

SUPPLEMENTARY INFORMATION

SEVERE INJURY IS ASSOCIATED WITH INSULIN RESISTANCE, ER STRESS RESPONSE AND UNFOLDED PROTEIN RESPONSE

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Supplemental Table 1. List of genes with fold changes that are significantly altered by thermal injury in blood.

Symbol	Entrez Gene ID for Human	Entrez Gene Name	Affymetrix Probe Set ID	IPA Pathway	Fold Change 0-10dpb	Fold Change 11-49dpb	Fold Change 50-264dpb	Fold Change 265+dpb
ACLY	47	ATP citrate lyase	210337_s_at	Insulin Receptor Signaling,	-1.343			-1.301
ACTA1	58	actin, alpha 1, skeletal muscle	203872_at	Calcium Signaling,				3.189
AIFM1	9131	apoptosis-inducing factor, mitochondrion-associated, 1	205512_s_at	Apoptosis,			-1.264	-1.288
AKAP5	9495	A kinase (PRKA) anchor protein 5	230846_at	Calcium Signaling,				1.512
AKT1	207	v-akt murine thymoma viral oncogene homolog 1	207163_s_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,			1.553	1.781
AKT2	208	v-akt murine thymoma viral oncogene homolog 2	226156_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.447	-1.538	-1.239	-1.406
AKT3	10000	v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma)	212607_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.541		
ALB	213	albumin	1565228_s_at	Acute Phase Response,			4.187	1.637
APCS	325	amyloid P component, serum	206350_at	Acute Phase Response,			1.558	1.621
APOA1	335	apolipoprotein A-I	231694_at	Acute Phase Response,			1.283	
APOA2	336	apolipoprotein A-II	219466_s_at	Acute Phase Response,		1.762	1.368	1.592
ATF2	1386	activating transcription factor 2	1555146_at	Calcium Signaling, ERK/MAPK Signaling, SAPK/JNK Signaling			2.966	1.908
ATF4	468	activating transcription factor 4 (tax-responsive enhancer element B67)	200779_at	ER Stress, ERK/MAPK Signaling,	-1.511	-1.32	-1.311	-1.241
ATF6	22926	activating transcription factor 6	231927_at	ER Stress,			-1.299	
ATP2A1	487	ATPase, Ca++ transporting, cardiac muscle, fast twitch 1	230693_at	Calcium Signaling,			1.308	
ATP2A2	488	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	209186_at	Calcium Signaling,		-1.309	-1.331	
ATP2A3	489	ATPase, Ca++ transporting, ubiquitous	230453_s_at	Calcium Signaling,		-1.599	1.197	1.894
ATP2B1	490	ATPase, Ca++ transporting, plasma membrane 1	215716_s_at	Calcium Signaling,		-2.018	1.397	
ATP2B2	491	ATPase, Ca++ transporting, plasma membrane 2	239357_at	Calcium Signaling,			1.512	
ATP2B3	492	ATPase, Ca++ transporting, plasma membrane 3	215911_x_at	Calcium Signaling,			1.969	
ATP2B4	493	ATPase, Ca++ transporting, plasma membrane 4	205410_s_at	Calcium Signaling,			1.209	
BAD	572	BCL2-associated agonist of cell death	1861_at	Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.455	-1.37	-1.507	-1.775
BAX	581	BCL2-associated X protein	208478_s_at	Apoptosis,	-2.171	-1.886	-1.686	-1.727
BCL2	596	B-cell CLL/lymphoma 2	207004_at	Apoptosis, PI3K/AKT Signaling,			1.716	1.697
BCL2L1	598	BCL2-like 1	206665_s_at	Apoptosis, PI3K/AKT Signaling,			1.604	
BID	637	BH3 interacting domain death agonist	211725_s_at	Apoptosis,	-1.37			
BIRC2	329	baculoviral IAP repeat-containing 2	202076_at	Apoptosis,	-1.262	-1.254	-1.173	
C1S	716	complement component 1, s subcomponent	233042_at	Acute Phase Response,			1.314	
C2	717	complement component 2	1554533_at	Acute Phase Response,			1.549	
CALM3	808	calmodulin 3 (phosphorylase kinase, delta)	200653_s_at	Calcium Signaling,		1.47	-1.247	1.494
CALR	811	calreticulin	212953_x_at	Calcium Signaling,			-1.376	
CAMK1D	57118	calcium/calmodulin-dependent protein kinase ID	235626_at	Calcium Signaling,		-1.88	1.522	
CAMK1G	57172	calcium/calmodulin-dependent protein kinase IG	215161_at	Calcium Signaling,			1.804	

CAMK2D	817	calcium/calmodulin-dependent protein kinase II delta	231042_s_at	Calcium Signaling,			1.884	
CAMK2G	818	calcium/calmodulin-dependent protein kinase II gamma	214322_at	Calcium Signaling,		-1.302		
CAMKK1	84254	calcium/calmodulin-dependent protein kinase kinase 1, alpha	1552768_at	Calcium Signaling,		1.342	1.241	
CAMKK2	10645	calcium/calmodulin-dependent protein kinase kinase 2, beta	213812_s_at	Calcium Signaling,			-1.621	
CAPN1	823	calpain 1, (mu/I) large subunit	232012_at	Apoptosis,	-1.334	-1.319	-1.533	
CAPN2	824	calpain 2, (m/II) large subunit	208683_at	Apoptosis,	-1.448			
CAPN3	825	calpain 3, (p94)	210944_s_at	Apoptosis,			-1.769	
CAPN6	827	calpain 6	202965_s_at	Apoptosis,			-1.651	
CAPN9	10753	calpain 9	210641_at	Apoptosis,			1.268	
CASP2	835	caspase 2, apoptosis-related cysteine peptidase	209811_at	Apoptosis,		-1.409	-1.528	-1.243
CASP3	836	caspase 3, apoptosis-related cysteine peptidase	202763_at	Apoptosis, ER Stress,			1.21	1.49
CASP9	842	caspase 9, apoptosis-related cysteine peptidase	210775_x_at	Apoptosis, ER Stress,			-1.356	-1.4
CBL	867	Cas-Br-M (murine) ecotropic retroviral transforming sequence	225231_at	Insulin Receptor Signaling,		1.312	1.271	
CDC37	11140	cell division cycle 37 homolog (S. cerevisiae)	209953_s_at	PI3K/AKT Signaling,	-1.592		-1.761	-1.647
CDC42	998	cell division cycle 42 (GTP binding protein, 25kDa)	226400_at	SAPK/JNK Signaling	2.253	3.041	1.926	2.101
CDKN1B	1027	cyclin-dependent kinase inhibitor 1B (p27, Kip1)	209112_at	PI3K/AKT Signaling,			1.194	1.282
CEBPB	1051	CCAAT/enhancer binding protein (C/EBP), beta	212501_at	Acute Phase Response,			-1.317	
CFB	629	complement factor B	211920_at	Acute Phase Response,			1.372	
CHP	11261	calcium binding protein P22	214665_s_at	Calcium Signaling,			-1.392	
CHRNA1	1134	cholinergic receptor, nicotinic, alpha 1 (muscle)	206633_at	Calcium Signaling,			1.472	
CHRNA10	57053	cholinergic receptor, nicotinic, alpha 10	1568675_at	Calcium Signaling,			-1.544	
CHRNA2	1135	cholinergic receptor, nicotinic, alpha 2 (neuronal)	207868_at	Calcium Signaling,			1.211	
CP	1356	ceruloplasmin (ferroxidase)	228143_at	Acute Phase Response,			2.052	1.401
CREB1	1385	cAMP responsive element binding protein 1	225565_at	ERK/MAPK Signaling,	-1.635		1.263	1.392
CRK	1398	v-crck sarcoma virus CT10 oncogene homolog (avian)	202224_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling	-1.374		-1.418	-1.637
CRKL	1399	v-crck sarcoma virus CT10 oncogene homolog (avian)-like	206184_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling				-1.27
CRP	1401	C-reactive protein, pentraxin-related	205753_at	Acute Phase Response,			1.246	
CTNNB1	1499	catenin (cadherin-associated protein), beta 1, 88kDa	1554411_at	PI3K/AKT Signaling,			-1.558	
DAXX	1616	death-domain associated protein	216038_x_at	SAPK/JNK Signaling			1.575	1.461
DIABLO	56616	diablo homolog (Drosophila)	219350_s_at	Apoptosis,	-1.412	-1.356	-1.211	
DUSP6	1848	dual specificity phosphatase 6	208893_s_at	ERK/MAPK Signaling,	-1.587			
DUSP9	1852	dual specificity phosphatase 9	205777_at	ERK/MAPK Signaling,			1.466	
EIF2B3	8891	eukaryotic translation initiation factor 2B, subunit 3 gamma, 58kDa	218488_at	Insulin Receptor Signaling,			-1.226	
EIF4E	1977	eukaryotic translation initiation factor 4E	201437_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,			1.235	
ELF1	1997	E74-like factor 1 (ets domain transcription factor)	212420_at	ERK/MAPK Signaling,	-1.481			
ELF2	1998	E74-like factor 2 (ets domain transcription factor)	242735_x_at	ERK/MAPK Signaling,	-1.609			
ELF3	1999	E74-like factor 3 (ets domain transcription factor,	229842_at	ERK/MAPK Signaling,			2.121	1.358

		epithelial-specific)						
ELF4	2000	E74-like factor 4 (ets domain transcription factor)	31845_at	ERK/MAPK Signaling,	-1.398	-1.28	-1.281	-1.372
ELK3	2004	ELK3, ETS-domain protein (SRF accessory protein 2)	221773_at	ERK/MAPK Signaling,		-1.503		
ENDOG	2021	endonuclease G	204824_at	Apoptosis,			-1.284	
ERN1	2081	endoplasmic reticulum to nucleus signaling 1	235745_at	ER Stress,	-1.654			
ESR1	2099	estrogen receptor 1	217190_x_at	ERK/MAPK Signaling,			2.882	2.064
FGG	2266	fibrinogen gamma chain	219612_s_at	Acute Phase Response,			1.547	
FOXO1	2308	forkhead box O1	202724_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.59	-1.622	1.912	1.424
FOXO3	2309	forkhead box O3	204131_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.713		-1.321	-1.559
FTL	2512	ferritin, light polypeptide	213187_x_at	Acute Phase Response,			-1.487	-1.596
FYN	2534	FYN oncogene related to SRC, FGR, YES	1559101_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.579			
GAB1	2549	GRB2-associated binding protein 1	1560382_at	Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			-1.662	
GAB2	9846	GRB2-associated binding protein 2	203853_s_at	PI3K/AKT Signaling,				-1.583
GNA12	2768	guanine nucleotide binding protein (G protein) alpha 12	221737_at	SAPK/JNK Signaling			1.225	
GNB1	2782	guanine nucleotide binding protein (G protein), beta polypeptide 1	200745_s_at	SAPK/JNK Signaling			-1.253	
GNB3	2784	guanine nucleotide binding protein (G protein), beta polypeptide 3	206047_at	SAPK/JNK Signaling			1.402	
GNG2	54331	guanine nucleotide binding protein (G protein), gamma 2	1555766_a_at	SAPK/JNK Signaling		1.983	-1.39	
GRB2	2885	growth factor receptor-bound protein 2	228572_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling		3.387	2.597	2.451
GRIA2	2891	glutamate receptor, ionotropic, AMPA 2	205358_at	Calcium Signaling,			1.661	
GRIA3	2892	glutamate receptor, ionotropic, AMPA 3	208032_s_at	Calcium Signaling,		1.382	1.332	
GRIK1	2897	glutamate receptor, ionotropic, kainate 1	214611_at	Calcium Signaling,			2.912	1.477
GRIN1	2902	glutamate receptor, ionotropic, N-methyl D-aspartate 1	210782_x_at	Calcium Signaling,			1.303	1.223
GRIN2A	2903	glutamate receptor, ionotropic, N-methyl D-aspartate 2A	206534_at	Calcium Signaling,			-1.591	
GRIN2B	2904	glutamate receptor, ionotropic, N-methyl D-aspartate 2B	210411_s_at	Calcium Signaling,			1.493	1.436
GRIN2D	2906	glutamate receptor, ionotropic, N-methyl D-aspartate 2D	207036_x_at	Calcium Signaling,			1.378	
GRIN3B	116444	glutamate receptor, ionotropic, N-methyl-D-aspartate 3B	233892_at	Calcium Signaling,				1.237
GSK3A	2931	glycogen synthase kinase 3 alpha	202210_x_at	Insulin Receptor Signaling, PI3K/AKT Signaling,			-1.372	
HAMP	57817	hepcidin antimicrobial peptide	220491_at	Acute Phase Response,			1.984	
HDAC10	83933	histone deacetylase 10	232870_at	Calcium Signaling,			1.366	1.308
HDAC11	79885	histone deacetylase 11	219847_at	Calcium Signaling,		1.373	1.312	
HDAC2	3066	histone deacetylase 2	242141_at	Calcium Signaling,			1.211	1.352
HDAC3	8841	histone deacetylase 3	216326_s_at	Calcium Signaling,		-1.293		
HDAC7	51564	histone deacetylase 7	217937_s_at	Calcium Signaling,		-1.639	-1.37	
HDAC8	55869	histone deacetylase 8	223909_s_at	Calcium Signaling,			-1.251	
HDAC9	9734	histone deacetylase 9	205659_at	Calcium Signaling,		-2.109		1.416
HIST3H3 (includes EG:8290)	8290	histone cluster 3, H3	208572_at	ERK/MAPK Signaling,			1.245	
HLA-B	3106	major histocompatibility complex, class I, B	211911_x_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.387	-1.702	-1.326	
HNF1A	6927	HNF1 homeobox A	216930_at	Acute Phase Response,			1.851	

HNRNPK	3190	heterogeneous nuclear ribonucleoprotein K	200775_s_at	Acute Phase Response, SAPK/JNK Signaling			-1.136	1.192
HRG	3273	histidine-rich glycoprotein	31835_at	Acute Phase Response,			1.696	
HSPB3	8988	heat shock 27kDa protein 3	206375_s_at	ERK/MAPK Signaling,			1.314	
HTRA2	27429	HtrA serine peptidase 2	203089_s_at	Apoptosis,	-1.37	-1.374	-1.459	-1.481
IKBKB	3551	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	209341_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.54	-1.467	-1.433	
IKBKG	8517	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma	209929_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.504	-1.57	-1.489	-1.824
IL1F7	27178	interleukin 1 family, member 7 (zeta)	221470_s_at	Acute Phase Response,	-1.35			
IL1R1	3554	interleukin 1 receptor, type I	215561_s_at	Acute Phase Response,			1.378	
IL1RN	3557	interleukin 1 receptor antagonist	212657_s_at	Acute Phase Response,			-1.77	
IL6	3569	interleukin 6 (interferon, beta 2)	243977_at	Acute Phase Response,			1.288	
IL6R	3570	interleukin 6 receptor	217489_s_at	Acute Phase Response,				-1.692
IL6ST	3572	interleukin 6 signal transducer (gp130, oncostatin M receptor)	204864_s_at	Acute Phase Response,				1.426
INPP5D	3635	inositol polyphosphate-5-phosphatase, 145kDa	1568943_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.35			
INPPL1	3636	inositol polyphosphate phosphatase-like 1	201598_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.479		-1.225	
INSR	3643	insulin receptor	226212_s_at	Insulin Receptor Signaling,			1.381	1.207
ITGB1	3688	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	1553530_a_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-2.423	-1.625	-1.541	-1.903
ITIH4	3700	inter-alpha (globulin) inhibitor H4 (plasma Kallikrein-sensitive glycoprotein)	242720_at	Acute Phase Response,			1.388	
ITPR1	3708	inositol 1,4,5-triphosphate receptor, type 1	203710_at	Calcium Signaling,		-1.715	1.454	1.633
JAK1	3716	Janus kinase 1	1552611_a_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-2.263	-1.638	-1.213	-1.829
JAK3	3718	Janus kinase 3	227677_at	PI3K/AKT Signaling,			-1.537	
JMJD7-PLA2G4B	8681	JMJD7-PLA2G4B readthrough transcript	219095_at	ERK/MAPK Signaling,	-1.323			
KRAS	3845	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	204010_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			1.435	1.865
KSR1	8844	kinase suppressor of ras 1	235252_at	ERK/MAPK Signaling,				1.491
LIMS1	3987	LIM and senescent cell antigen-like domains 1	1566127_at	PI3K/AKT Signaling,			1.488	
LMNA	4000	lamin A/C	244225_x_at	Apoptosis,		1.469	1.344	1.326
MAP2K2	5605	mitogen-activated protein kinase kinase 2	213490_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,			-1.41	-1.351
MAP2K3	5606	mitogen-activated protein kinase kinase 3	215498_s_at	Acute Phase Response,			-1.762	
MAP2K7	5609	mitogen-activated protein kinase kinase 7	226053_at	Acute Phase Response, Apoptosis, SAPK/JNK Signaling	-1.598		1.352	1.58
MAP3K1	4214	mitogen-activated protein kinase kinase kinase 1	225927_at	Acute Phase Response, SAPK/JNK Signaling			1.23	1.353
MAP3K11	4296	mitogen-activated protein kinase kinase kinase 11	203652_at	SAPK/JNK Signaling	-1.662	-1.436	-1.347	-1.562
MAP3K13	9175	mitogen-activated protein kinase kinase kinase 13	211083_s_at	SAPK/JNK Signaling			1.69	
MAP3K14	9020	mitogen-activated protein kinase kinase kinase 14	205192_at	Acute Phase Response, Apoptosis,	-1.538			
MAP3K2	10746	mitogen-activated protein kinase kinase kinase 2	226979_at	SAPK/JNK Signaling	-1.458		1.473	
MAP3K3	4215	mitogen-activated protein kinase kinase kinase 3	243505_at	SAPK/JNK Signaling		-1.516	-1.42	-1.597
MAP3K4	4216	mitogen-activated protein kinase kinase kinase 4	216199_s_at	SAPK/JNK Signaling		-1.773		
MAP3K7	6885	mitogen-activated protein kinase kinase kinase 7	211537_x_at	Acute Phase Response, SAPK/JNK Signaling			-1.297	-1.342

MAP3K9	4293	mitogen-activated protein kinase kinase kinase 9	213927_at	SAPK/JNK Signaling			1.393	
MAP4K1	11184	mitogen-activated protein kinase kinase kinase kinase 1	214219_x_at	SAPK/JNK Signaling				1.883
MAP4K5	11183	mitogen-activated protein kinase kinase kinase kinase 5	211081_s_at	SAPK/JNK Signaling	-1.57			
MAPK1	5594	mitogen-activated protein kinase 1	229847_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,		1.475	1.574	
MAPK11	5600	mitogen-activated protein kinase 11	211500_at	Acute Phase Response,		1.478	1.354	
MAPK12	6300	mitogen-activated protein kinase 12	1556341_s_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			1.235	
MAPK3	5595	mitogen-activated protein kinase 3	212046_x_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,			-1.346	
MAPK7	5598	mitogen-activated protein kinase 7	35617_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,			-1.243	
MAPK8	5599	mitogen-activated protein kinase 8	226048_at	Acute Phase Response, Apoptosis, ER Stress, Insulin Receptor Signaling, SAPK/JNK Signaling		-1.591	1.258	
MAPK8IP1	9479	mitogen-activated protein kinase 8 interacting protein 1	213014_at	PI3K/AKT Signaling, SAPK/JNK Signaling			1.353	
MAPK8IP3	23162	mitogen-activated protein kinase 8 interacting protein 3	213177_at	SAPK/JNK Signaling			1.325	
MAPK9	5601	mitogen-activated protein kinase 9	225781_at	Acute Phase Response, SAPK/JNK Signaling	-1.712	-1.781		
MDM2	4193	Mdm2 p53 binding protein homolog (mouse)	205385_at	PI3K/AKT Signaling,			-1.411	-1.277
MEF2A (includes EG:4205)	4205	myocyte enhancer factor 2A	242176_at	Calcium Signaling,			-1.845	
MEF2B	4207	LOC729991-MEF2B readthrough transcript	209926_at	Calcium Signaling,		1.541	1.26	1.276
MEF2D	4209	myocyte enhancer factor 2D	225641_at	Calcium Signaling,		-2.009		
MINK1	50488	misshapen-like kinase 1 (zebrafish)	209241_x_at	SAPK/JNK Signaling				1.539
MKNK2	2872	MAP kinase interacting serine/threonine kinase 2	223199_at	ERK/MAPK Signaling,	-1.568			
MTOR	2475	mechanistic target of rapamycin (serine/threonine kinase)	202288_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.263	-1.298	-1.317	
MYCN	4613	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	209756_s_at	ERK/MAPK Signaling,			1.539	
MYD88	4615	myeloid differentiation primary response gene (88)	209124_at	Acute Phase Response,			-1.397	
MYH1	4619	myosin, heavy chain 1, skeletal muscle, adult	205951_at	Calcium Signaling,				1.77
MYH10	4628	myosin, heavy chain 10, non-muscle	213067_at	Calcium Signaling,			1.591	
MYH11	4629	myosin, heavy chain 11, smooth muscle	207961_x_at	Calcium Signaling,			1.815	1.445
MYH13	8735	myosin, heavy chain 13, skeletal muscle	208208_at	Calcium Signaling,			1.622	
MYH14	79784	myosin, heavy chain 14	217660_at	Calcium Signaling,			1.497	
MYH16	84176	myosin, heavy chain 16 pseudogene	1564072_at	Calcium Signaling,			1.889	
MYH2	4620	myosin, heavy chain 2, skeletal muscle, adult	204631_at	Calcium Signaling,			1.498	
MYH4	4622	myosin, heavy chain 4, skeletal muscle	208148_at	Calcium Signaling,			2.223	
MYH7	4625	myosin, heavy chain 7, cardiac muscle, beta	204737_s_at	Calcium Signaling,			1.753	1.88
MYH7B (includes EG:57644)	57644	myosin, heavy chain 7B, cardiac muscle, beta	215795_at	Calcium Signaling,			1.333	1.409
MYH9	4627	myosin, heavy chain 9, non-muscle	211926_s_at	Calcium Signaling,			-1.328	

MYL2	4633	myosin, light chain 2, regulatory, cardiac, slow	209742_s_at	Calcium Signaling,				1.459
MYL4	4635	myosin, light chain 4, alkali; atrial, embryonic	210395_x_at	Calcium Signaling,			-1.42	
MYL6	4637	myosin, light chain 6, alkali, smooth muscle and non-muscle	212082_s_at	Calcium Signaling,			-1.441	
NCK1	4690	NCK adaptor protein 1	211063_s_at	Insulin Receptor Signaling,			1.242	
NFAT5	10725	nuclear factor of activated T-cells 5, tonicity-responsive	224984_at	Calcium Signaling,		-1.346		
NFATC1	4772	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1	211105_s_at	SAPK/JNK Signaling	-1.528	-1.416	1.504	-1.291
NFATC2	4773	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2	224542_s_at	Calcium Signaling,		1.336	1.854	1.383
NFATC3	4775	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	210555_s_at	SAPK/JNK Signaling	-2.084			
NFATC4	4776	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4	236270_at	Calcium Signaling,			2.266	
NFKB2	4791	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	207535_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.923	-1.521	-1.331	
NFKBIB	4793	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, beta	214448_x_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,			1.344	1.385
NFKBIE	4794	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	203927_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.636	-1.565		
NOLC1	9221	nucleolar and coiled-body phosphoprotein 1	205895_s_at	Acute Phase Response,		-1.924	-1.216	
NOS3	4846	nitric oxide synthase 3 (endothelial cell)	229093_at	PI3K/AKT Signaling,			1.403	
NR3C1	2908	nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)	201865_x_at	Acute Phase Response,			-1.277	1.3
NRBP1	29959	nuclear receptor binding protein 1	217765_at	Acute Phase Response,			-1.527	
PAK1	5058	p21 protein (Cdc42/Rac)-activated kinase 1	226507_at	ERK/MAPK Signaling,	-1.549			
PAK2	5062	p21 protein (Cdc42/Rac)-activated kinase 2	208878_s_at	ERK/MAPK Signaling,		-1.439		1.33
PAK6	56924	p21 protein (Cdc42/Rac)-activated kinase 6	219461_at	ERK/MAPK Signaling,			1.445	
PAK7	57144	p21 protein (Cdc42/Rac)-activated kinase 7	213990_s_at	ERK/MAPK Signaling,		1.331		
PDE3B	5140	phosphodiesterase 3B, cGMP-inhibited	231276_at	Insulin Receptor Signaling,			1.383	
PDPK1	5170	3-phosphoinositide dependent protein kinase-1	204524_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.389	-1.224		
PIK3C2A	5286	phosphoinositide-3-kinase, class 2, alpha polypeptide	1553694_a_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling		-1.663	-1.314	
PIK3C3	5289	phosphoinositide-3-kinase, class 3	241304_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling		-1.423	-1.445	
PIK3CD	5293	phosphoinositide-3-kinase, catalytic, delta polypeptide	203879_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			-1.17	
PIK3R1	5295	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	212240_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				1.41
PIK3R2	5296	phosphoinositide-3-kinase, regulatory subunit 2 (beta)	229392_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			1.362	
PIK3R3	8503	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	202743_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.602	-1.54		
PIK3R5	23533	phosphoinositide-3-kinase, regulatory subunit 5	227645_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling	-1.429	-1.344	-1.315	-1.258
PLA2G2A	5320	phospholipase A2, group IIA (platelets, synovial fluid)	203649_s_at	ERK/MAPK Signaling,			-1.479	

PLA2G2E	30814	phospholipase A2, group IIE	221389_at	ERK/MAPK Signaling,			1.888	
PLA2G4C	8605	phospholipase A2, group IVC (cytosolic, calcium-independent)	209785_s_at	ERK/MAPK Signaling,			-2.022	-2.063
PLA2G5	5322	phospholipase A2, group V	215871_at	ERK/MAPK Signaling,			2.589	
PLA2G6	8398	phospholipase A2, group VI (cytosolic, calcium-independent)	204691_x_at	ERK/MAPK Signaling,	-1.602	-1.583	-1.429	-1.299
PPP1CC	5501	protein phosphatase 1, catalytic subunit, gamma isoform	200726_at	ERK/MAPK Signaling, Insulin Receptor Signaling,		-1.542		
PPP1R10	5514	protein phosphatase 1, regulatory (inhibitor) subunit 10	201703_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				1.233
PPP1R11	6992	protein phosphatase 1, regulatory (inhibitor) subunit 11	1566301_at	ERK/MAPK Signaling, Insulin Receptor Signaling,			1.65	
PPP1R3D	5509	protein phosphatase 1, regulatory (inhibitor) subunit 3D	204555_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,			-1.747	
PPP1R7	5510	protein phosphatase 1, regulatory (inhibitor) subunit 7	201214_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.355		-1.315	
PPP2CB	5516	protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform	201374_x_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			1.627	
PPP2R1B	5519	protein phosphatase 2 (formerly 2A), regulatory subunit A, beta isoform	202886_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			-1.376	-1.356
PPP2R2A	5520	protein phosphatase 2 (formerly 2A), regulatory subunit B, alpha isoform	236492_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.495	-1.47		
PPP2R2C	5522	protein phosphatase 2 (formerly 2A), regulatory subunit B, gamma isoform	228137_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			1.359	
PPP2R4	5524	protein phosphatase 2A activator, regulatory subunit 4	216105_x_at	ERK/MAPK Signaling, PI3K/AKT Signaling,		1.556	1.31	1.393
PPP2R5B	5526	protein phosphatase 2, regulatory subunit B', beta isoform	204611_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.402		-1.315	
PPP2R5C	5527	protein phosphatase 2, regulatory subunit B', gamma isoform	1554364_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.647	-1.799	-1.619	
PPP2R5D	5528	protein phosphatase 2, regulatory subunit B', delta isoform	211159_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			-1.238	
PPP2R5E	5529	protein phosphatase 2, regulatory subunit B', epsilon isoform	229322_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			1.277	1.397
PPP3CA	5530	protein phosphatase 3 (formerly 2B), catalytic subunit, alpha isoform	202429_s_at	Calcium Signaling,			1.264	
PPP3CC	5533	protein phosphatase 3 (formerly 2B), catalytic subunit, gamma isoform	32541_at	Calcium Signaling,		-2.059		
PPP3R2	5535	protein phosphatase 3 (formerly 2B), regulatory subunit B, beta isoform	244782_at	Calcium Signaling,			1.604	-1.353
PRKACA	5566	protein kinase, cAMP-dependent, catalytic, alpha	216234_s_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,			-1.389	-1.437
PRKACB	5567	protein kinase, cAMP-dependent, catalytic, beta	235780_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,			1.609	
PRKAG1	5571	protein kinase, AMP-activated, gamma 1 non-catalytic subunit	201805_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,			-1.244	
PRKAG2	51422	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	215231_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.9	-1.988		
PRKAR1A	5573	protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1)	242482_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.621	-1.858		
PRKAR1B	5575	protein kinase, cAMP-dependent, regulatory, type I, beta	212559_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,				1.295
PRKAR2A	5576	protein kinase, cAMP-dependent, regulatory, type II, alpha	213052_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,		1.554		

PRKCB	5579	protein kinase C, beta	228795_at	ERK/MAPK Signaling,			-1.41	1.202
PRKCG	5582	protein kinase C, gamma	236195_x_at	ERK/MAPK Signaling,			1.253	
PRKCZ	5590	protein kinase C, zeta	202178_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.739	-1.785	-1.445	-1.426
PTK2	5747	PTK2 protein tyrosine kinase 2	207821_s_at	ERK/MAPK Signaling,			1.324	
PTK2B	2185	PTK2B protein tyrosine kinase 2 beta	203110_at	ERK/MAPK Signaling,				1.469
PTPN1	5770	protein tyrosine phosphatase, non-receptor type 1	202716_at	Insulin Receptor Signaling,			-1.375	
PTPN11	5781	protein tyrosine phosphatase, non-receptor type 11	209896_s_at	Acute Phase Response, Insulin Receptor Signaling,	-1.944	-1.66	-1.573	-1.819
PTPRF	5792	protein tyrosine phosphatase, receptor type, F	215066_at	Insulin Receptor Signaling,		1.614	1.914	1.636
PXN	5829	paxillin	201087_at	ERK/MAPK Signaling,			-1.454	
RAC2	5880	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	207419_s_at	ERK/MAPK Signaling, SAPK/JNK Signaling			-2.079	
RAF1	5894	v-raf-1 murine leukemia viral oncogene homolog 1	1557675_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.684			
RAP2A	5911	RAP2A, member of RAS oncogene family	225585_at	Calcium Signaling,			1.395	
RAP2B	5912	RAP2B, member of RAS oncogene family	227897_at	Calcium Signaling,		2.667	2.103	2.197
RAPGEF1	2889	Rap guanine nucleotide exchange factor (GEF) 1	225738_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.919	-1.825	1.367	
RAPGEF3	10411	Rap guanine nucleotide exchange factor (GEF) 3	210051_at	ERK/MAPK Signaling,			1.531	1.329
RBP4	5950	retinol binding protein 4, plasma	219140_s_at	Acute Phase Response,			-1.414	
RCAN1	1827	regulator of calcineurin 1	215254_at	Calcium Signaling,				1.25
RELA (includes EG:5970)	5970	v-rel reticuloendotheliosis viral oncogene homolog A (avian)	209878_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.34	-1.246	-1.348	-1.222
RHEB	6009	Ras homolog enriched in brain	213404_s_at	PI3K/AKT Signaling,	-1.375	-1.34	1.6	-1.621
RHOQ	23433	ras homolog gene family, member Q	1559582_at	Insulin Receptor Signaling,	-1.687	-1.456	1.3	1.432
RIPK1	8737	receptor (TNFRSF)-interacting serine-threonine kinase 1	226551_at	Acute Phase Response, SAPK/JNK Signaling	-1.384	-1.439	-1.397	-1.359
ROCK1	6093	Rho-associated, coiled-coil containing protein kinase 1	235854_x_at	Apoptosis,			1.562	
RPS6KA4	8986	ribosomal protein S6 kinase, 90kDa, polypeptide 4	230544_at	ERK/MAPK Signaling,		1.49	1.374	1.577
RPS6KA5	9252	ribosomal protein S6 kinase, 90kDa, polypeptide 5	204633_s_at	ERK/MAPK Signaling,	-2.197			
RPS6KB1	6198	ribosomal protein S6 kinase, 70kDa, polypeptide 1	226660_at	Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.376		
SAA1	6288	serum amyloid A1	214456_x_at	Acute Phase Response,			1.216	
SCNN1A	6337	sodium channel, nonvoltage-gated 1 alpha	217264_s_at	Insulin Receptor Signaling,			1.585	1.448
SCNN1B	6338	sodium channel, nonvoltage-gated 1, beta	205464_at	Insulin Receptor Signaling,			1.481	
SCNN1G	6340	sodium channel, nonvoltage-gated 1, gamma	207295_at	Insulin Receptor Signaling,			-2.055	
SERPINA1	5265	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1	211429_s_at	Acute Phase Response,			-1.479	
SERPINF2	5345	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 2	205075_at	Acute Phase Response,			1.689	1.654
SFN	2810	stratifin	209260_at	PI3K/AKT Signaling,			1.474	
SGK1	6446	serum/glucocorticoid regulated kinase 1	201739_at	Insulin Receptor Signaling,	-2.377			
SH2D2A	9047	SH2 domain protein 2A	207351_s_at	SAPK/JNK Signaling	-2.062			
SHC1	6464	SHC (Src homology 2 domain containing) transforming protein 1	214853_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.314	-1.241		
SLC8A1	6546	solute carrier family 8 (sodium/calcium exchanger), member 1	1565306_a_at	Calcium Signaling,				1.329
SOCS1	8651	suppressor of cytokine signaling 1	210000_s_at	Acute Phase Response,			1.671	1.496

SOCS3	9021	suppressor of cytokine signaling 3	214105_at	Acute Phase Response, Insulin Receptor Signaling,			1.276	1.245
SOCS6	9306	suppressor of cytokine signaling 6	227542_at	Acute Phase Response,			1.333	
SOS1	6654	son of sevenless homolog 1 (Drosophila)	227426_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.483	-1.754	-1.209	2.381
SOS2	6655	son of sevenless homolog 2 (Drosophila)	217576_x_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling		1.536	-1.789	
SPTAN1	6709	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin)	215235_at	Apoptosis,				1.966
SRC	6714	v-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian)	213324_at	ERK/MAPK Signaling,		-1.445	-1.539	
STAT1	6772	signal transducer and activator of transcription 1, 91kDa	209969_s_at	ERK/MAPK Signaling,	-3.269			
STAT3	6774	signal transducer and activator of transcription 3 (acute-phase response factor)	243213_at	Acute Phase Response, ERK/MAPK Signaling,	-1.58		-1.588	-1.668
STX4	6810	syntaxin 4	203530_s_at	Insulin Receptor Signaling,	-1.386		-1.191	
TAOK3	51347	TAO kinase 3	220761_s_at	ER Stress,	-1.363			1.493
TCF3	6929	transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)	213731_s_at	Acute Phase Response,			1.502	1.473
TCF4	6925	transcription factor 4	222146_s_at	Acute Phase Response,			1.432	1.857
TF	7018	transferrin	220109_at	Acute Phase Response,			2.589	
THEM4	117145	thioesterase superfamily member 4	243492_at	PI3K/AKT Signaling,		-2.095		
TLN1	7094	talin 1	232763_at	ERK/MAPK Signaling,			1.447	2.19
TNFRSF11B	4982	tumor necrosis factor receptor superfamily, member 11b	204933_s_at	Acute Phase Response,	-1.82	-1.815		
TNNI1	7135	troponin I type 1 (skeletal, slow)	205177_at	Calcium Signaling,			1.339	
TNNT3	7140	troponin T type 3 (skeletal, fast)	205693_at	Calcium Signaling,			1.672	
TP53	7157	tumor protein p53	201746_at	Apoptosis, PI3K/AKT Signaling, SAPK/JNK Signaling				2.459
TRA@	6955	T cell receptor alpha locus	234849_at	SAPK/JNK Signaling	-1.694		2.131	1.718
TRADD	8717	TNFRSF1A-associated via death domain	205641_s_at	Acute Phase Response, SAPK/JNK Signaling	-1.896	-1.656	-1.683	-1.852
TRDN	10345	triadin	222919_at	Calcium Signaling,			1.816	
TRPC6	7225	transient receptor potential cation channel, subfamily C, member 6	217287_s_at	Calcium Signaling,			1.664	
VAMP2	6844	vesicle-associated membrane protein 2 (synaptobrevin 2)	201557_at	Insulin Receptor Signaling,				1.86
XIAP	331	X-linked inhibitor of apoptosis	225858_s_at	Apoptosis,			1.301	1.488
YWHAB	7529	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide	208743_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			-1.228	
YWHAG	7532	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide	222985_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			-1.187	
YWHAH	7533	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide	242325_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			1.499	
YWHAQ (includes EG:10971)	10971	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide	212426_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.532	-1.509		
YWHAZ	7534	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	200640_at	ERK/MAPK Signaling, PI3K/AKT Signaling,			-1.316	-1.691

Supplemental Table 2. List of genes with fold changes that are significantly altered by thermal injury in fat.

Symbol	Entrez Gene ID for Human	Entrez Gene Name	Affymetrix Probe Set ID	IPA Pathway	Fold Change 0-10dpb	Fold Change 11-49dpb	Fold Change 50-264dpb	Fold Change 265+dpb
A2M	2	alpha-2-macroglobulin	217757_at	Acute Phase Response,		1.666		1.844
AKT1	207	v-akt murine thymoma viral oncogene homolog 1	207163_s_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	1.311			
AKT2	208	v-akt murine thymoma viral oncogene homolog 2	226156_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,				1.63
AKT3	10000	v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma)	222880_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	1.835			3.023
AMBP	259	alpha-1-microglobulin/bikunin precursor	214425_at	Acute Phase Response,	-1.352	-1.398		-1.604
APOH	350	apolipoprotein H (beta-2-glycoprotein I)	205216_s_at	Acute Phase Response,		-1.398		-1.394
ARAF	369	v-raf murine sarcoma 3611 viral oncogene homolog	201895_at	ERK/MAPK Signaling,	1.367	1.546		
ATF2	1386	activating transcription factor 2	212984_at	ERK/MAPK Signaling, SAPK/JNK Signaling				1.456
ATF4	468	activating transcription factor 4 (tax-responsive enhancer element B67)	200779_at	ER Stress, ERK/MAPK Signaling,	1.295			
ATP2C1	27032	ATPase, Ca++ transporting, type 2C, member 1	209935_at	Calcium Signaling,			-1.489	
BAK1	578	BCL2-antagonist/killer 1	203728_at	Apoptosis,				-1.505
BAX	581	BCL2-associated X protein	211833_s_at	Apoptosis,				-2.227
BCL2	596	B-cell CLL/lymphoma 2	203685_at	Apoptosis, PI3K/AKT Signaling,				1.796
BCL2L1	598	BCL2-like 1	212312_at	PI3K/AKT Signaling,	1.403			
BCL3	602	B-cell CLL/lymphoma 3	204907_s_at	Acute Phase Response, PI3K/AKT Signaling,	1.331			1.326
BIRC3	330	baculoviral IAP repeat-containing 3	210538_s_at	Apoptosis,				-2.594
C1R	715	complement component 1, r subcomponent	212067_s_at	Acute Phase Response,	1.749	1.913		
C1S	716	complement component 1, s subcomponent	208747_s_at	Acute Phase Response,		1.697		1.586
C3	718	complement component 3	217767_at	Acute Phase Response,	1.958	2.068		2.255
C4BPA	722	complement component 4 binding protein, alpha	205654_at	Acute Phase Response,				-1.438
CABIN1	23523	calcineurin binding protein 1	37652_at	Calcium Signaling,			1.567	
CALM3	808	calmodulin 3 (phosphorylase kinase, delta)	200623_s_at	Calcium Signaling,			1.652	
CAPN6	827	calpain 6	202965_s_at	Apoptosis,				2.049
CASP9	842	caspase 9, apoptosis-related cysteine peptidase	210775_x_at	Apoptosis, ER Stress,				-1.253
CBL	867	Cas-Br-M (murine) ecotropic retroviral transforming sequence	229010_at	Insulin Receptor Signaling,				1.769
CCND1	595	cyclin D1	214019_at	PI3K/AKT Signaling,	1.299			
CDC2	983	cell division cycle 2, G1 to S and G2 to M	203214_x_at	Apoptosis,				-3.217
CDC37	11140	cell division cycle 37 homolog (S. cerevisiae)	209953_s_at	PI3K/AKT Signaling,	1.622	1.701		
CDKN1A	1026	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	202284_s_at	PI3K/AKT Signaling,				-3.63
CRABP2	1382	cellular retinoic acid binding protein 2	202575_at	Acute Phase Response,	-4.321	-2.714		-3.266
CREB3	10488	cAMP responsive element binding protein 3	209432_s_at	ERK/MAPK Signaling,	1.34	1.288		
CRKL	1399	v-crkl sarcoma virus CT10 oncogene homolog (avian)-like	212180_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling				-1.531

CRP	1401	C-reactive protein, pentraxin-related	205753_at	Acute Phase Response,				-1.273
CTNNB1	1499	catenin (cadherin-associated protein), beta 1, 88kDa	1554411_at	PI3K/AKT Signaling,	-1.818			-2.154
CYCS (includes EG:54205)	54205	cytochrome c, somatic	208905_at	Apoptosis,			-1.53	
DNAJC3	5611	DnaJ (Hsp40) homolog, subfamily C, member 3	1558080_s_at	ER Stress,	2.064			1.837
DUSP4	1846	dual specificity phosphatase 4	204015_s_at	ERK/MAPK Signaling, SAPK/JNK Signaling	3.093			1.864
EIF2B5	8893	eukaryotic translation initiation factor 2B, subunit 5 epsilon, 82kDa	1558050_at	Insulin Receptor Signaling,	-1.433	-1.455		-1.9
EIF2S1	1965	eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa	201144_s_at	ER Stress,			-1.501	-1.305
EIF4E	1977	eukaryotic translation initiation factor 4E	201435_s_at	PI3K/AKT Signaling,			-2.006	-1.831
EIF4EBP1	1978	eukaryotic translation initiation factor 4E binding protein 1	221539_at	ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	2.1	1.419		1.451
ELF1	1997	E74-like factor 1 (ets domain transcription factor)	212418_at	ERK/MAPK Signaling,	-1.468	-1.49		-1.58
ELF5	2001	E74-like factor 5 (ets domain transcription factor)	220624_s_at	ERK/MAPK Signaling,		-1.314		
ERN1	2081	endoplasmic reticulum to nucleus signaling 1	235745_at	ER Stress,				-1.729
ESR1	2099	estrogen receptor 1	211233_x_at	ERK/MAPK Signaling,				-1.468
ETS1	2113	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	224833_at	ERK/MAPK Signaling,	1.437	1.429		1.669
ETS2	2114	v-ets erythroblastosis virus E26 oncogene homolog 2 (avian)	201328_at	ERK/MAPK Signaling,	-2.204	-1.909		-3.455
F8	2157	coagulation factor VIII, procoagulant component	205756_s_at	Acute Phase Response,				1.92
FADD (includes EG:8772)	8772	Fas (TNFRSF6)-associated via death domain	202535_at	SAPK/JNK Signaling		-1.298		-1.52
FAS	355	Fas (TNF receptor superfamily, member 6)	216252_x_at	Apoptosis,				-2.078
FN1	2335	fibronectin 1	1558199_at	Acute Phase Response,		2.939		
FOXO1	2308	forkhead box O1	202724_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,				1.548
FYN	2534	FYN oncogene related to SRC, FGR, YES	216033_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	1.543			1.66
GAB1	2549	GRB2-associated binding protein 1	226002_at	Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.797	-2.027		-1.565
GAB2	9846	GRB2-associated binding protein 2	203853_s_at	PI3K/AKT Signaling,				1.411
GNA12	2768	guanine nucleotide binding protein (G protein) alpha 12	224681_at	SAPK/JNK Signaling	1.44	1.363		1.566
GNB1	2782	guanine nucleotide binding protein (G protein), beta polypeptide 1	200745_s_at	SAPK/JNK Signaling				1.338
GNG11	2791	guanine nucleotide binding protein (G protein), gamma 11	204115_at	SAPK/JNK Signaling				1.732
GNG2	54331	guanine nucleotide binding protein (G protein), gamma 2	224964_s_at	SAPK/JNK Signaling				2.106
GNG7	2788	guanine nucleotide binding protein (G protein), gamma 7	206896_s_at	SAPK/JNK Signaling		1.334		
GRB10	2887	growth factor receptor-bound protein 10	210999_s_at	Insulin Receptor Signaling,	2.053	1.579		1.74
GRIN1	2902	glutamate receptor, ionotropic, N-methyl D-aspartate 1	205915_x_at	Calcium Signaling,			1.306	
H3F3A (includes EG:3020)	3020	H3 histone, family 3A	211940_x_at	ERK/MAPK Signaling,	-1.322			
HP	3240	haptoglobin	208470_s_at	Acute Phase Response,	4.258			
HSP90AA1	3320	heat shock protein 90kDa alpha (cytosolic), class A member 1	211968_s_at	PI3K/AKT Signaling,	1.475			
HSPA5	3309	heat shock 70kDa protein 5 (glucose-regulated protein,	230031_at	ER Stress,	1.718			

		78kDa)					
HSPB1	3315	heat shock 27kDa protein 1	201841_s_at	ERK/MAPK Signaling,			-2.765
HSPB2	3316	heat shock 27kDa protein 2	205824_at	ERK/MAPK Signaling,	1.979		1.857
IL18	3606	interleukin 18 (interferon-gamma-inducing factor)	206295_at	Acute Phase Response,	-5.132	-4.964	-9.615
IL1A	3552	interleukin 1, alpha	208200_at	Acute Phase Response,	1.422		1.887
IL1F10	84639	interleukin 1 family, member 10 (theta)	224262_at	Acute Phase Response,			-1.484
IL1F5	26525	interleukin 1 family, member 5 (delta)	222223_s_at	Acute Phase Response,	-8.826	-6.354	-18.669
IL1F7	27178	interleukin 1 family, member 7 (zeta)	221470_s_at	Acute Phase Response,	10.476		
IL1F8	27177	interleukin 1 family, member 8 (eta)	231755_at	Acute Phase Response,	-1.512	-1.402	-1.485
IL1R1	3554	interleukin 1 receptor, type I	202948_at	Acute Phase Response,	1.653		
IL1RAP	3556	interleukin 1 receptor accessory protein	205227_at	Acute Phase Response,			-1.853
IL1RN	3557	interleukin 1 receptor antagonist	212657_s_at	Acute Phase Response,	-5.356	-1.834	-16.822
IL6	3569	interleukin 6 (interferon, beta 2)	243977_at	Acute Phase Response,	-1.629		
IL6ST	3572	interleukin 6 signal transducer (gp130, oncostatin M receptor)	211000_s_at	Acute Phase Response,	2.435	1.841	2.977
ILK	3611	integrin-linked kinase	201234_at	PI3K/AKT Signaling,	1.429	1.532	1.475
INPPL1	3636	inositol polyphosphate phosphatase-like 1	201598_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,		1.698	
INSR	3643	insulin receptor	226216_at	Insulin Receptor Signaling,			1.691
IRS2	8660	insulin receptor substrate 2	209184_s_at	Insulin Receptor Signaling,			1.65
ITGA2	3673	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)	227314_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-4.413	-3.86	-8.846
ITGA5	3678	integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	201389_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	1.684	1.736	
ITGB1	3688	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	215879_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.521		-1.553
JAK1	3716	Janus kinase 1	1562103_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.226	-1.469	
KRAS	3845	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	204009_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			-1.468
LCK	3932	lymphocyte-specific protein tyrosine kinase	204891_s_at	SAPK/JNK Signaling		1.437	
LIPE	3991	lipase, hormone-sensitive	213855_s_at	Insulin Receptor Signaling,	3.309		2.904
MAP2K2	5605	mitogen-activated protein kinase kinase 2	202424_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,			-1.433
MAP2K3	5606	mitogen-activated protein kinase kinase 3	215499_at	Acute Phase Response,			-2.23
MAP2K4	6416	mitogen-activated protein kinase kinase 4	203265_s_at	Acute Phase Response, Apoptosis, SAPK/JNK Signaling			-1.714
MAP3K1	4214	mitogen-activated protein kinase kinase kinase 1	225927_at	Acute Phase Response, SAPK/JNK Signaling	-1.798	-1.745	
MAP3K12	7786	mitogen-activated protein kinase kinase kinase 12	205447_s_at	SAPK/JNK Signaling		1.464	1.191
MAP3K14	9020	mitogen-activated protein kinase kinase kinase 14	205192_at	Acute Phase Response, Apoptosis,			-1.374
MAP3K3	4215	mitogen-activated protein kinase kinase kinase 3	203514_at	SAPK/JNK Signaling	1.219	1.238	1.375
MAP3K5 (includes EG:4217)	4217	mitogen-activated protein kinase kinase kinase 5	203836_s_at	Acute Phase Response, Apoptosis, ER Stress, PI3K/AKT Signaling, SAPK/JNK Signaling			1.466
MAP3K7	6885	mitogen-activated protein kinase kinase kinase 7	211536_x_at	Acute Phase Response, SAPK/JNK Signaling			-1.505
MAP3K9	4293	mitogen-activated protein kinase kinase kinase 9	213927_at	SAPK/JNK Signaling	-2.951	-3.051	-5.236

MAP4K4	9448	mitogen-activated protein kinase kinase kinase kinase 4	218181_s_at	SAPK/JNK Signaling	1.316	1.303		1.527
MAPK1	5594	mitogen-activated protein kinase 1	224621_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.337		-1.793
MAPK10	5602	mitogen-activated protein kinase 10	204813_at	SAPK/JNK Signaling				1.616
MAPK11	5600	mitogen-activated protein kinase 11	211499_s_at	Acute Phase Response,	1.304			
MAPK12	6300	mitogen-activated protein kinase 12	1556341_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				-1.274
MAPK13	5603	mitogen-activated protein kinase 13	210058_at	Acute Phase Response,	-2.838	-2.382		-5.014
MAPK14	1432	mitogen-activated protein kinase 14	210449_x_at	Acute Phase Response,		1.537		
MAPK6	5597	mitogen-activated protein kinase 6	207121_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.608	-1.51		-2.259
MAPK8	5599	mitogen-activated protein kinase 8	210671_x_at	Acute Phase Response, Apoptosis, ER Stress, Insulin Receptor Signaling, SAPK/JNK Signaling				-1.205
MAPKAPK5	8550	mitogen-activated protein kinase-activated protein kinase 5	212871_at	ERK/MAPK Signaling,				-1.198
MAPKSP1	8649	MAPK scaffold protein 1	217971_at	ERK/MAPK Signaling,		-1.348		
MDM2	4193	Mdm2 p53 binding protein homolog (mouse)	229711_s_at	PI3K/AKT Signaling,				-1.62
MRAS	22808	muscle RAS oncogene homolog	225185_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				2.009
MYC	4609	v-myc myelocytomatosis viral oncogene homolog (avian)	202431_s_at	ERK/MAPK Signaling,				-1.948
MYH10	4628	myosin, heavy chain 10, non-muscle	212372_at	Calcium Signaling,			1.756	
NCK1	4690	NCK adaptor protein 1	204725_s_at	Insulin Receptor Signaling,		-1.574		
NFKB2	4791	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	207535_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,				-1.269
NFKBIE	4794	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	203927_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,				-1.587
NGFR	4804	nerve growth factor receptor (TNFR superfamily, member 16)	205858_at	Acute Phase Response,		1.604		
NOLC1	9221	nucleolar and coiled-body phosphoprotein 1	211951_at	Acute Phase Response,				-1.79
NOS3	4846	nitric oxide synthase 3 (endothelial cell)	205581_s_at	PI3K/AKT Signaling,	1.645	1.336	1.567	
NR3C1	2908	nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)	216321_s_at	Acute Phase Response,				1.512
NRAS	4893	neuroblastoma RAS viral (v-ras) oncogene homolog	202647_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				-1.468
PAK6	56924	p21 protein (Cdc42/Rac)-activated kinase 6	1555310_a_at	ERK/MAPK Signaling,	-5.311	-4.573		-9.296
PDE3B	5140	phosphodiesterase 3B, cGMP-inhibited	222317_at	Insulin Receptor Signaling,				2.728
PIK3C2A	5286	phosphoinositide-3-kinase, class 2, alpha polypeptide	241905_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling				1.654
PIK3C2G	5288	phosphoinositide-3-kinase, class 2, gamma polypeptide	215129_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling				-2.052
PIK3CA	5290	phosphoinositide-3-kinase, catalytic, alpha polypeptide	235980_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				1.588
PIK3CB	5291	phosphoinositide-3-kinase, catalytic, beta polypeptide	212688_at	Acute Phase Response, ERK/MAPK Signaling, Insulin	-1.452	-1.649		

				Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				
PIK3R1	5295	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	212240_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	1.606	1.554		2.072
PIK3R3	8503	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	202743_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	2.106	2.039		1.682
PIK3R5	23533	phosphoinositide-3-kinase, regulatory subunit 5	220566_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling				-1.436
PLA2G10	8399	phospholipase A2, group X	207222_at	ERK/MAPK Signaling,				-1.302
PLA2G1B	5319	phospholipase A2, group IB (pancreas)	206311_s_at	ERK/MAPK Signaling,		-2.838		-3.181
PLA2G2A	5320	phospholipase A2, group IIA (platelets, synovial fluid)	203649_s_at	ERK/MAPK Signaling,	3.243	2.544		
PLA2G6	8398	phospholipase A2, group VI (cytosolic, calcium-independent)	210647_x_at	ERK/MAPK Signaling,	1.278	1.261		-1.889
PPARG	5468	peroxisome proliferator-activated receptor gamma	208510_s_at	ERK/MAPK Signaling,				2.022
PPM1J	333926	protein phosphatase 1J (PP2C domain containing)	229484_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				-1.321
PPP1CA	5499	protein phosphatase 1, catalytic subunit, alpha isoform	200846_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-1.477
PPP1CB	5500	protein phosphatase 1, catalytic subunit, beta isoform	201408_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-1.549
PPP1R11	6992	protein phosphatase 1, regulatory (inhibitor) subunit 11	1566302_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-1.498
PPP1R14A	94274	protein phosphatase 1, regulatory (inhibitor) subunit 14A	227006_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	2.615			2.242
PPP1R14B	26472	protein phosphatase 1, regulatory (inhibitor) subunit 14B	212680_x_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-1.4
PPP1R14C	81706	protein phosphatase 1, regulatory (inhibitor) subunit 14C	226907_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-10.89
PPP1R3A	5506	protein phosphatase 1, regulatory (inhibitor) subunit 3A	211169_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				-1.548
PPP1R3C	5507	protein phosphatase 1, regulatory (inhibitor) subunit 3C	240187_at	ERK/MAPK Signaling, Insulin Receptor Signaling,		1.399		
PPP1R3D	5509	protein phosphatase 1, regulatory (inhibitor) subunit 3D	204554_at	ERK/MAPK Signaling, Insulin Receptor Signaling,		-1.389		
PPP2R1B	5519	protein phosphatase 2 (formerly 2A), regulatory subunit A, beta isoform	202884_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				1.585
PPP2R2B	5521	protein phosphatase 2 (formerly 2A), regulatory subunit B, beta isoform	213849_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				-1.592
PPP2R2C	5522	protein phosphatase 2 (formerly 2A), regulatory subunit B, gamma isoform	228010_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-5.875	-6.393		-20.034
PPP2R3A (includes EG:5523)	5523	protein phosphatase 2 (formerly 2A), regulatory subunit B'', alpha	209633_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				-1.616
PPP2R3B	28227	protein phosphatase 2 (formerly 2A), regulatory subunit B'', beta	219264_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				-2.131
PPP2R4	5524	protein phosphatase 2A activator, regulatory subunit 4	208874_x_at	ERK/MAPK Signaling, PI3K/AKT Signaling,		1.525		
PPP2R5A	5525	protein phosphatase 2, regulatory subunit B', alpha isoform	202187_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				1.56
PPP2R5E	5529	protein phosphatase 2, regulatory subunit B', epsilon isoform	229322_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				1.354
PRKACB	5567	protein kinase, cAMP-dependent, catalytic, beta	202742_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				2.201
PRKAG2	51422	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	233748_x_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	1.466			1.515
PRKAR2B	5577	protein kinase, cAMP-dependent, regulatory, type II, beta	203680_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				2.377
PRKCA	5578	protein kinase C, alpha	215194_at	ERK/MAPK Signaling,		1.269		

PRKCH	5583	protein kinase C, eta	218764_at	Insulin Receptor Signaling,	-1.388		-1.401
PRKCI	5584	protein kinase C, iota	209677_at	ERK/MAPK Signaling, Insulin Receptor Signaling,		-1.5	
PTEN	5728	phosphatase and tensin homolog	227469_at	Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.826	-2.069
PTK2	5747	PTK2 protein tyrosine kinase 2	241453_at	ERK/MAPK Signaling,			-1.472
PTK2B	2185	PTK2B protein tyrosine kinase 2 beta	203110_at	ERK/MAPK Signaling,			-1.307
PTPN1	5770	protein tyrosine phosphatase, non-receptor type 1	217686_at	Insulin Receptor Signaling,		1.203	
RAC1	5879	ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)	1567458_s_at	ERK/MAPK Signaling, SAPK/JNK Signaling		-1.672	-2.072
RAC3	5881	ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3)	206103_at	ERK/MAPK Signaling, SAPK/JNK Signaling	1.402		1.35
RAPGEF1	2889	Rap guanine nucleotide exchange factor (GEF) 1	225738_at	ERK/MAPK Signaling, Insulin Receptor Signaling,		1.635	
RAPGEF3	10411	Rap guanine nucleotide exchange factor (GEF) 3	210051_at	ERK/MAPK Signaling,			1.622
RBP3	5949	retinol binding protein 3, interstitial	210318_at	Acute Phase Response,		-1.192	
RBP4	5950	retinol binding protein 4, plasma	219140_s_at	Acute Phase Response,			2.033
RBP7	116362	retinol binding protein 7, cellular	238066_at	Acute Phase Response,			1.967
RHOQ	23433	ras homolog gene family, member Q	212122_at	Insulin Receptor Signaling,	1.456	1.569	2.031
RPS6KA5	9252	ribosomal protein S6 kinase, 90kDa, polypeptide 5	204633_s_at	ERK/MAPK Signaling,	-1.584		
RPS6KB2	6199	ribosomal protein S6 kinase, 70kDa, polypeptide 2	203777_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.495	-1.95
RPTOR	57521	regulatory associated protein of MTOR, complex 1	225715_at	Insulin Receptor Signaling,			-1.444
RRAS	6237	related RAS viral (r-ras) oncogene homolog	212647_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			1.963
SCNN1A	6337	sodium channel, nonvoltage-gated 1 alpha	203453_at	Insulin Receptor Signaling,	-5.894	-6.183	-12.948
SCNN1B	6338	sodium channel, nonvoltage-gated 1, beta	205464_at	Insulin Receptor Signaling,	-2.556	-3.577	-3.366
SCNN1G	6340	sodium channel, nonvoltage-gated 1, gamma	241436_at	Insulin Receptor Signaling,		-2.976	
SERPINF1	5176	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1	202283_at	Acute Phase Response,		1.521	1.545
SERPINF2	5345	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 2	205075_at	Acute Phase Response,	1.602		
SERPING1	710	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	200986_at	Acute Phase Response,	1.663		1.606
SFN	2810	stratifin	33323_r_at	PI3K/AKT Signaling,	-4.785	-4.145	-31.996
SGK1	6446	serum/glucocorticoid regulated kinase 1	201739_at	Insulin Receptor Signaling,			-3.353
SHC1	6464	SHC (Src homology 2 domain containing) transforming protein 1	201469_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	1.449		
SOCS1	8651	suppressor of cytokine signaling 1	209999_x_at	Acute Phase Response,		1.318	
SOCS6	9306	suppressor of cytokine signaling 6	214462_at	Acute Phase Response,		-1.333	-1.417
SOS1	6654	son of sevenless homolog 1 (Drosophila)	230337_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			2.14
SOS2	6655	son of sevenless homolog 2 (Drosophila)	217575_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			-1.481
SPTAN1	6709	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin)	215235_at	Apoptosis,			1.783 1.645

SRF	6722	serum response factor (c-fos serum response element-binding transcription factor)	202401_s_at	ERK/MAPK Signaling,				-1.558
STXBP4	252983	syntaxin binding protein 4	237706_at	Insulin Receptor Signaling,	-1.573	-1.694		
TCF3	6929	transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)	213731_s_at	Acute Phase Response,	1.259			-1.325
TCF4	6925	transcription factor 4	212382_at	Acute Phase Response,		1.464		2.416
THEM4	117145	thioesterase superfamily member 4	243492_at	PI3K/AKT Signaling,	1.377	1.241		
TLN1	7094	talin 1	203254_s_at	ERK/MAPK Signaling,	1.747			1.621
TLN2	83660	talin 2	212703_at	ERK/MAPK Signaling,	1.728			2.069
TPM1	7168	tropomyosin 1 (alpha)	238688_at	Calcium Signaling,			1.688	
TRADD	8717	TNFRSF1A-associated via death domain	205641_s_at	Acute Phase Response, SAPK/JNK Signaling		-1.315		
TRIP10	9322	thyroid hormone receptor interactor 10	202734_at	Insulin Receptor Signaling,	1.556			
TYK2	7297	tyrosine kinase 2	205546_s_at	PI3K/AKT Signaling,	1.236	1.378		
VAMP2	6844	vesicle-associated membrane protein 2 (synaptobrevin 2)	201557_at	Insulin Receptor Signaling,				1.354
VWF	7450	von Willebrand factor	202112_at	Acute Phase Response,	1.743	1.905		1.805
XBP1	7494	X-box binding protein 1	200670_at	ER Stress,				-1.487
XIAP	331	X-linked inhibitor of apoptosis	235222_x_at	Apoptosis,				-1.504
YWHAЕ	7531	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide	210317_s_at	PI3K/AKT Signaling,	1.601			
YWHAQ (includes EG:10971)	10971	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide	212426_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,		-1.323		
YWHAZ	7534	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	200641_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-2.057	-2.14	-1.865	-2.442
ZAK	51776	sterile alpha motif and leucine zipper containing kinase AZK	218833_at	SAPK/JNK Signaling	-1.405	-1.594		-1.499

Supplemental Table 3. List of genes with fold changes that are significantly altered by thermal injury in muscle.

Symbol	Entrez Gene ID for Human	Entrez Gene Name	Affymetrix Probe Set ID	IPA Pathway	Fold Change 0-10dpb	Fold Change 11-49dpb	Fold Change 50-264dpb	Fold Change 265+dpb
A2M	2	alpha-2-macroglobulin	217757_at	Acute Phase Response,	-1.54		-1.7	-1.723
ACCN2	41	amiloride-sensitive cation channel 2, neuronal	37953_s_at	Insulin Receptor Signaling,				-1.531
ACIN1	22985	apoptotic chromatin condensation inducer 1	201715_s_at	Apoptosis,	1.48			
ACLY	47	ATP citrate lyase	210337_s_at	Insulin Receptor Signaling,	-2.3	-1.836	-2.046	-2.166
ACTA1	58	actin, alpha 1, skeletal muscle	203872_at	Calcium Signaling,	1.78			
ACTA2	59	actin, alpha 2, smooth muscle, aorta	243140_at	Calcium Signaling,	-1.35		-1.729	-1.889
ACTC1	70	actin, alpha, cardiac muscle 1	205132_at	Calcium Signaling,	3.78			
AGT	183	angiotensinogen (serpin peptidase inhibitor, clade A, member 8)	202834_at	Acute Phase Response,	1.85			
AKT1	207	v-akt murine thymoma viral oncogene homolog 1	207163_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,		-1.403		
AKT3	10000	v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma)	212607_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.38		-1.519	-1.701
ARAF	369	v-raf murine sarcoma 3611 viral oncogene homolog	201895_at	ERK/MAPK Signaling,	1.47			
ASPH	444	aspartate beta-hydroxylase	210896_s_at	Calcium Signaling,	-5.76	-2.554	-5.594	-6.386
ATF1	466	activating transcription factor 1	222103_at	ERK/MAPK Signaling,			1.339	
ATF2	1386	activating transcription factor 2	212984_at	Calcium Signaling, ERK/MAPK Signaling, SAPK/JNK Signaling	-1.34			
ATF4	468	activating transcription factor 4 (tax-responsive enhancer element B67)	200779_at	Calcium Signaling, ER Stress, ERK/MAPK Signaling,	1.21			
ATF6	22926	activating transcription factor 6	231927_at	ER Stress,	-1.4			
ATP2A2	488	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	209186_at	Calcium Signaling,	-2.12			
ATP2A3	489	ATPase, Ca++ transporting, ubiquitous	230453_s_at	Calcium Signaling,	1.33			
ATP2B4	493	ATPase, Ca++ transporting, plasma membrane 4	212135_s_at	Calcium Signaling,	-2.45	-2.161	-1.798	
ATP2C1	27032	ATPase, Ca++ transporting, type 2C, member 1	209935_at	Calcium Signaling,	-1.77		-1.606	
BCAR1	9564	breast cancer anti-estrogen resistance 1	223116_at	ERK/MAPK Signaling,	1.78	1.479		
BID	637	BH3 interacting domain death agonist	204493_at	Apoptosis,				-1.722
BRAF	673	v-raf murine sarcoma viral oncogene homolog B1	206044_s_at	ERK/MAPK Signaling,				1.272
C1R	715	complement component 1, r subcomponent	212067_s_at	Acute Phase Response,			-2.555	
C1S	716	complement component 1, s subcomponent	1555229_a_at	Acute Phase Response,	-3.05		-5.051	-4.758
C2	717	complement component 2	203052_at	Acute Phase Response,	-4.02		-8.518	-5.183
C4A	720	complement component 4A (Rodgers blood group)	208451_s_at	Acute Phase Response,				-1.52
CALM3	808	calmodulin 3 (phosphorylase kinase, delta)	211985_s_at	Calcium Signaling,	1.64	1.829		
CALR	811	calreticulin	212953_x_at	Calcium Signaling,		-1.717	-1.703	
CAMK1	8536	calcium/calmodulin-dependent protein kinase I	204392_at	Calcium Signaling,				-1.477
CAMK1D	57118	calcium/calmodulin-dependent protein kinase ID	235626_at	Calcium Signaling,	-1.65			
CAMK2A	815	calcium/calmodulin-dependent protein kinase II alpha	207613_s_at	Calcium Signaling,	-1.55			
CAMK2D	817	calcium/calmodulin-dependent protein kinase II delta	231793_s_at	Calcium Signaling,	1.84			
CAMK2G	818	calcium/calmodulin-dependent protein kinase II gamma	214322_at	Calcium Signaling,	-1.16			
CAMKK2	10645	calcium/calmodulin-dependent protein kinase kinase 2,	213812_s_at	Calcium Signaling,	-1.6			

		beta					
CAPN1	823	calpain 1, (mu/I) large subunit	232012_at	Apoptosis,	-1.52		-1.515
CAPN11	11131	calpain 11	207962_at	Apoptosis,	1.21		
CAPN2	824	calpain 2, (m/II) large subunit	214888_at	Apoptosis,	-1.69	-1.707	-1.513
CAPN6	827	calpain 6	202965_s_at	Apoptosis,		-2.455	
CAPN7	23473	calpain 7	203357_s_at	Apoptosis,			-1.376
CASP10	843	caspase 10, apoptosis-related cysteine peptidase	205467_at	Apoptosis,	-1.18		-1.199
CASP2	835	caspase 2, apoptosis-related cysteine peptidase	226032_at	Apoptosis,	-1.88	-1.651	-1.166
CASP6	839	caspase 6, apoptosis-related cysteine peptidase	209790_s_at	Apoptosis,	-1.94		-1.635
CASP7	840	caspase 7, apoptosis-related cysteine peptidase	207181_s_at	Apoptosis, ER Stress,	-1.78	-1.863	-1.866
CASP8	841	caspase 8, apoptosis-related cysteine peptidase	213373_s_at	Apoptosis,	-2.45		-2.091
CBL	867	Cas-Br-M (murine) ecotropic retroviral transforming sequence	225231_at	Insulin Receptor Signaling,	-1.66		-1.243
CCND1	595	cyclin D1	208712_at	PI3K/AKT Signaling,	-8.51		
CDC42	998	cell division cycle 42 (GTP binding protein, 25kDa)	214230_at	SAPK/JNK Signaling	1.57		
CDKN1A	1026	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	202284_s_at	PI3K/AKT Signaling,	2.53	-1.207	-1.295
CEBPB	1051	CCAAT/enhancer binding protein (C/EBP), beta	212501_at	Acute Phase Response,	1.63		
CHRNA1	1134	cholinergic receptor, nicotinic, alpha 1 (muscle)	206633_at	Calcium Signaling,	3.95	7.113	
CHRNA4	1137	cholinergic receptor, nicotinic, alpha 4	216900_s_at	Calcium Signaling,	1.31		
CHRNA5	1138	cholinergic receptor, nicotinic, alpha 5	206533_at	Calcium Signaling,	1.26		
CHRNA1	1140	cholinergic receptor, nicotinic, beta 1 (muscle)	206703_at	Calcium Signaling,	2.14		
CREB1	1385	cAMP responsive element binding protein 1	204314_s_at	Calcium Signaling, ERK/MAPK Signaling,	-1.93	-1.595	-1.298
CREB3L4	148327	cAMP responsive element binding protein 3-like 4	226455_at	Calcium Signaling, ERK/MAPK Signaling,			1.193
CREB5	9586	cAMP responsive element binding protein 5	229228_at	Calcium Signaling, ERK/MAPK Signaling,	-1.72		
CREBBP	1387	CREB binding protein	211808_s_at	Calcium Signaling,	1.36	1.337	1.335
CRK	1398	v-crk sarcoma virus CT10 oncogene homolog (avian)	202226_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling	-1.38	-1.568	-1.553
CRKL	1399	v-crk sarcoma virus CT10 oncogene homolog (avian)-like	212180_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling			1.387
CTNNB1	1499	catenin (cadherin-associated protein), beta 1, 88kDa	1554411_at	PI3K/AKT Signaling,	-2.87	-1.61	-2.051
CYCS (includes EG:54205)	54205	cytochrome c, somatic	208905_at	Apoptosis,	1.45		1.762
DFFA	1676	DNA fragmentation factor, 45kDa, alpha polypeptide	223518_at	Apoptosis,	-1.38		
DFFB	1677	DNA fragmentation factor, 40kDa, beta polypeptide (caspase-activated DNase)	206752_s_at	Apoptosis,			-1.277
DUSP1	1843	dual specificity phosphatase 1	201044_x_at	ERK/MAPK Signaling,			-1.794
DUSP4	1846	dual specificity phosphatase 4	204014_at	ERK/MAPK Signaling, SAPK/JNK Signaling	-2.64		-3.626
DUSP6	1848	dual specificity phosphatase 6	208892_s_at	ERK/MAPK Signaling,	-3.86	-2.124	-2.654
DUSP8	1850	dual specificity phosphatase 8	206374_at	SAPK/JNK Signaling	1.63	1.297	
ECSIT	51295	ECSIT homolog (Drosophila)	218225_at	Acute Phase Response,	1.48		
EIF2AK3	9451	eukaryotic translation initiation factor 2-alpha kinase 3	241463_at	ER Stress,	1.25		
EIF2B2	8892	eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa	202461_at	Insulin Receptor Signaling,	1.39	1.492	1.36
EIF2B4	8890	eukaryotic translation initiation factor 2B, subunit 4 delta, 67kDa	215482_s_at	Insulin Receptor Signaling,	1.79	1.631	1.469

EIF2B5	8893	eukaryotic translation initiation factor 2B, subunit 5 epsilon, 82kDa	212351_at	Insulin Receptor Signaling,	1.34			1.242
EIF2S1	1965	eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa	201144_s_at	ER Stress,	1.49			
EIF4EBP1	1978	eukaryotic translation initiation factor 4E binding protein 1	221539_at	ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	1.64			
ELF1	1997	E74-like factor 1 (ets domain transcription factor)	212418_at	ERK/MAPK Signaling,	-1.85			
ELF2	1998	E74-like factor 2 (ets domain transcription factor)	210361_s_at	ERK/MAPK Signaling,	-1.68	-1.382		
ELF4	2000	E74-like factor 4 (ets domain transcription factor)	31845_at	ERK/MAPK Signaling,	-2.38			-1.722
ELK3	2004	ELK3, ETS-domain protein (SRF accessory protein 2)	221773_at	ERK/MAPK Signaling,	-2.02		-1.977	-1.955
ESR1	2099	estrogen receptor 1	205225_at	ERK/MAPK Signaling,	-2.72	-2.312	-1.186	-1.63
ETS1	2113	v-ets erythroblastosis virus E26 oncogene homolog 1 (avian)	1555355_a_at	ERK/MAPK Signaling,	-2.11	-1.979		-1.544
FADD	8772	Fas (TNFRSF6)-associated via death domain	202535_at	SAPK/JNK Signaling	-1.4			
FAS	355	Fas (TNF receptor superfamily, member 6)	215719_x_at	Apoptosis,	-2.41			-2.031
FN1	2335	fibronectin 1	1558199_at	Acute Phase Response,	-2.3		-2.523	-2.442
FOXO1	2308	forkhead box O1	202723_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	2.32			
FOXO4	4303	forkhead box O4	205451_at	Insulin Receptor Signaling,	1.47			1.477
FTL	2512	ferritin, light polypeptide	201265_at	Acute Phase Response,	-1.33		-1.904	-2.245
FYN	2534	FYN oncogene related to SRC, FGR, YES	210105_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-2.04	-1.85	-2.126	-2.031
GAB1	2549	GRB2-associated binding protein 1	229114_at	Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-2.17	-1.729		
GADD45A	1647	growth arrest and DNA-damage-inducible, alpha	203725_at	SAPK/JNK Signaling	6.15	4.616	3.224	
GNA12	2768	guanine nucleotide binding protein (G protein) alpha 12	224681_at	SAPK/JNK Signaling			-1.272	-1.315
GNA13	10672	guanine nucleotide binding protein (G protein), alpha 13	224761_at	SAPK/JNK Signaling	1.4			
GNB1	2782	guanine nucleotide binding protein (G protein), beta polypeptide 1	200746_s_at	SAPK/JNK Signaling	-1.59			-2.007
GNG11	2791	guanine nucleotide binding protein (G protein), gamma 11	204115_at	SAPK/JNK Signaling	-1.59	-1.491	-1.515	-1.832
GNG2	54331	guanine nucleotide binding protein (G protein), gamma 2	224964_s_at	SAPK/JNK Signaling	-3.7			-3.243
GNG5	2787	guanine nucleotide binding protein (G protein), gamma 5	207157_s_at	SAPK/JNK Signaling	1.41			
GRB10	2887	growth factor receptor-bound protein 10	215248_at	Insulin Receptor Signaling,	-1.63			
GRB2	2885	growth factor receptor-bound protein 2	223049_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.49			-1.424
GRIA3	2892	glutamate receptor, ionotropic, AMPA 3	206730_at	Calcium Signaling,	-1.22		-1.211	
GRIN2A	2903	glutamate receptor, ionotropic, N-methyl D-aspartate 2A	231384_at	Calcium Signaling,				1.54
GSK3B	2932	glycogen synthase kinase 3 beta	209945_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,				1.669
H3F3A (includes EG:3020)	3020	H3 histone, family 3A	211999_at	ERK/MAPK Signaling,	-1.36	-1.116		-1.099
HDAC1	3065	histone deacetylase 1	201209_at	Calcium Signaling,	-1.61			
HDAC11	79885	histone deacetylase 11	227679_at	Calcium Signaling,				1.67
HDAC2	3066	histone deacetylase 2	242141_at	Calcium Signaling,	1.42			
HDAC3	8841	histone deacetylase 3	216326_s_at	Calcium Signaling,			-1.167	
HDAC4	9759	histone deacetylase 4	228813_at	Calcium Signaling,	2.58	3.564	1.859	1.575
HDAC5	10014	histone deacetylase 5	202455_at	Calcium Signaling,	1.67			

HDAC6	10013	histone deacetylase 6	211722_s_at	Calcium Signaling,	1.46			
HDAC7	51564	histone deacetylase 7	236326_at	Calcium Signaling,	-1.27			-1.409
HDAC9	9734	histone deacetylase 9	205659_at	Calcium Signaling,	-1.58	-1.759		
HDAC9 (includes EG:9734)	9734	histone deacetylase 9	205659_at	Calcium Signaling,				
HLA-B	3106	major histocompatibility complex, class I, B	208729_x_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-1.69			
HNRNPK	3190	heterogeneous nuclear ribonucleoprotein K	200097_s_at	Acute Phase Response, SAPK/JNK Signaling	-1.19	-1.283		
HP	3240	haptoglobin	206697_s_at	Acute Phase Response,	-5.51			-9.623
HSP90AA1	3320	heat shock protein 90kDa alpha (cytosolic), class A member 1	214328_s_at	PI3K/AKT Signaling,	1.18	1.346		
HSP90AB1	3326	heat shock protein 90kDa alpha (cytosolic), class B member 1	1557910_at	PI3K/AKT Signaling,	1.67			
HSPB1	3315	heat shock 27kDa protein 1	201841_s_at	ERK/MAPK Signaling,	2.51	2.298	2.052	1.954
HSPB7	27129	heat shock 27kDa protein family, member 7 (cardiovascular)	218934_s_at	ERK/MAPK Signaling,	2.89			
IKBKB	3551	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	209341_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	-1.62			
IL1A	3552	interleukin 1, alpha	208200_at	Acute Phase Response,	-1.49			-1.605
IL1R1	3554	interleukin 1 receptor, type I	202948_at	Acute Phase Response,			-2.952	
IL1RAP	3556	interleukin 1 receptor accessory protein	205227_at	Acute Phase Response,	-1.37			
IL6R	3570	interleukin 6 receptor	205945_at	Acute Phase Response,	3.27			
IL6ST	3572	interleukin 6 signal transducer (gp130, oncostatin M receptor)	212196_at	Acute Phase Response,	-1.87		-2.024	-2.091
INPP5D	3635	inositol polyphosphate-5-phosphatase, 145kDa	203332_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-2.46	-2.368		-2.962
INSR	3643	insulin receptor	226450_at	Insulin Receptor Signaling,	1.92			1.636
IRS1	3667	insulin receptor substrate 1	204686_at	Insulin Receptor Signaling, SAPK/JNK Signaling	-2.26	-1.785		
ITGA2	3673	integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)	227314_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-2.7			
ITGA4	3676	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	205885_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-2.37			-2.86
ITGB1	3688	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	1553530_a_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-3.34	-2.63	-3.518	-3.873
ITPR1	3708	inositol 1,4,5-triphosphate receptor, type 1	240052_at	Calcium Signaling,	-1.79	-1.576	-1.557	-1.783
ITPR2	3709	inositol 1,4,5-triphosphate receptor, type 2	202660_at	Calcium Signaling,	-3.43		-2.325	-1.678
ITPR3	3710	inositol 1,4,5-triphosphate receptor, type 3	201188_s_at	Calcium Signaling,	-2.23			
JAK1	3716	Janus kinase 1	1552610_a_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-2.22	-1.97	-2.089	-2.101
JAK2	3717	Janus kinase 2	1562031_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-3.44	-1.918		-3.21
JUN	3725	jun oncogene	201465_s_at	Acute Phase Response, SAPK/JNK Signaling				2.129
KRAS	3845	v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog	1559203_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.36			
KSR1	8844	kinase suppressor of ras 1	235252_at	ERK/MAPK Signaling,	2.26		1.863	1.65
LBP	3929	lipopolysaccharide binding protein	214461_at	Acute Phase Response,			-4.97	
LIMS1	3987	LIM and senescent cell antigen-like domains 1	1566129_at	PI3K/AKT Signaling,	-1.46	-1.526		-1.589
LIPE	3991	lipase, hormone-sensitive	208186_s_at	Insulin Receptor Signaling,	-4.98	-2.797	-3.939	-3.676
MAP2K4	6416	mitogen-activated protein kinase kinase 4	203266_s_at	Acute Phase Response, SAPK/JNK Signaling			1.258	1.336

MAP2K6	5608	mitogen-activated protein kinase kinase 6	205698_s_at	Acute Phase Response,				2.009
MAP2K7	5609	mitogen-activated protein kinase kinase 7	226053_at	Acute Phase Response, Apoptosis, SAPK/JNK Signaling	1.79	-1.581		-1.594
MAP3K1	4214	mitogen-activated protein kinase kinase kinase 1	225927_at	Acute Phase Response, SAPK/JNK Signaling	-2.18			
MAP3K11	4296	mitogen-activated protein kinase kinase kinase 11	203652_at	SAPK/JNK Signaling	-1.25			
MAP3K13	9175	mitogen-activated protein kinase kinase kinase 13	1562440_at	SAPK/JNK Signaling				-1.302
MAP3K14	9020	mitogen-activated protein kinase kinase kinase 14	205192_at	Acute Phase Response, Apoptosis,	1.48			
MAP3K3	4215	mitogen-activated protein kinase kinase kinase 3	227131_at	SAPK/JNK Signaling	-1.51			
MAP3K7	6885	mitogen-activated protein kinase kinase kinase 7	206854_s_at	Acute Phase Response, SAPK/JNK Signaling	-1.37		-1.376	-1.476
MAP3K8	1326	mitogen-activated protein kinase kinase kinase 8	235421_at	PI3K/AKT Signaling,	-6.31	-3.029		-6.545
MAP4K4	9448	mitogen-activated protein kinase kinase kinase kinase 4	1558732_at	Apoptosis, SAPK/JNK Signaling	-2.04	-1.67		-1.99
MAP4K5	11183	mitogen-activated protein kinase kinase kinase kinase 5	203553_s_at	SAPK/JNK Signaling	-1.8		-1.692	
MAPK1	5594	mitogen-activated protein kinase 1	224621_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.36			
MAPK10	5602	mitogen-activated protein kinase 10	204813_at	SAPK/JNK Signaling	-1.47	-1.339	-1.47	-1.327
MAPK12	6300	mitogen-activated protein kinase 12	206106_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	1.76			
MAPK14	1432	mitogen-activated protein kinase 14	202530_at	Acute Phase Response,	-1.35			
MAPK6	5597	mitogen-activated protein kinase 6	207121_s_at	Acute Phase Response, Apoptosis, Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	1.51			
MAPK8IP3	23162	mitogen-activated protein kinase 8 interacting protein 3	213177_at	SAPK/JNK Signaling	1.64			
MAPK9	5601	mitogen-activated protein kinase 9	203218_at	Acute Phase Response, SAPK/JNK Signaling	-1.37		-1.316	-1.358
MAPKSP1	8649	MAPK scaffold protein 1	217971_at	ERK/MAPK Signaling,	-1.48			
MBTPS1	8720	membrane-bound transcription factor peptidase, site 1	201620_at	ER Stress,	-1.73	-1.7		
MEF2A (includes EG:4205)	4205	myocyte enhancer factor 2A	242176_at	Calcium Signaling,	-1.9			-1.917
MEF2D	4209	myocyte enhancer factor 2D	203004_s_at	Calcium Signaling,	2.66		1.934	1.777
MKNK1	8569	MAP kinase interacting serine/threonine kinase 1	243256_at	ERK/MAPK Signaling,	-2.09			-2.051
MKNK2	2872	MAP kinase interacting serine/threonine kinase 2	223199_at	ERK/MAPK Signaling,	2.3			
MRAS	22808	muscle RAS oncogene homolog	206538_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	1.67			
MYD88	4615	myeloid differentiation primary response gene (88)	209124_at	Acute Phase Response,	-1.64			-1.628
MYH10	4628	myosin, heavy chain 10, non-muscle	212372_at	Calcium Signaling,	-1.74		-1.863	-1.82
MYH11	4629	myosin, heavy chain 11, smooth muscle	201495_x_at	Calcium Signaling,		-1.999	-2.281	-2.422
MYH14	79784	myosin, heavy chain 14	226988_s_at	Calcium Signaling,	2.22	2.121	1.651	1.634
MYH2	4620	myosin, heavy chain 2, skeletal muscle, adult	204631_at	Calcium Signaling,	1.78			
MYL6	4637	myosin, light chain 6, alkali, smooth muscle and non-muscle	212082_s_at	Calcium Signaling,	-1.68	-1.603	-1.657	-1.672
MYL7	58498	myosin, light chain 7, regulatory	219942_at	Calcium Signaling,	1.47			
MYL9 (includes EG:10398)	10398	myosin, light chain 9, regulatory	201058_s_at	Calcium Signaling,			-1.549	
NAIP	4671	NLR family, apoptosis inhibitory protein	204861_s_at	Apoptosis,	-4.19			-5.953
NCK1	4690	NCK adaptor protein 1	211063_s_at	Insulin Receptor Signaling,	-1.37			
NFAT5	10725	nuclear factor of activated T-cells 5, tonicity-responsive	208003_s_at	Calcium Signaling,	-1.71			

NFATC1	4772	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1	210162_s_at	Calcium Signaling, SAPK/JNK Signaling				1.228
NFATC3	4775	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	210556_at	Calcium Signaling, SAPK/JNK Signaling	-1.97	-1.354		
NFKB2	4791	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	209636_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	1.41			
NFKBIB	4793	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, beta	228388_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	1.66			
NOLC1	9221	nucleolar and coiled-body phosphoprotein 1	211951_at	Acute Phase Response,	1.57			
NR3C1	2908	nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)	211671_s_at	Acute Phase Response,	-1.52			-1.373
ORM2	5005	orosomucoid 2	214465_at	Acute Phase Response,	-1.23			
PAK2	5062	p21 protein (Cdc42/Rac)-activated kinase 2	208876_s_at	ERK/MAPK Signaling,				-1.316
PAK4	10298	p21 protein (Cdc42/Rac)-activated kinase 4	215326_at	ERK/MAPK Signaling,	1.37			
PDE3B	5140	phosphodiesterase 3B, cGMP-inhibited	222317_at	Insulin Receptor Signaling,	-5.59		-3.982	-5.97
PDPK1	5170	3-phosphoinositide dependent protein kinase-1	32029_at	Acute Phase Response, Insulin Receptor Signaling, PI3K/AKT Signaling,	-2.07			-2.967
PIK3C2A	5286	phosphoinositide-3-kinase, class 2, alpha polypeptide	241905_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling	-2.75	-1.87	-2.026	-2.603
PIK3CA	5290	phosphoinositide-3-kinase, catalytic, alpha polypeptide	204369_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.8	-1.762	-1.656	-1.81
PIK3CD	5293	phosphoinositide-3-kinase, catalytic, delta polypeptide	203879_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.72			-1.797
PIK3CG	5294	phosphoinositide-3-kinase, catalytic, gamma polypeptide	206370_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-2.02			-1.877
PIK3R3	8503	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	202743_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling			-1.982	
PIK3R5	23533	phosphoinositide-3-kinase, regulatory subunit 5	227645_at	ERK/MAPK Signaling, Insulin Receptor Signaling, SAPK/JNK Signaling	-1.63	-1.469		-1.725
PLA2G12A	81579	phospholipase A2, group XIIA	242323_at	ERK/MAPK Signaling,	-1.37	-1.35		
PLA2G4A	5321	phospholipase A2, group IVA (cytosolic, calcium-dependent)	210145_at	ERK/MAPK Signaling,	-2.8		-2.119	
PLA2G4C	8605	phospholipase A2, group IVC (cytosolic, calcium-independent)	209785_s_at	ERK/MAPK Signaling,		2.696	2.483	
PLA2G6	8398	phospholipase A2, group VI (cytosolic, calcium-independent)	215938_s_at	ERK/MAPK Signaling,	-1.29		-1.761	
PLCG1	5335	phospholipase C, gamma 1	202789_at	Apoptosis, ERK/MAPK Signaling,	-1.27		-1.268	-1.324
PLCG2	5336	phospholipase C, gamma 2 (phosphatidylinositol-specific)	204613_at	Apoptosis, ERK/MAPK Signaling,	-1.5			-1.657
PPARG	5468	peroxisome proliferator-activated receptor gamma	208510_s_at	ERK/MAPK Signaling,	-5.35		-5.371	-5.645
PPP1CB	5500	protein phosphatase 1, catalytic subunit, beta isoform	201408_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	1.47			
PPP1R12A	4659	protein phosphatase 1, regulatory (inhibitor) subunit 12A	201604_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.26			-1.378
PPP1R14B	26472	protein phosphatase 1, regulatory (inhibitor) subunit 14B	212680_x_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	1.76			
PPP1R14C	81706	protein phosphatase 1, regulatory (inhibitor) subunit 14C	226907_at	ERK/MAPK Signaling, Insulin Receptor Signaling,			2.054	2.481
PPP1R3A	5506	protein phosphatase 1, regulatory (inhibitor) subunit 3A	211169_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				3.435
PPP1R3D	5509	protein phosphatase 1, regulatory (inhibitor) subunit 3D	204555_s_at	ERK/MAPK Signaling, Insulin Receptor Signaling,				1.721

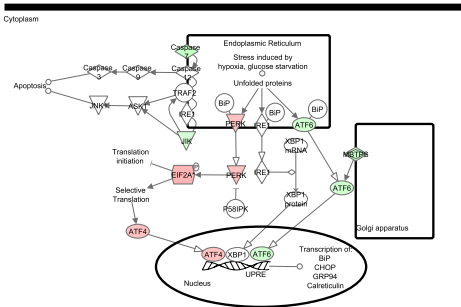
PPP2CA	5515	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform	208652_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	1.27			
PPP2R1B	5519	protein phosphatase 2 (formerly 2A), regulatory subunit A, beta isoform	202886_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-4.34	-2.837	-4.674	-4.427
PPP2R2A	5520	protein phosphatase 2 (formerly 2A), regulatory subunit B, alpha isoform	236492_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.67	-1.38		
PPP2R2B	5521	protein phosphatase 2 (formerly 2A), regulatory subunit B, beta isoform	213849_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,				-1.405
PPP2R5B	5526	protein phosphatase 2, regulatory subunit B', beta isoform	635_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	1.35			1.286
PPP2R5C	5527	protein phosphatase 2, regulatory subunit B', gamma isoform	1557718_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.78	-1.375		-1.83
PPP2R5E	5529	protein phosphatase 2, regulatory subunit B', epsilon isoform	229322_at	ERK/MAPK Signaling, PI3K/AKT Signaling,		-1.302		
PPP3CC	5533	protein phosphatase 3 (formerly 2B), catalytic subunit, gamma isoform	32541_at	Calcium Signaling,	2.2			1.877
PRKACB	5567	protein kinase, cAMP-dependent, catalytic, beta	202742_s_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-2.12	-1.712	-1.617	-2.004
PRKAG1	5571	protein kinase, AMP-activated, gamma 1 non-catalytic subunit	201805_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	1.37			
PRKAG2	51422	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	215231_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-2.71	-2.252	-2.42	-2.416
PRKAR1A	5573	protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1)	242482_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-2.63	1.303	-2.534	-3.295
PRKAR2A	5576	protein kinase, cAMP-dependent, regulatory, type II, alpha	204842_x_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.54	-1.448		1.645
PRKAR2B	5577	protein kinase, cAMP-dependent, regulatory, type II, beta	203680_at	Calcium Signaling, ERK/MAPK Signaling, Insulin Receptor Signaling,	-12.19		-4.031	-8.745
PRKCA	5578	protein kinase C, alpha	215194_at	Apoptosis, ERK/MAPK Signaling,	1.36			
PRKCB	5579	protein kinase C, beta	209685_s_at	ERK/MAPK Signaling,	-1.38			-1.362
PRKCG	5582	protein kinase C, gamma	206270_at	ERK/MAPK Signaling,	1.35			
PRKCH	5583	protein kinase C, eta	206099_at	Insulin Receptor Signaling,	-1.7			
PRKCI	5584	protein kinase C, iota	209677_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	-1.23			1.588
PTEN	5728	phosphatase and tensin homolog	233314_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	-3.64	-2.099		-2.855
PTK2	5747	PTK2 protein tyrosine kinase 2	1559529_at	ERK/MAPK Signaling,	-1.92			-1.398
PTPN11	5781	protein tyrosine phosphatase, non-receptor type 11	212610_at	Acute Phase Response, Insulin Receptor Signaling,	1.29			
PTPRF	5792	protein tyrosine phosphatase, receptor type, F	200636_s_at	Insulin Receptor Signaling,	-6.27		-1.767	
RAC1	5879	ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)	1567458_s_at	ERK/MAPK Signaling, SAPK/JNK Signaling	-1.53	-1.692		
RAC2	5880	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	213603_s_at	ERK/MAPK Signaling, SAPK/JNK Signaling				-2.163
RAF1	5894	v-raf-1 murine leukemia viral oncogene homolog 1	201244_s_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling,	1.59		1.579	1.535
RAP1B	5908	RAP1B, member of RAS oncogene family	200833_s_at	Calcium Signaling, ERK/MAPK Signaling,	-1.77			-1.687
RAP2A	5911	RAP2A, member of RAS oncogene family	221830_at	Calcium Signaling,	-1.29		-1.405	
RAP2B	5912	RAP2B, member of RAS oncogene family	213923_at	Calcium Signaling,	-2.46		-1.976	-1.557
RAPGEF1	2889	Rap guanine nucleotide exchange factor (GEF) 1	225738_at	ERK/MAPK Signaling, Insulin Receptor Signaling,	1.68			
RAPGEF4	11069	Rap guanine nucleotide exchange factor (GEF) 4	205651_x_at	ERK/MAPK Signaling,	-1.65			

RBP4	5950	retinol binding protein 4, plasma	219140_s_at	Acute Phase Response,	-11.22		-8.722	-13.148
RBP7	116362	retinol binding protein 7, cellular	238066_at	Acute Phase Response,	-5.84		-4.465	-4.945
RELA	5970	v-rel reticuloendotheliosis viral oncogene homolog A (avian)	201783_s_at	Acute Phase Response, Apoptosis, PI3K/AKT Signaling,	1.46			
RHEB	6009	Ras homolog enriched in brain	213409_s_at	PI3K/AKT Signaling,	1.8	1.431		
RHOQ	23433	ras homolog gene family, member Q	1559582_at	Insulin Receptor Signaling,	-2.09	-1.808	-1.726	-2.26
RIPK1	8737	receptor (TNFRSF)-interacting serine-threonine kinase 1	209941_at	Acute Phase Response, SAPK/JNK Signaling	-1.66			
ROCK1	6093	Rho-associated, coiled-coil containing protein kinase 1	213044_at	Apoptosis,	-1.73	-1.316		-1.72
RPTOR	57521	regulatory associated protein of MTOR, complex 1	225715_at	Insulin Receptor Signaling,	1.65			1.621
RRAS	6237	related RAS viral (r-ras) oncogene homolog	212647_at	Acute Phase Response, Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling				-1.584
RRAS2	22800	related RAS viral (r-ras) oncogene homolog 2	208456_s_at	Apoptosis, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling		-1.364		
SAA1	6288	serum amyloid A1	208607_s_at	Acute Phase Response,				-5.116
SERPINA1	5265	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1	202833_s_at	Acute Phase Response,				-2.886
SERPINA3	12	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3	202376_at	Acute Phase Response,	8.97			
SERPINE1	5054	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	1568765_at	Acute Phase Response,	-1.28		-1.257	
SERPING1	710	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	200986_at	Acute Phase Response,			-2.075	-1.811
SHC1	6464	SHC (Src homology 2 domain containing) transforming protein 1	214853_s_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling			-1.756	-1.546
SLC8A1	6546	solute carrier family 8 (sodium/calcium exchanger), member 1	1561614_at	Calcium Signaling,	-1.58	-1.522		
SLC8A3	6547	solute carrier family 8 (sodium/calcium exchanger), member 3	1562403_a_at	Calcium Signaling,	2.41			2.073
SOCS1	8651	suppressor of cytokine signaling 1	210001_s_at	Acute Phase Response,	-1.67		-1.84	-1.984
SOCS2	8835	suppressor of cytokine signaling 2	203372_s_at	Acute Phase Response,	-1.78		-1.813	-1.759
SOCS3	9021	suppressor of cytokine signaling 3	214105_at	Acute Phase Response, Insulin Receptor Signaling,	1.41			
SOCS4	122809	suppressor of cytokine signaling 4	1552792_at	Acute Phase Response,			-1.278	
SOCS5	9655	suppressor of cytokine signaling 5	209647_s_at	Acute Phase Response,	-1.55			
SOD2	6648	superoxide dismutase 2, mitochondrial	216841_s_at	Acute Phase Response,	3.5			
SOS1	6654	son of sevenless homolog 1 (Drosophila)	212780_at	Acute Phase Response, ERK/MAPK Signaling, Insulin Receptor Signaling, PI3K/AKT Signaling, SAPK/JNK Signaling	-1.53		-1.521	
SPTAN1	6709	spectrin, alpha, non-erythrocytic 1 (alpha-fodrin)	214925_s_at	Apoptosis,	-1.8			-1.647
STAT1	6772	signal transducer and activator of transcription 1, 91kDa	209969_s_at	ERK/MAPK Signaling,	-2.37			
STAT3	6774	signal transducer and activator of transcription 3 (acute-phase response factor)	225289_at	Acute Phase Response, ERK/MAPK Signaling,	1.58			
STXBP4	252983	syntaxin binding protein 4	237706_at	Insulin Receptor Signaling,	-1.31			-1.249
TAOK3	51347	TAO kinase 3	220761_s_at	ER Stress,	-1.22	-1.277		
TCF3	6929	transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)	213731_s_at	Acute Phase Response,	1.46			-1.327

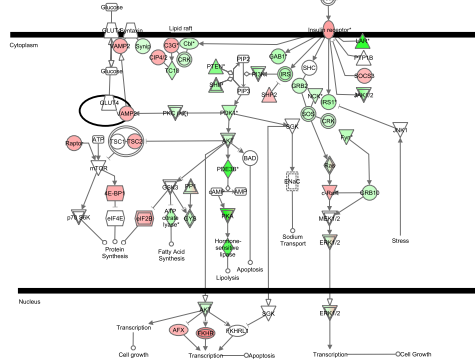
TCF4	6925	transcription factor 4	212386_at	Acute Phase Response,	-1.64		-1.528	-1.308
TF	7018	transferrin	203400_s_at	Acute Phase Response,	-11.35			-15.456
TLN2	83660	talin 2	212701_at	ERK/MAPK Signaling,	-1.53	-1.42		
TNFRSF11B	4982	tumor necrosis factor receptor superfamily, member 11b	204932_at	Acute Phase Response,	-1.73		-2.302	-2.01
TNNI2	7136	troponin I type 2 (skeletal, fast)	206393_at	Calcium Signaling,	1.79			
TNNT1	7138	troponin T type 1 (skeletal, slow)	213201_s_at	Calcium Signaling,	1.79			
TNNT2	7139	troponin T type 2 (cardiac)	215389_s_at	Calcium Signaling,	1.66			1.524
TP53	7157	tumor protein p53	201746_at	Apoptosis, PI3K/AKT Signaling, SAPK/JNK Signaling	1.81			
TP63	8626	tumor protein p63	207382_at	Calcium Signaling,	2.24	2.954	3.626	2.869
TPM1	7168	tropomyosin 1 (alpha)	210987_x_at	Calcium Signaling,	-1.97		-2.177	-2.263
TPM3	7170	tropomyosin 3	222976_s_at	Calcium Signaling,	-1.58			
TPM4	7171	tropomyosin 4	212481_s_at	Calcium Signaling,			-2.329	
TRA@	6955	T cell receptor alpha locus	217143_s_at	SAPK/JNK Signaling	-2.82			-2.408
TRADD	8717	TNFRSF1A-associated via death domain	205641_s_at	Acute Phase Response, SAPK/JNK Signaling	-1.61		-1.618	-1.329
TRD@	6964	T cell receptor delta locus	213830_at	SAPK/JNK Signaling	-2.2		-1.907	-2.214
TRIP10	9322	thyroid hormone receptor interactor 10	202734_at	Insulin Receptor Signaling,	1.58			
TRPC1	7220	transient receptor potential cation channel, subfamily C, member 1	205803_s_at	Calcium Signaling,	-2.2		-1.893	-2.186
TRPC6	7225	transient receptor potential cation channel, subfamily C, member 6	206528_at	Calcium Signaling,	-1.51		-1.51	-1.46
TSC2	7249	tuberous sclerosis 2	215735_s_at	Insulin Receptor Signaling, PI3K/AKT Signaling,	1.58			
VAMP2	6844	vesicle-associated membrane protein 2 (synaptobrevin 2)	214792_x_at	Insulin Receptor Signaling,	1.57			
VWF	7450	von Willebrand factor	202112_at	Acute Phase Response,				-1.591
XIAP	331	X-linked inhibitor of apoptosis	225859_at	Apoptosis,		-1.311		
YWHAB	7529	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide	208743_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.51			
YWHAG	7532	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide	222985_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	1.25			
YWHAH	7533	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide	201020_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.47	-1.542		-1.644
YWHAQ (includes EG:10971)	10971	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide	200693_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-1.84		-2.09	
YWHAZ	7534	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	200641_s_at	ERK/MAPK Signaling, PI3K/AKT Signaling,	-3.05		-2.182	
ZAK	51776	sterile alpha motif and leucine zipper containing kinase AZK	223519_at	SAPK/JNK Signaling	1.75			

A

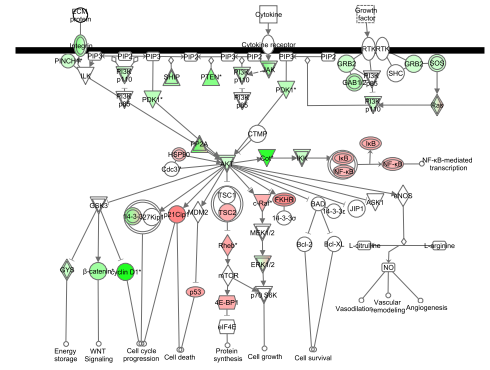
Endoplasmic Reticulum Stress Pathway

**B**

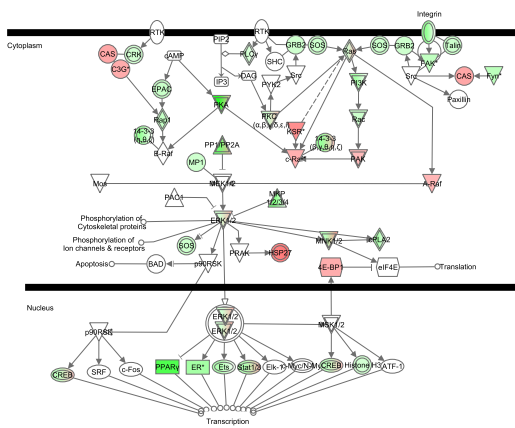
Insulin Receptor Signaling

**C**

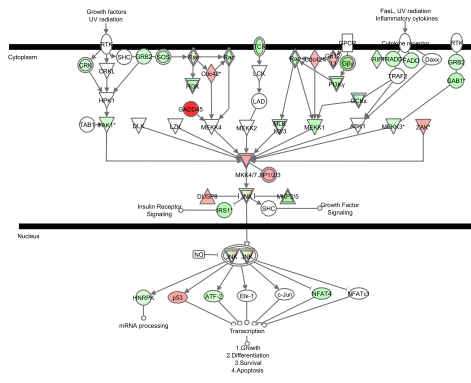
PI3K/AKT Signaling

**D**

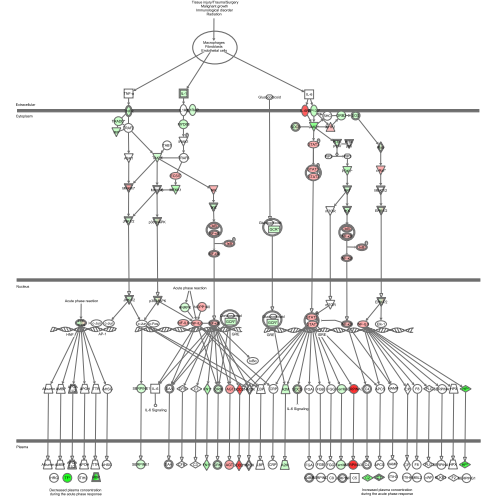
ERK/MAPK Signaling

**E**

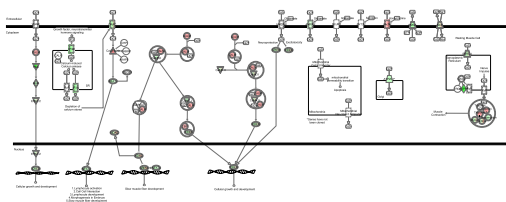
SAPK/JNK Signaling

**F**

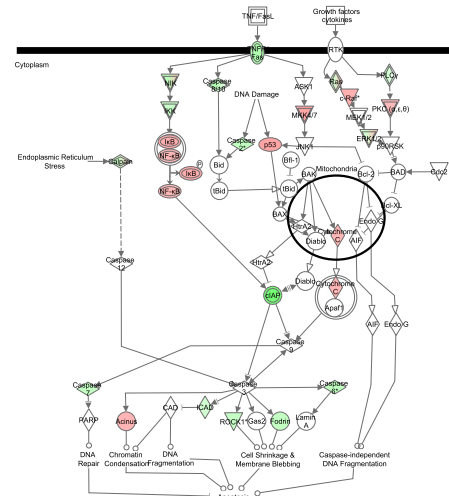
Acute Phase Response Signaling

**G**

Calcium Signaling

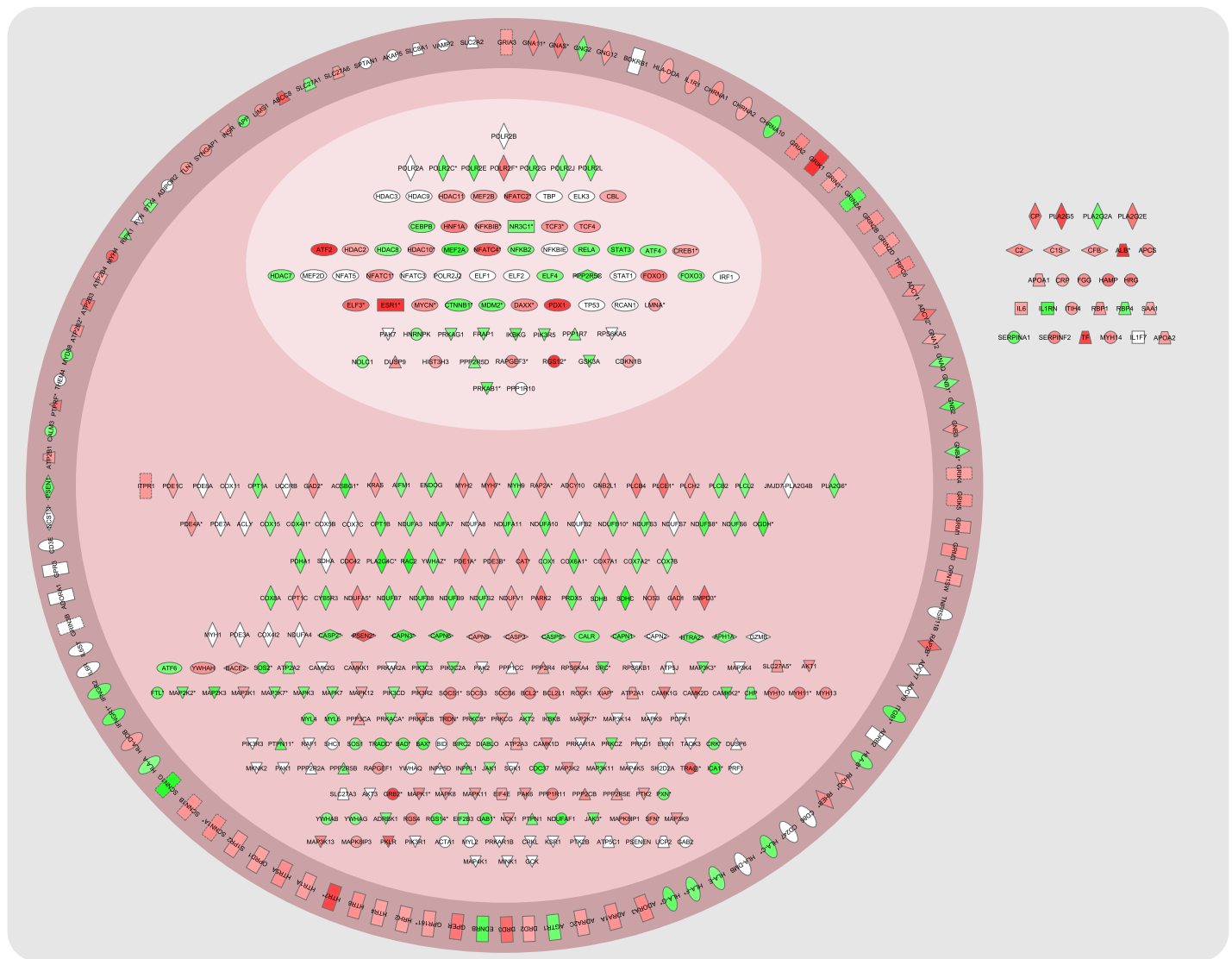
**H**

Apoptosis Signaling

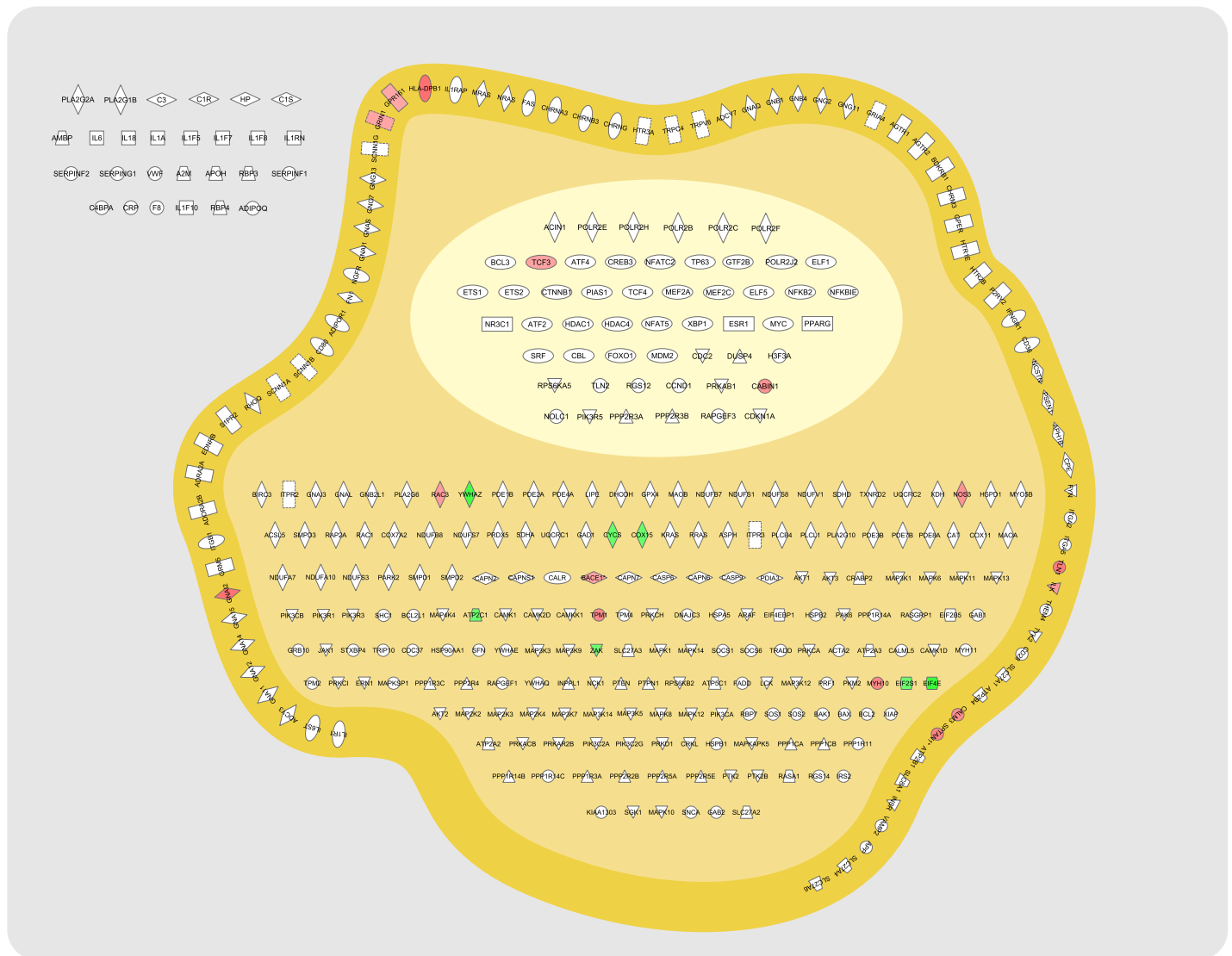


Supplemental Figure 1. Canonical signaling pathways associated with insulin resistance and ER/SR stress were identified: (A) ER/SR stress, (B) insulin receptor, (C) phosphoinositide-3-kinase (PI3K), (D) Extracellular regulated MAP kinase 1/2 / mitogen-activated protein kinase 1 (ERK/MAPK), (E) c-Jun N-terminal kinase (SAPK/JNK), (F) acute phase response, (G) calcium, and (H) apoptosis.

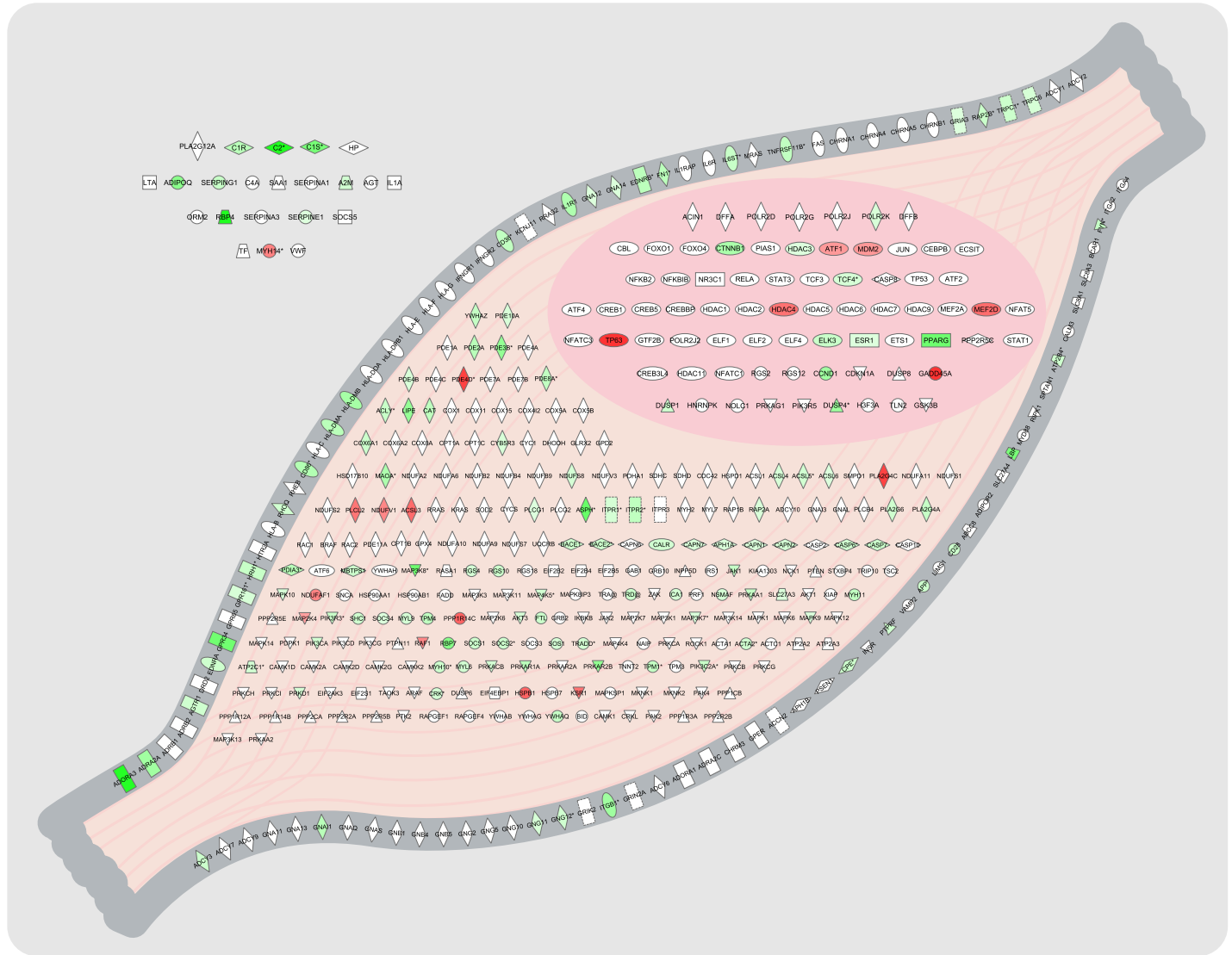
□ Cytokine, ◇ Enzyme, □ G-protein coupled receptor, □ Ion channel, ▽ Kinase, □ Ligand-dependent nuclear receptor, ◇ Peptidase, △ Phosphatase, ○ Transcription regulator, ◇ Translation regulator, ○ Transmembrane receptor, ▽ Transporter, ○ Other.



Supplemental Figure 2. Burn injury induces alterations in the expression of insulin-resistance and ER stress associated-genes in peripheral blood leukocytes. Pathway analyses of representative genes involved in insulin resistance, the UPR, and ER stress at 0-10 days post burn, 11-49 days post burn, 50-250 days post burn, and 251+ days post burn. Genes for which the expression was statistically significantly increased following a burn injury are shown in red and those that had decreased expression are shown in green.

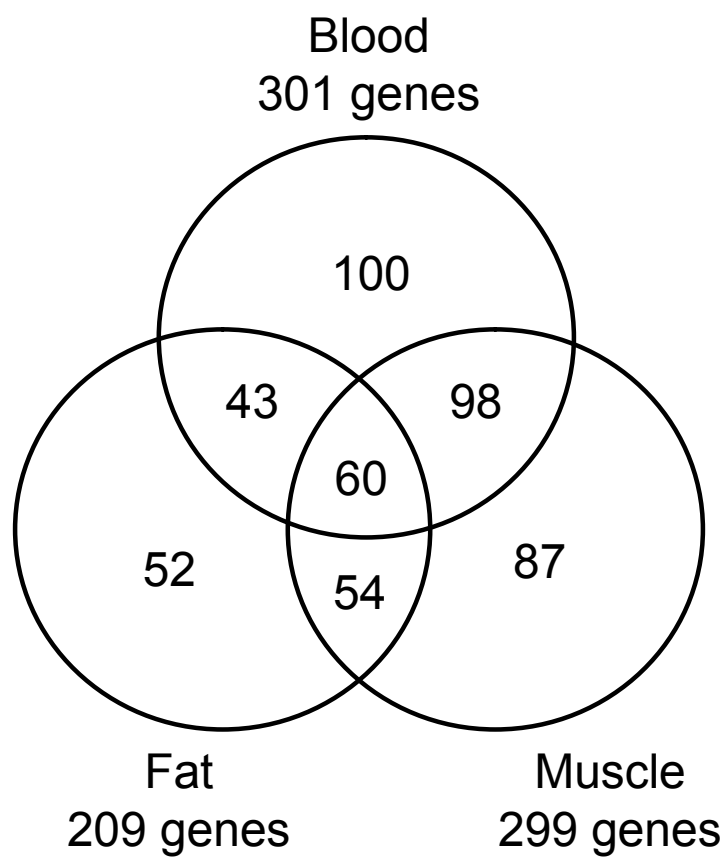


Supplemental Figure 3. Burn injury induces alterations in the expression of insulin-resistance and SR stress associated-genes in fat. Pathway analyses of representative genes involved in insulin resistance, the UPR, and SR stress at 0-10 days post burn, 11-49 days post burn, 50-250 days post burn, and 251+ days post burn. Genes for which the expression was statistically significantly increased following a burn injury are shown in red and those that had decreased expression are shown in green.



Supplemental Figure 4. Burn injury induces alterations in the expression of insulin-resistance and ER stress associated-genes in muscle. Pathway analyses of representative genes involved in insulin resistance, the UPR, and ER stress at 0-10 days post burn, 11-49 days post burn, 50-250 days post burn, and 251+ days post burn. Genes for which the expression was statistically significantly increased following a burn injury are shown in red and those that had decreased expression are shown in green.

□ Cytokine, ◇ Enzyme, ▭ G-protein coupled receptor, ▮ Ion channel, ▽ Kinase,
 ▨ Ligand-dependent nuclear receptor, ◇ Peptidase, △ Phosphatase, ○ Transcription regulator,
 ⬡ Translation regulator, ○ Transmembrane receptor, ▤ Transporter, ○ Other.



Supplemental Figure 5. Venn diagram of genes involved in insulin resistance and ER stress whose expression is significantly different between burned patients and healthy subjects.