

SUPPLEMENTARY MATERIAL

Panax Quinquefolium Saponins Attenuate Myocardial Dysfunction Induced by Chronic Ischemia

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Methods and materials

Proteomic analysis

1.1 Tissue sample preparation

Tissue samples for proteomic analysis were snap-frozen with liquid nitrogen, grinded into a fine powder, and suspended with 10 μ L extraction buffer (7M urea, 2M thiourea, 0.1% CHAPS) per mg tissue on ice. The samples were sonicated at 30% amplitude for 60 seconds with the digital Sonifier OX (Branson). The homogenate was centrifuged at 15,000 g for 10 min at 4°C. The total protein concentration of each sample was determined using the Bradford method.

1.2 iTRAQ labeling

iTRAQ labeling was carried out with an iTRAQ reagent 3 plex protein quantitation kit (Applied Biosystems). Myocardium tissue (100- μ g protein per subject) was labeled with iTRAQ reagents 114, 115, and 116. Three labeled

samples were pooled, vacuum-dried, and subjected to reverse-phase fractionation.

1.3 Peptide liquid chromatography fractionation

The iTRAQ labeled pooled sample was resuspended in 100 μ l buffer A (98% ddH₂O, 2% ACN, PH=10), loaded onto a 4.6 $\times$ 250 mm Durashell-C18 column (150 Å, 5 μ m particles, Agela), and fractionated with HPLC (RIGOL, China).

Peptides were eluted using an increasing acetonitrile gradient with buffer A and buffer B (98% ACN, 2% water with ammonia). The flow rate was 0.7 ml/min. The elution gradient was: 5-8% buffer B for 0-5 min, 8-18% buffer B for 5-35 min, 18-32% buffer B for 35-62 min, 32-95% buffer B for 62-64 min, 95% buffer B for 64-78 min, and then elution gradient was changed to 5% buffer B for 4 min. Fractions were collected every 1 min, pooled into 8 fractions by intervals and dried by vacuum centrifugation.

1.4 LC-MS/MS analysis

Nanoflow electrospray ionization tandem mass spectrometric analysis of peptide samples was carried out using Orbitrap Fusion Lumos (Thermo Scientific, Bremen, Germany) interfaced with EASY-nLC 1000 System. A full MS scan (300–1400 m/z) was acquired in the positive ion mode at a resolution of 70,000 (at 400 m/z) with automatic gain control (AGC) - $1 \times 3E6$, a maximum ion accumulation time - 20 ms, number of scan - ranges of one, and dynamic exclusion - 18.0 s. Information for peptides and peptide fragments were collected as follows: 10 fragment files were collected after every full scan (MS2 scan), higher collision energy dissociation fragmentation, an isolation window - 1.6 m/z, full scan at a resolution of 17,500 (at 120 m/z), micro-scans - one, maximum ion accumulation time - 60ms, normalized collision energy - 30 eV, and an under-fill ratio - 0.1%.

1.5 Protein identification and quantitation and statistical analysis

The MS data were searched against the database for peptide identification (uniprot_Sus_scrofa_35257_20160914.fasta) and quantified using Mascot 2.1 and Proteome Discoverer (V.1.4, Thermo Scientific). Proteins with at least two unique peptides and FDR of 1% were subjected to further quantitative data analysis. The following parameters were used in analysis: peptide mass tolerance - 20 ppm, fragment mass tolerance - 2 ppm, number of allowed maximum missed tryptic cleavage sites - 2; oxidation of methionine and Acetyl (protein N-term) - dynamic modification; carbamidomethyl (C) - static modifications. Relative quantitation of proteins was carried out based on the relative intensities of reporter ions released during MS/MS fragmentation of peptides. Student's *t*-test was used to compare differences of protein expression among three groups of samples. Statistical significance was defined as $P < 0.05$. Fold change over 1.2 was the threshold to identify differently expressed proteins.

Figure S1

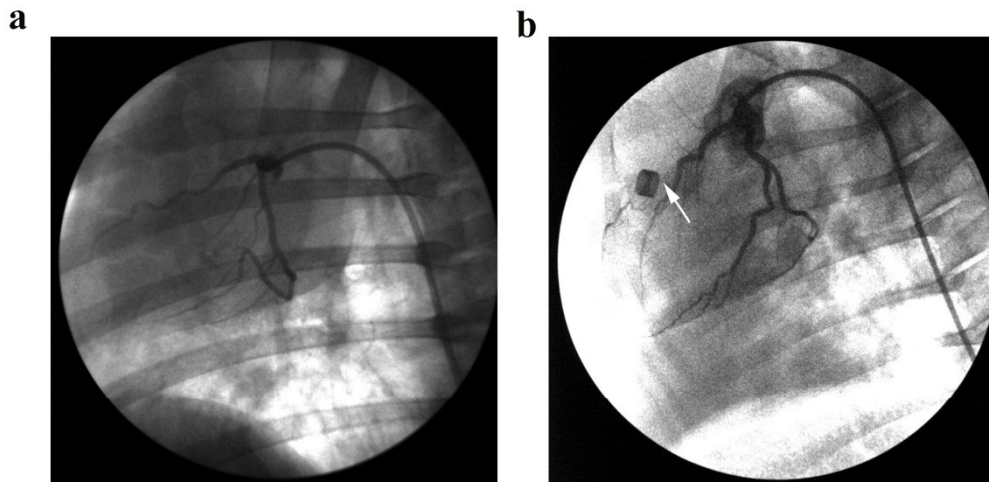


Figure S1 legend: Exemplary coronary angiogram. Images were obtained in the left anterior oblique (LAO) 30°. (a) Normal LAD artery in the sham group at the baseline; (b) LAD artery stenosis by coronary angiogram at two months post-surgery. LAD, left anterior descending branch; LCX, left circumflex branch.

Figure S2

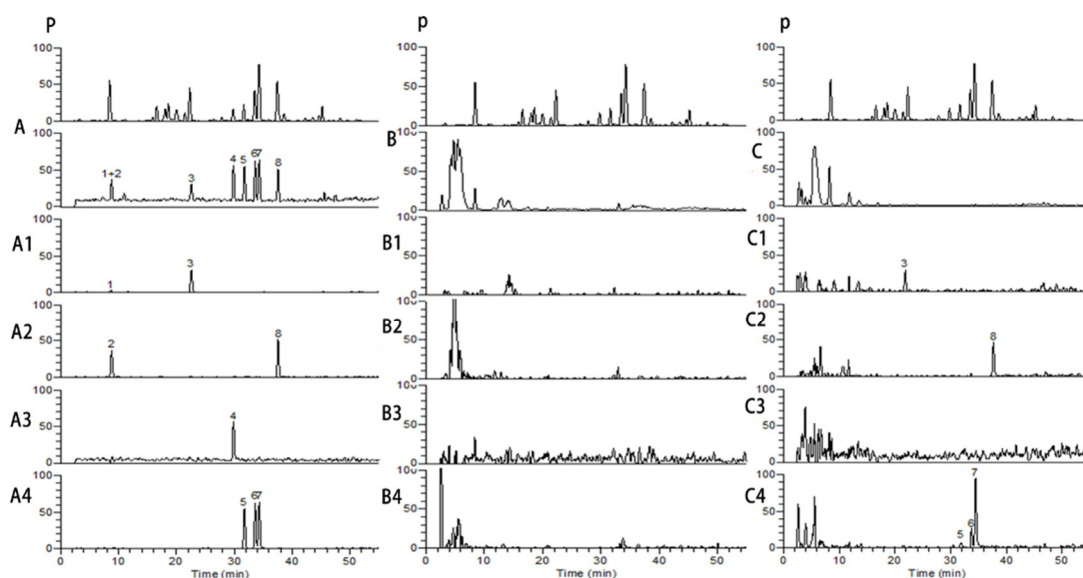


Figure S2 legend: Typical base peak chromatograms of PQS in pig plasma after oral administration. A: Mixed standards B: Blank plasma C: Plasma sample after drug treatment P: PQS extract. A1-A4: Extracted base peak chromatograms of mixed standards; B1-B4: Extracted base peak chromatograms of blank pig plasma; C1-C4: Extracted base peak chromatograms of plasma sample after administration of PQS extract

Figure S3

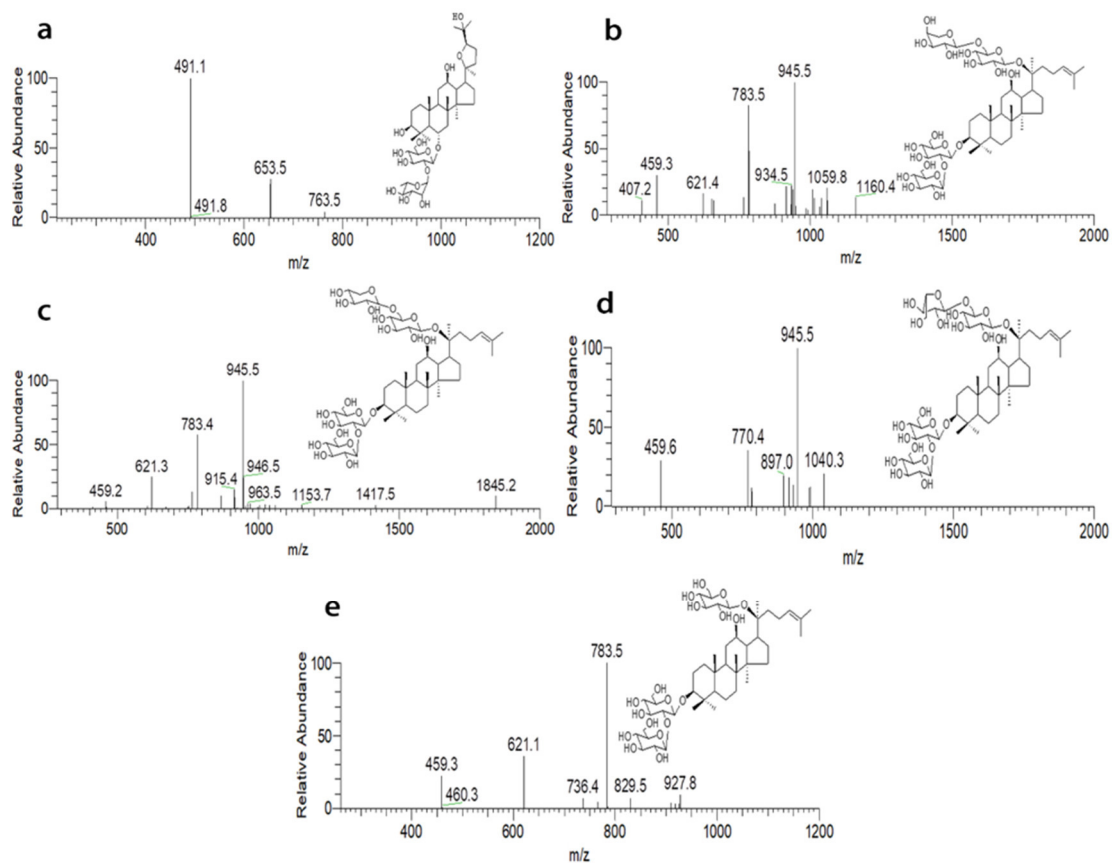


Figure S3 legend: Five major components of PQS discovered in plasma.

a: F11; b: Rc; c: Rb2; d: Rb3; e: Rd.

Table 1. The potential targets of five major PQS components

Rc	Rb3	F11	Rd	Rb2
ATP1A1	ATP1A1	CXCR4	ATP1A1	ATP1A1
GAA	GAA	ADORA2A	GAA	GAA
MGAM	MGAM	NT5C2	MGAM	MGAM
ADORA2A	ADORA2A	POLA1	ADORA2A	ADORA2A
POLA1	POLA1	ADK	POLA1	POLA1
AMY2B	AMY2B	ADORA2B	AMY2B	AMY2B
ADORA2B	ADORA2B	IMPDH1	ADORA2B	ADORA2B
NR3C1	NR3C1	ADORA3	NR3C1	NR3C1
AMY2A	AMY2A	POLB	AMY2A	AMY2A
ADORA3	ADORA3	ENPP1	ADORA3	ADORA3
SI	SI	ADA	SI	SI
POLB	POLB	DNMT1	POLB	POLB
DNMT1	DNMT1	ADORA1	DNMT1	DNMT1
ADORA1	ADORA1	SCN1A	ADORA1	ADORA1
SCN1A	SCN1A	GABRA2	SCN1A	SCN1A
CXCR4	CXCR4	GAA	CXCR4	CXCR4
GABRA2	GABRA2	MGAM	GABRA2	GABRA2
GABRD	GABRD	GABRD	GABRD	GABRD
SLC47A1	SLC47A1	SLC47A1	SLC47A1	SLC47A1
GABRB1	GABRB1	GABRB1	GABRB1	GABRB1
FGF1	FGF1	FGF1	FGF1	FGF1
GABRG3	GABRG3	GABRG3	GABRG3	GABRG3
CYP3A4	CYP3A4	CYP3A4	CYP3A4	CYP3A4
GLRA3	GLRA3	NFKB2	GLRA3	GLRA3
NFKB2	NFKB2	TNF	NFKB2	NFKB2
TNF	TNF	GABRE	TNF	TNF
PTGIS	PTGIS	MMP9	PTGIS	PTGIS
GABRE	GABRE	GABRA3	GABRE	GABRE
MMP9	MMP9	CYP51A1	MMP9	MMP9
GABRA3	GABRA3	FGG	GABRA3	GABRA3
CYP51A1	CYP51A1	GABRG1	CYP51A1	CYP51A1
GABRG1	GABRG1	GABRP	GABRG1	GABRG1
GABRP	GABRP	NR3C1	GABRP	GABRP
GABRA4	GABRA4	GUCY1A2	GABRA4	GABRA4
P2RY12	P2RY12	GABRA4	P2RY12	P2RY12
PTGIR	PTGIR	GABRB2	PTGIR	PTGIR
GABRB2	GABRB2	IFNG	GABRB2	GABRB2
IFNG	IFNG	EGF	IFNG	IFNG
CA4	CA4	AMY2A	CA4	CA4
KCNH2	KCNH2	CA4	KCNH2	KCNH2
FGF4	FGF4	KCNH2	FGF4	FGF4
GABRQ	GABRQ	FGF4	GABRQ	GABRQ
DHFR	DHFR	FGB	DHFR	DHFR
SMO	SMO	GABRQ	SMO	SMO
GABRB3	GABRB3	DHFR	GABRB3	GABRB3
GABRA5	GABRA5	ATP1A1	GABRA5	GABRA5
PADI4	PADI4	GABRB3	PADI4	PADI4
GABRA6	GABRA6	SI	GABRA6	GABRA6
GABRA1	GABRA1	NPR1	GABRA1	GABRA1
MLNR	MLNR	GABRA5	MLNR	MLNR
SLC01B3	SLC01B3	PADI4	SLC01B3	SLC01B3
GABRG2	GABRG2	GABRA6	GABRG2	GABRG2
CA2	CA2	GABRA1	CA2	CA2
LRP2	LRP2	FGA	LRP2	LRP2
ANXA1	ANXA1	MLNR	ANXA1	ANXA1
GRIK1	GRIK1	SLC01B3	GRIK1	GRIK1
ALB	ALB	GABRG2	ALB	ALB

ABCB1	ABCB1
FGF2	FGF2
SLC01B1	SLC01B1
ABCC2	ABCC2
FBP1	FBP1
AKT1	AKT1
PDE7B	PDE7B
PRKAB1	PRKAB1
ACVR1	ACVR1
ASNA1	ASNA1
ADRBK2	ADRBK2
PDE4A	PDE4A
ACSS2	ACSS2
ATP1A3	ATP1A3
ACVRL1	ACVRL1
UGCG	UGCG
ATP1A4	ATP1A4
ADCY1	ADCY1
AMY1A	AMY1A
NT5C2	NT5C2
AMHR2	AMHR2
TNK2	TNK2
TH	TH
ASNS	ASNS
ADK	ADK
ABL2	ABL2
ADRBK1	ADRBK1
TPH1	TPH1
IMPDH1	IMPDH1
PDE4D	PDE4D
SLC19A2	SLC19A2
PAH	PAH
GANAB	GANAB
PDE7A	PDE7A
PRKAA1	PRKAA1
ABCC9	ABCC9
PDE4C	PDE4C
CREB1	CREB1
ACSS1	ACSS1
PIM1	PIM1
ATP1A2	ATP1A2
PYGL	PYGL
ABL1	ABL1
AFG3L2	AFG3L2
CDK15	CDK15
GANC	GANC
HINT1	HINT1
ASS1	ASS1
TPK1	TPK1
AMY1C	AMY1C
ACVR1B	ACVR1B
ACSL1	ACSL1
ABCA1	ABCA1
NOS3	NOS3
ENPP1	ENPP1
NEU2	NEU2
PDE4B	PDE4B
IMPDH2	IMPDH2

CA2
LRP2
GRIK1
ALB
ABCB1
FGF2
SLC01B1
ABCC2
FBP1
AKT1
TCN1
PRKAB1
ACVR1
ASNA1
ADRBK2
ACSS2
MUT
ATP1A3
ACVRL1
ADCY1
MMAB
AMHR2
TNK2
MTRR
ASNS
GLRA3
ABL2
ADRBK1
MTR
PDE4D
SLC5A2
SLC25A5
CUBN
PRKAA1
ABCC9
AMN
CREB1
CYP3A7-C
ACSS1
PIM1
ATP1A2
PYGL
ABL1
AFG3L2
MMACHC
CDK15
HINT1
ASS1
ACVR1B
ACSL1
ABCA1
SLC25A6
MMAA
CYP3A7
PDE4B
IMPDH2
NAE1
PRKAB2

ABCB1
FGF2
SLC01B1
ABCC2
FBP1
AKT1
PDE7B
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ACVR1
ASNA1
ADRBK2
PDE4A
ACSS2
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ACVRL1
UGCG
ATP1A4
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AMHR2
TNK2
TH
ASNS
ADK
ABL2
ADRBK1
TPH1
IMPDH1
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SLC19A2
PAH
GANAB
PDE7A
PRKAA1
ABCC9
PDE4C
CREB1
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CDK15
GANC
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ABCA1
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ABCC2
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ADRBK1
TPH1
IMPDH1
PDE4D
SLC19A2
PAH
GANAB
PDE7A
PRKAA1
ABCC9
PDE4C
CREB1
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PYGL
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AFG3L2
CDK15
GANC
HINT1
ASS1
TPK1
AMY1C
ACVR1B
ACSL1
ABCA1
NOS3
ENPP1
NEU2
PDE4B
IMPDH2

NAE1	NAE1	SLC5A1	NAE1	NAE1
ADA	ADA	APAF1	ADA	ADA
PRKAB2	PRKAB2	ABCC8	PRKAB2	PRKAB2
APAF1	APAF1	ALK	APAF1	APAF1
ABCC8	ABCC8	ABCB11	ABCC8	ABCC8
ALK	ALK	ABCG1	ALK	ALK
ABCB11	ABCB11	ARAF	ABCB11	ABCB11
ABCG1	ABCG1	SLC25A4	ABCG1	ABCG1
ARAF	ARAF	CACNA2D	ARAF	ARAF
SLC25A4	SLC25A4	PRDX5	SLC25A4	SLC25A4
AMY1B	AMY1B	SERPINC1	AMY1B	AMY1B
CACNB1	CACNA2D	PTGIS	CACNA2D	CACNA2D
CACNA2D	FKBP1A	CA1	FKBP1A	FKBP1A
CACNA1H	PRDX5	AR	PRDX5	PRDX5
FKBP1A	ESR2	F10	ESR2	ESR2
PRDX5	ESR1	P2RY12	ESR1	ESR1
CACNA1F	SERPINC1	PTGIR	SERPINC1	SERPINC1
KDM5D	HSD3B2	CES1	HSD3B2	HSD3B2
ALKBH3	PTGER1	SMO	PTGER1	PTGER1
OGFOD2	CA1	SLC2A2	CA1	CA1
ESR2	FGG	CLCN2	FGG	FGG
P3H3	PTGER4	IKBKB	PTGER4	PTGER4
TMLHE	PGR	ANXA1	PGR	PGR
CACNA1A	AR	SLC6A2	AR	AR
CACNA1I	GUCY1A2	SLC6A2	GUCY1A2	GUCY1A2
ESR1	SERPIND1		SERPIND1	SERPIND1
CACNA2D	F10		F10	F10
P4HTM	EGF		EGF	EGF
SERPINC1	PRKCA		PRKCA	PRKCA
HSD3B2	HSD3B1		HSD3B1	HSD3B1
PLOD1	HMGCR		HMGCR	HMGCR
SHBG	MTOR		MTOR	MTOR
EGLN2	FGB		FGB	FGB
PTGER1	ITGB2		ITGB2	ITGB2
ALKBH2	PTGER2		PTGER2	PTGER2
CA1	FASN		FASN	FASN
CACNA1S	PTGER3		PTGER3	PTGER3
FGG	CES1		CES1	CES1
BBOX1	SLC2A2		SLC2A2	SLC2A2
PTGER4	NPR1		NPR1	NPR1
PGR	PTGFR		PTGFR	PTGFR
AR	CLCN2		CLCN2	CLCN2
CACNA2D	IKBKB		IKBKB	IKBKB
GUCY1A2	FGA		FGA	FGA
SERPIND1	ITGAL		ITGAL	ITGAL
CACNB4	CYP19A1		CYP19A1	CYP19A1
F10	HDAC2		HDAC2	HDAC2
CACNA1B	VDR		VDR	VDR
CACNA1C	PRKCD		PRKCD	PRKCD
EGF	SLC6A2		SLC6A2	SLC6A2
PRKCA	CYP27B1		CYP27B1	CYP27B1
CACNA1D	NR3C2		NR3C2	NR3C2
HSD3B1	NR3C2		NR3C2	NR3C2
HMGCR				
PAM				
CACNB3				
SLC23A1				
MTOR				

OGFOD1
FGB
ITGB2
PTGER2
FASN
DBH
PTGER3
EGLN3
SLC2A2
PLOD3
P4HA1
NPR1
CYP11B2
CACNA1G
PTGFR
EGLN1
CLCN2
IKBKB
FGA
CACNB2
P3H2
LCT
ITGAL
CYP19A1
HDAC2
VDR
PLOD2
P3H1
PRKCD
SLC6A2
PHYH
CYP27B1
CACNG1
NR3C2
NR3C2

Table 2. List of 184 downregulated proteins of PQS vs. Untreated

Accession	Symbol	ENTREZID	U/S	PQS/U	Ratio U/S	pValue U/S	Significant U/S	Change U/S	Ratio PQS/U	pValue PQS/S	Significant PQS/U	Change PQS/U
D0VWV4	SDHC	100524676	0.783	0.651	0.791	0.0007	Yes	Down	0.665	0.0007	Yes	Down
I3LAQ0	I3LAQ0		0.771	0.661	0.660	0.0316	Yes	Down	0.680	0.0030	Yes	Down
F1S571	COL11A1	397175	4.979	0.68	4.116	0.0186	Yes	Up	0.687	0.0002	Yes	Down
F1S902	COMP	396554	3.865	0.537	3.543	0.0057	Yes	Up	0.580	0.0036	Yes	Down
F1RS37	POSTN	100152401	3.023	0.709	3.478	0.0475	Yes	Up	0.729	0.0014	Yes	Down
F1RRJ9	LTBP3	100517877	2.941	0.588	2.781	0.0048	Yes	Up	0.584	0.0003	Yes	Down
F1S6Q3	CILP2	100518061	3.232	0.775	2.756	0.0182	Yes	Up	0.804	0.0090	Yes	Down
F1RQI0	COL12A1		3.277	0.766	2.738	0.0233	Yes	Up	0.787	0.0024	Yes	Down
Q29116-3	TNC	397460	2.608	0.812	2.470	0.0082	Yes	Up	0.798	0.0022	Yes	Down
O62797	O62797		2.662	0.733	2.456	0.0135	Yes	Up	0.754	0.0021	Yes	Down
F1S6B5	FMOD	100526237	2.619	0.794	2.388	0.0074	Yes	Up	0.804	0.0023	Yes	Down

F1RYL4	FRZB	100152419	2.445	0.633	2.372	0.013 4	Yes	Up	0.630	0.0011	Yes	Down
C1IHT9	PDK4	100286778	2.178	0.506	2.087	0.002 1	Yes	Up	0.498	0.0002	Yes	Down
F1S2T5	LTBP2	100514300	1.822	0.679	2.051	0.011 8	Yes	Up	0.674	0.0003	Yes	Down
P79263	ITIH4	396799	2.277	0.404	1.919	0.036 5	Yes	Up	0.480	0.0054	Yes	Down
F1RVS9	PI16	100155010	1.849	0.684	1.856	0.001 0	Yes	Up	0.673	0.0061	Yes	Down
E7BXW9	MUSTN1	100622867	1.806	0.656	1.830	0.020 6	Yes	Up	0.663	0.0029	Yes	Down
F1S285	COL14A1	100158059	1.883	0.781	1.802	0.006 9	Yes	Up	0.825	0.0163	Yes	Down
F1RU22	EFEMP2	100526031	1.766	0.836	1.797	0.000 9	Yes	Up	0.721	0.0399	Yes	Down
I3L8F7	NES	100153933	1.905	0.789	1.775	0.007 0	Yes	Up	0.793	0.0006	Yes	Down
Z4YP82	SPARC	595124	1.781	0.692	1.766	0.002 1	Yes	Up	0.728	0.0051	Yes	Down
Q1W0S7	AEBP1	733628	1.572	0.822	1.761	0.021 1	Yes	Up	0.820	0.0004	Yes	Down
F1SH92	ITIH4	396799	1.662	0.574	1.751	0.008 6	Yes	Up	0.529	0.0028	Yes	Down
I3LMU6	RCN3	100518493	1.93	0.706	1.725	0.019 6	Yes	Up	0.787	0.0343	Yes	Down

P63221	RPS21	100037996	1.566	0.757	1.669	0.010 4	Yes	Up	0.720	0.0085	Yes	Down
F2Z5S3	LOC1006 24417	100624417	1.434	0.841	1.658	0.033 6	Yes	Up	0.738	0.0419	Yes	Down
G9B792	ANKRD2	100155185	1.6	0.777	1.628	0.002 8	Yes	Up	0.777	0.0095	Yes	Down
I3LM94	I3LM94		1.725	0.726	1.601	0.010 8	Yes	Up	0.806	0.0410	Yes	Down
F1RX36	LOC1021 58263	102158263	1.714	0.567	1.600	0.009 6	Yes	Up	0.603	0.0023	Yes	Down
I3LJX2	I3LJX2		1.773	0.756	1.599	0.033 4	Yes	Up	0.829	0.0450	Yes	Down
I3L856	GPX7	100621417	1.711	0.677	1.598	0.024 0	Yes	Up	0.764	0.0370	Yes	Down
J9JIL5	LOC1006 20367	100620367	1.51	0.772	1.592	0.005 1	Yes	Up	0.754	0.0178	Yes	Down
F1SCD1	F1SCD1		1.686	0.66	1.584	0.039 1	Yes	Up	0.678	0.0046	Yes	Down
F1SNY2	RPL3	396768	1.587	0.829	1.580	0.004 1	Yes	Up	0.825	0.0006	Yes	Down
F1RS99	COL6A5	100515967	1.677	0.756	1.578	0.010 7	Yes	Up	0.804	0.0182	Yes	Down
F1SVB0	CAPG	100519653	1.597	0.753	1.578	0.015 2	Yes	Up	0.820	0.0360	Yes	Down
F1SM61	FBLN1	100519144	1.638	0.855	1.568	0.014 8	Yes	Up	0.809	0.0144	Yes	Down

F1SPG5	F1SPG5		1.353	0.725	1.549	0.030 8	Yes	Up	0.722	0.0183	Yes	Down
F1SD87	FBLN5	100155248	1.513	0.817	1.525	0.000 4	Yes	Up	0.801	0.0016	Yes	Down
I3LR85	PRKCD	100622955	1.491	0.869	1.520	0.007 1	Yes	Up	0.778	0.0398	Yes	Down
Q56P20	ARF4	595108	1.569	0.664	1.512	0.004 9	Yes	Up	0.711	0.0070	Yes	Down
I3LGC2	RRBP1	100155369	1.558	0.787	1.512	0.013 7	Yes	Up	0.773	0.0037	Yes	Down
I3LPP3	C16orf91		1.54	0.726	1.504	0.027 9	Yes	Up	0.708	0.0032	Yes	Down
F1RL06	LOC1005 23213	100523213	1.509	0.649	1.498	0.000 2	Yes	Up	0.648	0.0000	Yes	Down
F1SI06	HDLBP	100233187	1.552	0.791	1.498	0.006 4	Yes	Up	0.767	0.0033	Yes	Down
F8SIP2	EFEMP1	100512046	1.388	0.804	1.477	0.034 7	Yes	Up	0.797	0.0310	Yes	Down
F1SN67	FBN1	414836	1.483	0.671	1.475	0.003 0	Yes	Up	0.705	0.0079	Yes	Down
I3LEB7	PODN	100622214	1.557	0.79	1.473	0.015 0	Yes	Up	0.809	0.0414	Yes	Down
K7GL43	THY1	100271931	1.51	0.786	1.467	0.003 2	Yes	Up	0.813	0.0058	Yes	Down
F1SCC7	LOC1001 56325	100156325	1.488	0.608	1.459	0.001 1	Yes	Up	0.614	0.0047	Yes	Down

I3LIK6	I3LIK6		1. 556	0. 83	1. 456	0. 040 5	Yes	Up	0. 828	0. 0039	Yes	Down
A5A758	KRT1	100049664	1. 412	0. 671	1. 453	0. 015 7	Yes	Up	0. 647	0. 0038	Yes	Down
Q9MZ46	Q9MZ46		1. 458	0. 645	1. 452	0. 000 3	Yes	Up	0. 686	0. 0043	Yes	Down
A1X898	P4HA1	100037299	1. 411	0. 778	1. 443	0. 041 8	Yes	Up	0. 820	0. 0186	Yes	Down
F2Z557	PABPC1	100153958	1. 308	0. 851	1. 435	0. 041 5	Yes	Up	0. 825	0. 0337	Yes	Down
Q8MI72	FH	100627128	1. 437	0. 845	1. 432	0. 001 9	Yes	Up	0. 822	0. 0046	Yes	Down
F1S5J3	NRAP	733691	1. 386	0. 75	1. 429	0. 003 8	Yes	Up	0. 776	0. 0057	Yes	Down
F1SJT7	APOA4	397681	1. 389	0. 72	1. 423	0. 004 4	Yes	Up	0. 724	0. 0010	Yes	Down
F1SCC6	LOC1001 53899	100153899	1. 502	0. 779	1. 416	0. 011 1	Yes	Up	0. 771	0. 0014	Yes	Down
D9U8D1	LC8	100157773	1. 52	0. 807	1. 411	0. 020 9	Yes	Up	0. 831	0. 0297	Yes	Down
I3L818	SERPINF2	100525254	1. 427	0. 801	1. 408	0. 005 2	Yes	Up	0. 768	0. 0052	Yes	Down
I3LQG4	SAMD4A	100156574	1. 476	0. 768	1. 407	0. 035 0	Yes	Up	0. 780	0. 0124	Yes	Down
I3LAW4	I3LAW4		1. 515	0. 837	1. 406	0. 018 3	Yes	Up	0. 822	0. 0133	Yes	Down

O97763	NPC2	397410	1.534	0.654	1.404	0.037 4	Yes	Up	0.715	0.0137	Yes	Down
F1SFI5	HRG	100152095	1.379	0.75	1.403	0.001 1	Yes	Up	0.777	0.0044	Yes	Down
F1RRX1	LCN2	100153501	1.282	0.846	1.403	0.024 1	Yes	Up	0.794	0.0198	Yes	Down
Q9TV36	FBN1	414836	1.418	0.745	1.398	0.000 8	Yes	Up	0.777	0.0080	Yes	Down
F1SV97	PTP4A2	100625391	1.356	0.769	1.394	0.009 0	Yes	Up	0.828	0.0377	Yes	Down
F1SBF9	TM9SF3	100157588	1.477	0.774	1.392	0.011 4	Yes	Up	0.802	0.0098	Yes	Down
L8B0U8	IGHG		1.355	0.811	1.389	0.013 5	Yes	Up	0.786	0.0041	Yes	Down
M3UZ93	SYNGR2		1.399	0.687	1.386	0.001 6	Yes	Up	0.753	0.0177	Yes	Down
Q08094	CNN2	397565	1.428	0.76	1.381	0.013 6	Yes	Up	0.817	0.0251	Yes	Down
F1S0J2	C4BPA	100520761	1.279	0.734	1.379	0.028 9	Yes	Up	0.701	0.0050	Yes	Down
F1STC5	F1STC5		1.383	0.695	1.377	0.003 0	Yes	Up	0.686	0.0004	Yes	Down
L8B0W4	IGHG		1.447	0.679	1.372	0.010 2	Yes	Up	0.695	0.0039	Yes	Down
F1RN76	CD5L	100154019	1.327	0.862	1.371	0.005 3	Yes	Up	0.812	0.0172	Yes	Down

F1SU78	MCU	100153794	1.311	0.754	1.364	0.035 4	Yes	Up	0.783	0.0061	Yes	Down
F1RX12	GMDS	100520846	1.352	0.827	1.361	0.003 2	Yes	Up	0.833	0.0055	Yes	Down
A5A8W8	C4A	445467	1.455	0.706	1.361	0.016 9	Yes	Up	0.747	0.0093	Yes	Down
K9J6H8	A2M	403166	1.346	0.78	1.359	0.006 4	Yes	Up	0.769	0.0058	Yes	Down
Q8SPS7	HP	397061	1.372	0.512	1.358	0.000 7	Yes	Up	0.530	0.0004	Yes	Down
F1RZH4	F1RZH4		1.374	0.779	1.355	0.007 0	Yes	Up	0.802	0.0093	Yes	Down
F1S133	CFI	100516921	1.309	0.836	1.348	0.007 1	Yes	Up	0.832	0.0039	Yes	Down
F1SAY0	PTGFRN	397023	1.421	0.811	1.345	0.013 7	Yes	Up	0.812	0.0031	Yes	Down
F1RKK5	PRRC1	100515883	1.348	0.81	1.344	0.000 2	Yes	Up	0.818	0.0008	Yes	Down
F1SME1	C5	414437	1.346	0.761	1.344	0.001 6	Yes	Up	0.762	0.0034	Yes	Down
K7GRG1	TRAF2	100513840	1.361	0.834	1.344	0.001 7	Yes	Up	0.815	0.0170	Yes	Down
Q29433	apoB		1.315	0.876	1.344	0.011 0	Yes	Up	0.827	0.0283	Yes	Down
F1RX35	LOC1006 27396	100627396	1.396	0.66	1.341	0.009 2	Yes	Up	0.695	0.0036	Yes	Down

K7GNW6	CMC4	106504181	1.385	0.669	1.337	0.038 4	Yes	Up	0.689	0.0092	Yes	Down
F1S815	ROR1	100520620	1.231	0.787	1.333	0.025 3	Yes	Up	0.807	0.0031	Yes	Down
F1S543	CNN3	100049656	1.197	0.855	1.319	0.037 9	Yes	Up	0.833	0.0044	Yes	Down
I3LAI3	I3LAI3		1.305	0.762	1.304	0.044 4	Yes	Up	0.765	0.0005	Yes	Down
F1S404	F1S404		1.212	0.727	1.303	0.032 1	Yes	Up	0.783	0.0160	Yes	Down
Q58GK8	FASN	397561	1.273	0.746	1.297	0.049 1	Yes	Up	0.789	0.0117	Yes	Down
F1RN05	SPTLC1	100739638	1.347	0.849	1.296	0.007 5	Yes	Up	0.803	0.0136	Yes	Down
F1SLL5	PLPP1	100515451	1.402	0.82	1.292	0.045 4	Yes	Up	0.826	0.0302	Yes	Down
F1RKK1	FBN2	100048956	1.321	0.792	1.289	0.003 9	Yes	Up	0.821	0.0108	Yes	Down
B5A562	B5A562		1.279	0.662	1.288	0.006 8	Yes	Up	0.697	0.0036	Yes	Down
K7GNN0	VWF	399543	1.291	0.684	1.281	0.000 7	Yes	Up	0.756	0.0221	Yes	Down
F1S610	AHCYL1	100512899	1.306	0.732	1.267	0.007 2	Yes	Up	0.779	0.0127	Yes	Down
F2Z5P0	SEC61B	100511362	1.223	0.812	1.267	0.041 9	Yes	Up	0.823	0.0420	Yes	Down

I3L707	RPL37A	100524282	1.166	0.758	1.264	0.046 1	Yes	Up	0.739	0.0034	Yes	Down
L8B0X5	IGHG		1.29	0.791	1.264	0.002 5	Yes	Up	0.817	0.0056	Yes	Down
F1RX37	FGB	100514354	1.256	0.675	1.261	0.010 7	Yes	Up	0.682	0.0054	Yes	Down
I3LAE4	YIPF5	768112	1.296	0.784	1.259	0.032 0	Yes	Up	0.831	0.0233	Yes	Down
I3LQ17	I3LQ17		1.256	0.788	1.249	0.005 2	Yes	Up	0.802	0.0086	Yes	Down
F1S187	TAF15	100518332	1.244	0.807	1.235	0.024 5	Yes	Up	0.829	0.0050	Yes	Down
Q28936	Q28936		1.271	0.731	1.234	0.008 7	Yes	Up	0.732	0.0000	Yes	Down
F1RMN7	HPX	396998	1.248	0.724	1.228	0.017 3	Yes	Up	0.746	0.0037	Yes	Down
K7ZJP7	IGHM		1.238	0.776	1.220	0.001 7	Yes	Up	0.781	0.0004	Yes	Down
I3VKE6	I3VKE6	406870	1.257	0.805	1.219	0.007 6	Yes	Up	0.827	0.0068	Yes	Down
F1RM09	STRN4	100513929	1.13	0.775	1.203	0.034 2	Yes	Up	0.792	0.0108	Yes	Down
F2Z501	TMED2	100625917	1.151	0.841	1.201	0.042 3	Yes	Up	0.811	0.0477	Yes	Down
F1RYJ8	CSRP2	100153630	1.814	0.72	2.536	0.054 0	No	No	0.643	0.0270	Yes	Down

B3F0B7	CRABP1	100169745	2.047	0.74	1.950	0.079 1	No	No	0.790	0.0323	Yes	Down
F1S198	CCL16	100516396	2.035	0.711	1.683	0.063 9	No	No	0.748	0.0084	Yes	Down
K7GT00	COL14A1	100158059	1.995	0.781	1.675	0.053 3	No	No	0.813	0.0077	Yes	Down
I3LB66	SFRP1	100621622	1.855	0.772	1.612	0.070 6	No	No	0.811	0.0249	Yes	Down
L8B0S7	IGHG		1.863	0.526	1.501	0.112 1	No	No	0.618	0.0194	Yes	Down
Q15I73	CTGF	100152141	1.301	0.829	1.428	0.051 0	No	No	0.824	0.0454	Yes	Down
F1SAU6	KIZ	100156028	1.525	0.652	1.388	0.107 2	No	No	0.694	0.0488	Yes	Down
F1SJR4	ARFGAP3	100523962	1.208	0.86	1.375	0.087 7	No	No	0.809	0.0203	Yes	Down
F1SPN1	FKBP11	100524935	1.622	0.73	1.372	0.105 9	No	No	0.788	0.0253	Yes	Down
F1SFI4	KNG1	396568	1.377	0.754	1.343	0.052 0	No	No	0.780	0.0447	Yes	Down
F1SE20	PLAT	397121	1.489	0.68	1.340	0.115 3	No	No	0.730	0.0485	Yes	Down
A0A0A0M Y56	A0A0A0M Y56		1.482	0.633	1.326	0.065 7	No	No	0.699	0.0220	Yes	Down
A0A075B 7H6	A0A075B 7H6		1.207	0.758	1.265	0.057 9	No	No	0.761	0.0124	Yes	Down

Q69DK8	Q69DK8	397274	1.17	0.719	1.264	0.052 1	No	No	0.739	0.0032	Yes	Down
F1S7K2	LRG1	100524848	1.383	0.773	1.239	0.080 6	No	No	0.783	0.0037	Yes	Down
F1RKK2	SLC12A2	100516960	1.382	0.764	1.237	0.142 5	No	No	0.783	0.0038	Yes	Down
B3F714	LBP	101055392	1.109	0.869	1.233	0.112 9	No	No	0.767	0.0455	Yes	Down
L8B0Y6	IGHG		1.323	0.728	1.232	0.147 6	No	No	0.789	0.0427	Yes	Down
F1RYY0	FKBP5	100155423	1.239	0.822	1.230	0.078 9	No	No	0.816	0.0235	Yes	Down
K7GRT9	CD151	100511619	1.341	0.776	1.230	0.053 6	No	No	0.789	0.0011	Yes	Down
F1SKI4	QRICH1	100525663	1.158	0.875	1.230	0.181 6	No	No	0.826	0.0438	Yes	Down
F1RP79	CLN5	100152208	1.327	0.77	1.226	0.057 8	No	No	0.823	0.0224	Yes	Down
P80310	S100A12	100301483	1.1	0.859	1.220	0.067 1	No	No	0.821	0.0128	Yes	Down
F1S8T1	NOLC1	100517974	1.29	0.746	1.216	0.051 6	No	No	0.813	0.0354	Yes	Down
F2Z4Z2	GTF2A2	100521701	1.131	0.887	1.198	0.027 7	No	No	0.831	0.0269	Yes	Down
Q29168	orf		1.143	0.802	1.189	0.034 4	No	No	0.794	0.0166	Yes	Down

F1RIR2	STX4	100523599	1.319	0.786	1.181	0.124 8	No	No	0.828	0.0160	Yes	Down
F1ST28	CD68	103158530	1.134	0.783	1.175	0.091 7	No	No	0.816	0.0090	Yes	Down
F1RR05	DCAKD	100521290	1.164	0.706	1.166	0.039 2	No	No	0.789	0.0430	Yes	Down
L8B0W0	IGHG		1.24	0.737	1.164	0.057 9	No	No	0.784	0.0124	Yes	Down
F1RNK3	MYADM	100519316	1.104	0.828	1.161	0.104 9	No	No	0.763	0.0185	Yes	Down
F1SAB8	DCTN5	100524641	1.102	0.84	1.153	0.088 4	No	No	0.810	0.0150	Yes	Down
I3LND2	SEC62	100125961	1.093	0.85	1.147	0.043 5	No	No	0.823	0.0059	Yes	Down
I3LJU1	SURF4	100623620	1.257	0.805	1.147	0.137 8	No	No	0.830	0.0052	Yes	Down
F1RUQ0	JCHAIN	100625252	1.119	0.673	1.143	0.009 3	No	No	0.696	0.0024	Yes	Down
B1A2I2	PLIN		1.075	0.755	1.137	0.263 0	No	No	0.801	0.0170	Yes	Down
I3L6U3	I3L6U3		1.108	0.659	1.135	0.082 8	No	No	0.677	0.0053	Yes	Down
F1SCD0	LOC3966 85	396685	1.167	0.796	1.135	0.014 2	No	No	0.793	0.0049	Yes	Down
P61958	SUMO2	397044	1.091	0.782	1.134	0.027 5	No	No	0.813	0.0115	Yes	Down

Q5S1S4	CA3	494016	1.214	0.706	1.128	0.122 1	No	No	0.737	0.0235	Yes	Down
A0A075B 7I7	A0A075B 7I7		1.14	0.714	1.124	0.016 0	No	No	0.767	0.0159	Yes	Down
F1SQ40	PDIA5	100518582	1.132	0.802	1.123	0.125 7	No	No	0.823	0.0054	Yes	Down
A0A140T AK8	APOH	100522100	1.163	0.812	1.120	0.030 6	No	No	0.818	0.0013	Yes	Down
F1RX61	SARAF	100154322	1.169	0.669	1.115	0.051 7	No	No	0.734	0.0177	Yes	Down
F1STC2	F1STC2		1.11	0.61	1.114	0.029 4	No	No	0.597	0.0083	Yes	Down
F1SEQ6	TSPAN14	100154486	1.136	0.775	1.114	0.189 7	No	No	0.773	0.0162	Yes	Down
F1SEQ3	GHITM	100156458	1.043	0.443	1.114	0.094 6	No	No	0.463	0.0016	Yes	Down
F4MHU7	TSTA3	100620054	1.109	0.818	1.102	0.001 2	No	No	0.816	0.0027	Yes	Down
F1S2A8	BCAP31	100520774	1.104	0.797	1.102	0.042 6	No	No	0.810	0.0155	Yes	Down
K7GLJ4	MASP1	100152125	1.067	0.791	1.100	0.070 9	No	No	0.803	0.0028	Yes	Down
F1RX97	MRPS28	100152709	1.108	0.839	1.100	0.014 2	No	No	0.823	0.0097	Yes	Down
F1SCF9	TECR	100515709	1.056	0.792	1.086	0.079 8	No	No	0.786	0.0197	Yes	Down

I3LVQ5	APBA1	100513711	1.085	0.77	1.075	0.243 3	No	No	0.817	0.0299	Yes	Down
I3LCE9	I3LCE9		1.11	0.761	1.069	0.116 4	No	No	0.796	0.0082	Yes	Down
K7ZPU8	IGHG5-1		1.105	0.696	1.066	0.126 1	No	No	0.706	0.0003	Yes	Down
L8B0S2	IGHG		1.008	0.754	1.061	0.157 3	No	No	0.697	0.0089	Yes	Down
B6DSR1	Prp		1.033	0.877	1.051	0.136 6	No	No	0.827	0.0214	Yes	Down
K9IVH7	VKORC1L 1	100518062	1.058	0.709	1.047	0.049 9	No	No	0.752	0.0076	Yes	Down
Q53DY5	HIST1H1 D	595122	1.053	0.763	1.039	0.115 6	No	No	0.775	0.0118	Yes	Down
I3L5J7	I3L5J7		0.981	0.825	1.012	0.827 7	No	No	0.832	0.0007	Yes	Down
A0A075B 7I9	A0A075B 7I9		1.018	0.736	1.002	0.906 5	No	No	0.772	0.0188	Yes	Down
Q5JZM5	MPZ	100153273	0.918	0.727	0.975	0.675 6	No	No	0.749	0.0023	Yes	Down
A0A076JF S8	ATP6	808506	0.948	0.767	0.948	0.000 0	No	No	0.812	0.0285	Yes	Down
A0A076J DJ4	ND4	808510	0.943	0.811	0.925	0.078 9	No	No	0.810	0.0005	Yes	Down
F1SJR8	TSPO	396592	0.911	0.655	0.909	0.028 2	No	No	0.682	0.0068	Yes	Down

A0A076J9Y2	COX3	808507	0.909	0.824	0.881	0.0296	No	No	0.771	0.0132	Yes	Down
P79382	MGST1	397567	0.9	0.827	0.866	0.0263	No	No	0.816	0.0314	Yes	Down
F2Z5K3	RAP1A	100153199	0.821	0.818	0.852	0.0268	No	No	0.827	0.0371	Yes	Down
K7ZRK0	IGHA	100568455	0.825	0.775	0.848	0.0066	No	No	0.748	0.0034	Yes	Down

U= Untreated, **S**=Sham

Table 3. List of 149 upregulated proteins of PQS vs. Untreated

Accession	Symbol	ENTREZID	U/S	PQS/U	Ratio U/S	pValue U/S	Significant U/S	Change U/S	Ratio PQS/U	pValue PQS/S	Significant PQS/U	Change PQS/U
Q863I2	OXSR1	397618	0.835	1.351	0.823	0.001 ₂	Yes	Down	1.324	0.0094	Yes	Up
F1SLX5	AASS	100513962	0.796	1.346	0.807	0.000 ₉	Yes	Down	1.283	0.0204	Yes	Up
F1S3H4	COQ6	100155731	0.788	1.273	0.807	0.002 ₇	Yes	Down	1.237	0.0093	Yes	Up
Q3ZD69	LMNA	100126859	0.813	1.293	0.807	0.003 ₈	Yes	Down	1.272	0.0015	Yes	Up
F1SAM3	CDH2	100515322	0.843	1.172	0.806	0.011 ₆	Yes	Down	1.225	0.0165	Yes	Up
I3LE14	CCDC58	100627794	0.809	1.32	0.805	0.003 ₄	Yes	Down	1.453	0.0210	Yes	Up
F1RRY6	PTGES2	100155133	0.854	1.258	0.805	0.016 ₇	Yes	Down	1.292	0.0035	Yes	Up
F1SEN2	GLUD1	100157162	0.821	1.212	0.801	0.010 ₄	Yes	Down	1.222	0.0047	Yes	Up
I3LUM8	LOC100 626089	100626089	0.807	1.292	0.799	0.002 ₂	Yes	Down	1.220	0.0256	Yes	Up
P79381	EPHX1	397639	0.794	1.497	0.794	0.003 ₈	Yes	Down	1.459	0.0019	Yes	Up
F1RYA4	NAP1L4	100737250	0.859	1.255	0.791	0.030 ₆	Yes	Down	1.248	0.0023	Yes	Up

Q6QR67	RETN	396674	0.748	1.398	0.791	0.018 2	Yes	Down	1.399	0.0000	Yes	Up
P79274	ACADL	396931	0.777	1.227	0.790	0.001 3	Yes	Down	1.208	0.0049	Yes	Up
F1RUZ0	RPS6KB 2	100512153	0.755	1.323	0.788	0.009 7	Yes	Down	1.272	0.0224	Yes	Up
Q56VQ1	Oas2	595128	0.736	1.262	0.788	0.015 3	Yes	Down	1.219	0.0198	Yes	Up
Q4PS87	Q4PS87	574062	0.79	1.152	0.784	0.009 8	Yes	Down	1.227	0.0362	Yes	Up
Q8MI68	MUT	399535	0.717	1.209	0.782	0.023 9	Yes	Down	1.204	0.0109	Yes	Up
F1RVL5	LOC100 523824	100523824	0.767	1.213	0.781	0.001 2	Yes	Down	1.201	0.0010	Yes	Up
F1S4Y6	DYNLR B1	100156707	0.761	1.254	0.771	0.006 5	Yes	Down	1.322	0.0131	Yes	Up
K9J6K1	TAPBP	100155428	0.835	1.401	0.764	0.046 4	Yes	Down	1.360	0.0053	Yes	Up
F1RRB3	XYLB	100628009	0.736	1.435	0.763	0.011 8	Yes	Down	1.348	0.0151	Yes	Up
F1RK10	SUCLA2	399540	0.766	1.241	0.762	0.001 0	Yes	Down	1.239	0.0032	Yes	Up
F1RZQ9	UQCC2	100153818	0.769	1.201	0.759	0.010 2	Yes	Down	1.249	0.0121	Yes	Up
F1SIH5	STOML 2	100625031	0.737	1.237	0.757	0.014 7	Yes	Down	1.347	0.0258	Yes	Up

F1SLA0	ATP5B	100157156	0.759	1.211	0.756	0.000 1	Yes	Down	1.208	0.0001	Yes	Up
F1SGT3	PDHX	100525559	0.731	1.236	0.755	0.006 2	Yes	Down	1.227	0.0038	Yes	Up
F1S8Y5	PGAM1	100154776	0.737	1.346	0.752	0.004 2	Yes	Down	1.333	0.0034	Yes	Up
F1RJK0	COQ5	100157055	0.713	1.272	0.750	0.005 3	Yes	Down	1.219	0.0160	Yes	Up
F1RIB4	F1RIB4	397618	0.677	1.239	0.749	0.022 5	Yes	Down	1.236	0.0004	Yes	Up
F1RXD4	RMDN1	100513962	0.73	1.268	0.746	0.001 0	Yes	Down	1.232	0.0073	Yes	Up
F1S750	ECHDC 2	100155731	0.745	1.259	0.746	0.013 7	Yes	Down	1.279	0.0096	Yes	Up
E7EBY5	MACRO D1	100126859	0.735	1.216	0.741	0.001 8	Yes	Down	1.214	0.0012	Yes	Up
I3LPW0	NDUFB 4	100515322	0.753	1.142	0.739	0.001 8	Yes	Down	1.205	0.0253	Yes	Up
F1S006	FN3K	100627794	0.752	1.273	0.739	0.004 3	Yes	Down	1.278	0.0124	Yes	Up
F1S3J9	ICAM1	100155133	0.753	1.235	0.736	0.042 3	Yes	Down	1.226	0.0285	Yes	Up
F1S1F4	WNK4	100157162	0.804	1.185	0.736	0.016 8	Yes	Down	1.201	0.0255	Yes	Up
F1SAK6	ATP5L	100626089	0.757	1.204	0.736	0.001 7	Yes	Down	1.234	0.0053	Yes	Up

F1S418	PRDX3	397639	0.754	1.305	0.735	0.002 0	Yes	Down	1.294	0.0030	Yes	Up
F1SLQ7	MRRF	100737250	0.695	1.271	0.735	0.013 4	Yes	Down	1.273	0.0012	Yes	Up
F1SIF2	NDUFS 3	396674	0.717	1.264	0.732	0.001 4	Yes	Down	1.244	0.0111	Yes	Up
F1SKD6	SLC16A 7	396931	0.692	1.257	0.731	0.028 1	Yes	Down	1.212	0.0302	Yes	Up
F2Z5B6	TPM1	100512153	0.79	1.198	0.731	0.012 0	Yes	Down	1.217	0.0021	Yes	Up
I3LVC7	I3LVC7	595128	0.763	1.343	0.730	0.015 3	Yes	Down	1.304	0.0043	Yes	Up
F1SRV4	GSTK1	574062	0.713	1.288	0.724	0.000 4	Yes	Down	1.296	0.0006	Yes	Up
I3L7T8	I3L7T8	399535	0.724	1.274	0.722	0.000 1	Yes	Down	1.254	0.0016	Yes	Up
Q9TSX9	PRDX6	100523824	0.692	1.429	0.714	0.005 7	Yes	Down	1.402	0.0037	Yes	Up
F1SFR6	SUCLG2	100156707	0.712	1.213	0.713	0.000 3	Yes	Down	1.244	0.0063	Yes	Up
F1S3H1	ALDH6 A1	100155428	0.725	1.242	0.710	0.001 6	Yes	Down	1.252	0.0012	Yes	Up
F1SMB2	DLAT	100628009	0.699	1.274	0.709	0.000 3	Yes	Down	1.226	0.0111	Yes	Up
F1RJI7	COX6A1	399540	0.661	1.522	0.709	0.016 2	Yes	Down	1.622	0.0345	Yes	Up

F1RZF7	NFE2L2	100153818	0.655	1.418	0.707	0.009 3	Yes	Down	1.421	0.0197	Yes	Up
F1RZV1	BAG2	100625031	0.668	1.24	0.707	0.005 1	Yes	Down	1.244	0.0031	Yes	Up
F1SE87	CHMP5	100157156	0.712	1.201	0.705	0.039 9	Yes	Down	1.222	0.0416	Yes	Up
I3LUN7	KCNS3	100525559	0.752	1.302	0.703	0.008 6	Yes	Down	1.372	0.0102	Yes	Up
K7GP58	AIFM1	100154776	0.697	1.257	0.703	0.000 6	Yes	Down	1.249	0.0003	Yes	Up
F1SLY2	NDUFA 5	100157055	0.701	1.267	0.700	0.000 3	Yes	Down	1.248	0.0075	Yes	Up
P00348	HADH	397618	0.714	1.277	0.699	0.000 8	Yes	Down	1.278	0.0005	Yes	Up
B5KJG2	PGAM2	100513962	0.695	1.224	0.694	0.002 6	Yes	Down	1.224	0.0118	Yes	Up
P81045	COX17	100155731	0.674	1.313	0.694	0.001 8	Yes	Down	1.259	0.0340	Yes	Up
Q8SPJ9	COX7A1	100126859	0.7	1.269	0.693	0.000 3	Yes	Down	1.272	0.0013	Yes	Up
F1SGH5	PDHB	100515322	0.675	1.263	0.690	0.001 4	Yes	Down	1.251	0.0037	Yes	Up
F1S2K3	NUTF2	100627794	0.609	1.267	0.687	0.016 0	Yes	Down	1.211	0.0169	Yes	Up
I3LSI3	AK2	100155133	0.678	1.217	0.682	0.001 0	Yes	Down	1.213	0.0006	Yes	Up

G8IFA6	G8IFA6	100157162	0.64	1.441	0.679	0.003 8	Yes	Down	1.385	0.0055	Yes	Up
C1PIG4	PRKAR 2A	100626089	0.661	1.245	0.678	0.000 7	Yes	Down	1.206	0.0099	Yes	Up
F1RT87	RAB2A	397639	0.727	1.259	0.673	0.006 7	Yes	Down	1.255	0.0003	Yes	Up
F1RKM1	ALDH7 A1	100737250	0.632	1.274	0.671	0.003 6	Yes	Down	1.263	0.0187	Yes	Up
F1SN02	FRMD5	396674	0.593	1.36	0.669	0.014 1	Yes	Down	1.320	0.0040	Yes	Up
I3LGM4	NDUFA 11	396931	0.675	1.351	0.662	0.000 5	Yes	Down	1.327	0.0036	Yes	Up
F1SHR6	F1SHR6	100512153	0.695	1.152	0.661	0.004 5	Yes	Down	1.232	0.0427	Yes	Up
I3LVF9	VAMP3	595128	0.647	1.277	0.659	0.026 4	Yes	Down	1.322	0.0306	Yes	Up
F1SN53	C2orf88	574062	0.62	1.444	0.653	0.003 5	Yes	Down	1.416	0.0012	Yes	Up
D0G781	NDUFA B1	399535	0.61	1.154	0.637	0.003 1	Yes	Down	1.201	0.0133	Yes	Up
F1S3F3	ISCA2	100523824	0.607	1.427	0.633	0.005 9	Yes	Down	1.439	0.0040	Yes	Up
I3L9H2	CPNE2	100156707	0.601	1.4	0.630	0.037 6	Yes	Down	1.393	0.0241	Yes	Up
B2LWF9	GLUT4	100155428	0.664	1.235	0.629	0.003 6	Yes	Down	1.219	0.0029	Yes	Up

F1RMR5	ISOC2	100628009	0.649	1.235	0.627	0.003 3	Yes	Down	1.297	0.0162	Yes	Up
F1SR71	MOGAT 1	399540	0.637	1.25	0.626	0.000 2	Yes	Down	1.359	0.0270	Yes	Up
Q00P29	ACTB	100153818	0.675	1.581	0.626	0.004 3	Yes	Down	1.758	0.0248	Yes	Up
I3L5L3	CD82	100625031	0.66	1.355	0.624	0.012 0	Yes	Down	1.380	0.0139	Yes	Up
L8B149	IGHG	100157156	0.506	1.824	0.621	0.022 8	Yes	Down	1.639	0.0261	Yes	Up
I3LIC1	I3LIC1	100525559	0.515	1.603	0.611	0.019 7	Yes	Down	1.440	0.0345	Yes	Up
I3LLT8	I3LLT8	100154776	0.568	1.535	0.604	0.004 2	Yes	Down	1.380	0.0393	Yes	Up
Q6UV40	ALDOA	100157055	0.571	1.433	0.603	0.014 4	Yes	Down	1.472	0.0019	Yes	Up
F1SMT0	EFHD1	397618	0.648	1.368	0.603	0.003 8	Yes	Down	1.439	0.0070	Yes	Up
F6PSL2	MYL2	100513962	0.602	1.335	0.601	0.001 1	Yes	Down	1.373	0.0048	Yes	Up
F1RFC8	MTFP1	100155731	0.594	1.248	0.599	0.000 1	Yes	Down	1.341	0.0191	Yes	Up
F1RVA3	LOC100 623668	100126859	0.553	1.468	0.598	0.003 1	Yes	Down	1.443	0.0009	Yes	Up
I3LN63	MRPL5 4	100515322	0.522	1.254	0.592	0.007 5	Yes	Down	1.201	0.0378	Yes	Up

Q8MI02	SPAM-1	100627794	0.614	1.376	0.590	0.002 1	Yes	Down	1.540	0.0289	Yes	Up
I3LUC9	I3LUC9	100155133	0.624	1.503	0.589	0.006 9	Yes	Down	1.513	0.0142	Yes	Up
P0C2C3	2-Mar	100157162	0.566	1.253	0.589	0.006 8	Yes	Down	1.244	0.0224	Yes	Up
Q9TV61	MYH1	100626089	0.542	1.346	0.584	0.004 3	Yes	Down	1.286	0.0364	Yes	Up
K7GSK1	ART3	397639	0.531	1.385	0.583	0.004 5	Yes	Down	1.362	0.0086	Yes	Up
A0A0D5 BWD2	C1QBP	100737250	0.512	1.712	0.582	0.007 3	Yes	Down	1.527	0.0296	Yes	Up
F1RXY4	COQ3	396674	0.598	1.336	0.574	0.001 5	Yes	Down	1.354	0.0324	Yes	Up
F1RIJ7	TAS1R1	396931	0.563	1.539	0.568	0.000 3	Yes	Down	1.507	0.0010	Yes	Up
F1RU33	BANF1	100512153	0.534	1.465	0.545	0.005 9	Yes	Down	1.530	0.0039	Yes	Up
F1RR97	COQ4	595128	0.583	1.355	0.541	0.005 9	Yes	Down	1.496	0.0240	Yes	Up
F1SN52	HIBCH	574062	0.561	1.438	0.534	0.001 1	Yes	Down	1.406	0.0198	Yes	Up
F1SSF9	MYL7	399535	0.496	1.77	0.526	0.001 2	Yes	Down	1.652	0.0083	Yes	Up
Q68RU1	ApoN	100523824	0.445	1.557	0.503	0.003 5	Yes	Down	1.414	0.0306	Yes	Up

F1RJ45	LOC100155689	100156707	0.483	1.725	0.479	0.000 0	Yes	Down	1.684	0.0010	Yes	Up
P63317	TNNC1	100155428	0.477	1.417	0.477	0.000 0	Yes	Down	1.348	0.0125	Yes	Up
F1SS61	MYH3	100628009	0.503	1.337	0.473	0.003 1	Yes	Down	1.491	0.0382	Yes	Up
P13618	ATP5J	399540	0.468	1.657	0.470	0.001 2	Yes	Down	1.627	0.0048	Yes	Up
F1SKJ2	TXN2	100153818	0.48	1.435	0.462	0.002 1	Yes	Down	1.554	0.0114	Yes	Up
P04416	P04416	100625031	1.532	1.516	1.444	0.030 0	Yes	Up	1.708	0.0198	Yes	Up
F1S2V2	TPD52L1	100157156	1.498	1.462	1.436	0.005 3	Yes	Up	1.472	0.0006	Yes	Up
G8ENM3	RBKS	100525559	1.346	1.615	1.359	0.010 7	Yes	Up	1.580	0.0029	Yes	Up
P00998	SPINK1	100154776	1.265	1.495	1.317	0.007 8	Yes	Up	1.414	0.0158	Yes	Up
F1RK44	DNASE1	100157055	1.292	1.71	1.302	0.001 2	Yes	Up	1.615	0.0121	Yes	Up
F1SBS4	F1SBS4	397618	1.412	1.211	1.258	0.080 4	No	No	1.201	0.0052	Yes	Up
F1S0J8	KRT19	100513962	1.275	1.305	1.175	0.077 7	No	No	1.284	0.0021	Yes	Up
F1RJI8	TRIAP1	100155731	1.101	1.268	1.106	0.011 1	No	No	1.238	0.0141	Yes	Up

I3LCF9	AHSP	100126859	0.985	1.364	1.015	0.454 3	No	No	1.352	0.0468	Yes	Up
B0LXF7	B0LXF7	100515322	0.974	1.572	1.012	0.600 7	No	No	1.401	0.0474	Yes	Up
Q1W0Y0	Q1W0Y 0	100627794	1.024	1.599	1.004	0.793 5	No	No	1.512	0.0074	Yes	Up
I3LJ52	LOC100 621642	100155133	0.962	1.637	0.974	0.476 4	No	No	1.531	0.0101	Yes	Up
Q6PLK3	MAOB	100157162	0.957	1.276	0.962	0.102 8	No	No	1.250	0.0081	Yes	Up
M3VK03	CHMP7	100626089	0.863	1.245	0.958	0.511 4	No	No	1.367	0.0322	Yes	Up
F1RP25	CLYBL	397639	1.029	1.189	0.957	0.381 0	No	No	1.202	0.0061	Yes	Up
F1STN0	SMPDL 3B	100737250	0.901	1.135	0.933	0.196 1	No	No	1.213	0.0420	Yes	Up
L8B0V6	IGHG	396674	1.02	1.222	0.920	0.305 9	No	No	1.230	0.0160	Yes	Up
A0A075B 7I5	A0A075 B7I5	396931	1.117	2.702	0.898	0.464 0	No	No	2.741	0.0198	Yes	Up
F1RXW5	TMEM1 77	100512153	0.81	1.181	0.893	0.239 4	No	No	1.205	0.0112	Yes	Up
Q9GJX2	DBI	595128	0.83	1.253	0.886	0.057 5	No	No	1.208	0.0140	Yes	Up
I3LTW1	EML2	574062	1.141	1.187	0.883	0.490 3	No	No	1.266	0.0418	Yes	Up

P00355	GAPDH	399535	0.862	1.196	0.878	0.029 9	No	No	1.230	0.0055	Yes	Up
F1S451	LDHD	100523824	0.869	1.23	0.876	0.003 3	No	No	1.228	0.0179	Yes	Up
F1RZR6	CUTA	100156707	0.958	1.639	0.869	0.109 4	No	No	1.635	0.0033	Yes	Up
F1S078	F1S078	100155428	0.87	1.274	0.866	0.026 5	No	No	1.217	0.0189	Yes	Up
F1S3W2	FAAH	100628009	0.833	1.247	0.854	0.091 6	No	No	1.207	0.0373	Yes	Up
F1RGJ2	CTNNA 1	399540	0.892	1.251	0.851	0.026 8	No	No	1.274	0.0031	Yes	Up
Q29593	TALDO 1	100153818	0.862	1.322	0.850	0.085 6	No	No	1.295	0.0143	Yes	Up
D5LIE7	D5LIE7	100625031	0.848	1.286	0.842	0.001 4	No	No	1.250	0.0065	Yes	Up
F1SLC2	TOMM2 2	100157156	0.838	1.276	0.840	0.018 7	No	No	1.214	0.0254	Yes	Up
F1S1Q7	APOOL	100525559	0.809	1.202	0.836	0.008 0	No	No	1.219	0.0106	Yes	Up
D2XN65	D2XN6 5	100154776	0.767	1.311	0.834	0.038 5	No	No	1.319	0.0210	Yes	Up
F1SFL1	ARL8B	100157055	0.709	1.202	0.832	0.203 9	No	No	1.224	0.0484	Yes	Up
F1S765	C1orf12 3	397618	0.707	1.174	0.823	0.095 9	No	No	1.232	0.0457	Yes	Up

Q29550	Q29550	100513962	0.702	1.685	0.815	0.109 5	No	No	1.627	0.0053	Yes	Up
I3LPC8	I3LPC8	100155731	0.835	1.163	0.808	0.090 5	No	No	1.234	0.0234	Yes	Up
F1SHF5	AP4S1	100126859	0.735	1.275	0.807	0.177 2	No	No	1.328	0.0064	Yes	Up
I3LPS1	LOC100 622283	100515322	0.716	1.405	0.792	0.247 5	No	No	1.393	0.0451	Yes	Up
F1RJ12	PPP1R3 D	100627794	0.852	1.22	0.789	0.097 9	No	No	1.203	0.0119	Yes	Up
C6L245	try	100155133	0.939	1.75	0.775	0.114 5	No	No	1.662	0.0060	Yes	Up
L8B0V2	IGHG	100157162	0.967	1.229	0.739	0.150 2	No	No	1.353	0.0342	Yes	Up
F1RZQ3	UFSP2	100626089	0.695	1.546	0.664	0.115 3	No	No	1.475	0.0457	Yes	Up
Q863I2	OXSR1	397639	0.835	1.351	0.823	0.001 2	Yes	Down	1.324	0.0094	Yes	Up
F1SLX5	AASS	100737250	0.796	1.346	0.807	0.000 9	Yes	Down	1.283	0.0204	Yes	Up
F1S3H4	COQ6	396674	0.788	1.273	0.807	0.002 7	Yes	Down	1.237	0.0093	Yes	Up
Q3ZD69	LMNA	396931	0.813	1.293	0.807	0.003 8	Yes	Down	1.272	0.0015	Yes	Up
F1SAM3	CDH2	100512153	0.843	1.172	0.806	0.011 6	Yes	Down	1.225	0.0165	Yes	Up

I3LE14	CCDC58	595128	0.809	1.32	0.805	0.003 4	Yes	Down	1.453	0.0210	Yes	Up
F1RRY6	PTGES2	574062	0.854	1.258	0.805	0.016 7	Yes	Down	1.292	0.0035	Yes	Up
F1SEN2	GLUD1	399535	0.821	1.212	0.801	0.010 4	Yes	Down	1.222	0.0047	Yes	Up
I3LUM8	LOC100 626089	100523824	0.807	1.292	0.799	0.002 2	Yes	Down	1.220	0.0256	Yes	Up
P79381	EPHX1	100156707	0.794	1.497	0.794	0.003 8	Yes	Down	1.459	0.0019	Yes	Up
F1RYA4	NAP1L4	100155428	0.859	1.255	0.791	0.030 6	Yes	Down	1.248	0.0023	Yes	Up
Q6QR67	RETN	100628009	0.748	1.398	0.791	0.018 2	Yes	Down	1.399	0.0000	Yes	Up
P79274	ACADL	399540	0.777	1.227	0.790	0.001 3	Yes	Down	1.208	0.0049	Yes	Up
F1RUZ0	RPS6KB 2	100153818	0.755	1.323	0.788	0.009 7	Yes	Down	1.272	0.0224	Yes	Up
Q56VQ1	Oas2	100625031	0.736	1.262	0.788	0.015 3	Yes	Down	1.219	0.0198	Yes	Up
Q4PS87	Q4PS87	100157156	0.79	1.152	0.784	0.009 8	Yes	Down	1.227	0.0362	Yes	Up
Q8MI68	MUT	100525559	0.717	1.209	0.782	0.023 9	Yes	Down	1.204	0.0109	Yes	Up
F1RVL5	LOC100 523824	100154776	0.767	1.213	0.781	0.001 2	Yes	Down	1.201	0.0010	Yes	Up

F1S4Y6	DYNLR B1	100157055	0.761	1.254	0.771	0.006 5	Yes	Down	1.322	0.0131	Yes	Up
K9J6K1	TAPBP	397618	0.835	1.401	0.764	0.046 4	Yes	Down	1.360	0.0053	Yes	Up
F1RRB3	XYLB	100513962	0.736	1.435	0.763	0.011 8	Yes	Down	1.348	0.0151	Yes	Up
F1RK10	SUCLA2	100155731	0.766	1.241	0.762	0.001 0	Yes	Down	1.239	0.0032	Yes	Up
F1RZQ9	UQCC2	100126859	0.769	1.201	0.759	0.010 2	Yes	Down	1.249	0.0121	Yes	Up
F1SIH5	STOML 2	100515322	0.737	1.237	0.757	0.014 7	Yes	Down	1.347	0.0258	Yes	Up
F1SLA0	ATP5B	100627794	0.759	1.211	0.756	0.000 1	Yes	Down	1.208	0.0001	Yes	Up
F1SGT3	PDHX	100155133	0.731	1.236	0.755	0.006 2	Yes	Down	1.227	0.0038	Yes	Up
F1S8Y5	PGAM1	100157162	0.737	1.346	0.752	0.004 2	Yes	Down	1.333	0.0034	Yes	Up
F1RJK0	COQ5	100626089	0.713	1.272	0.750	0.005 3	Yes	Down	1.219	0.0160	Yes	Up
F1RIB4	F1RIB4	397639	0.677	1.239	0.749	0.022 5	Yes	Down	1.236	0.0004	Yes	Up
F1RXD4	RMDN1	100737250	0.73	1.268	0.746	0.001 0	Yes	Down	1.232	0.0073	Yes	Up
F1S750	ECHDC 2	396674	0.745	1.259	0.746	0.013 7	Yes	Down	1.279	0.0096	Yes	Up

E7EBY5	MACRO D1	396931	0.735	1.216	0.741	0.001 8	Yes	Down	1.214	0.0012	Yes	Up
I3LPW0	NDUFB 4	100512153	0.753	1.142	0.739	0.001 8	Yes	Down	1.205	0.0253	Yes	Up
F1S006	FN3K	595128	0.752	1.273	0.739	0.004 3	Yes	Down	1.278	0.0124	Yes	Up
F1S3J9	ICAM1	574062	0.753	1.235	0.736	0.042 3	Yes	Down	1.226	0.0285	Yes	Up

U= Untreated, **S**=Sham

Table 4. List of 341 upregulated proteins of Untreated vs. Sham

Accession	Symbol	ENTREZID	U/S	PQS/U	Ratio U/S	pValue U/S	Significant U/S	Change U/S	Ratio PQS/U	pValue PQS/S	Significant PQS/U	Change PQS/U
F1S571	COL11A 1	397175	4.979	0.68	4.116	0.018 6	Yes	Up	0.687	0.0002	Yes	Down
F1S902	COMP	396554	3.865	0.537	3.543	0.005 7	Yes	Up	0.580	0.0036	Yes	Down
F1RS37	POSTN	100152401	3.023	0.709	3.478	0.047 5	Yes	Up	0.729	0.0014	Yes	Down
F1RRJ9	LTBP3	100517877	2.941	0.588	2.781	0.004 8	Yes	Up	0.584	0.0003	Yes	Down
F1S6Q3	CILP2	100518061	3.232	0.775	2.756	0.018 2	Yes	Up	0.804	0.0090	Yes	Down
F1RQI0	COL12A 1		3.277	0.766	2.738	0.023 3	Yes	Up	0.787	0.0024	Yes	Down
Q29116- 3	TNC	397460	2.608	0.812	2.470	0.008 2	Yes	Up	0.798	0.0022	Yes	Down
O62797	O62797		2.662	0.733	2.456	0.013 5	Yes	Up	0.754	0.0021	Yes	Down
F1S6B5	FMOD	100526237	2.619	0.794	2.388	0.007 4	Yes	Up	0.804	0.0023	Yes	Down
F1RYL4	FRZB	100152419	2.445	0.633	2.372	0.013 4	Yes	Up	0.630	0.0011	Yes	Down
C1IHT9	PDK4	100286778	2.178	0.506	2.087	0.002 1	Yes	Up	0.498	0.0002	Yes	Down

F1S2T5	LTBP2	100514300	1.822	0.679	2.051	0.011 8	Yes	Up	0.674	0.0003	Yes	Down
P79263	ITIH4	396799	2.277	0.404	1.919	0.036 5	Yes	Up	0.480	0.0054	Yes	Down
F1RVS9	PI16	100155010	1.849	0.684	1.856	0.001 0	Yes	Up	0.673	0.0061	Yes	Down
E7BXW9	MUSTN 1	100622867	1.806	0.656	1.830	0.020 6	Yes	Up	0.663	0.0029	Yes	Down
F1S285	COL14A 1	100158059	1.883	0.781	1.802	0.006 9	Yes	Up	0.825	0.0163	Yes	Down
F1RU22	EFEMP 2	100526031	1.766	0.836	1.797	0.000 9	Yes	Up	0.721	0.0399	Yes	Down
I3L8F7	NES	100153933	1.905	0.789	1.775	0.007 0	Yes	Up	0.793	0.0006	Yes	Down
Z4YP82	SPARC	595124	1.781	0.692	1.766	0.002 1	Yes	Up	0.728	0.0051	Yes	Down
Q1W0S7	AEBP1	733628	1.572	0.822	1.761	0.021 1	Yes	Up	0.820	0.0004	Yes	Down
F1SH92	ITIH4	396799	1.662	0.574	1.751	0.008 6	Yes	Up	0.529	0.0028	Yes	Down
I3LMU6	RCN3	100518493	1.93	0.706	1.725	0.019 6	Yes	Up	0.787	0.0343	Yes	Down
P63221	RPS21	100037996	1.566	0.757	1.669	0.010 4	Yes	Up	0.720	0.0085	Yes	Down
F2Z5S3	LOC100 624417	100624417	1.434	0.841	1.658	0.033 6	Yes	Up	0.738	0.0419	Yes	Down

G9B792	ANKRD 2	100155185	1.6	0.777	1.628	0.002 8	Yes	Up	0.777	0.0095	Yes	Down
I3LM94	I3LM94		1.725	0.726	1.601	0.010 8	Yes	Up	0.806	0.0410	Yes	Down
F1RX36	LOC102 158263	102158263	1.714	0.567	1.600	0.009 6	Yes	Up	0.603	0.0023	Yes	Down
I3LJX2	I3LJX2		1.773	0.756	1.599	0.033 4	Yes	Up	0.829	0.0450	Yes	Down
I3L856	GPX7	100621417	1.711	0.677	1.598	0.024 0	Yes	Up	0.764	0.0370	Yes	Down
J9JIL5	LOC100 620367	100620367	1.51	0.772	1.592	0.005 1	Yes	Up	0.754	0.0178	Yes	Down
F1SCD1	F1SCD1		1.686	0.66	1.584	0.039 1	Yes	Up	0.678	0.0046	Yes	Down
F1SNY2	RPL3	396768	1.587	0.829	1.580	0.004 1	Yes	Up	0.825	0.0006	Yes	Down
F1RS99	COL6A5	100515967	1.677	0.756	1.578	0.010 7	Yes	Up	0.804	0.0182	Yes	Down
F1SVB0	CAPG	100519653	1.597	0.753	1.578	0.015 2	Yes	Up	0.820	0.0360	Yes	Down
F1SM61	FBLN1	100519144	1.638	0.855	1.568	0.014 8	Yes	Up	0.809	0.0144	Yes	Down
F1SPG5	F1SPG5		1.353	0.725	1.549	0.030 8	Yes	Up	0.722	0.0183	Yes	Down
F1SD87	FBLN5	100155248	1.513	0.817	1.525	0.000 4	Yes	Up	0.801	0.0016	Yes	Down

I3LR85	PRKCD	100622955	1.491	0.869	1.520	0.007 1	Yes	Up	0.778	0.0398	Yes	Down
Q56P20	ARF4	595108	1.569	0.664	1.512	0.004 9	Yes	Up	0.711	0.0070	Yes	Down
I3LGC2	RRBP1	100155369	1.558	0.787	1.512	0.013 7	Yes	Up	0.773	0.0037	Yes	Down
I3LPP3	C16orf9 1		1.54	0.726	1.504	0.027 9	Yes	Up	0.708	0.0032	Yes	Down
F1RL06	LOC100 523213	100523213	1.509	0.649	1.498	0.000 2	Yes	Up	0.648	0.0000	Yes	Down
F1SI06	HDLBP	100233187	1.552	0.791	1.498	0.006 4	Yes	Up	0.767	0.0033	Yes	Down
F8SIP2	EFEMP 1	100512046	1.388	0.804	1.477	0.034 7	Yes	Up	0.797	0.0310	Yes	Down
F1SN67	FBN1	414836	1.483	0.671	1.475	0.003 0	Yes	Up	0.705	0.0079	Yes	Down
I3LEB7	PODN	100622214	1.557	0.79	1.473	0.015 0	Yes	Up	0.809	0.0414	Yes	Down
K7GL43	THY1	100271931	1.51	0.786	1.467	0.003 2	Yes	Up	0.813	0.0058	Yes	Down
F1SCC7	LOC100 156325	100156325	1.488	0.608	1.459	0.001 1	Yes	Up	0.614	0.0047	Yes	Down
I3LIK6	I3LIK6		1.556	0.83	1.456	0.040 5	Yes	Up	0.828	0.0039	Yes	Down
A5A758	KRT1	100049664	1.412	0.671	1.453	0.015 7	Yes	Up	0.647	0.0038	Yes	Down

Q9MZ46	Q9MZ46		1.458	0.645	1.452	0.0003	Yes	Up	0.686	0.0043	Yes	Down
A1X898	P4HA1	100037299	1.411	0.778	1.443	0.0418	Yes	Up	0.820	0.0186	Yes	Down
F2Z557	PABPC1	100153958	1.308	0.851	1.435	0.0415	Yes	Up	0.825	0.0337	Yes	Down
Q8MI72	FH	100627128	1.437	0.845	1.432	0.0019	Yes	Up	0.822	0.0046	Yes	Down
F1S5J3	NRAP	733691	1.386	0.75	1.429	0.0038	Yes	Up	0.776	0.0057	Yes	Down
F1SJT7	APOA4	397681	1.389	0.72	1.423	0.0044	Yes	Up	0.724	0.0010	Yes	Down
F1SCC6	LOC100153899	100153899	1.502	0.779	1.416	0.0111	Yes	Up	0.771	0.0014	Yes	Down
D9U8D1	LC8	100157773	1.52	0.807	1.411	0.0209	Yes	Up	0.831	0.0297	Yes	Down
I3L818	SERPINF2	100525254	1.427	0.801	1.408	0.0052	Yes	Up	0.768	0.0052	Yes	Down
I3LQG4	SAMD4A	100156574	1.476	0.768	1.407	0.0350	Yes	Up	0.780	0.0124	Yes	Down
I3LAW4	I3LAW4		1.515	0.837	1.406	0.0183	Yes	Up	0.822	0.0133	Yes	Down
O97763	NPC2	397410	1.534	0.654	1.404	0.0374	Yes	Up	0.715	0.0137	Yes	Down
F1SFI5	HRG	100152095	1.379	0.75	1.403	0.0011	Yes	Up	0.777	0.0044	Yes	Down

F1RRX1	LCN2	100153501	1.282	0.846	1.403	0.024 1	Yes	Up	0.794	0.0198	Yes	Down
Q9TV36	FBN1	414836	1.418	0.745	1.398	0.000 8	Yes	Up	0.777	0.0080	Yes	Down
F1SV97	PTP4A2	100625391	1.356	0.769	1.394	0.009 0	Yes	Up	0.828	0.0377	Yes	Down
F1SBF9	TM9SF 3	100157588	1.477	0.774	1.392	0.011 4	Yes	Up	0.802	0.0098	Yes	Down
L8B0U8	IGHG		1.355	0.811	1.389	0.013 5	Yes	Up	0.786	0.0041	Yes	Down
M3UZ93	SYNGR2		1.399	0.687	1.386	0.001 6	Yes	Up	0.753	0.0177	Yes	Down
Q08094	CNN2	397565	1.428	0.76	1.381	0.013 6	Yes	Up	0.817	0.0251	Yes	Down
F1S0J2	C4BPA	100520761	1.279	0.734	1.379	0.028 9	Yes	Up	0.701	0.0050	Yes	Down
F1STC5	F1STC5		1.383	0.695	1.377	0.003 0	Yes	Up	0.686	0.0004	Yes	Down
L8B0W4	IGHG		1.447	0.679	1.372	0.010 2	Yes	Up	0.695	0.0039	Yes	Down
F1RN76	CD5L	100154019	1.327	0.862	1.371	0.005 3	Yes	Up	0.812	0.0172	Yes	Down
F1SU78	MCU	100153794	1.311	0.754	1.364	0.035 4	Yes	Up	0.783	0.0061	Yes	Down
F1RX12	GMDS	100520846	1.352	0.827	1.361	0.003 2	Yes	Up	0.833	0.0055	Yes	Down

A5A8W8	C4A	445467	1.455	0.706	1.361	0.016 9	Yes	Up	0.747	0.0093	Yes	Down
K9J6H8	A2M	403166	1.346	0.78	1.359	0.006 4	Yes	Up	0.769	0.0058	Yes	Down
Q8SPS7	HP	397061	1.372	0.512	1.358	0.000 7	Yes	Up	0.530	0.0004	Yes	Down
F1RZH4	F1RZH4		1.374	0.779	1.355	0.007 0	Yes	Up	0.802	0.0093	Yes	Down
F1S133	CFI	100516921	1.309	0.836	1.348	0.007 1	Yes	Up	0.832	0.0039	Yes	Down
F1SAY0	PTGFR N	397023	1.421	0.811	1.345	0.013 7	Yes	Up	0.812	0.0031	Yes	Down
F1RKK5	PRRC1	100515883	1.348	0.81	1.344	0.000 2	Yes	Up	0.818	0.0008	Yes	Down
F1SME1	C5	414437	1.346	0.761	1.344	0.001 6	Yes	Up	0.762	0.0034	Yes	Down
K7GRG1	TRAF2	100513840	1.361	0.834	1.344	0.001 7	Yes	Up	0.815	0.0170	Yes	Down
Q29433	apoB		1.315	0.876	1.344	0.011 0	Yes	Up	0.827	0.0283	Yes	Down
F1RX35	LOC100 627396	100627396	1.396	0.66	1.341	0.009 2	Yes	Up	0.695	0.0036	Yes	Down
K7GNW6	CMC4	106504181	1.385	0.669	1.337	0.038 4	Yes	Up	0.689	0.0092	Yes	Down
F1S815	ROR1	100520620	1.231	0.787	1.333	0.025 3	Yes	Up	0.807	0.0031	Yes	Down

F1S543	CNN3	100049656	1. 197	0. 855	1. 319	0. 037 9	Yes	Up	0. 833	0. 0044	Yes	Down
I3LAI3	I3LAI3		1. 305	0. 762	1. 304	0. 044 4	Yes	Up	0. 765	0. 0005	Yes	Down
F1S404	F1S404		1. 212	0. 727	1. 303	0. 032 1	Yes	Up	0. 783	0. 0160	Yes	Down
Q58GK8	FASN	397561	1. 273	0. 746	1. 297	0. 049 1	Yes	Up	0. 789	0. 0117	Yes	Down
F1RN05	SPTLC1	100739638	1. 347	0. 849	1. 296	0. 007 5	Yes	Up	0. 803	0. 0136	Yes	Down
F1SLL5	PLPP1	100515451	1. 402	0. 82	1. 292	0. 045 4	Yes	Up	0. 826	0. 0302	Yes	Down
F1RKK1	FBN2	100048956	1. 321	0. 792	1. 289	0. 003 9	Yes	Up	0. 821	0. 0108	Yes	Down
B5A562	B5A562		1. 279	0. 662	1. 288	0. 006 8	Yes	Up	0. 697	0. 0036	Yes	Down
K7GNN0	VWF	399543	1. 291	0. 684	1. 281	0. 000 7	Yes	Up	0. 756	0. 0221	Yes	Down
F1S610	AHCYL 1	100512899	1. 306	0. 732	1. 267	0. 007 2	Yes	Up	0. 779	0. 0127	Yes	Down
F2Z5P0	SEC61B	100511362	1. 223	0. 812	1. 267	0. 041 9	Yes	Up	0. 823	0. 0420	Yes	Down
I3L707	RPL37A	100524282	1. 166	0. 758	1. 264	0. 046 1	Yes	Up	0. 739	0. 0034	Yes	Down
L8B0X5	IGHG		1. 29	0. 791	1. 264	0. 002 5	Yes	Up	0. 817	0. 0056	Yes	Down

F1RX37	FGB	100514354	1.256	0.675	1.261	0.010 7	Yes	Up	0.682	0.0054	Yes	Down
I3LAE4	YIPF5	768112	1.296	0.784	1.259	0.032 0	Yes	Up	0.831	0.0233	Yes	Down
I3LQ17	I3LQ17		1.256	0.788	1.249	0.005 2	Yes	Up	0.802	0.0086	Yes	Down
F1S187	TAF15	100518332	1.244	0.807	1.235	0.024 5	Yes	Up	0.829	0.0050	Yes	Down
Q28936	Q28936		1.271	0.731	1.234	0.008 7	Yes	Up	0.732	0.0000	Yes	Down
F1RMN7	HPX	396998	1.248	0.724	1.228	0.017 3	Yes	Up	0.746	0.0037	Yes	Down
K7ZJP7	IGHM		1.238	0.776	1.220	0.001 7	Yes	Up	0.781	0.0004	Yes	Down
I3VKE6	I3VKE6	406870	1.257	0.805	1.219	0.007 6	Yes	Up	0.827	0.0068	Yes	Down
F1RM09	STRN4	100513929	1.13	0.775	1.203	0.034 2	Yes	Up	0.792	0.0108	Yes	Down
F2Z501	TMED2	100625917	1.151	0.841	1.201	0.042 3	Yes	Up	0.811	0.0477	Yes	Down
I3LUP3	GPR4	100144489	3.876	0.825	3.441	0.007 9	Yes	Up	0.841	0.0024	No	No
F1SJL4	CILP	397672	2.928	0.942	2.827	0.015 1	Yes	Up	0.929	0.0287	No	No
F1RF28	F1RF28		2.873	0.947	2.570	0.010 2	Yes	Up	0.909	0.1109	No	No

F1SFA7	COL1A2	100626716	2.27	0.852	2.270	0.000 1	Yes	Up	0.857	0.0102	No	No
D5KRL1	COL21A 1	100523618	2.403	0.903	2.247	0.016 9	Yes	Up	0.943	0.1089	No	No
F1SL03	F1SL03		2.225	0.856	2.223	0.001 6	Yes	Up	0.925	0.1752	No	No
Q95283	COX4I1		2.354	0.797	2.185	0.009 0	Yes	Up	0.837	0.0247	No	No
F1RSE1	LOC100 524171	100524171	2.295	0.885	2.122	0.024 8	Yes	Up	0.872	0.0025	No	No
F1S021	COL5A1	397533	1.886	0.935	2.081	0.027 0	Yes	Up	0.955	0.0510	No	No
F1RQI2	F1RQI2		2.149	0.848	2.049	0.014 4	Yes	Up	0.845	0.0041	No	No
Q53DY6	Q53DY6	595122	2.414	1.094	2.041	0.031 0	Yes	Up	1.167	0.0452	No	No
F1SIF1	FAM18 0B	100511437	2.107	0.865	2.027	0.023 0	Yes	Up	0.836	0.0076	No	No
A0A0H5 ANC0	OGN	106509723	2.037	0.93	2.020	0.001 0	Yes	Up	0.962	0.2059	No	No
F1S6B4	PRELP	100511032	1.96	0.947	2.009	0.001 1	Yes	Up	0.951	0.0135	No	No
F1RYI8	COL3A1	100152001	2.061	0.968	2.000	0.000 9	Yes	Up	0.990	0.4566	No	No
I3LUM2	I3LUM2		1.813	0.897	1.901	0.006 6	Yes	Up	0.912	0.0335	No	No

F1SQ08	KERA	100157843	1.833	0.762	1.886	0.0026	Yes	Up	0.857	0.0979	No	No
Q2EN75	S100A6	106507066	1.629	1.046	1.848	0.0164	Yes	Up	0.978	0.7196	No	No
K7GSQ6	ITGAE	100519919	1.549	0.904	1.780	0.0390	Yes	Up	0.837	0.0705	No	No
F1RF11	MMP2	397391	1.88	0.816	1.748	0.0210	Yes	Up	0.804	0.0639	No	No
K7GP55	BGN	397396	1.803	0.956	1.729	0.0026	Yes	Up	0.911	0.0599	No	No
F1SUE4	ASPN	100511749	1.778	1.116	1.680	0.0053	Yes	Up	1.062	0.1538	No	No
F1RGS0	THBS3	100155108	1.885	0.833	1.665	0.0481	Yes	Up	0.846	0.0269	No	No
I3LEE6	PCOLCE	100627524	1.861	0.747	1.665	0.0225	Yes	Up	0.829	0.0526	No	No
Q1T7A8	COL6A1	100623720	1.676	0.986	1.635	0.0010	Yes	Up	0.969	0.0950	No	No
F1SEC6	CPXM2	100153578	1.857	0.911	1.634	0.0323	Yes	Up	0.916	0.2953	No	No
F1SX60	VCAN	397328	1.629	0.914	1.625	0.0038	Yes	Up	0.881	0.0211	No	No
F1SB59	FNDC1	100154276	1.687	0.819	1.608	0.0048	Yes	Up	0.869	0.1382	No	No
F1RVE2	HELQ	100524635	1.642	0.863	1.602	0.0015	Yes	Up	0.854	0.0165	No	No

Q9XSD9	DCN	396957	1.716	1.085	1.598	0.011 4	Yes	Up	1.088	0.0003	No	No
P79388	FOLR2	396853	1.615	0.789	1.592	0.036 3	Yes	Up	0.783	0.0896	No	No
F1SEN4	LOC100 517243	100517243	1.607	0.826	1.590	0.023 6	Yes	Up	0.931	0.3331	No	No
F1SQ09	LUM	100152607	1.579	1.003	1.587	0.003 8	Yes	Up	1.009	0.1154	No	No
F1S1V8	F1S1V8		1.689	0.876	1.576	0.010 3	Yes	Up	0.870	0.0036	No	No
P45846	DPT	100516366	1.625	0.97	1.568	0.008 0	Yes	Up	0.952	0.0567	No	No
F1SSA6	MYH10	396903	1.615	0.876	1.567	0.006 8	Yes	Up	0.870	0.0015	No	No
U3R8H0	APN		1.571	0.601	1.560	0.028 2	Yes	Up	0.747	0.1310	No	No
I3LNK1	OLFML 1	100622122	1.55	0.854	1.554	0.002 4	Yes	Up	0.896	0.0438	No	No
P02543	VIM	100522394	1.713	0.818	1.536	0.032 1	Yes	Up	0.907	0.1833	No	No
Q9GJV4	fhl1C	397667	1.539	0.847	1.530	0.003 3	Yes	Up	0.864	0.0046	No	No
I3LI44	COTL1	100621773	1.52	0.948	1.526	0.023 6	Yes	Up	0.935	0.3542	No	No
I3LGK3	RNASE1	100312980	1.534	1.155	1.520	0.007 1	Yes	Up	1.118	0.2455	No	No

F1S405	LTBP1		1.541	0.812	1.510	0.009 1	Yes	Up	0.866	0.0402	No	No
Q9GLM1	Q9GLM 1		1.646	1.002	1.506	0.040 3	Yes	Up	0.878	0.2934	No	No
F1S1B3	PCP4L1	100523600	1.571	0.779	1.490	0.006 9	Yes	Up	0.832	0.0756	No	No
A5A8W4	TNXB	445520	1.614	1.033	1.480	0.019 9	Yes	Up	0.990	0.7179	No	No
F1SS26	THBS1	492313	1.595	0.858	1.479	0.023 4	Yes	Up	0.883	0.0135	No	No
F1RKW9	MYO1D	100049650	1.519	0.856	1.469	0.006 3	Yes	Up	0.860	0.0603	No	No
A0SEH3	C8G	100037955	1.534	0.794	1.467	0.008 3	Yes	Up	0.852	0.0386	No	No
F1SGP8	RCN1	100516484	1.436	0.915	1.466	0.014 8	Yes	Up	0.911	0.2152	No	No
F1S981	SPON1	100127436	1.573	0.833	1.463	0.024 9	Yes	Up	0.862	0.0496	No	No
Q3Y5G4	NRAP	733691	1.467	0.835	1.445	0.013 0	Yes	Up	0.844	0.0016	No	No
F1S0M9	FKBP10	100511038	1.446	0.752	1.434	0.000 4	Yes	Up	0.843	0.1329	No	No
F1S0M0	MATN2	100155607	1.347	0.926	1.432	0.015 0	Yes	Up	0.916	0.0535	No	No
F1RM62	HSPB6	100127444	1.525	1.007	1.432	0.017 2	Yes	Up	1.059	0.1547	No	No

F1RLQ2	LMNA	100126859	1. 579	0. 827	1. 432	0. 048 6	Yes	Up	0. 897	0. 2296	No	No
F1S788	C8A	100037953	1. 533	0. 826	1. 431	0. 013 9	Yes	Up	0. 802	0. 0789	No	No
Q6SEG5	UCHL1	396637	1. 38	1. 103	1. 420	0. 007 4	Yes	Up	0. 987	0. 8512	No	No
Q0PM28	Q0PM2 8	780402	1. 473	0. 859	1. 420	0. 023 6	Yes	Up	0. 891	0. 0516	No	No
B5APU6	B5APU 6	100174964	1. 432	0. 938	1. 419	0. 001 3	Yes	Up	0. 867	0. 0702	No	No
F1SUS0	MFAP2	100523794	1. 411	0. 887	1. 418	0. 003 5	Yes	Up	0. 842	0. 0197	No	No
F1S8S4	ENAH	100525245	1. 438	0. 801	1. 413	0. 012 0	Yes	Up	0. 850	0. 0825	No	No
P40125	CAP1		1. 397	0. 899	1. 412	0. 000 5	Yes	Up	0. 890	0. 0225	No	No
A3EX84	LGALS3	100038033	1. 54	0. 865	1. 406	0. 035 7	Yes	Up	0. 888	0. 0200	No	No
I3L638	VTN	100623732	1. 331	0. 874	1. 403	0. 015 2	Yes	Up	0. 881	0. 0100	No	No
F1RK01	CPB2	100155038	1. 41	0. 898	1. 389	0. 006 9	Yes	Up	0. 882	0. 0057	No	No
Q59IP2	COL5A2	397532	1. 366	0. 998	1. 389	0. 015 7	Yes	Up	0. 925	0. 1925	No	No
I3L6L3	ANKRD 66	100155360	1. 372	0. 9	1. 388	0. 002 1	Yes	Up	0. 895	0. 0065	No	No

F1SLW6	MFAP5	100512231	1.397	0.822	1.386	0.003 8	Yes	Up	0.841	0.0047	No	No
F1SI65	MAP1A	100520470	1.382	0.893	1.385	0.000 1	Yes	Up	0.961	0.4778	No	No
P02554	P02554		1.405	0.851	1.384	0.003 6	Yes	Up	0.935	0.2871	No	No
D2SQP3	CSRP3	100337687	1.405	0.904	1.381	0.001 4	Yes	Up	0.897	0.0257	No	No
F1SB47	F1SB47		1.417	0.931	1.378	0.010 3	Yes	Up	0.949	0.0732	No	No
P61288	TPT1	397664	1.364	0.875	1.374	0.000 2	Yes	Up	0.864	0.0467	No	No
A5J2A8	TRX		1.288	1.215	1.363	0.013 9	Yes	Up	1.124	0.1987	No	No
F1S6F7	CDKN2 C	100515210	1.412	0.882	1.354	0.020 3	Yes	Up	0.836	0.0783	No	No
A1XQV7	HSBP1	100579143	1.455	0.81	1.354	0.021 6	Yes	Up	0.879	0.1160	No	No
K7GLE2	CD44	100525150	1.431	0.891	1.354	0.023 4	Yes	Up	0.851	0.0280	No	No
F2Z576	HIST1H 3E	100154511	1.278	1.127	1.352	0.010 9	Yes	Up	0.994	0.9400	No	No
B8LFE3	CMYA1	100134978	1.291	1.033	1.352	0.042 7	Yes	Up	0.936	0.3181	No	No
F1RZN7	KLKB1	397144	1.34	0.801	1.347	0.000 1	Yes	Up	0.835	0.0129	No	No

F1SS24	FN1	397620	1.367	0.833	1.347	0.0026	Yes	Up	0.837	0.0002	No	No
F1SL52	RBP1	100156666	1.486	0.84	1.343	0.0418	Yes	Up	0.864	0.0080	No	No
F1RH92	MYOT	100101550	1.37	0.903	1.342	0.0061	Yes	Up	0.894	0.0031	No	No
F1S8R5	SRP9	100524270	1.341	0.945	1.341	0.0003	Yes	Up	1.018	0.6754	No	No
F1SKG6	F1SKG6		1.349	0.888	1.339	0.0067	Yes	Up	0.901	0.0891	No	No
A9GYW6	APLE		1.199	0.886	1.338	0.0494	Yes	Up	0.845	0.1411	No	No
Q29387	EEF1G	397022	1.412	0.91	1.336	0.0135	Yes	Up	0.914	0.0009	No	No
I3LTB8	I3LTB8		1.287	0.981	1.333	0.0144	Yes	Up	0.953	0.2705	No	No
P62844	RPS15	397607	1.316	0.927	1.333	0.0198	Yes	Up	0.882	0.0917	No	No
K9IVL7	LRP1	100627964	1.399	0.858	1.333	0.0098	Yes	Up	0.860	0.0023	No	No
I3LEM1	LOC100511406	100511406	1.343	1.006	1.332	0.0006	Yes	Up	0.901	0.3497	No	No
F1ST88	GLIPR2	100515356	1.288	0.876	1.330	0.0047	Yes	Up	0.823	0.0612	No	No
F1RG04	CCDC6	100155896	1.342	0.861	1.329	0.0010	Yes	Up	0.923	0.1323	No	No

G8G223	coro1a		1. 27	0. 828	1. 328	0. 010 3	Yes	Up	0. 847	0. 0060	No	No
F1RKY2	SERPIN D1	100155945	1. 382	0. 883	1. 325	0. 010 5	Yes	Up	0. 888	0. 0040	No	No
F2Z5Q1	CHMP2 B	100516044	1. 384	0. 92	1. 322	0. 021 8	Yes	Up	0. 913	0. 0250	No	No
K9J4M9	COLEC1 2		1. 342	0. 815	1. 322	0. 029 5	Yes	Up	0. 841	0. 0471	No	No
B5APU8	ARPC3	100154518	1. 326	0. 883	1. 321	0. 008 0	Yes	Up	0. 878	0. 0158	No	No
O97507	F12	397474	1. 45	0. 853	1. 320	0. 045 6	Yes	Up	0. 854	0. 0610	No	No
F1SDK3	MGMT	100155050	1. 403	0. 919	1. 319	0. 049 0	Yes	Up	0. 960	0. 3818	No	No
A5PF02	C2	448981	1. 311	0. 87	1. 317	0. 039 3	Yes	Up	0. 870	0. 0512	No	No
K9IVC5	PADI2	100621356	1. 324	1. 057	1. 316	0. 016 4	Yes	Up	1. 066	0. 0235	No	No
A0A0F6T NY5	APOB	100523371	1. 321	0. 841	1. 315	0. 000 7	Yes	Up	0. 886	0. 0707	No	No
F1SRC8	CLEC3B	100620511	1. 305	0. 984	1. 308	0. 000 0	Yes	Up	0. 979	0. 3942	No	No
F1SIW0	STAB1	100525609	1. 212	0. 821	1. 305	0. 023 6	Yes	Up	0. 847	0. 0247	No	No
F1SU87	MICU1	100155980	1. 316	0. 938	1. 304	0. 000 5	Yes	Up	0. 929	0. 0597	No	No

F1RRU7	MRC2	100516106	1.304	0.896	1.304	0.044 5	Yes	Up	0.874	0.0292	No	No
I3LBY0	ARCN1	100622860	1.317	0.867	1.303	0.003 4	Yes	Up	0.853	0.0025	No	No
F1SK12	MAP1B	100519062	1.373	0.83	1.302	0.048 3	Yes	Up	0.864	0.0221	No	No
I3LC64	ECM1	100620701	1.255	0.961	1.301	0.006 0	Yes	Up	0.986	0.4756	No	No
Q0MUU2	SMPX	780438	1.289	0.94	1.301	0.001 5	Yes	Up	0.967	0.2202	No	No
F1SFI6	FETUB	100517609	1.199	0.826	1.301	0.045 2	Yes	Up	0.860	0.0237	No	No
Q29195	RPL10	733593	1.313	0.883	1.300	0.001 6	Yes	Up	0.893	0.0180	No	No
O11780	TGFBI	100519300	1.34	1.112	1.295	0.009 0	Yes	Up	1.116	0.0458	No	No
F1S8K5	SUPT16 H	100157967	1.23	0.988	1.293	0.017 2	Yes	Up	0.908	0.2644	No	No
F1SR10	CMAS	100520022	1.355	0.847	1.291	0.042 5	Yes	Up	0.864	0.0836	No	No
F1SII5	INMT	100512997	1.188	0.882	1.291	0.030 2	Yes	Up	0.773	0.0643	No	No
F1S6A9	HEBP2	100155860	1.253	0.859	1.287	0.023 9	Yes	Up	0.914	0.3038	No	No
I3LPL7	GLG1	100622584	1.268	0.936	1.286	0.001 8	Yes	Up	0.898	0.0402	No	No

I3LUR7	COL6A3	100101551	1.304	1.024	1.285	0.001 3	Yes	Up	1.027	0.0217	No	No
K9IVM5	GIMAP4		1.238	0.938	1.285	0.014 4	Yes	Up	0.910	0.0242	No	No
F1SLI3	MAP4	100519172	1.284	0.957	1.283	0.002 5	Yes	Up	0.964	0.0644	No	No
A1XQT6	MYL1	397666	1.296	1.011	1.282	0.016 1	Yes	Up	0.978	0.3239	No	No
K7GQE4	ENPEP	397080	1.255	1.077	1.280	0.002 8	Yes	Up	1.052	0.1329	No	No
M3VHA5	SEC16A		1.332	0.818	1.277	0.013 9	Yes	Up	0.857	0.1614	No	No
F1S6V0	SWAP7 0	100521312	1.23	0.814	1.275	0.016 5	Yes	Up	0.858	0.0227	No	No
I3L5T3	FBL	100626002	1.249	0.864	1.275	0.004 0	Yes	Up	0.858	0.0014	No	No
I3LIM2	UGDH	100627727	1.227	0.873	1.274	0.030 5	Yes	Up	0.890	0.1229	No	No
F2Z5Q8	RPL35A	100514796	1.266	1.002	1.273	0.000 2	Yes	Up	0.983	0.2613	No	No
I3LF89	CPN2	100627569	1.333	0.682	1.273	0.014 2	Yes	Up	0.793	0.0644	No	No
A0A097Z MY9	ELN	100286864	1.302	0.829	1.272	0.036 8	Yes	Up	0.847	0.0193	No	No
Q95281	RPL29	396993	1.312	0.871	1.271	0.010 9	Yes	Up	0.914	0.0718	No	No

I3L9Y4	ZNF692	100525277	1.327	0.81	1.270	0.019 6	Yes	Up	0.874	0.0607	No	No
F1RMT5	DIAPH1	100511072	1.227	0.987	1.269	0.010 9	Yes	Up	0.969	0.2961	No	No
I3LTV3	FNDC3 A	100621035	1.237	1.066	1.269	0.004 5	Yes	Up	1.033	0.4109	No	No
Q29201	RPS16	100623279	1.248	1	1.268	0.001 9	Yes	Up	0.987	0.1859	No	No
F1RUN2	ALB	396960	1.289	0.829	1.266	0.003 8	Yes	Up	0.838	0.0019	No	No
F1SPF9	COPG1	100516936	1.184	0.954	1.264	0.029 2	Yes	Up	0.915	0.0485	No	No
Q95MZ3	Q95MZ 3	397241	1.291	0.996	1.264	0.007 0	Yes	Up	1.043	0.2471	No	No
F1SNK3	MTAP	100516774	1.257	0.896	1.263	0.004 6	Yes	Up	0.910	0.0643	No	No
F1S596	PRKCSH	100516540	1.304	0.951	1.262	0.011 2	Yes	Up	0.949	0.0168	No	No
F1S3H9	LOC100 517145	100517145	1.248	0.921	1.259	0.033 7	Yes	Up	0.982	0.6423	No	No
I3LI15	SETD7	100626704	1.362	0.941	1.259	0.040 9	Yes	Up	0.964	0.4308	No	No
F1SM78	MYL12 B	414399	1.283	0.946	1.259	0.003 7	Yes	Up	0.865	0.0800	No	No
F1SMN5	FLNC	100518997	1.287	0.945	1.258	0.003 1	Yes	Up	0.956	0.0244	No	No

I3LSZ6	RPL28		1.241	0.933	1.258	0.003 4	Yes	Up	0.925	0.0447	No	No
F1RXC1	CA1	100153915	1.206	0.879	1.255	0.009 0	Yes	Up	0.889	0.0075	No	No
P62901	RPL31	100737826	1.223	0.978	1.254	0.012 0	Yes	Up	0.972	0.3029	No	No
F1SH96	ITIH1	396963	1.215	1.023	1.254	0.016 8	Yes	Up	0.947	0.3152	No	No
F1RIA0	HOMER 2	100156419	1.278	0.963	1.251	0.007 4	Yes	Up	0.962	0.1129	No	No
I3L5S3	CCNYL1	100520645	1.216	0.964	1.249	0.037 4	Yes	Up	0.876	0.1122	No	No
Q1T7A9	COL6A1	100623720	1.302	0.988	1.248	0.011 5	Yes	Up	1.001	0.9400	No	No
I3LEX0	RPS9	100622613	1.274	0.959	1.248	0.010 4	Yes	Up	0.940	0.0251	No	No
F1SHD6	EEF1B2	100154920	1.268	0.961	1.248	0.003 9	Yes	Up	0.971	0.2587	No	No
F2Z5R7	RPS29	414391	1.16	0.95	1.246	0.029 4	Yes	Up	0.904	0.0580	No	No
P60662	MYL6	396807	1.246	0.876	1.245	0.006 2	Yes	Up	0.861	0.0033	No	No
I3LJW5	RNLS	100155046	1.276	0.915	1.242	0.009 0	Yes	Up	0.875	0.0298	No	No
F6PVJ7	NME1	100142626	1.315	0.938	1.242	0.024 5	Yes	Up	0.955	0.2829	No	No

F1SEG7	LOC100 514544	100514544	1.302	1.598	1.242	0.030 0	Yes	Up	1.385	0.0722	No	No
B5APV1	B5APV1	100154462	1.32	0.832	1.242	0.039 0	Yes	Up	0.885	0.0649	No	No
F2Z5G9	SNRPD 1	100524872	1.16	1.115	1.242	0.035 9	Yes	Up	0.957	0.6408	No	No
F1RGA9	F1RGA9		1.267	0.828	1.241	0.008 4	Yes	Up	0.873	0.0329	No	No
B6E241	GRB2	100192436	1.216	0.889	1.241	0.004 8	Yes	Up	0.851	0.0199	No	No
I3LS72	COL6A1	100623720	1.215	1.023	1.241	0.008 1	Yes	Up	1.051	0.1143	No	No
F1RF79	NPPA	397496	1.262	0.911	1.241	0.014 4	Yes	Up	0.932	0.0579	No	No
I3L7Y1	RPL26	100627662	1.282	0.936	1.240	0.019 4	Yes	Up	0.960	0.1849	No	No
F2Z5I9	DSTN	445516	1.23	0.978	1.239	0.004 9	Yes	Up	0.968	0.1712	No	No
B5APU7	B5APU 7		1.282	0.878	1.238	0.008 5	Yes	Up	0.905	0.0259	No	No
I3L660	PFN2	100621523	1.227	0.967	1.238	0.010 7	Yes	Up	0.938	0.1187	No	No
Q6J267	Q6J267		1.292	0.93	1.238	0.014 0	Yes	Up	0.929	0.0003	No	No
F1SAD9	PDIA4	100522203	1.218	0.912	1.237	0.005 9	Yes	Up	0.927	0.0105	No	No

F1SUP2	SPCS2	100739125	1. 3	0. 912	1. 237	0. 018 7	Yes	Up	0. 925	0. 0152	No	No
F1RGW0	PDIA2	100738360	1. 263	0. 989	1. 236	0. 045 5	Yes	Up	0. 967	0. 1264	No	No
I3LBP0	WDFY1	100157180	1. 256	0. 911	1. 235	0. 024 2	Yes	Up	0. 913	0. 0799	No	No
I3LH3	EEF2	100624328	1. 222	0. 905	1. 234	0. 001 0	Yes	Up	0. 899	0. 0017	No	No
F1SMW7	SERPIN B2	100519286	1. 199	1. 02	1. 234	0. 009 3	Yes	Up	0. 979	0. 4781	No	No
F2Z5S6	BRK1	100522899	1. 198	0. 803	1. 234	0. 047 4	Yes	Up	0. 788	0. 1139	No	No
F1SU12	DDOST	397385	1. 298	0. 878	1. 234	0. 021 3	Yes	Up	0. 871	0. 0200	No	No
I3LU89	CHMP1 A	100628127	1. 236	0. 968	1. 232	0. 020 5	Yes	Up	0. 894	0. 1064	No	No
A1Z624	A1Z624		1. 19	0. 917	1. 232	0. 032 0	Yes	Up	0. 841	0. 1222	No	No
F1SV90	EIF3I	100521499	1. 216	0. 917	1. 232	0. 003 3	Yes	Up	0. 880	0. 0491	No	No
Q8WMG9	Q8WM G9	397160	1. 26	0. 893	1. 232	0. 004 5	Yes	Up	0. 874	0. 0314	No	No
A7WLH8	SUMO1	100127139	1. 191	0. 705	1. 232	0. 020 8	Yes	Up	0. 855	0. 2037	No	No
Q29238	CLIC1	594847	1. 254	0. 881	1. 231	0. 024 6	Yes	Up	0. 983	0. 7887	No	No

I3LPN0	MCT7	397389	1.23	0.964	1.230	0.000 4	Yes	Up	0.928	0.2092	No	No
Q7M2W6	CRYAB	100519789	1.269	1.003	1.230	0.007 3	Yes	Up	1.014	0.2459	No	No
F1RJV5	PDLIM4	100520235	1.276	0.879	1.227	0.026 5	Yes	Up	0.913	0.0788	No	No
F1SUC8	EIF4EB P2	100523927	1.23	0.88	1.226	0.003 3	Yes	Up	0.885	0.0549	No	No
P62272	RPS18	396980	1.261	0.93	1.225	0.009 7	Yes	Up	0.982	0.6294	No	No
F1RI01	RPL13A	780432	1.264	0.935	1.225	0.036 1	Yes	Up	0.977	0.4042	No	No
F1SDN6	CTBP2	100154421	1.181	0.882	1.224	0.046 7	Yes	Up	0.894	0.1033	No	No
Q6IG15	RTN4	100170118	1.276	0.857	1.221	0.037 5	Yes	Up	0.848	0.0051	No	No
F1RQ91	RPS4X	397611	1.227	0.879	1.221	0.001 3	Yes	Up	0.887	0.0014	No	No
I3LGP6	TSTA3	100620054	1.209	0.821	1.220	0.009 7	Yes	Up	0.915	0.2373	No	No
I3LJU7	HSPB7	100627988	1.227	0.922	1.220	0.007 7	Yes	Up	0.921	0.0150	No	No
I3LN42	GC	448964	1.222	0.922	1.219	0.008 9	Yes	Up	0.935	0.0892	No	No
F1RTJ9	RPL21	100736809	1.258	0.978	1.216	0.009 4	Yes	Up	0.964	0.0598	No	No

I3LS04	ACTN1	100513412	1.189	0.938	1.216	0.012 2	Yes	Up	0.926	0.0072	No	No
F1SI55	BZW1	100152909	1.169	0.892	1.214	0.015 9	Yes	Up	0.889	0.0047	No	No
F1S409	SEC23I P	100157013	1.259	0.849	1.214	0.037 1	Yes	Up	0.876	0.0231	No	No
F2Z512	RPS23	396638	1.259	0.929	1.213	0.011 3	Yes	Up	0.920	0.0272	No	No
F1S935	RPL18A	100520891	1.231	0.926	1.213	0.026 8	Yes	Up	0.921	0.0085	No	No
F1S7L8	SH3GL1	100523947	1.181	0.902	1.213	0.031 0	Yes	Up	0.891	0.0031	No	No
M3VHA2	CTBP1		1.238	0.892	1.211	0.013 9	Yes	Up	0.868	0.0140	No	No
F2Z5B9	RPL34	100517840	1.228	0.745	1.211	0.002 6	Yes	Up	0.832	0.1159	No	No
I3LQ79	MVP	100622738	1.265	0.883	1.211	0.023 2	Yes	Up	0.923	0.0836	No	No
F2Z5J1	PSMC1	100155274	1.145	0.944	1.211	0.047 8	Yes	Up	0.903	0.0418	No	No
B3CL06	TF	396996	1.214	0.864	1.210	0.000 2	Yes	Up	0.867	0.0043	No	No
F1RVD4	SEC31A	100511210	1.166	0.924	1.210	0.014 0	Yes	Up	0.917	0.0178	No	No
E3UV40	ERK2	100153927	1.183	0.935	1.210	0.014 1	Yes	Up	0.923	0.0061	No	No

F2Z5C7	RPS3A	414390	1.233	0.904	1.209	0.010 6	Yes	Up	0.905	0.0019	No	No
I3L5W3	FCN2	396881	1.235	0.844	1.207	0.028 8	Yes	Up	0.936	0.3019	No	No
F1RRR1	GOSR2	100519332	1.223	0.972	1.206	0.013 3	Yes	Up	0.954	0.0456	No	No
F1RT25	SNX3	100627262	1.147	0.911	1.206	0.022 4	Yes	Up	0.888	0.0217	No	No
P01025	C3	397072	1.216	0.851	1.206	0.000 7	Yes	Up	0.874	0.0088	No	No
P62936	PPIA	397637	1.203	0.95	1.205	0.000 1	Yes	Up	0.912	0.0507	No	No
F1SAH5	DPAGT1	100517773	1.246	0.748	1.203	0.028 9	Yes	Up	0.822	0.1562	No	No
F1SFI7	AHSG	397585	1.202	0.879	1.203	0.001 0	Yes	Up	0.873	0.0210	No	No
F1SSP6	ACTR3 B	102159531	1.229	1.032	1.202	0.011 5	Yes	Up	1.040	0.4598	No	No
I3LK33	RPL15	100620094	1.256	0.917	1.201	0.018 0	Yes	Up	0.896	0.0289	No	No
F1RGI2	LOC100 514845	100514845	1.142	0.925	1.201	0.021 2	Yes	Up	0.894	0.0397	No	No
P28491	CALR	100381266	1.246	0.833	1.201	0.035 9	Yes	Up	0.860	0.0393	No	No
F1RJ93	TAGLN2	100515893	1.208	0.927	1.201	0.010 3	Yes	Up	0.899	0.0230	No	No

P04416	P04416		1. 532	1. 516	1. 444	0. 030 0	Yes	Up	1. 708	0. 0198	Yes	Up
F1S2V2	TPD52L 1	100515246	1. 498	1. 462	1. 436	0. 005 3	Yes	Up	1. 472	0. 0006	Yes	Up
G8ENM3	RBKS	102163141	1. 346	1. 615	1. 359	0. 010 7	Yes	Up	1. 580	0. 0029	Yes	Up
P00998	SPINK1		1. 265	1. 495	1. 317	0. 007 8	Yes	Up	1. 414	0. 0158	Yes	Up
F1RK44	DNASE 1	397051	1. 292	1. 71	1. 302	0. 001 2	Yes	Up	1. 615	0. 0121	Yes	Up

U= Untreated, **S**=Sham

Table 5. List of 392 downregulated proteins of Untreated vs. Sham

Accession	Symbol	ENTREZID	U/S	PQS/U	Ratio U/S	pValue U/S	Significant U/S	Change U/S	Ratio PQS/U	pValue PQS/S	Significant PQS/U	Change PQS/U
D0VWV4	SDHC	100524676	0.783	0.651	0.791	0.0007	Yes	Down	0.665	0.0007	Yes	Down
I3LAQ0	I3LAQ0		0.771	0.661	0.660	0.0316	Yes	Down	0.680	0.0030	Yes	Down
P62895	CYCS	100170131	0.825	1.1	0.833	0.0006	Yes	Down	1.108	0.0015	No	No
A5A755	GNAQ	654405	0.832	1.191	0.833	0.0209	Yes	Down	1.175	0.0074	No	No
I3LGI2	LOC100738512	100738512	0.901	1.113	0.833	0.0461	Yes	Down	1.120	0.0244	No	No
F1SM07	COPS8	100515865	0.805	1.139	0.833	0.0116	Yes	Down	1.091	0.1522	No	No
F1S1L1	TIMM8A	100517443	0.794	1.057	0.832	0.0141	Yes	Down	1.117	0.1364	No	No
F1SU00	F1SU00		0.881	1.01	0.832	0.0210	Yes	Down	1.057	0.1469	No	No
Q52I78	NAMPT	595123	0.842	1.132	0.832	0.0016	Yes	Down	1.169	0.0367	No	No
F1ST01	SELENBP1	100152724	0.828	1.174	0.830	0.0036	Yes	Down	1.141	0.0332	No	No
F1RHM3	RYR2	396856	0.83	1.132	0.830	0.0007	Yes	Down	1.123	0.0123	No	No

K7GQM4	PRAF2	100511673	0.862	1.062	0.830	0.033 7	Yes	Down	1.045	0.2191	No	No
I3LS73	TIMM13	100620885	0.817	1.111	0.830	0.002 8	Yes	Down	1.125	0.0177	No	No
F1SQP4	NDUFA1 2	100518016	0.805	1.081	0.829	0.005 2	Yes	Down	1.082	0.0055	No	No
F1SDV5	EMILIN 3	100519117	0.848	1.269	0.829	0.017 0	Yes	Down	1.231	0.0832	No	No
Q2EN80	NDUFB6	733605	0.809	1.059	0.828	0.005 4	Yes	Down	1.042	0.1381	No	No
F1RFI1	TUFM	100516488	0.825	1.13	0.828	0.001 7	Yes	Down	1.118	0.0117	No	No
A5GFS8	VAPB	100144536	0.812	1.016	0.828	0.004 7	Yes	Down	1.005	0.7986	No	No
I3LMQ8	NDUFAF 7	100522486	0.774	1.076	0.828	0.034 3	Yes	Down	1.066	0.0758	No	No
F1RKU0	IDH3A	100157242	0.824	1.107	0.827	0.001 0	Yes	Down	1.107	0.0057	No	No
F1S2E3	PPIF	100152612	0.773	1.21	0.827	0.040 5	Yes	Down	1.147	0.0458	No	No
Q6UAQ8	ETFB	396614	0.827	1.056	0.827	0.000 1	Yes	Down	1.047	0.0096	No	No
P36887	PRKACA	397652	0.833	1.092	0.827	0.000 8	Yes	Down	1.079	0.0072	No	No
F1S9V7	C14orf2	100523804	0.864	1.134	0.827	0.011 5	Yes	Down	1.163	0.0103	No	No

I3LLI8	I3LLI8		0.829	1.122	0.826	0.008 3	Yes	Down	1.113	0.0072	No	No
I3LKT9	C2orf71		0.814	1.104	0.826	0.037 3	Yes	Down	1.084	0.0315	No	No
A1XQS3	NDUFA4	100579141	0.835	1.07	0.825	0.002 7	Yes	Down	1.051	0.0484	No	No
F1SPG0	RAB7A	100622795	0.821	1.07	0.825	0.000 4	Yes	Down	1.069	0.0173	No	No
I3LFK0	BCS1L	100626589	0.849	1.112	0.825	0.007 8	Yes	Down	1.160	0.0426	No	No
F1SK15	MCCC2	100518224	0.806	1.132	0.825	0.005 6	Yes	Down	1.117	0.0639	No	No
Q8SPT0	Q8SPT0		0.847	1.025	0.824	0.004 3	Yes	Down	1.071	0.0911	No	No
I3LLW3	SAMM5 0	100626494	0.826	1.048	0.824	0.000 4	Yes	Down	1.066	0.0216	No	No
F1S9K1	F1S9K1		0.837	1.054	0.824	0.001 8	Yes	Down	1.112	0.0613	No	No
I3LNJ1	I3LNJ1		0.825	1.173	0.824	0.009 5	Yes	Down	1.164	0.0073	No	No
I3LLU8	SBK2	100621492	0.804	1.01	0.823	0.004 5	Yes	Down	1.028	0.1176	No	No
F1S663	LAMC1	100514785	0.802	1.109	0.823	0.003 4	Yes	Down	1.103	0.0016	No	No
F1SI71	C15H2o rf47	100522576	0.754	1.21	0.822	0.035 2	Yes	Down	1.127	0.1207	No	No

K9IW73	DLST- tv1		0.8	1.193	0.822	0.004 1	Yes	Down	1.142	0.0308	No	No
A4Z6H0	ADSSL1	100048943	0.803	1.168	0.822	0.025 8	Yes	Down	1.153	0.0366	No	No
F1SAS2	ACSS1	100154828	0.809	1.155	0.821	0.003 1	Yes	Down	1.163	0.0008	No	No
F1SH10	NCEH1	100154209	0.802	1.166	0.821	0.003 1	Yes	Down	1.136	0.0376	No	No
F1SUG1	SUPV3L 1	100155960	0.859	0.981	0.821	0.013 7	Yes	Down	1.072	0.4929	No	No
D2SW95	COPB1	100337660	0.869	1.012	0.821	0.019 7	Yes	Down	1.116	0.2343	No	No
F1S3H7	PTGR2	100156930	0.827	1.115	0.820	0.004 9	Yes	Down	1.097	0.0119	No	No
F1S261	PPM1E	100518751	0.831	0.929	0.819	0.001 3	Yes	Down	1.032	0.6190	No	No
I3LER5	COX4I1	100624067	0.836	1.156	0.819	0.015 0	Yes	Down	1.128	0.0303	No	No
F1SN58	LOC100 152170	100152170	0.836	1.016	0.819	0.022 1	Yes	Down	1.059	0.1532	No	No
F1RYZ0	RPLP2	100513643	0.799	1.287	0.819	0.022 0	Yes	Down	1.098	0.4114	No	No
M3UZ42	UFM1	100522509	0.813	1.125	0.819	0.000 7	Yes	Down	1.168	0.0809	No	No
P80895	PCMT1	100502562	0.804	1.144	0.818	0.001 6	Yes	Down	1.161	0.0176	No	No

F2Z5K2	PSMA5	497063	0.769	1.163	0.818	0.018 9	Yes	Down	1.151	0.0829	No	No
I3LFZ8	RAB5B	100625381	0.808	1.214	0.817	0.013 3	Yes	Down	1.155	0.0346	No	No
F1RFD4	USMG5	100520866	0.828	1.102	0.816	0.002 5	Yes	Down	1.124	0.0118	No	No
F1S5S1	IBA57	100513524	0.77	1.15	0.816	0.016 8	Yes	Down	1.133	0.0074	No	No
F2Z5Q3	COPS7A	100157341	0.801	1.117	0.816	0.018 6	Yes	Down	1.096	0.1503	No	No
I3LMP2	ABHD10	100623142	0.873	1.023	0.816	0.027 8	Yes	Down	1.065	0.0910	No	No
F1RS52	MMAA	100523624	0.857	1.087	0.816	0.040 7	Yes	Down	1.126	0.0738	No	No
F1STY1	NDUFC2	102157422	0.828	1.108	0.815	0.012 9	Yes	Down	1.131	0.0300	No	No
F1RUI1	HSD17B 10	100524293	0.882	1.12	0.815	0.046 4	Yes	Down	1.141	0.0496	No	No
F1S870	PSMF1	100152620	0.853	1.124	0.815	0.036 8	Yes	Down	1.132	0.1110	No	No
F1RR64	ENDOG	100514888	0.835	1.17	0.814	0.004 5	Yes	Down	1.200	0.0061	No	No
F1SPH2	F1SPH2		0.802	1.159	0.814	0.015 8	Yes	Down	1.174	0.1425	No	No
F1SB60	SOD2	100154319	0.816	1.18	0.814	0.001 0	Yes	Down	1.190	0.0007	No	No

F1SED0	ACADSB	100154810	0.82	1.13	0.814	0.001 0	Yes	Down	1.111	0.0127	No	No
I3LS60	CARKD	100153456	0.763	1.083	0.813	0.020 7	Yes	Down	1.117	0.0216	No	No
F1S433	F1S433		0.771	1.203	0.813	0.033 8	Yes	Down	1.150	0.0312	No	No
I3L7J1	TAPT1	100626638	0.786	1.039	0.812	0.005 9	Yes	Down	1.124	0.1045	No	No
M3VK21	SLC25A 12	100524283	0.822	1.163	0.812	0.001 0	Yes	Down	1.162	0.0064	No	No
A0A0K1T QQ7	CBR3	100512990	0.813	1.025	0.812	0.004 9	Yes	Down	1.022	0.2755	No	No
A9X3T3	PECI	100134957	0.807	1.045	0.811	0.001 4	Yes	Down	1.021	0.2133	No	No
F1S7K4	PLIN4	100524667	0.815	1.117	0.811	0.001 2	Yes	Down	1.104	0.0044	No	No
I3LTC2	FUK	100625448	0.753	1.041	0.810	0.042 3	Yes	Down	1.015	0.8358	No	No
Q5XLD3	CKM	397264	0.818	1.145	0.810	0.002 2	Yes	Down	1.160	0.0074	No	No
A0PFK5	CP	406870	0.788	1.164	0.810	0.003 6	Yes	Down	1.125	0.0243	No	No
F1SIS9	NDUFA1 0	100521478	0.837	1.129	0.810	0.005 3	Yes	Down	1.175	0.0195	No	No
F1SIB5	F1SIB5		0.834	1.112	0.810	0.013 5	Yes	Down	1.061	0.2412	No	No

F1RVD2	ENOPH 1	100511394	0.796	1.317	0.809	0.001 2	Yes	Down	1.230	0.0617	No	No
I3LSM7	IMMT	100738124	0.834	1.185	0.809	0.005 9	Yes	Down	1.185	0.0045	No	No
I3LU60	LRRC47	100624753	0.792	1.197	0.809	0.037 4	Yes	Down	1.162	0.0166	No	No
F1SKL2	TST	100153230	0.806	1.16	0.809	0.000 3	Yes	Down	1.140	0.0117	No	No
F1RGJ3	HSPA9	100521183	0.789	1.175	0.809	0.003 3	Yes	Down	1.147	0.0100	No	No
F1RHN4	TXNRD2	100156736	0.809	1.057	0.809	0.000 7	Yes	Down	1.082	0.1696	No	No
F1RJH2	ACADS	396932	0.795	1.1	0.809	0.005 8	Yes	Down	1.119	0.0084	No	No
F1SJ34	COX5A	100156967	0.805	1.193	0.808	0.004 4	Yes	Down	1.183	0.0138	No	No
F1SDW9	PPP1R1 6B	100517865	0.772	1.149	0.808	0.019 8	Yes	Down	1.197	0.0667	No	No
I3LCB2	POLR2H	100628241	0.809	1.152	0.808	0.003 2	Yes	Down	1.188	0.0199	No	No
M3VH65	MFN1	100627612	0.805	1.143	0.807	0.001 2	Yes	Down	1.121	0.2907	No	No
F2Z543	PHB	100524707	0.798	1.184	0.806	0.004 1	Yes	Down	1.194	0.0057	No	No
I3LDC1	SDHB	414412	0.808	1.1	0.805	0.000 4	Yes	Down	1.097	0.0049	No	No

F1RVN1	NDUFV1	100522783	0.798	1.09	0.805	0.000 6	Yes	Down	1.105	0.0077	No	No
F1SGI7	KRT75		0.728	1.008	0.805	0.041 3	Yes	Down	0.857	0.2018	No	No
Q0QF01	SDHA		0.795	1.102	0.804	0.000 7	Yes	Down	1.094	0.0057	No	No
B8Y651	NDUFB8	448979	0.791	1	0.804	0.004 3	Yes	Down	1.025	0.2233	No	No
A2TLM1	RPIA	100038014	0.822	1.179	0.804	0.009 3	Yes	Down	1.140	0.0192	No	No
I3LBE4	LOC100 511690	100511690	0.807	1.027	0.803	0.001 3	Yes	Down	1.029	0.0569	No	No
F1RFA5	PGP	100739035	0.786	1.071	0.803	0.002 6	Yes	Down	1.087	0.0723	No	No
F1SHD7	NDUFS1	100516402	0.791	1.121	0.802	0.001 5	Yes	Down	1.128	0.0047	No	No
F1SNA8	HSDL2	100155587	0.809	1.05	0.802	0.000 4	Yes	Down	1.060	0.0067	No	No
F1SLA8	F1SLA8		0.807	1.34	0.802	0.027 1	Yes	Down	1.135	0.3667	No	No
F2Z5W6	LAMTO R1	100520503	0.777	1.101	0.802	0.006 3	Yes	Down	1.205	0.1328	No	No
K7GM50	GSTZ1	100626791	0.787	1.141	0.802	0.008 4	Yes	Down	1.119	0.0248	No	No
F1S8A5	MRPS26	100157874	0.831	1.032	0.801	0.012 7	Yes	Down	1.122	0.1174	No	No

F1S1A8	NDUFS2	100156075	0.799	1.11	0.801	0.000 9	Yes	Down	1.118	0.0012	No	No
F1RSX7	LOC100 524642	100524642	0.813	1.192	0.801	0.011 6	Yes	Down	1.192	0.0604	No	No
F1SVC4	PTCD3	100517886	0.844	1.096	0.801	0.015 9	Yes	Down	1.149	0.0300	No	No
F1S9I9	2-Mar		0.809	1.042	0.800	0.001 9	Yes	Down	1.070	0.1028	No	No
K7GPW3	APOO	100525438	0.784	1.12	0.800	0.014 4	Yes	Down	1.136	0.0039	No	No
F1S4N2	CYB5R1	100511951	0.808	1.096	0.800	0.009 3	Yes	Down	1.074	0.0214	No	No
F1S108	CISD2	100524158	0.8	0.908	0.799	0.001 9	Yes	Down	0.919	0.0653	No	No
I3LQU8	I3LQU8		0.81	1.126	0.799	0.028 3	Yes	Down	1.158	0.0838	No	No
P68137	ACTA1	100154254	0.794	1.127	0.799	0.000 4	Yes	Down	1.134	0.0009	No	No
F1SM98	NDUFV2	100037991	0.802	1.14	0.799	0.001 3	Yes	Down	1.140	0.0001	No	No
F1SRF0	HHATL	100523865	0.803	1.011	0.798	0.001 7	Yes	Down	1.019	0.0564	No	No
I3LHA3	I3LHA3		0.833	1.121	0.798	0.010 1	Yes	Down	1.110	0.0185	No	No
F1RPS8	ATP5A1	100157880	0.803	1.101	0.797	0.000 3	Yes	Down	1.125	0.0097	No	No

Q5D144	TFAM	397279	0.794	1.14	0.797	0.000 9	Yes	Down	1.149	0.0129	No	No
F1SCC9	F1SCC9		0.776	0.855	0.797	0.007 4	Yes	Down	0.849	0.0008	No	No
P00172-2	CYB5A	414799	0.78	1.093	0.797	0.013 7	Yes	Down	1.125	0.0606	No	No
F1RSP5	GPT	100524618	0.785	1.064	0.796	0.001 6	Yes	Down	1.063	0.0036	No	No
I3LS35	LPCAT3	100627653	0.786	1.077	0.795	0.008 4	Yes	Down	1.066	0.0376	No	No
F1S564	RTCA	100154102	0.782	1.469	0.794	0.007 2	Yes	Down	1.348	0.0692	No	No
I3LLE3	ACADVL	100520636	0.78	1.107	0.794	0.001 2	Yes	Down	1.102	0.0008	No	No
K7GPJ4	ACOT9	100525265	0.809	1.147	0.794	0.004 3	Yes	Down	1.145	0.0007	No	No
F1STS4	ME3	100520040	0.766	1.152	0.793	0.007 4	Yes	Down	1.155	0.0007	No	No
Q2HYU1	CKMT2	733602	0.796	1.019	0.793	0.000 1	Yes	Down	1.018	0.0539	No	No
F1S6Q1	NDUFA1 3	100622110	0.78	1.094	0.793	0.001 2	Yes	Down	1.078	0.0131	No	No
A8CYZ2	SIRT3	100125971	0.802	1.202	0.793	0.001 5	Yes	Down	1.198	0.0137	No	No
P00503	GOT1	396967	0.778	1.165	0.792	0.001 2	Yes	Down	1.170	0.0004	No	No

F1SGC6	NDUFB5	100523751	0.779	1.197	0.791	0.0016	Yes	Down	1.194	0.0011	No	No
F1RNZ1	UQCRFS1	100522678	0.819	1.04	0.791	0.0088	Yes	Down	1.126	0.1006	No	No
F1SA66	TIMM44	100521124	0.758	1.217	0.791	0.0311	Yes	Down	1.121	0.1378	No	No
F1RT96	ACSF2	100512859	0.791	1.188	0.790	0.0019	Yes	Down	1.186	0.0163	No	No
P50584	NUDT2	397577	0.809	1.006	0.790	0.0302	Yes	Down	1.043	0.2688	No	No
I3LEV7	SH3BGR	100626262	0.753	1.133	0.789	0.0093	Yes	Down	1.133	0.0206	No	No
Q29594	CKB	100627332	0.764	1.244	0.789	0.0372	Yes	Down	1.254	0.0532	No	No
I3LP02	ACAT1	100626793	0.794	1.114	0.788	0.0003	Yes	Down	1.127	0.0026	No	No
I3LS66	TNNT2	100622450	0.805	1.177	0.788	0.0017	Yes	Down	1.187	0.0011	No	No
P00571	AK1	100521423	0.759	1.112	0.786	0.0079	Yes	Down	1.115	0.0096	No	No
I3LDC3	NDUFB10	100623873	0.822	1.058	0.786	0.0071	Yes	Down	1.110	0.0522	No	No
F1SKY2	NIT2	100625406	0.786	1.105	0.785	0.0033	Yes	Down	1.130	0.0100	No	No
B0LY42	B0LY42	100141312	0.797	1.031	0.784	0.0021	Yes	Down	1.064	0.1920	No	No

F1SE26	VDAC1P 5	397651	0.801	1.064	0.783	0.002 2	Yes	Down	1.089	0.0208	No	No
F1SHL9	PKM	100158154	0.781	1.123	0.783	0.000 0	Yes	Down	1.127	0.0023	No	No
F1SB90	GNAI1	100144419	0.761	1.239	0.782	0.018 5	Yes	Down	1.150	0.2590	No	No
D0G0B3	ACAA2	100312959	0.781	1.104	0.781	0.001 3	Yes	Down	1.117	0.0127	No	No
F1S069	PDK1	100286871	0.764	1.138	0.780	0.001 4	Yes	Down	1.103	0.0372	No	No
B2CZF5	SMCT1	100127159	0.741	0.924	0.780	0.008 3	Yes	Down	0.974	0.5119	No	No
F1S4Z9	SNTA1	100151843	0.745	1.124	0.780	0.019 4	Yes	Down	1.132	0.0012	No	No
F1RY43	PDP1	100153002	0.757	1.229	0.779	0.004 0	Yes	Down	1.173	0.0259	No	No
F1RKG8	PEBP1	100518336	0.795	1.168	0.779	0.001 4	Yes	Down	1.183	0.0018	No	No
I3LD01	FIS1	100622909	0.833	1.136	0.779	0.019 7	Yes	Down	1.189	0.0207	No	No
F1S085	METAP1 D	100522284	0.838	1.166	0.779	0.031 1	Yes	Down	1.200	0.2503	No	No
F1RXT3	PPP6R2	100517282	0.77	1.094	0.778	0.019 2	Yes	Down	1.234	0.0973	No	No
Q9MZ16	VDAC1	397010	0.774	1.124	0.778	0.001 2	Yes	Down	1.145	0.0133	No	No

F1SJP6	F1SJP6		0.763	1.205	0.778	0.006 6	Yes	Down	1.196	0.0024	No	No
I3LRR4	NDUFV3	100620809	0.746	1.217	0.777	0.004 7	Yes	Down	1.119	0.1362	No	No
P02189	MB	397467	0.777	1.15	0.776	0.001 3	Yes	Down	1.146	0.0032	No	No
I3LHS7	COQ9	100620830	0.805	1.135	0.776	0.006 0	Yes	Down	1.173	0.0267	No	No
Q9XSW7	Q9XSW 7	396555	0.765	1.197	0.776	0.027 4	Yes	Down	1.156	0.0548	No	No
I3L820	RRAD	100623310	0.819	1.166	0.775	0.009 4	Yes	Down	1.108	0.0900	No	No
A0A0M3K L54	A0A0M 3KL54		0.752	1.094	0.775	0.046 9	Yes	Down	1.142	0.2549	No	No
F1SAC1	ECHS1	102157599	0.824	1.07	0.775	0.011 7	Yes	Down	1.148	0.0731	No	No
A7WLI1	CD81	780427	0.858	0.972	0.775	0.046 1	Yes	Down	0.955	0.2943	No	No
F1SBU7	LONP1	100511917	0.776	1.089	0.775	0.000 4	Yes	Down	1.138	0.0304	No	No
F1SIF8	NUP160	100513973	0.723	1.17	0.773	0.012 0	Yes	Down	1.154	0.0584	No	No
F1S897	IDH3B	733641	0.703	1.435	0.773	0.026 9	Yes	Down	1.301	0.0904	No	No
I3L742	LOC100 518219	100518219	0.833	1.048	0.773	0.034 2	Yes	Down	1.091	0.2478	No	No

I3LT95	PSMG1	100625573	0.739	1.095	0.772	0.013 0	Yes	Down	1.196	0.0603	No	No
F1SCH1	NDUFB7	100737726	0.781	1.059	0.772	0.002 1	Yes	Down	1.061	0.1349	No	No
F1SV59	ADPRHL 2	100525405	0.692	1.226	0.772	0.029 1	Yes	Down	1.153	0.0570	No	No
F1SKM0	UQCRC1	100156879	0.767	1.138	0.770	0.000 1	Yes	Down	1.152	0.0021	No	No
Q6UAQ9	ETFA	396615	0.775	1.126	0.770	0.003 1	Yes	Down	1.145	0.0054	No	No
Q9G1G3	COII		0.823	1.032	0.770	0.016 3	Yes	Down	1.068	0.0637	No	No
I3LT90	MCCC1	100624482	0.763	1.172	0.768	0.003 4	Yes	Down	1.189	0.0060	No	No
F1RPD2	LOC100 524613	100524613	0.757	1.122	0.768	0.001 3	Yes	Down	1.131	0.0052	No	No
M9TGS8	Eci1	100738177	0.749	1.13	0.767	0.005 0	Yes	Down	1.138	0.0011	No	No
F1SSH8	OGDH	100515636	0.741	1.149	0.765	0.002 7	Yes	Down	1.134	0.0031	No	No
I3LP41	MDH2	397039	0.774	1.106	0.765	0.000 7	Yes	Down	1.122	0.0088	No	No
D3K5L3	COMT	100155530	0.819	1.041	0.764	0.015 5	Yes	Down	1.101	0.1155	No	No
F1S325	HYI	100517478	0.8	1.155	0.762	0.016 8	Yes	Down	1.152	0.0236	No	No

F1SHX9	L2HGD H	100152180	0.69	1.211	0.761	0.024 4	Yes	Down	1.174	0.0229	No	No
I3L6A4	I3L6A4		0.703	1.352	0.761	0.028 7	Yes	Down	1.236	0.0575	No	No
K9IVV5	WARS	100515390	0.818	1.182	0.761	0.035 5	Yes	Down	1.185	0.0394	No	No
I3LLG4	DNAJA3	100624182	0.78	1.118	0.760	0.043 2	Yes	Down	1.180	0.1060	No	No
F1S8Q4	ADCK3	100525602	0.728	1.21	0.759	0.004 3	Yes	Down	1.179	0.0074	No	No
Q2MJK3	NRAS	100739349	0.849	1.075	0.759	0.033 3	Yes	Down	1.177	0.0993	No	No
F1STD5	ACTR1B	100511252	0.831	1.106	0.758	0.023 2	Yes	Down	1.180	0.0406	No	No
F1SK00	IDH2	100155880	0.777	1.157	0.757	0.001 8	Yes	Down	1.177	0.0033	No	No
F1RIX8	CBR4	100153608	0.781	1.123	0.757	0.002 4	Yes	Down	1.111	0.0538	No	No
F1SQC6	EMC3	100154665	0.678	1.201	0.757	0.037 1	Yes	Down	1.192	0.1116	No	No
A8D737	A8D737	100126163	0.748	1.123	0.757	0.000 3	Yes	Down	1.117	0.0011	No	No
F1RP22	F1RP22		0.771	1.144	0.755	0.003 6	Yes	Down	1.194	0.0164	No	No
F1SP54	NIPSNA P3B	100739365	0.746	1.227	0.753	0.001 3	Yes	Down	1.199	0.0076	No	No

P79384	PCCB	100158147	0.73	1.163	0.753	0.0047	Yes	Down	1.176	0.0017	No	No
I3LQV5	PDK2	100516037	0.772	1.164	0.753	0.0015	Yes	Down	1.161	0.0043	No	No
M3VK15	TBC1D9	100739067	0.721	1.129	0.752	0.0043	Yes	Down	1.186	0.0286	No	No
I3LJ05	C13H21orf33	100623793	0.727	1.207	0.752	0.0055	Yes	Down	1.192	0.0015	No	No
Z4YP73	LOC100517869	100517869	0.686	1.265	0.752	0.0294	Yes	Down	1.183	0.0661	No	No
Q95285	Q95285		0.766	1.094	0.751	0.0009	Yes	Down	1.230	0.1162	No	No
F1S331	ERI3	100521097	0.803	1.156	0.750	0.0142	Yes	Down	1.120	0.0939	No	No
F1RPU8	MPC2	100154777	0.804	1.094	0.750	0.0328	Yes	Down	1.132	0.0477	No	No
I3LVD5	ACTG1	397653	0.763	1.162	0.749	0.0008	Yes	Down	1.198	0.0081	No	No
Q6W6X3	Q6W6X3		0.758	1.13	0.748	0.0018	Yes	Down	1.106	0.1390	No	No
F1S1X2	MTFMT	100513511	0.812	1.064	0.747	0.0171	Yes	Down	1.132	0.1583	No	No
F1SPT0	USP4	100512072	0.731	1.148	0.747	0.0019	Yes	Down	1.190	0.0421	No	No
Q6QA72	Q6QA72		0.719	1.058	0.747	0.0032	Yes	Down	1.057	0.1391	No	No

B2MUB8	CGI-75	100147809	0.824	1.288	0.746	0.033 3	Yes	Down	1.104	0.4393	No	No
I3LR69	FTH1	397030	0.725	0.956	0.744	0.002 9	Yes	Down	0.990	0.6746	No	No
F1SSN2	PRKAG2	100515868	0.748	1.523	0.744	0.023 2	Yes	Down	1.341	0.0735	No	No
A7XPL0	A7XPL0		0.717	1.12	0.742	0.008 5	Yes	Down	1.054	0.2438	No	No
F1RL80	BCAT2	396841	0.763	1.15	0.742	0.001 7	Yes	Down	1.181	0.0076	No	No
F1RGN8	SMTNL2	100523750	0.749	1.176	0.742	0.038 3	Yes	Down	1.186	0.0419	No	No
F1S781	PARS2	100513158	0.694	1.271	0.740	0.013 2	Yes	Down	1.146	0.1972	No	No
A5D9P1	HSD17B 8	100154372	0.736	1.177	0.740	0.013 6	Yes	Down	1.121	0.0764	No	No
F1SAW8	CASQ2	397436	0.677	1.132	0.740	0.014 4	Yes	Down	1.139	0.0183	No	No
F1RSZ3	ACSL1	448982	0.728	1.158	0.739	0.000 6	Yes	Down	1.168	0.0014	No	No
Q0PIT9	NAXE	780405	0.681	1.108	0.739	0.017 8	Yes	Down	1.099	0.0698	No	No
Q2EN77	MGST3	733607	0.822	1.071	0.739	0.026 0	Yes	Down	1.130	0.0543	No	No
F1SAR5	GLRX5	100154744	0.683	1.33	0.737	0.029 5	Yes	Down	1.214	0.0668	No	No

F1RTY3	CDNF	100511096	0.736	1.053	0.737	0.032 3	Yes	Down	1.052	0.3134	No	No
F1RIA7	TMEM1 09	100511116	0.723	1.162	0.734	0.003 2	Yes	Down	1.170	0.0847	No	No
F1SFL6	CRBN	100737786	0.759	1.144	0.734	0.042 3	Yes	Down	1.248	0.1425	No	No
A1XQV9	MLC2V		0.772	1.05	0.734	0.014 2	Yes	Down	1.130	0.0930	No	No
F1S7R9	SAMD5	100522528	0.622	1.515	0.732	0.040 3	Yes	Down	1.293	0.1244	No	No
I3LCC6	PSMB3	497064	0.679	1.303	0.732	0.045 2	Yes	Down	1.206	0.0633	No	No
I3L8N1	I3L8N1		0.742	1.104	0.730	0.000 6	Yes	Down	1.142	0.0256	No	No
F1SL07	NDUFA9	100524622	0.741	1.166	0.728	0.000 8	Yes	Down	1.182	0.0029	No	No
F1S6K5	APRT	100622001	0.683	1.28	0.728	0.018 7	Yes	Down	1.101	0.3818	No	No
K7GN40	ADHFE1	100521620	0.71	1.155	0.723	0.003 3	Yes	Down	1.147	0.0037	No	No
I3LIQ2	I3LIQ2		0.74	1.186	0.723	0.002 4	Yes	Down	1.165	0.0754	No	No
A1XQS7	MCEE	100037986	0.718	1.335	0.720	0.010 3	Yes	Down	1.405	0.0586	No	No
F1SNW4	MYL3	100515755	0.715	1.193	0.718	0.000 6	Yes	Down	1.190	0.0018	No	No

I3LKQ1	GNG7	100621275	0.646	1.143	0.718	0.016 0	Yes	Down	1.125	0.0063	No	No
F1RMD6	VPS36	100513172	0.638	1.183	0.718	0.020 5	Yes	Down	1.207	0.0547	No	No
F1SSX4	VAMP2	100620549	0.742	1.212	0.716	0.002 0	Yes	Down	1.159	0.0970	No	No
I3L733	CHN1	100513051	0.752	1.136	0.716	0.022 4	Yes	Down	1.159	0.1534	No	No
P81140	GCDH	100522477	0.684	1.296	0.714	0.003 8	Yes	Down	1.255	0.0886	No	No
F1RK48	SRL	100514098	0.723	1.143	0.714	0.000 4	Yes	Down	1.159	0.0025	No	No
F1S9V9	TMEM3 8A	100514568	0.674	0.952	0.714	0.008 7	Yes	Down	0.890	0.0934	No	No
F1SNX7	GTPBP1	100520611	0.821	1.15	0.712	0.041 5	Yes	Down	1.320	0.1522	No	No
F1SRC5	ACO2	396999	0.733	1.183	0.711	0.001 5	Yes	Down	1.195	0.0013	No	No
P11607-2	ATP2A2	396875	0.7	1.2	0.711	0.009 0	Yes	Down	1.154	0.0340	No	No
I3LAI1	I3LAI1		0.693	1.191	0.710	0.040 7	Yes	Down	1.168	0.2890	No	No
F1SP56	NIPSNA P3A	100154081	0.706	1.129	0.707	0.003 3	Yes	Down	1.125	0.0020	No	No
F2Z5L8	PABPN1	100155260	0.682	1.509	0.707	0.017 4	Yes	Down	1.343	0.0645	No	No

B1PK11	B1PK11	100142669	0.656	1.134	0.706	0.008 8	Yes	Down	1.112	0.0352	No	No
I3LNZ2	LOC100 510904	100510904	0.727	1.095	0.703	0.001 9	Yes	Down	1.113	0.0079	No	No
F1RHF1	TBC1D4	100523202	0.741	1.6	0.700	0.005 0	Yes	Down	1.239	0.3514	No	No
A0EPJ2	ND3	808508	0.704	0.863	0.700	0.000 1	Yes	Down	0.839	0.0105	No	No
Q29551	OXCT1	396978	0.673	1.159	0.696	0.001 8	Yes	Down	1.141	0.0041	No	No
F1SL01	TFG	414406	0.685	1.104	0.695	0.011 9	Yes	Down	1.104	0.0320	No	No
Q29529	CBR2	396780	0.809	1.097	0.695	0.037 1	Yes	Down	1.222	0.1265	No	No
F1SLD2	FAM136 A	100525693	0.797	1.009	0.695	0.031 6	Yes	Down	1.123	0.2138	No	No
F1SS86	DHRS7C	100515625	0.651	1.098	0.693	0.005 1	Yes	Down	1.063	0.1051	No	No
F1STB2	HINT2	100512882	0.627	1.232	0.690	0.013 5	Yes	Down	1.151	0.0720	No	No
F1S7X2	MYCT1	100515064	0.802	1.091	0.689	0.037 1	Yes	Down	1.264	0.1129	No	No
Q2EN79	UQCR10	100155687	0.677	1.203	0.688	0.000 4	Yes	Down	1.199	0.0060	No	No
Q29368	Q29368		0.736	1.02	0.682	0.033 1	Yes	Down	1.134	0.2948	No	No

I3LUG2	PCDH11 X	414736	0.682	1.256	0.676	0.002 1	Yes	Down	1.336	0.0778	No	No
F1SAJ9	MAPRE 2		0.661	1.52	0.676	0.016 1	Yes	Down	1.321	0.1184	No	No
L8B0W9	IGHG		0.708	1.17	0.673	0.019 8	Yes	Down	1.194	0.0480	No	No
I3LIR3	LYRM7	100519080	0.635	1.441	0.670	0.012 1	Yes	Down	1.317	0.0889	No	No
Q6IG16	RTN4	100170118	0.649	1.253	0.668	0.012 3	Yes	Down	1.255	0.0971	No	No
F1S6C3	ACAD8	100627341	0.607	1.091	0.667	0.012 2	Yes	Down	1.103	0.0071	No	No
F1RUW3	TOMM6	106504412	0.721	1.189	0.662	0.009 8	Yes	Down	1.258	0.0965	No	No
I3LUD5	UBXN1	100621165	0.714	1.247	0.660	0.018 9	Yes	Down	1.363	0.0580	No	No
I3L670	LOC100 515532	100515532	0.643	1.059	0.654	0.018 0	Yes	Down	1.109	0.1070	No	No
F1RG17	NME3	100514398	0.65	0.954	0.651	0.000 4	Yes	Down	0.983	0.4671	No	No
F1SLX2	A2M	403166	0.629	1.023	0.645	0.002 3	Yes	Down	1.061	0.2209	No	No
F1SMH6	C5orf51	100522766	0.668	1.255	0.638	0.017 7	Yes	Down	1.068	0.6634	No	No
I3LUZ8	LOC100 516656	100516656	0.638	1.149	0.634	0.000 0	Yes	Down	1.190	0.0142	No	No

F1SP25	CTNNAL 1	100626033	0. 679	1. 219	0. 618	0. 018 7	Yes	Down	1. 161	0. 1528	No	No
Q29235	Q29235		0. 634	1. 151	0. 612	0. 001 8	Yes	Down	1. 189	0. 0472	No	No
F1SQ12	F1SQ12		0. 479	2. 211	0. 597	0. 039 9	Yes	Down	1. 762	0. 0809	No	No
Q8MIZ3	DCPS	396689	0. 616	1. 267	0. 596	0. 028 1	Yes	Down	1. 336	0. 0745	No	No
I3LLQ7	C1orf50	100620609	0. 706	1. 189	0. 590	0. 020 3	Yes	Down	1. 393	0. 1286	No	No
Q29568	Q29568		0. 494	1. 513	0. 586	0. 020 9	Yes	Down	1. 306	0. 1157	No	No
Q29582	Q29582		0. 696	1. 075	0. 586	0. 030 5	Yes	Down	1. 279	0. 1448	No	No
I3LPP1	FH	100627128	0. 622	1. 204	0. 577	0. 016 4	Yes	Down	1. 298	0. 0725	No	No
F1RUR3	CCNY	100525480	0. 538	1. 624	0. 569	0. 008 4	Yes	Down	1. 386	0. 0961	No	No
P10173	FH	100627128	0. 543	1. 176	0. 564	0. 004 8	Yes	Down	1. 395	0. 1088	No	No
F1RUP6	F1RUP6		0. 475	1. 467	0. 501	0. 001 2	Yes	Down	1. 294	0. 0917	No	No
A0A075B 7J0	A0A075 B7J0		0. 459	1. 135	0. 436	0. 004 9	Yes	Down	1. 087	0. 2148	No	No
F1S0V3	ANXA6	100625675	0. 492	1. 542	0. 434	0. 018 5	Yes	Down	2. 325	0. 2466	No	No

P50828	HPX	396998	0.184	4.324	0.316	0.012 5	Yes	Down	2.988	0.1062	No	No
Q863I2	OXSRI	397618	0.835	1.351	0.823	0.001 2	Yes	Down	1.324	0.0094	Yes	Up
F1SLX5	AASS	100513962	0.796	1.346	0.807	0.000 9	Yes	Down	1.283	0.0204	Yes	Up
F1S3H4	COQ6	100155731	0.788	1.273	0.807	0.002 7	Yes	Down	1.237	0.0093	Yes	Up
Q3ZD69	LMNA	100126859	0.813	1.293	0.807	0.003 8	Yes	Down	1.272	0.0015	Yes	Up
F1SAM3	CDH2	100515322	0.843	1.172	0.806	0.011 6	Yes	Down	1.225	0.0165	Yes	Up
I3LE14	CCDC58	100627794	0.809	1.32	0.805	0.003 4	Yes	Down	1.453	0.0210	Yes	Up
F1RRY6	PTGES2	100155133	0.854	1.258	0.805	0.016 7	Yes	Down	1.292	0.0035	Yes	Up
F1SEN2	GLUD1	100157162	0.821	1.212	0.801	0.010 4	Yes	Down	1.222	0.0047	Yes	Up
I3LUM8	LOC100 626089	100626089	0.807	1.292	0.799	0.002 2	Yes	Down	1.220	0.0256	Yes	Up
P79381	EPHX1	397639	0.794	1.497	0.794	0.003 8	Yes	Down	1.459	0.0019	Yes	Up
F1RYA4	NAP1L4	100737250	0.859	1.255	0.791	0.030 6	Yes	Down	1.248	0.0023	Yes	Up
Q6QR67	RETN	396674	0.748	1.398	0.791	0.018 2	Yes	Down	1.399	0.0000	Yes	Up

P79274	ACADL	396931	0.777	1.227	0.790	0.001 3	Yes	Down	1.208	0.0049	Yes	Up
F1RUZ0	RPS6KB 2	100512153	0.755	1.323	0.788	0.009 7	Yes	Down	1.272	0.0224	Yes	Up
Q56VQ1	Oas2	595128	0.736	1.262	0.788	0.015 3	Yes	Down	1.219	0.0198	Yes	Up
Q4PS87	Q4PS87	574062	0.79	1.152	0.784	0.009 8	Yes	Down	1.227	0.0362	Yes	Up
Q8MI68	MUT	399535	0.717	1.209	0.782	0.023 9	Yes	Down	1.204	0.0109	Yes	Up
F1RVL5	LOC100 523824	100523824	0.767	1.213	0.781	0.001 2	Yes	Down	1.201	0.0010	Yes	Up
F1S4Y6	DYNLRB 1	100156707	0.761	1.254	0.771	0.006 5	Yes	Down	1.322	0.0131	Yes	Up
K9J6K1	TAPBP	100155428	0.835	1.401	0.764	0.046 4	Yes	Down	1.360	0.0053	Yes	Up
F1RRB3	XYLB	100628009	0.736	1.435	0.763	0.011 8	Yes	Down	1.348	0.0151	Yes	Up
F1RK10	SUCLA2	399540	0.766	1.241	0.762	0.001 0	Yes	Down	1.239	0.0032	Yes	Up
F1RZQ9	UQCC2	100153818	0.769	1.201	0.759	0.010 2	Yes	Down	1.249	0.0121	Yes	Up
F1SIH5	STOML2	100625031	0.737	1.237	0.757	0.014 7	Yes	Down	1.347	0.0258	Yes	Up
F1SLA0	ATP5B	100157156	0.759	1.211	0.756	0.000 1	Yes	Down	1.208	0.0001	Yes	Up

F1SGT3	PDHX	100525559	0.731	1.236	0.755	0.006 2	Yes	Down	1.227	0.0038	Yes	Up
F1S8Y5	PGAM1	100154776	0.737	1.346	0.752	0.004 2	Yes	Down	1.333	0.0034	Yes	Up
F1RJK0	COQ5	100157055	0.713	1.272	0.750	0.005 3	Yes	Down	1.219	0.0160	Yes	Up
F1RIB4	F1RIB4		0.677	1.239	0.749	0.022 5	Yes	Down	1.236	0.0004	Yes	Up
F1RXD4	RMDN1	100156087	0.73	1.268	0.746	0.001 0	Yes	Down	1.232	0.0073	Yes	Up
F1S750	ECHDC2	100519847	0.745	1.259	0.746	0.013 7	Yes	Down	1.279	0.0096	Yes	Up
E7EBY5	MACRO D1	100522538	0.735	1.216	0.741	0.001 8	Yes	Down	1.214	0.0012	Yes	Up
I3LPW0	NDUFB4	100624335	0.753	1.142	0.739	0.001 8	Yes	Down	1.205	0.0253	Yes	Up
F1S006	FN3K	100523990	0.752	1.273	0.739	0.004 3	Yes	Down	1.278	0.0124	Yes	Up
F1S3J9	ICAM1	396750	0.753	1.235	0.736	0.042 3	Yes	Down	1.226	0.0285	Yes	Up
F1S1F4	WNK4	100520693	0.804	1.185	0.736	0.016 8	Yes	Down	1.201	0.0255	Yes	Up
F1SAK6	ATP5L	396956	0.757	1.204	0.736	0.001 7	Yes	Down	1.234	0.0053	Yes	Up
F1S418	PRDX3	100154143	0.754	1.305	0.735	0.002 0	Yes	Down	1.294	0.0030	Yes	Up

F1SLQ7	MRRF	100515005	0.695	1.271	0.735	0.013 4	Yes	Down	1.273	0.0012	Yes	Up
F1SIF2	NDUFS3	100510948	0.717	1.264	0.732	0.001 4	Yes	Down	1.244	0.0111	Yes	Up
F1SKD6	SLC16A 7	100158241	0.692	1.257	0.731	0.028 1	Yes	Down	1.212	0.0302	Yes	Up
F2Z5B6	TPM1	100037999	0.79	1.198	0.731	0.012 0	Yes	Down	1.217	0.0021	Yes	Up
I3LVC7	I3LVC7		0.763	1.343	0.730	0.015 3	Yes	Down	1.304	0.0043	Yes	Up
F1SRV4	GSTK1	100521480	0.713	1.288	0.724	0.000 4	Yes	Down	1.296	0.0006	Yes	Up
I3L7T8	I3L7T8		0.724	1.274	0.722	0.000 1	Yes	Down	1.254	0.0016	Yes	Up
Q9TSX9	PRDX6	399538	0.692	1.429	0.714	0.005 7	Yes	Down	1.402	0.0037	Yes	Up
F1SFR6	SUCLG2	397026	0.712	1.213	0.713	0.000 3	Yes	Down	1.244	0.0063	Yes	Up
F1S3H1	ALDH6A 1	100153301	0.725	1.242	0.710	0.001 6	Yes	Down	1.252	0.0012	Yes	Up
F1SMB2	DLAT	397054	0.699	1.274	0.709	0.000 3	Yes	Down	1.226	0.0111	Yes	Up
F1RJI7	COX6A1	100152232	0.661	1.522	0.709	0.016 2	Yes	Down	1.622	0.0345	Yes	Up
F1RZF7	NFE2L2	100516343	0.655	1.418	0.707	0.009 3	Yes	Down	1.421	0.0197	Yes	Up

F1RZV1	BAG2	100522554	0.668	1.24	0.707	0.005 1	Yes	Down	1.244	0.0031	Yes	Up
F1SE87	CHMP5	100513035	0.712	1.201	0.705	0.039 9	Yes	Down	1.222	0.0416	Yes	Up
I3LUN7	KCNS3	733666	0.752	1.302	0.703	0.008 6	Yes	Down	1.372	0.0102	Yes	Up
K7GP58	AIFM1	100524062	0.697	1.257	0.703	0.000 6	Yes	Down	1.249	0.0003	Yes	Up
F1SLY2	NDUFA5	100525371	0.701	1.267	0.700	0.000 3	Yes	Down	1.248	0.0075	Yes	Up
P00348	HADH	397604	0.714	1.277	0.699	0.000 8	Yes	Down	1.278	0.0005	Yes	Up
B5KJG2	PGAM2	100188980	0.695	1.224	0.694	0.002 6	Yes	Down	1.224	0.0118	Yes	Up
P81045	COX17	100156799	0.674	1.313	0.694	0.001 8	Yes	Down	1.259	0.0340	Yes	Up
Q8SPJ9	COX7A1	399685	0.7	1.269	0.693	0.000 3	Yes	Down	1.272	0.0013	Yes	Up
F1SGH5	PDHB	100516042	0.675	1.263	0.690	0.001 4	Yes	Down	1.251	0.0037	Yes	Up
F1S2K3	NUTF2	100520245	0.609	1.267	0.687	0.016 0	Yes	Down	1.211	0.0169	Yes	Up
I3LSI3	AK2	100620859	0.678	1.217	0.682	0.001 0	Yes	Down	1.213	0.0006	Yes	Up
G8IFA6	G8IFA6		0.64	1.441	0.679	0.003 8	Yes	Down	1.385	0.0055	Yes	Up

C1PIG4	PRKAR2 A	397493	0.661	1.245	0.678	0.000 7	Yes	Down	1.206	0.0099	Yes	Up
F1RT87	RAB2A	100151822	0.727	1.259	0.673	0.006 7	Yes	Down	1.255	0.0003	Yes	Up
F1RKM1	ALDH7A 1		0.632	1.274	0.671	0.003 6	Yes	Down	1.263	0.0187	Yes	Up
F1SN02	FRMD5	100152168	0.593	1.36	0.669	0.014 1	Yes	Down	1.320	0.0040	Yes	Up
I3LGM4	NDUFA1 1	100514033	0.675	1.351	0.662	0.000 5	Yes	Down	1.327	0.0036	Yes	Up
F1SHR6	F1SHR6		0.695	1.152	0.661	0.004 5	Yes	Down	1.232	0.0427	Yes	Up
I3LVF9	VAMP3	100628225	0.647	1.277	0.659	0.026 4	Yes	Down	1.322	0.0306	Yes	Up
F1SN53	C2orf88	100515418	0.62	1.444	0.653	0.003 5	Yes	Down	1.416	0.0012	Yes	Up
D0G781	NDUFAB 1	100312976	0.61	1.154	0.637	0.003 1	Yes	Down	1.201	0.0133	Yes	Up
F1S3F3	ISCA2	100738266	0.607	1.427	0.633	0.005 9	Yes	Down	1.439	0.0040	Yes	Up
I3L9H2	CPNE2		0.601	1.4	0.630	0.037 6	Yes	Down	1.393	0.0241	Yes	Up
B2LWF9	GLUT4	396754	0.664	1.235	0.629	0.003 6	Yes	Down	1.219	0.0029	Yes	Up
F1RMR5	ISOC2	100518558	0.649	1.235	0.627	0.003 3	Yes	Down	1.297	0.0162	Yes	Up

F1SR71	MOGAT 1	100524113	0.637	1.25	0.626	0.000 2	Yes	Down	1.359	0.0270	Yes	Up
Q00P29	ACTB	414396	0.675	1.581	0.626	0.004 3	Yes	Down	1.758	0.0248	Yes	Up
I3L5L3	CD82	100270689	0.66	1.355	0.624	0.012 0	Yes	Down	1.380	0.0139	Yes	Up
L8B149	IGHG		0.506	1.824	0.621	0.022 8	Yes	Down	1.639	0.0261	Yes	Up
I3LIC1	I3LIC1		0.515	1.603	0.611	0.019 7	Yes	Down	1.440	0.0345	Yes	Up
I3LLT8	I3LLT8		0.568	1.535	0.604	0.004 2	Yes	Down	1.380	0.0393	Yes	Up
Q6UV40	ALDOA		0.571	1.433	0.603	0.014 4	Yes	Down	1.472	0.0019	Yes	Up
F1SMT0	EFHD1	100153398	0.648	1.368	0.603	0.003 8	Yes	Down	1.439	0.0070	Yes	Up
F6PSL2	MYL2	396690	0.602	1.335	0.601	0.001 1	Yes	Down	1.373	0.0048	Yes	Up
F1RFC8	MTFP1	100157687	0.594	1.248	0.599	0.000 1	Yes	Down	1.341	0.0191	Yes	Up
F1RVA3	LOC100 623668	100623668	0.553	1.468	0.598	0.003 1	Yes	Down	1.443	0.0009	Yes	Up
I3LN63	MRPL54	100521888	0.522	1.254	0.592	0.007 5	Yes	Down	1.201	0.0378	Yes	Up
Q8MI02	SPAM-1	397074	0.614	1.376	0.590	0.002 1	Yes	Down	1.540	0.0289	Yes	Up

I3LUC9	I3LUC9		0.624	1.503	0.589	0.006 9	Yes	Down	1.513	0.0142	Yes	Up
P0C2C3	2-Mar		0.566	1.253	0.589	0.006 8	Yes	Down	1.244	0.0224	Yes	Up
Q9TV61	MYH1	100125538	0.542	1.346	0.584	0.004 3	Yes	Down	1.286	0.0364	Yes	Up
K7GSK1	ART3	100522086	0.531	1.385	0.583	0.004 5	Yes	Down	1.362	0.0086	Yes	Up
A0A0D5B WD2	C1QBP		0.512	1.712	0.582	0.007 3	Yes	Down	1.527	0.0296	Yes	Up
F1RXY4	COQ3	100622666	0.598	1.336	0.574	0.001 5	Yes	Down	1.354	0.0324	Yes	Up
F1RIJ7	TAS1R1		0.563	1.539	0.568	0.000 3	Yes	Down	1.507	0.0010	Yes	Up
F1RU33	BANF1	100622671	0.534	1.465	0.545	0.005 9	Yes	Down	1.530	0.0039	Yes	Up
F1RR97	COQ4	100156776	0.583	1.355	0.541	0.005 9	Yes	Down	1.496	0.0240	Yes	Up
F1SN52	HIBCH	100514687	0.561	1.438	0.534	0.001 1	Yes	Down	1.406	0.0198	Yes	Up
F1SSF9	MYL7	100514437	0.496	1.77	0.526	0.001 2	Yes	Down	1.652	0.0083	Yes	Up
Q68RU1	ApoN	445462	0.445	1.557	0.503	0.003 5	Yes	Down	1.414	0.0306	Yes	Up
F1RJ45	LOC100 155689	100155689	0.483	1.725	0.479	0.000 0	Yes	Down	1.684	0.0010	Yes	Up

P63317	TNNC1	100156435	0.477	1.417	0.477	0.000 0	Yes	Down	1.348	0.0125	Yes	Up
F1SS61	MYH3		0.503	1.337	0.473	0.003 1	Yes	Down	1.491	0.0382	Yes	Up
P13618	ATP5J	100622245	0.468	1.657	0.470	0.001 2	Yes	Down	1.627	0.0048	Yes	Up
F1SKJ2	TXN2	100158080	0.48	1.435	0.462	0.002 1	Yes	Down	1.554	0.0114	Yes	Up

U= Untreated, **S**=Sham