at	---	---	-0.336	-2.05	0.0432	1.00
merck-ENST00000278622_at	AF132199	AF132199	0.239	2.05	0.0432	1.00
merck-BG716493_s_at	AFLP2	NM_001642 NM_001142276 NM_00114	-0.0736	-2.05	0.0432	1.00
merck-AF264622_at	---	AF264622	-0.298	-2.05	0.0432	1.00
merck-AK130474_a_at	---	---	0.177	2.05	0.0432	1.00
merck2-BU03721_at	NR_015400	NR_015400	0.109	2.05	0.0434	1.00
merck2-NM_004054_at	C3AR1	NM_004054	-0.234	-2.05	0.0434	1.00
merck2-BX648513_at	POLA1	BX648513	0.479	2.05	0.0434	1.00
merck-NM_018982_s_at	YIPF1	NM_018982 NR_036639 NM_036640	-0.0915	-2.05	0.0434	1.00
merck-NM_016107_at	ZFR	NM_016107	0.162	2.05	0.0434	1.00
merck2-NM_013394_at	FGF1	NM_008000 NM_031316 NM_031317 N	-0.0988	-2.05	0.0434	1.00
merck-NM_004529_at	MLLT3	NM_003452 NM_016379 NM_0010018	0.154	2.05	0.0434	1.00
merck-ENST00000323920_at	COL2A1	NM_004529	0.142	2.05	0.0434	1.00
merck-NM_031150_at	COL387647	NG_000957	-0.118	-2.05	0.0435	1.00
merck2-AK056080_at	---	---	-0.130	-2.05	0.0435	1.00
merck-NM_001194_at	HCN2	NM_003930	-0.130	-2.05	0.0435	1.00
merck2-BM468535_at	---	---	-0.132	-2.05	0.0435	1.00
merck-RSE_E00000399804_at	ZEB2	NM_014795 NM_001171653	-0.197	-2.05	0.0435	1.00
merck-NM_006706_at	TCERG1	NG_025418	-0.137	-2.05	0.0436	1.00
merck-ENST00000380536_s_at	GPM6B	NM_001001995	0.190	2.05	0.0436	1.00
merck-NM_006706_at	---	NM_006706 NM_001040006	0.156	2.05	0.0436	1.00
merck-BF057095_s_at	---	---	-0.243	-2.05	0.0436	1.00
merck2-BD786226_at	---	---	0.067	2.05	0.0436	1.00
merck-NM_021339_at	NHLRC2	B013743	0.155	2.05	0.0436	1.00
merck-ENST00000367603_a_at	HIVEP2	NM_006734	0.163	2.05	0.0436	1.00
merck-AK001851_s_at	QRSL1	NM_018202	0.209	2.05	0.0437	1.00
merck-NM_001005464_s_at	HIST2H3A	NM_001005464 NM_021059 NM_00112	-0.149	-2.05	0.0437	1.00
merck2-BC017339_at	THEM4	NM_053055	0.234	2.04	0.0437	1.00
merck2-BC108287_a_at	ZNF516	NM_014643	-0.283	-2.04	0.0437	1.00
merck2-BG230697_x_at	PSAP	NM_002778 NM_001042465 NM_00104	-0.0612	-2.04	0.0438	1.00
merck2-XM_098264_s_at	LOC100128651	D25271	-0.114	-2.04	0.0438	1.00
merck-AV715889_s_at	SKP1 LOC728622	NM_006930 NM_170679 NR_036619	0.113	2.04	0.0438	1.00
merck-ENST00000373790_at	TAF1	NM_004606 NM_138923	0.127	2.04	0.0438	1.00
merck-A421220_at	---	AL161785	-0.175	-2.04	0.0438	1.00
merck-NM_015327_at	SMG5	NM_015327	-0.169	-2.04	0.0438	1.00
merck-BX537586_at	STK17A	BC023508	0.153	2.04	0.0438	1.00
merck-BC050552_s_at	NISCH	BC050552	-0.114	-2.04	0.0438	1.00
merck-NM_016217_at	HECA	NM_016217	0.0710	2.04	0.0439	1.00
merck-CR621898_at	---	CR621898	0.142	2.04	0.0439	1.00
merck-AW852694_at	---	---	-0.0931	-2.04	0.0439	1.00
merck-ENST00000330493_at	PPP1R21	XR_108331 XR_114986	-0.136	-2.04	0.0439	1.00
merck2-AK172753_at	PrsSAP1P1	NM_014731	-0.103	-2.04	0.0439	1.00
merck-NM_014731_at	---	---	-0.131	-2.04	0.0439	1.00

merck-NM_003415_at	ZNF268	NM_003415 NM_001165881 NM_15294	0.176	2.04	0.0439	1.00
merck-ENST00000313566_at	AP451	NM_001128126	0.139	2.04	0.0440	1.00
merck2-AW1665829_at	---	D00596	0.161	2.04	0.0440	1.00
merck2-NM_199127_s_at	---	---	0.231	2.04	0.0440	1.00
merck2-NM_007110_at	TEP1	NM_007110	-0.123	-2.04	0.0440	1.00
merck2-NM_001100874_at	SLC9B1	NM_001100874	-0.127	-2.04	0.0440	1.00
merck-NM_015137_at	EFR3A	NM_015137	0.153	2.04	0.0440	1.00
merck-NM_004566_at	PFKFB3	NM_004566 NM_001145443	-0.167	-2.04	0.0441	1.00
merck2-BX647290_at	---	BX647290	0.120	2.04	0.0441	1.00
merck-ENST00000373701_s_at	OGT	NM_181672 NM_181673	0.204	2.04	0.0441	1.00
merck-AF088004_at	---	AF088004	-0.170	-2.04	0.0441	1.00
merck-NM_003639_s_at	IKBKG	NM_001099857 NM_001099856 NM_0C	-0.119	-2.04	0.0441	1.00
merck-NM_001013723_s_at	ZNRF2P1	NR_003502	-0.111	-2.04	0.0442	1.00
merck2-NM_017979_at	UNC45A	NM_018671 NM_001039675	-0.149	-2.04	0.0442	1.00
merck2-NM_001415_at	EIF2S3	NM_001415	0.0804	2.04	0.0442	1.00
merck2-AY346375_at	ZNF562_ZNF812	NM_001130031 NM_001130032 NM_01	-0.128	-2.04	0.0442	1.00
merck2-BF60629_at	---	AP002740	-0.128	-2.04	0.0443	1.00
merck-CG00682_s_at	DUSP1	NM_006000	-0.146	-2.04	0.0443	1.00
merck-NM_003047_at	SLC9A	NM_003064	-0.002	-2.04	0.0443	1.00
merck-NM_000832_at	TAOK2	NM_004763	-0.174	-2.04	0.0443	1.00
merck2-CR742385_at	NUP93	NM_014699	-0.143	-2.04	0.0443	1.00
merck2-NM_022073_at	EGLN3	NM_022073	0.243	2.04	0.0444	1.00
merck-AF195821_s_at	TCL6	AF195821	0.216	2.04	0.0445	1.00
merck-AK091013_at	LOC401188	AK091013	-0.145	-2.04	0.0445	1.00
merck2-BX348702_at	TU1K1	NM_012290 NM_001136554 NM_00113	0.131	2.04	0.0445	1.00
merck-A765698_at	---	AC080106	0.334	2.04	0.0445	1.00
merck-AK056007_s_at	---	AK056007	0.169	2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.079	-2.04	0.0445	1.00
merck-BQ927793_s_at	LOC100506119	XR_108951 XR_108954 XR_108952 XF	-0.200	-2.04	0.0446	1.00
merck-G65655_X_at	---	UT3627	-0.178	-2.04	0.0446	1.00
merck-NM_178834_at	LAYN	NM_178834	-0.123	-2.04	0.0446	1.00
merck-DA395744_a_at	PDK2	NM_001199898	0.124	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	NG_000929	0.108	2.04	0.0446	1.00
merck-NM_173077_at	CPO	NM_173077	0.162	2.04	0.0446	1.00
merck-NM_012217_at	TPSD1	NM_012217	-0.138	-2.04	0.0447	1.00
merck-NM_024760_s_at	TLE6	NM_001143086 NM_024760	-0.137	-2.04	0.0447	1.00
merck-NM_024760_s_at	---	---	-0.079	-2.04	0.0447	1.00
merck-BQ927793_s_at	---	---	-0.200	-2.04	0.0447	1.00
merck-G65655_X_at	---	---	-0.178	-2.04	0.0447	1.00
merck-NM_178834_at	---	---	-0.123	-2.04	0.0447	1.00
merck-RSE_00000067763_at	---	---	0.124	2.04	0.0446	1.00
merck-NM_173077_at	---	---	0.108	2.04	0.0446	1.00
merck-NM_012217_at	---	---	0.162	2.04	0.0446	1.00
merck-AK091013_at	---	---	-0.138	-2.04	0.0447	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0447	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	0.169	2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.079	-2.04	0.0445	1.00
merck-BQ927793_s_at	---	---	-0.200	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.178	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	-0.123	-2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.124	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.108	2.04	0.0446	1.00
merck-NM_173077_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_012217_at	---	---	-0.138	-2.04	0.0447	1.00
merck-AK091013_at	---	---	-0.137	-2.04	0.0447	1.00
merck2-BX348702_at	---	---	0.169	2.04	0.0445	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.00
merck-AK091013_at	---	---	0.169	2.04	0.0445	1.00
merck2-BX348702_at	---	---	-0.137	-2.04	0.0446	1.00
merck-A765698_at	---	---	0.169	2.04	0.0445	1.00
merck-AK056007_s_at	---	---	-0.079	-2.04	0.0445	1.00
merck-CK002033_at	---	---	-0.200	-2.04	0.0446	1.00
merck-BQ927793_s_at	---	---	-0.178	-2.04	0.0446	1.00
merck-G65655_X_at	---	---	-0.123	-2.04	0.0446	1.00
merck-NM_178834_at	---	---	0.124	2.04	0.0446	1.00
merck-DA395744_a_at	---	---	0.108	2.04	0.0446	1.00
merck-RSE_00000067763_at	---	---	0.162	2.04	0.0446	1.00
merck-NM_173077_at	---	---	-0.138	-2.04	0.0447	1.00
merck-NM_012217_at	---	---	-0.137	-2.04	0.0447	1.

merck-NM_004963_at	<b>CDH17</b>	NM_004963 NM_001144663	-0.198	-2.02	0.0486	1.00	
merck2-AF00216_at	<b>BCL11A</b>	NM_018014 NM_138559	0.196	-2.02	0.0486	1.00	
merck-NM_145176_s_at	<b>FAM84A</b>	NM_145175	-0.120	-2.02	0.0486	1.00	
merck2-NM_024874_at	<b>KIAA0319L</b>	NM_024874	-0.188	-2.02	0.0487	1.00	
merck2-BC030787_at	<b>OFD1</b>	NM_003611	0.185	-2.02	0.0487	1.00	
merck-AV724728_at		AC009331	0.144	-2.02	0.0487	1.00	
merck-NC_001405_ORF_1036_s_at		--	-0.115	-2.02	0.0487	1.00	
merck-NM_001662_at	<b>ARF5</b>	NM_001662	-0.162	-2.02	0.0488	1.00	
merck2-CR609492_at		AF067136	-0.220	-2.02	0.0488	1.00	
merck-ENST00000360812_a_at	<b>TTYTY2B</b>	NR_001536 NR_003590	-0.145	-2.01	0.0488	1.00	
merck-T99486_s_at		--	0.174	-2.01	0.0488	1.00	
merck-NM_005860_at	<b>FSTL3</b>	NM_005860	-0.135	-2.01	0.0489	1.00	
merck2-NM_153231_at	<b>ZNF550</b>	BX538032	0.203	-2.01	0.0489	1.00	
merck2-BG704181_a_at	<b>SEPT15</b>	NM_004261 NM_203341	0.181	-2.01	0.0489	1.00	
merck-BC110332_a_at	<b>ZNF507</b>	NM_001136156 NM_014910	0.186	-2.01	0.0489	1.00	
merck-NM_018120_at	<b>ARMC1</b>	NM_018120	0.102	-2.01	0.0489	1.00	
merck-NM_018120_at		--	-0.0734	-2.01	0.0489	1.00	
merck-A089681_at		--	0.009	-2.01	0.0471	1.00	
merck-NM_012142_s_at	<b>TFIP11</b>	NM_001008697 NM_012143	-0.162	-2.01	0.0471	1.00	
merck2-AK075203_s_at	<b>CTSB</b>	NM_00201908 NM_147780 NM_147781 N	-0.0890	-2.01	0.0471	1.00	
merck2-NM_005456_s_at		--	-0.285	-2.01	0.0472	1.00	
merck-NM_024007_at	<b>EBF1</b>	NM_024007	0.224	-2.01	0.0472	1.00	
merck-DV080308_at	<b>DNAH12</b>	NM_178504	-0.179	-2.01	0.0472	1.00	
merck-ENST00000322446_a_at	<b>EIF2S3</b>	NM_0014145	0.144	-2.01	0.0472	1.00	
merck2-BE222032_at		AJ336618	-0.181	-2.01	0.0472	1.00	
merck-ENST00000356030_at		AF118064	0.212	-2.01	0.0472	1.00	
merck-BMP77356_at		--	-0.123	-2.01	0.0472	1.00	
merck2-BF965720_x_at		--	-0.225	-2.01	0.0473	1.00	
merck-AK098783_at	<b>FLJ25917</b>	AK098783	0.220	-2.01	0.0473	1.00	
merck2-NM_005826_at	<b>HNRNPR</b>	NM_001102398 NM_005826 NM_00110	0.0982	-2.01	0.0473	1.00	
merck-ALB33235_at	<b>SLC9A7P1</b>	NR_033801	-0.160	-2.01	0.0473	1.00	
merck-NM_008064_s_at	<b>C14orf126</b>	NM_080664	0.159	-2.01	0.0474	1.00	
merck-NM_006417_at	<b>IFI44</b>	NM_006417	-0.457	-2.01	0.0474	1.00	
merck-NM_030824_at	<b>ZNF442</b>	NM_030824	0.170	-2.01	0.0474	1.00	
merck-NM_001039674_x_at	<b>USP6</b>	NM_004505	0.128	-2.01	0.0474	1.00	
merck-ENST00000262033_at		--	0.117	-2.01	0.0474	1.00	
merck-NM_00103169_x_at	<b>CDCA2EP4</b>	NM_012121	-0.151	-2.01	0.0474	1.00	
merck-NM_178572_at	<b>C100ef93</b>	NM_173572	-0.101	-2.01	0.0474	1.00	
merck-NM_017857_at	<b>SSH3</b>	NM_017857	-0.179	-2.01	0.0475	1.00	
merck2-AK057568_at		--	0.200	-2.01	0.0476	1.00	
merck-NM_145084_at	<b>STAC3</b>	NM_145084	-0.215	-2.01	0.0477	1.00	
merck-BU521288_s_at	<b>NUDT3 RPS10-NUDT3</b>	NM_006703 NM_001202470	-0.137	-2.01	0.0477	1.00	
merck-BC009080_at	<b>NBR1</b>	BC009080	-0.156	-2.01	0.0477	1.00	
merck-AK026670_a_at	<b>METTL4</b>	NM_022840	0.202	-2.01	0.0477	1.00	
merck-BE737112_at		--	-0.173	-2.01	0.0477	1.00	
merck2-NM_00103169_a_at	<b>AADAC3</b>	NM_001103170 NM_001103169	-0.145	-2.01	0.0477	1.00	
merck-AK057104_s_at	<b>LDC10029415</b>	NR_037177 NR_037178 XR_110964 XF	0.203	-2.01	0.0478	1.00	
merck-NM_002300_s_at	<b>LDHB</b>	NM_002300 NM_001174097	0.133	-2.01	0.0478	1.00	
merck2-AK027825_at	<b>SLC38A1</b>	NM_030674 NM_001077484	0.160	-2.01	0.0478	1.00	
merck2-NM_018324_at	<b>OLAH</b>	NM_018324 NM_001039702	-0.159	-2.01	0.0478	1.00	
merck-NM_032038_at	<b>SPNS1</b>	NM_032038 NM_001142448 NM_001114	-0.137	-2.01	0.0478	1.00	
merck-W02683_at	<b>KPNB1</b>	L38951	-0.111	-2.00	0.0479	1.00	
merck-NM_203472_at	<b>SELS</b>	NM_203472	-0.230	-2.00	0.0479	1.00	
merck-NM_018169_x_at		--	-0.169	-2.00	0.0479	1.00	
merck2-AK0571652_at	<b>SP3B1</b>	NM_012433	-0.107	-2.00	0.0480	1.00	
merck2-B0218842_at		--	-0.0809	-2.00	0.0480	1.00	
merck2-B0218842_at	<b>IGFBP5</b>	NM_000509	0.164	-2.00	0.0480	1.00	
merck-BC039828_s_at	<b>SMC6</b>	NM_001142286 NM_024624	0.156	-2.00	0.0480	1.00	
merck-NM_004867_at	<b>ITM2A</b>	NM_004867 NM_001171581	0.211	-2.00	0.0480	1.00	
merck2-CD250161_at		--	0.107	-2.00	0.0480	1.00	
merck-AK090842_at		CR597563	-0.181	-2.00	0.0480	1.00	
merck-NM_018101_at	<b>CDCA8</b>	NM_018101	-0.206	-2.00	0.0480	1.00	
merck-XM_940076_at		--	-0.122	-2.00	0.0481	1.00	
merck-NM_001010844_s_at	<b>IRAK1BP1</b>	NM_001010844	0.153	-2.00	0.0481	1.00	
merck-AW263638_a_at	<b>PRKD1</b>	NM_022742	-0.179	-2.00	0.0482	1.00	
merck-BX933535_at		AL133167	0.155	-2.00	0.0482	1.00	
merck2-BP331530_a_at	<b>RRBP1</b>	NM_001042576 NM_004587	-0.140	-2.00	0.0482	1.00	
merck-NM_032814_a_at	<b>RNFT2</b>	NM_001109903 NM_032814	0.183	-2.00	0.0482	1.00	
merck2-BC038724_at	<b>REEP3</b>	NM_001003130	-0.262	-2.00	0.0482	1.00	
merck-BC040914_at		BC040914	0.288	-2.00	0.0482	1.00	
merck2-AK025304_at	<b>EPHB2</b>	NM_017449 NM_004442	-0.162	-2.00	0.0483	1.00	
merck-NM_001010844_s_at	<b>TMEM53</b>	NM_024587	-0.132	-2.00	0.0483	1.00	
merck2-B0218842_at		XR_110541 XR_114547	-0.148	-2.00	0.0483	1.00	
merck2-B02170544_s_at	<b>COG4</b>	NM_015386 NM_001195139	-0.230	-2.00	0.0483	1.00	
merck-NM_015324_at	<b>CNR2</b>	EU151712	0.168	-2.00	0.0484	1.00	
merck-AV715018_s_at		--	-0.170	-2.00	0.0484	1.00	
merck2-AI654832_at	<b>CAPN1</b>	NM_001198866 NM_0015186 NM_00119	-0.169	-2.00	0.0484	1.00	
merck-NM_005186_s_at	<b>POLQ2F3</b>	NM_014352	0.167	-2.00	0.0485	1.00	
merck-AF162278_a_at	<b>POLR3K</b>	NM_016310	-0.172	-2.00	0.0485	1.00	
merck-NM_032622_at		--	0.101	-2.00	0.0485	1.00	
merck-AF355799_a_at	<b>DEFT1P DEFT1P2</b>	NR_036686 NR_036687	-0.148	-2.00	0.0486	1.00	
merck-NM_032350_s_at	<b>C7orf150</b>	NM_023295 NM_001134395 NM_00113	-0.146	-2.00	0.0486	1.00	
merck-NM_017539_at	<b>DNAH3</b>	NM_017539	0.136	-2.00	0.0486	1.00	
merck-BC063531_a_at	<b>SIN3B</b>	NM_015260	-0.192	-2.00	0.0486	1.00	
merck-BE847868_at	<b>PHC3</b>	NM_024947	0.173	-2.00	0.0486	1.00	
merck2-BE811240_s_at		--	-0.0830	-2.00	0.0487	1.00	
merck-XM_943067_at		AY952890	-0.093	-2.00	0.0487	1.00	
merck-B005286_s_at	<b>EPMA2</b>	NM_005670	0.175	-2.00	0.0487	1.00	
merck2-BX537483_at		ITGA6	0.157	-2.00	0.0488	1.00	
merck2-B02100244221_at	<b>PAPIP2</b>	NM_020459	0.148	-2.00	0.0488	1.00	
merck-NM_152570_s_at		NM_152570	-0.172	-2.00	0.0488	1.00	
merck2-AK097700_s_at	<b>LINC02</b>	NM_027487	-0.196	-2.00	0.0488	1.00	
merck-NM_001385_at		DLG4	NM_001365 NM_001128827	-0.145	-2.00	0.0488	1.00
merck-D074303_at		--	-0.138	-2.00	0.0488	1.00	
merck-NM_152773_at		--	-0.111	-2.00	0.0488	1.00	
merck-NM_005032_at	<b>TCTEX1D2</b>	NM_152773	0.181	-2.00	0.0489	1.00	
merck-XM_496769_at	<b>PLS3</b>	NM_005032 NM_001136025 NM_00117	-0.109	-2.00	0.0489	1.00	
merck2-AY687925_s_at	<b>EEF1G</b>	NM_023309	0.113	-2.00	0.0489	1.00	
merck-NM_002424_at	<b>MMP8</b>	NM_002424	-0.408	-2.00	0.0489	1.00	
merck-NM_182621_at	<b>FAM159A</b>	BC041608	0.218	-2.00	0.0489	1.00	
merck-ENST00000326189_at	<b>LOC6464976</b>	AK096082	-0.149	-2.00	0.0489	1.00	
merck2-AA001222_at		--	0.174	-2.00	0.0489	1.00	
merck-ENST00000379938_at	<b>RREB1</b>	NM_001003699 NM_001168344 NM_00	-0.0840	-2.00	0.0490	1.00	
merck2-DA100265_a_at		NM_002851	-0.115	-2.00	0.0490	1.00	
merck2-Rota_P_s3_s_at	<b>PTPRZ1</b>	--	-0.0744	-2.00	0.0490	1.00	
merck-NR_002748_x_at	<b>SNORD4B</b>	NM_002748	0.333	-1.99	0.0490	1.00	
merck2-AB0562172_x_at		--	-0.0866	-1.99	0.0490	1.00	
merck-NM_004747_at	<b>PINW12</b>	NM_001123572 NM_018068	-0.149	-1.99	0.0490	1.00	
merck2-ENST0000037311_x_at	<b>OPRT637P MGC72080</b>	NM_004747	0.171	-1.99	0.0490	1.00	
merck-AK023236_at	<b>EXOG</b>	NM_002163 NM_001145464	-0.153	-1.99	0.0490	1.00	
merck-CR692570_s2_at	<b>GPR107</b>	NM_005107 NM_001145464	0.171	-1.99	0.0490	1.00	
merck-NM_014368_at		NM_0113657 NM_001136558 NM_02	-0.193	-1.99	0.0490	1.00	
merck-AF17360_at	<b>LHX6</b>	NM_014368 NM_199760	0.212	-1.99	0.0491	1.00	
merck-NM_145029_at		AF17360	0.433	-1.99	0.0491	1.00	
merck2-BX647602_at	<b>C6orf136</b>	NM_001109938 NM_145029 NM_00116	-0.194	-1.99	0.0491	1.00	
merck-AK26301_a_at	<b>C5orf42</b>	NM_023073	-0.115	-1.99	0.0491	1.00	
merck-NM_000803_at	<b>RPS6KA6</b>	NM_014496	0.164	-1.99	0.0491	1.00	
merck-BC009462_s_at	<b>FOLR2</b>	NM_000803 NM_001113534 NM_00111	-0.211	-1.99	0.0491	1.00	
merck-AK341167_a_at	<b>CD163</b>	BC008462	-0.180	-1.99	0.0491	1.00	
merck2-NM_004695_2_at	<b>NLRP3</b>	NM_004244 NM_203416	-0.283	-1.99	0.0491	1.00	
merck-NM_153742_at	<b>CTH</b>	NM_004895 NM_183395 NM_00107982	-0.190	-1.99	0.0492	1.00	
merck2-BU684534_at		NM_001902 NM_153742 NM_00119046	0.123	-1.99	0.0492	1.00	
merck-NM_004691_at	<b>RALGPS2</b>	--	-0.186	-1.99	0.0492	1.00	
merck2-BU684534_at		NM_152863	0.232	-1.99	0.0492	1.00	
merck-NM_004747_at		NM_181552 NM_001202543 XR_10885	-0.164	-1.99	0.0492	1.00	
merck-AK056307_a_at	<b>CUX1</b>	NM_181552 NM_001202543 XR_10885	-0.145	-1.99	0.0492	1.00	
merck2-BX648541_at		XR_108561 XR_112720 XR_113724	0.140	-1.99	0.0492	1.00	
merck-ENST00000333891_a_at	<b>PCLO</b>	NM_03026 NM_041540	-0.134	-1.99	0.0492	1.00	

merck-NM_198570_at	<b>VWC2</b>	NM_198570	-0.0885	-1.99	0.0493	1.00
merck-CR610223_a_at	<b>SCARB2</b>	NM_005505 NM_001204255	-0.270	-1.99	0.0493	1.00
merck-NM_002955_s_at	<b>CDK17</b>	NM_002955 NM_001170464	0.182	-1.99	0.0493	1.00
merck-AL17542_at	---	AL17542	-0.139	-1.99	0.0493	1.00
merck-AJ03145_at	<b>OR1F2P</b>	NR_002169	-0.146	-1.99	0.0493	1.00
merck-NM_003294_s_at	<b>TPSAB1 TPSB2</b>	NM_003294 NM_024164 XM_00311964	-0.185	-1.99	0.0494	1.00
merck-NM_002534_a_at	<b>OAS1</b>	NM_016816 NM_002534 NM_0010324	-0.322	-1.99	0.0494	1.00
merck-BX404802_at	---	EF445017	-0.126	-1.99	0.0494	1.00
merck-NM_032974_at	<b>CASP10</b>	NM_032974	-0.121	-1.99	0.0494	1.00
merck2-A1147879_at	---	EU280320	-0.184	-1.99	0.0495	1.00
merck-BX640760_s_at	<b>NBEA</b>	NM_015678 NM_001204197	0.190	-1.99	0.0495	1.00
merck2-B1765353_at	<b>REEP5</b>	NM_005669	0.147	-1.99	0.0495	1.00
merck-AK125365_at	<b>C19orf50</b>	BX648739	-0.100	-1.99	0.0495	1.00
merck-XM_936352_at	---	---	-0.136	-1.99	0.0496	1.00
merck-ENST00000340005_x_at	---	---	0.0787	-1.99	0.0496	1.00
merck-NM_207318_a_at	<b>FAM199X</b>	NM_207318	0.135	-1.99	0.0496	1.00
merck-AK08504_at	<b>OPN3</b>	NM_05434	0.223	-1.99	0.0496	1.00
merck-AK08501_at	<b>CBACAM2P</b>	NB_007754	-0.135	-1.99	0.0496	1.00
merck-XM_9371472_a_at	<b>HAUSS</b>	NM_011445	-0.145	-1.99	0.0496	1.00
merck-NM_001007255_at	<b>KLHD9</b>	NM_152286 NM_001007255 NR_03338	0.138	-1.99	0.0497	1.00
merck2-BX648405_s_at	<b>DDX21</b>	BX649405	0.178	-1.99	0.0497	1.00
merck-NM_001005962_s_at	<b>ERBB2</b>	NM_004448 NM_001005862	-0.240	-1.99	0.0497	1.00
merck-AF075028_at	<b>FXR1</b>	NM_005087 NM_001013438 NM_00101	0.131	-1.99	0.0498	1.00
merck-NM_005739_at	<b>RASGRP1</b>	NM_005739 NM_001128602	0.171	-1.99	0.0498	1.00
merck2-BE614460_at	<b>C11orf46</b>	BX647617	0.224	-1.99	0.0498	1.00
merck-NM_173473_s_at	<b>ANAPC16</b>	NM_173473	0.154	-1.99	0.0498	1.00
merck-NM_001242_at	<b>CD27</b>	NM_001242	0.190	-1.99	0.0498	1.00
merck-NM_004314_at	<b>ART1</b>	NM_004314	-0.151	-1.99	0.0499	1.00
merck2-AI654073_at	---	AL598942	0.221	-1.99	0.0499	1.00
merck-NM_173506_at	<b>LYPD4</b>	NM_173506	-0.142	-1.99	0.0499	1.00
merck2-NM_001080495_x_at	<b>TNRC18</b>	NM_001080495	-0.128	-1.99	0.0499	1.00
merck-BUS09154_at	<b>PPP2R1B</b>	NM_002716 NM_001177562 NM_0011	0.129	-1.99	0.0499	1.00
merck-AA454219_at	---	EU332860	-0.141	-1.99	0.0499	1.00
merck-BU741143_at	---	---	-0.112	-1.99	0.0499	1.00
merck2-BQ441045_at	---	---	-0.116	-1.99	0.0500	1.00
merck2-ENST00000376242_at	<b>PSORS1C3</b>	NR_026816	-0.130	-1.99	0.0500	1.00

List of 2,223 transcripts found in the EM131 cohort as being differentially expressed between HBV vaccine responders and poor-responders (moderated t-test, nominal  $p \leq 0.05$ ).  
 1,004 transcripts were induced in HBV vaccine responders (red) and 1,223 transcripts were repressed in HBV vaccine responders (blue) compared to HBV vaccine poor-responders.  
 For each transcript, its probeset identifier, its HUGO gene symbol, RefSeq accession number, fold difference between HBV vaccine responders versus poor-responders and the moderated t-test p-values are given. The transcripts belonging to the 15-gene expression signature are highlighted in grey.

**Supplementary Table 4b. Prediction of HBV vaccine response of the 15-gene signature on the EM131 test set**

HBV vaccine	predicted by the 15-gene signature	
	responder	poor responder
responder	9	8
poor responder	9	19

The 15-gene signature has an accuracy of 62.2% on the EM131 test set

**Supplementary Table 4c. Pathway enrichment analysis among genes differentially expressed between HBV vaccine responders and poor-responders**

Pathway		Ratio	nominal p-value	adjusted p-value	Intersect
<i>B-cell signaling</i>					
<i>B_CELL_DEVELOPMENT</i>		0.406	1.70E-07	6.33E-05	<i>IGH1.G</i> CDB798.HLA-DQA1.CD40.IGHM.HLA-DOB.HLA-DQB1.HLA-DRB1.CD79A
<i>ALTERED_T_CELL_and_B_CELL_SIGNALING_IN_RHEUMATOID_AF</i>		0.155	0.00868	0.231	<i>IGH1.PRTN3.CD79B.HLA-DQA1.CD40.IGHM.TNF51B.HLA-DOB.HLA-DRB1.DNA.DOB1</i>
<i>RAS signaling</i>					
<i>MAPK_SIGNALING</i>		0.176	0.00133	0.0991	<i>FGEF1AY.EIF1AX.PIK3R3.RRAS2.VEGFC.ATM.YWHAQ.SOS2.FOXO1.EIF2S3</i>
<i>EIF2_SIGNALING</i>		0.131	0.0461	0.409	<i>EIF1AY.EIF1AX.PIK3R3.RRAS2.EIF2S3.EIF2S2.EIF5.BC2E3.EIF5.PIK3R8.JNSR</i>
<i>Antigen presentation</i>					
<i>ALLOGRAFT_REJECTION_SIGNALING</i>		0.175	0.00619	0.192	<i>IGH1.HLA-DRB4.HLA-DOA1.IGH2.CD40.HLA-DQB1.HLA-DRB1.HLA-DRB1.HL</i>
<i>DENDRITIC_CELL_MATURATION</i>		0.132	0.00687	0.196	<i>IGH1.MAPK14.HLA-DRB4.HLA-DOA1.IGH2.PIK3R3.CD40.HLA-DOB.HLA-DRB1.HL</i>
<i>AUTOIMMUNE_THYROID_DISEASE_SIGNALING</i>		0.170	0.0152	0.354	<i>IGH1.HLA-DQA1.GH2.CD40.HLA-DOB.HLA-DRB1.HLA-DRB1.CFCER1.HLA</i>
<i>QX40_SIGNALING_PATHWAY</i>		0.156	0.0189	0.370	<i>HLA-DRBA2.TRFAS5.HLA-DQA1.HLA-DOB.HLA-DQB1.HLA-DRB1.HLA-DRB3.CE</i>
<i>CYTOTOXIC_T_LYMPHOCYTE-MEDIATED_APOPTOSIS_OF_TARGET</i>		0.155	0.0264	0.377	<i>HLA-DRB4.HLA-DOA1.HLA-DOB.HLA-DRB1.HLA-DRB1.HLA-DRB3.FCRBC1.GC</i>
<i>ANTIGEN_PRESENTATION_PATHWAY</i>		0.159	0.0422	0.409	<i>HLA-DRB4.HLA-DOA1.HLA-DOB.HLA-DRB1.HLA-DRB1.HLA-A.HLA-L</i>
<i>G-protein_coupled_receptor_signaling</i>					
<i>G_PROTEIN_SIGNALING_MEDiated_BY_TUBBY</i>		0.174	0.0169	0.370	<i>PLCB3.GNA14.GNG13.GNG7.GNA11.GNG4.GNAT1.LNSR</i>
<i>CCR3_SIGNALING_IN_EOSINOPHILS</i>		0.125	0.0275	0.377	<i>MAPK7.GNA14.PIK3R3.RRAS2.GNA13.GNG7.PAK3.ATM1.PTRK1.ROCK1</i>
<i>P2X7_PURINIC_RECECTOR_SIGNALING_PATHWAY</i>		0.126	0.0301	0.388	<i>PLCB3.ITGB3B2.CT2R7.GNA14.PIK3R3.RRAS2.GNA13.GNG7.ADCY9.ATM1.PLXNC1</i>
<i>FMRF1_SIGNALING_IN_NEUTROPHILS</i>		0.126	0.0389	0.409	<i>PLCB3.GNA14.PIK3R3.RRAS2.GNG13.GNG7.ATM1.PTR1.NOX1.CYBB.GNA11.P</i>
<i>IL-1_SIGNALING</i>		0.126	0.0465	0.409	<i>MAPK9.GNA14.MAP2K2.PIK3R3.GNC13.GNG7.ADCY9.TAB2.GNA11.GNC1</i>
Others					
<i>ROLE_OF_NFAT_IN_REGULATION_OF_THE_IMMUNE_RESPONSE</i>		0.162	4.26E-05	0.00457	<i>IGH1.HLBK.KPNP6.PLCB3.GNA14.CD79B.HLA-DOA1.PIK3R3.RRAS2.IGHM</i>
<i>PRIMARY_IMMUNODEFICIENCY_SIGNALING</i>		0.255	0.00018	0.0147	<i>IGH1.HLBK.IGNHG2.CD40.IGHM.DCLRE1.CD79A.HGK.IGLC1.LTR1.TNFRSF5</i>
<i>IL-8_SIGNALING</i>		0.146	0.00499	0.0464	<i>DEFA1EFA1B1DEFA1B3.FGP.GNA14.ZU1.PIK3R3.RRAS2.GNG13.VEGFC.GNC</i>
<i>IL-4_SIGNALING</i>		0.186	0.00171	0.105	<i>HLA-DPA1.PIK3R3.RRAS2.INPL1.HLA-DOB.HLA-DQB1.ATM1.FCEB1.HLA-DRB1</i>
<i>PIK3_SIGNALING_IN_B_LYMPHOCYTES</i>		0.148	0.0219	0.109	<i>IGH1.HLBK.PLCB3.GNA14.PIK3R3.RRAS2.GNA13.GNG7.CD40.MALT1.HGK.PIK3A1.BKL.IPTR1.CE</i>
<i>INTERFERON_SIGNALING</i>		0.242	0.0235	0.109	<i>IRF9.MET1.ATB3B.GNA14.BAK1.BAK1.IFK1.T315.OAS1</i>
<i>DNA_DAMAGE_and_BREAK_REPAIR_BY_HOMOLOGOUS_RECOMBINATION</i>		0.146	0.0409	0.143	<i>IGH1.HLBK.MET1.HLBK.PIK3R3.RRAS2.GNA14.IGHM.TNF51B.ATM.CD79A</i>
<i>SYSTIC_LUP.KUPERTHEMATOSUS_SIGNALING</i>		0.146	0.0409	0.151	<i>IGH1.CD22.CD79B.HLBK.PIK3R3.RRAS2.GNA14.IGHM.TNF51B.ATM.CD79A</i>
<i>RENAL_CELL_CARCINOMA_SIGNALING</i>		0.174	0.0447	0.151	<i>HCF1.GAB1.PIK3R3.RRAS2.WHL.PIK3A.GHM.SOS2.PIK3R2.PIK3R6.EGLN3.MET</i>
<i>MACROPHAGOCYTOSIS_SIGNALING</i>		0.159	0.0123	0.304	<i>HGTB1.CD3B.PIK3R2.RRAS2.CD14.ATM.FDGFB6.EGF.PIK3R6.MET.PIK3R2</i>
<i>CD40_SIGNALING</i>		0.156	0.0189	0.370	<i>MAPK14.TRFAS5.MAP2K6.PIK3R3.CD40.ATM.FCEB1.PIK3R6.AT1.KBKG</i>
<i>FGF_SIGNALING</i>		0.143	0.0209	0.377	<i>HGP4K1.GAB1.MAP2K6.PIK3R3.ATM1.TPR1.SOS2.FGF18.PIK3R6.FGF1.M</i>
<i>B_CELL_RECEPтор_SIGNALING</i>		0.123	0.0228	0.377	<i>BLNK.GNA14.PIK3R3.CD79B.GAB1.MAP2K6.PIK3R3.RRAS2.MALT1.PIK3R3</i>
<i>ROLE_OF_TISSUE_FACTOR_IN_CANCER</i>		0.132	0.0248	0.377	<i>MAPK14.ITGB3.GNA14.PIK3R3.RRAS2.VEGFC.BLK.ATM.FGA.GNA14.PIK3R3</i>
<i>MYC_MEDiated_APOTOSIS_SIGNALING</i>		0.155	0.0264	0.377	<i>PIK3R2.RRAS2.ATM1.YWHAQ.YWHAQ.SOS2.PIK3R2.BCL2.PIK3R3</i>
<i>RAN_SIGNALING</i>		0.250	0.0270	0.377	<i>KPNAP1.TNFR1.XPO1.KPNB1</i>
<i>GLUCOCORTICOID_RECEPтор_SIGNALING</i>		0.107	0.0277	0.377	<i>HSPPA1B.POMC.PIK3R14.PIK3R3.RRAS2.ATM1.ATP1G6.GESD.MED14.ST14</i>
<i>PI3K_SIGNALING</i>		0.122	0.0302	0.377	<i>HTG1.CD22.CD79B.HLBK.PIK3R3.RRAS2.GNA14.IGHM.TNF51B.ATM.CD79A</i>
<i>FGFAMMERIC_SIGNALING_IN_B_LYMPHOCYTES</i>		0.138	0.0312	0.387	<i>HTG1.CD22.CD79B.HLBK.PIK3R3.RRAS2.GNA14.IGHM.TNF51B.ATM.CD79A</i>
<i>COLORECTAL_CANCER_METASTASIS_SIGNALING</i>		0.108	0.0324	0.388	<i>FIC1.GNA14.PIK3R3.CD79B.GNA13.VEGFC.GNG7.ADCY9.ATM.MNP</i>
<i>IFI16_HA SIGNALING</i>		0.129	0.0360	0.409	<i>MAPK9.FIC1.PIK3R3.RRAS2.VEGFC.VHL.ATM1.PIK3R3</i>
<i>ENDOMETRIAL_CANCER_SIGNALING</i>		0.154	0.0369	0.409	<i>PIK3R2.RRAS2.ATM1.LEF1.SOS2.CTNNA1.PIK3R3</i>
<i>P70SK_SIGNALING</i>		0.122	0.0389	0.409	<i>IGH1.PLCB3.CD79B.PIK3R3.RRAS2.IGHM.ATM.CD79A.YWHAQ.YWHAQ.SOS2.PIK3R3</i>
<i>CELL_CYCLE_G_M2_DNA_DAMAGE_CHECKPOINT_SIGNALING</i>		0.156	0.0469	0.409	<i>ATM.CLPB2.GP2.PIK3R3.RRAS2.IGHM.SOS2.PIK3R2.LCCT87</i>
<i>PPARALPHA_XRXPALHA_ACTIVATION</i>		0.113	0.0478	0.409	<i>MAPK14.CLPB2.GP2.PIK3R3.RRAS2.IGHM.ATM.CD79A.YWHAQ.YWHAQ.SOS2.PIK3R2.PIK3R3</i>

**Legend**

The legend consists of two horizontal bars. The top bar is red and labeled "Genes induced in HBV vaccine responders compared to poor-responders". The bottom bar is blue and labeled "Genes repressed in HBV vaccine responders compared to poor-responders".

PPARALPHA\_XRAXALPHA\_ACIVATION 0.113 0.0478 0.409 MAP14,PCBD3,CAPN1,MAP2NG1,PRKACB,PRKACB1,ACTC19,SLC17A1,SLC17A2  
List of 40 pathways from the Ingenuity canonical pathway database significantly enriched among genes differentially expressed between HBV vaccine responders and non-responders (Fisher's exact test,  $p < 0.05$ ). The list of differentially expressed genes overlapping each pathway is given. Pathways that overlap in terms of genes (Jaccard index  $> 0.25$ ) were grouped and can be thought as implicated in a common biological function. Genes induced in HBV vaccine responders are indicated in red and genes repressed in HBV vaccine responders are indicated in blue.

**Supplementary Table 5a. List of FCM markers measured on the EM131 cohort**

Panel Name	Column Label	Cell Surface Marker
T cell	CT CD3	CD3+
T cell	CT CD4	CD3+, CD4+
T cell	CT CD8	CD3+, CD8+
T cell	CT DP	CD3+, CD4+, CD8+
T cell	CT DN	CD3+, CD4-, CD8-
T cell	CT DR+ B	CD3-, CD19+, HLADR+
T cell	CT DR- B	CD3-, CD19+, HLADR-
T cell	CT Mono	CD3-, CD4-, CD19-, CD14+
T cell	CT pDC	CD3-, CD4+, CD19-, CD14-, CD16-, CD56-, CD11c-, HLADR+, CD303+
T cell	CT mDC1	CD3-, CD4+, CD19-, CD14-, CD16-, CD56-, CD11c+, HLADR+, CD1c+, CD303-
T cell	CT mDC2	CD3-, CD4+, CD19-, CD14-, CD16-, CD56-, CD11c+, HLADR+, CD141+
T cell	CT ALL NK	CD3-, CD4-, CD19-, CD14-
T cell	CT 56-16+ NK	CD3-, CD4-, CD19-, CD14-, CD16+, CD56-
T cell	CT NK 56bright16-	CD3-, CD4-, CD19-, CD14-, CD16-, CD56++
T cell	CT NK 56low16-	CD56, CD16
T cell	CT NK 56low16+	CD56, CD16
T cell	CT NK 56bright16low	CD56, CD16
T-cell	PCT CD4 in CD3	CD3+, CD4+
T-cell	PCT CD8 in CD3	CD3+, CD8+
T-cell	PCT CD28- in CD8	CD3+, CD28-
T-cell	PCT CD62L+ in CD8	CD3+, CD8+, CD62L+
T-cell	PCT HLADR+CD38+ in CD4	CD3+, CD4+, CD38+, HLADR+
T-cell	PCT HLADR+CD38+ in CD8	CD3+, CD8+, CD38+, HLADR+
T-cell	PCT PD1+ in CD4	CD3+, CD4+, PD1+
T-cell	PCT PD1+ in CD8	CD3+, CD8+, PD1+
T-cell	PCT CD57+ in CD4	CD3+, CD4+, CD57+
T-cell	PCT CD57+ in CD8	CD3+, CD8+, CD57+
T-cell	PCT Naive in CD4	CD3+, CD4+, CD45RA+, CD27+, CCR7+
T-cell	PCT CM in CD4	CD3+, CD4+, CD45RA-, CD27-, CCR7+
T-cell	PCT EM in CD4	CD3+, CD4+, CD45RA-, CD27-, CCR7-
T-cell	PCT TEM1 in CD4	CD3+, CD4+, CD45RA-, CD27-, CCR7-, CD28+
T-cell	PCT TEM2 in CD4	CD3+, CD4+, CD45RA-, CD27-, CCR7-, CD28-
T-cell	PCT ILD in CD4	CD3+, CD4+, CD45RA+, CD27-, CCR7+
T-cell	PCT LD in CD4	CD3+, CD4+, CD45RA+, CD27-, CCR7-
T-cell	PCT Naive in CD8	CD3+, CD8+, CD45RA+, CD27+, CCR7+
T-cell	PCT CM in CD8	CD3+, CD8+, CD45RA-, CD27+, CCR7+
T-cell	PCT EM in CD8	CD3+, CD8+, CD45RA-, CD27-, CCR7-
T-cell	PCT TEM1 in CD8	CD3+, CD8+, CD45RA-, CD27-, CCR7-, CD28+
T-cell	PCT TEM2 in CD8	CD3+, CD8+, CD45RA-, CD27-, CCR7-, CD28-
T-cell	PCT ILD in CD8	CD3+, CD8+, CD45RA+, CD27-, CCR7+
T-cell	PCT LD in CD8	CD3+, CD8+, CD45RA+, CD27-, CCR7-
T-cell	PCT CD28+CD62L+Naive in CD4	CD3+, CD4+, CD45RA+, CD27+, CCR7+, CD28+, CD62L+
T-cell	PCT CD28+CD62L+Naive in CD8	CD3+, CD8+, CD45RA+, CD27+, CCR7+, CD28+, CD62L+
T-cell	PCT CD28+CD62L+CM in CD4	CD3+, CD4+, CD45RA+, CD27+, CCR7+, CD28+, CD62L+
T-cell	PCT CD28+CD62L+CM in CD8	CD3+, CD8+, CD45RA+, CD27+, CCR7+, CD28+, CD62L+
T-cell	PCT CD45RA- in CD4	CD3+, CD4+, CD45RA-
T-cell	PCT CD45RA- in CD8	CD3+, CD8+, CD45RA-
T-cell	RATIO CD4 to CD8	ratio of respective categories above
T-cell	RATIO CD28+CD62L+Naive to CD45RA- in CD4	ratio of respective categories above
T-cell	RATIO CD28+CD62L+Naive to CD45RA- in CD8	ratio of respective categories above
T-cell	PCT RATIO CD28+CD62L+CM to CD45RA-andILDandLD in CD4	ratio of respective categories above
T-cell	PCT RATIO CD28+CD62L+CM to CD45RA-andILDandLD in CD8	ratio of respective categories above
B-cell	PCT CD3+ T cells in Lymphocytes	CD3+
B-cell	PCT DR+ B cells in Lymphocytes	CD3-, CD19+, HLADR+
B-cell	PCT DR- B cells in Lymphocytes	CD3-, CD19+, HLADR-
B-cell	PCT switched IgG+ memory B cells	CD3-, CD19+, HLADR+, CD27+, IgG+
B-cell	PCT switched IgA+ MK memory B cells	CD3-, CD19+, HLADR+, CD27+, IgA+
B-cell	PCT unswitched IgM+ MK memory B cells	CD3-, CD19+, HLADR+, CD27+, IgM+
B-cell	PCT MZ like B cells	CD3-, CD19+, HLADR+, CD27+, B220+
B-cell	PCT immature B cells	CD3-, CD19+, HLADR+, CD27-, CD10+, IgM+, IgD-
B-cell	PCT IgM-IgD+ naive B cells	CD3-, CD19+, HLADR+, CD27-, CD10-, CD20-, IgM-, IgD+
B-cell	PCT IgM+IgD+ naive B cells	CD3-, CD19+, HLADR+, CD27-, CD10-, CD20+, IgM+, IgD+
B-cell	PCT IgM+IgD- naive B cells	CD3-, CD19+, HLADR+, CD27-, CD10-, CD20-, IgM+, IgD-
B-cell	PCT IgA+ memory B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20+, IgA+
B-cell	PCT IgG+ memory B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20+, IgG+
B-cell	PCT IgM+IgD+ memory B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20+, IgM+, IgD+
B-cell	PCT IgM+IgD- memory B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20+, IgM+, IgD-
B-cell	PCT IgM-IgD+ memory B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20+, IgM-, IgD+
B-cell	PCT plasma B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20-
B-cell	PCT IgA+ plasma B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20-, IgA+
B-cell	PCT IgD+ plasma B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20-, IgD+
B-cell	PCT IgG+ plasma B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, IgG+

B-cell	PCT IgM+ plasma B cells	CD3-, CD19+, HLADR+, CD27+, CD10-, CD20-, IgM+
Innate	PCT CD4 in WBC	CD3+, CD4+
Innate	PCT Mono in WBC	CD3-, CD4-, CD19-, CD14+
Innate	PCT CD16+ in Mono	CD3-, CD4-, CD19-, CD14+, CD16-
Innate	PCT NK 56-16+ in WBC	CD3-, CD4-, CD19-, CD14-, CD16+, CD56-
Innate	PCT NK 56bright16- in WBC	CD3-, CD4-, CD19-, CD14-, CD16-, CD56+
Innate	PCT NK 56low16- in WBC	CD3-, CD4-, CD19-, CD14-, CD16-, CD56lo
Innate	PCT NK 56low16+ in WBC	CD3-, CD4-, CD19-, CD14-, CD16+, CD56lo
Innate	PCT NK 56bright16low in WBC	CD3-, CD4-, CD19-, CD14-, CD16lo, CD56++
Innate	PCT pDC in WBC	CD3-,CD4+CD19-,CD14-CD16-,CD56-CD11c-,HLADR+,CD303+
Innate	PCT mDC1 in WBC	CD3-,CD4+CD19-,CD14-CD16-,CD56-CD11c+,HLADR+,CD1c+,CD303-
Innate	PCT mDC2 in WBC	CD3-,CD4+CD19-,CD14-CD16-,CD56-CD11c+,HLADR+,CD141+
Innate	PCT DRhi40+ in pDC	HLADR, CD40
Innate	PCT DRhi40+ in mDC1	HLADR, CD40
Innate	PCT DRhi40+ in mDC2	HLADR, CD40
Innate	MdFI DR in pDC	HLADR
Innate	MdFI CD4 in pDC	CD4
Innate	MdFI CD40 in pDC	CD40
Innate	MdFI DR in mDC1	HLADR
Innate	MdFI CD4 in mDC1	CD4
Innate	MdFI CD40 in mDC1	CD40
Innate	MdFI DR in mDC2	HLADR
Innate	MdFI CD4 in mDC2	CD4
Innate	MdFI CD40 in mDC2	CD40

FCM panel are colored differently; blue was used for T-cells, orange for B-cells and green for innate cells.

**Supplementary Table 5b. List of chemokines and cytokines measured on the EM131 cohort****Name**

Alpha-1-Antitrypsin (AAT)  
Alpha-2-Macroglobulin (A2Macro)  
Beta-2-Microglobulin (B2M)  
Brain-Derived Neurotrophic Factor (BDNF)  
C-Reactive Protein (CRP)  
Complement C3 (C3)  
Eotaxin-1  
Factor VII  
Ferritin (FRTN)  
Fibrinogen  
Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF)  
Haptoglobin  
Intercellular Adhesion Molecule 1 (ICAM-1)  
Interferon gamma (IFN-gamma)  
Interleukin-1 alpha (IL-1 alpha)  
Interleukin-1 beta (IL-1 beta)  
Interleukin-1 receptor antagonist (IL-1ra)  
Interleukin-10 (IL-10)  
Interleukin-12 Subunit p40 (IL-12p40)  
Interleukin-12 Subunit p70 (IL-12p70)  
Interleukin-15 (IL-15)  
Interleukin-17 (IL-17)  
Interleukin-18 (IL-18)  
Interleukin-2 (IL-2)  
Interleukin-23 (IL-23)  
Interleukin-3 (IL-3)  
Interleukin-4 (IL-4)  
Interleukin-5 (IL-5)  
Interleukin-6 (IL-6)  
Interleukin-7 (IL-7)  
Interleukin-8 (IL-8)  
Macrophage Inflammatory Protein-1 alpha (MIP-1 alpha)  
Macrophage Inflammatory Protein-1 beta (MIP-1 beta)  
Matrix Metalloproteinase-2 (MMP-2)  
Matrix Metalloproteinase-3 (MMP-3)  
Matrix Metalloproteinase-9 (MMP-9)  
Monocyte Chemotactic Protein 1 (MCP-1)  
Stem Cell Factor (SCF)  
T-Cell-Specific Protein RANTES (RANTES)  
Tissue Inhibitor of Metalloproteinases 1 (TIMP-1)  
Tumor Necrosis Factor alpha (TNF-alpha)  
Tumor Necrosis Factor beta (TNF-beta)  
Tumor Necrosis Factor Receptor 2 (TNFR2)  
Vascular Cell Adhesion Molecule-1 (VCAM-1)  
Vascular Endothelial Growth Factor (VEGF)  
Vitamin D-Binding Protein (VDBP)  
von Willebrand Factor (vWF)

**Supplementary Table 5c. Identification of cytokines/chemokines markers associated with response to HBV vaccine on the EM131 training set**

Cytokine marker	Univariate logistic regression			Multivariate logistic regression		
	OR	95% CI	p-value	OR	95% CI	p-value
Beta-2-Microglobulin (B2M)	1.56	[1.04, 2.46]	0.0397	0.938	[0.486, 1.79]	0.845
Interleukin-15 (IL-15)	2.15	[0.986, 5.27]	0.0702	1.14	[0.361, 3.56]	0.824
Interleukin-1 receptor antagonist (IL-1ra)	2.10	[0.925, 5.43]	0.0979	2.09	[0.652, 8.06]	0.244
Stem Cell Factor (SCF)	1.79	[1.01, 3.30]	0.0517	1.28	[0.570, 2.91]	0.548
Tumor Necrosis Factor Receptor 2 (TNFR2)	1.61	[1.07, 2.60]	0.0362	1.34	[0.653, 2.91]	0.440
Vascular Cell Adhesion Molecule-1 (VCAM-1)	1.47	[0.976, 2.36]	0.0839	1.07	[0.551, 2.16]	0.841
Vascular Endothelial Growth Factor (VEGF)	1.60	[1.01, 2.63]	0.0521	1.12	[0.636, 2.00]	0.697

Univariate and multivariate logistic regression between cytokines/chemokines marker levels pre-vaccination (Visit 2) and response to HBV vaccine in the EM131 training set. P-values of a normality test (z-test) testing the statistical significance of the association (null hypothesis: OR=1) are given in the table. Markers selected using the forward selection method based on AIC criteria (in grey) were combined in multivariate models.