

**Supplemental Data**

**Supplemental Table S1. LPL induced differential expression listed by fold change.**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
C1q and tumor necrosis factor related protein 3	C1QTNF3	NM_030945	5.2
phosphoglycerate kinase 2	PGK2	AL121974	3.2
BCL2-related protein A1	BCL2A1	NM_004049	3.1
heterogeneous nuclear ribonucleoprotein A1	HNRPA1	AL022097	3.0
caspase 10, apoptosis-related cysteine peptidase	CASP10	NM_001230	2.8
excision repair cross-complementing rodent repair deficiency, complementation group 6	ERCC6	NM_000124	2.5
calmodulin 1 (phosphorylase kinase, delta)	CALM1	N25325	2.5
oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	AF035776	2.5
ribosomal protein S3A	RPS3A	AL356115	2.4
Rho GTPase activating protein 24	ARHGAP24	NM_031305	2.4
histamine N-methyltransferase	HNMT	N40285	2.3
kelch-like 24 ( <i>Drosophila</i> )	KLHL24	AW006750	2.3
transforming growth factor, beta 2	TGFB2	NM_003238	2.3
zinc finger protein, X-linked	ZFX	NM_003410	2.2
fascin homolog 1, actin-bundling protein ( <i>Strongylocentrotus purpuratus</i> )	FSCN1	BC004908	2.2
olfactory receptor, family 2, subfamily A, member 20 pseudogene	OR2A20P	AA731709	2.2
collagen, type VII, alpha 1	COL7A1	NM_000094	2.2
Hydroxysteroid dehydrogenase like 2	HSDL2	AK023959	2.2
SH2 domain containing 3A	SH2D3A	N71739	2.2
CDNA: FLJ23194 fis, clone REC00490	---	AK026847	2.2
FAST kinase domains 2	FASTKD2	NM_014929	2.2
IQ motif containing C	IQCC	NM_018134	2.1
transient receptor potential cation channel, subfamily C, member 1	TRPC1	NM_003304	2.1
SH3 domain binding glutamic acid-rich protein	SH3BGR	NM_007341	2.1
serine/threonine kinase 3 (STE20 homolog, yeast)	STK3	Z25422	2.1
thrombospondin, type I, domain containing 1	THSD1	NM_018676	2.1
nuclear receptor subfamily 2, group F, member 2	NR2F2	AL037401	2.1
chromosome 18 open reading frame 25	C18orf25	W28849	2.1
methionyl-tRNA synthetase	MARS	AA621558	2.1
furin	FURIN	NM_002569	2.1
NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa	NDUFB8	AA723057	2.1
serine/threonine kinase 4	STK4	NM_006282	2.0
oxysterol binding protein-like 10	OSBPL10	NM_017784	2.0
phospholipase A2, group VII	PLA2G7	NM_005084	2.0
nuclear factor I/X (CCAAT-binding transcription factor)	NFIX	U18759	2.0
HLA-B associated transcript 1	BAT1	AL525504	2.0
SNW domain containing 1	SNW1	AL390153	2.0
OTU domain containing 4	OTUD4	NM_014928	2.0
chromosome 21 open reading frame 55	C21orf55	NM_017833	2.0
phosphatidylinositol 4-kinase type II	PI4KII	H84390	2.0

**Supplemental Table S1. LPL induced differential expression listed by fold change. (continued)**

<b>Gene Title</b>	<b>Gene Symbol</b>	<b>Representative Public ID</b>	<b>Fold Change</b>
loss of heterozygosity, 11, chromosomal region 2, gene A	LOH11CR2A	BC001234	2.0
complement component 3a receptor 1	C3AR1	U62027	2.0
metastasis suppressor 1	MTSS1	NM_014751	2.0
coatomer protein complex, subunit alpha	COPA	AI621079	-2.0
3'UTR of hypothetical protein (ORF1)	---	AL523076	-2.0
vacuolar protein sorting 13 homolog D ( <i>S. cerevisiae</i> )	VPS13D	NM_018156	-2.0
egl nine homolog 3 ( <i>C. elegans</i> )	EGLN3	NM_022073	-2.0
olfactory receptor, family 1, subfamily D, member 2	OR1D2	NM_002548	-2.0
paxillin	PXN	NM_002859	-2.0
low density lipoprotein receptor-related protein 3	LRP3	NM_002333	-2.0
guanine nucleotide binding protein (G protein), gamma 11	GNG11	NM_004126	-2.0
thrombospondin 1	THBS1	NM_003246	-2.0
similar to cell recognition molecule CASPR3	RP11-138L21.1	NM_024879	-2.1
tubulin, alpha 3c	TUBA3C	L11645	-2.1
differentially expressed in FDCP 6 homolog (mouse)	DEF6	NM_022047	-2.1
Clone 23605 mRNA sequence	---	AF007136	-2.1
solute carrier family 35, member C2	SLC35C2	NM_015945	-2.1
L-2-hydroxyglutarate dehydrogenase	L2HGDH	NM_024884	-2.2
GREB1 protein	GREB1	NM_014668	-2.2
RUN and FYVE domain containing 2	RUFY2	NM_017987	-2.2
BTB and CNC homology 1, basic leucine zipper transcription factor 2	BACH2	NM_021813	-2.2
heparan sulfate proteoglycan 2	HSPG2	AI991033	-2.2
interleukin 1 receptor accessory protein	IL1RAP	AF167343	-2.3
mucin 1, cell surface associated	MUC1	NM_002456	-2.3
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	AA443762	-2.3
zinc finger, FYVE domain containing 9	ZFYVE9	NM_004799	-2.3
nucleoporin 205kDa	NUP205	AW206115	-2.4
SP110 nuclear body protein	SP110	NM_004510	-2.4
steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1)	SRD5A1	NM_001047	-2.4
Ribosomal protein S11	RPS11	BF680255	-2.6
MON2 homolog ( <i>S. cerevisiae</i> )	MON2	BG548738	-2.7
zinc finger protein 324B	ZNF324B	AI744673	-2.7
leucine rich repeat containing 40	LRRC40	AL390149	-4.4
catenin, beta interacting protein 1	CTNNBIP1	NM_020248	-5.0

**Supplemental Table S2. TGRL induced differential expression listed by fold change.**

<b>Gene Title</b>	<b>Gene Symbol</b>	<b>Representative Public ID</b>	<b>Fold Change</b>
C1q and tumor necrosis factor related protein 3	C1QTNF3	NM_030945	4.4
melanocortin 1 receptor (alpha melanocyte stimulating hormone receptor)	MC1R	BG034972	2.8
syntrophin, alpha 1 (dystrophin-associated protein A1, 59kDa, acidic component)	SNTA1	NM_003098	2.7
oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	AF035776	2.7
SH3 domain binding glutamic acid-rich protein	SH3BGR	NM_007341	2.6
HLA-B associated transcript 1	BAT1	AL525504	2.6
NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa	NDUFB8	AA723057	2.6
methionyl-tRNA synthetase	MARS	AA621558	2.6
calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	AK024748	2.6
required for meiotic nuclear division 5 homolog B (S. cerevisiae)	RMND5B	AW131783	2.6
stimulated by retinoic acid gene 6 homolog (mouse)	STRA6	AF352728	2.4
F11 receptor	F11R	AF154005	2.4
tripartite motif-containing 66	TRIM66	AW271713	2.4
heterogeneous nuclear ribonucleoprotein A1	HNRPA1	AL022097	2.3
ras homolog gene family, member T2	RHOT2	BC004327	2.3
receptor (G protein-coupled) activity modifying protein 1	RAMP1	NM_005855	2.3
B-cell CLL/lymphoma 6 (zinc finger protein 51)	BCL6	NM_001706	2.3
BCL2-antagonist of cell death	BAD	U66879	2.3
chromosome 8 open reading frame 60	C8orf60	NM_024984	2.3
solute carrier family 7 (cationic amino acid transporter, y+ system), member 8	SLC7A8	AL365347	2.3
RAB11B, member RAS oncogene family	RAB11B	X79780	2.3
BCL2-like 11 (apoptosis facilitator)	BCL2L11	AA629050	2.3
pyrin and HIN domain family, member 1	PYHIN1	AK024890	2.3
DBF4 homolog B (S. cerevisiae)	DBF4B	NM_025104	2.3
kelch-like 24 (Drosophila)	KLHL24	AW006750	2.3
zinc finger protein 143	ZNF143	AW162015	2.3
U-box domain containing 5	UBOX5	NM_014948	2.2
hypothetical protein LOC286434	LOC286434	AW452796	2.2
blocked early in transport 1 homolog (S. cerevisiae)-like	BET1L	NM_016526	2.2
ribosomal protein S3A	RPS3A	AL356115	2.2
TAF9B RNA polymerase II, TATA box binding protein (TBP)-associated factor, 31kDa	TAF9B	AF077053	2.2
protein kinase, cAMP-dependent, catalytic, alpha	PRKACA	NM_002730	2.2
sulfotransferase family, cytosolic, 1B, member 1	SULT1B1	NM_014465	2.2
ribosomal protein S6 kinase, 90kDa, polypeptide 5	RPS6KA5	NM_004755	2.2
mitogen-activated protein kinase kinase 6	MAP2K6	U39657	2.2
epsin 2	EPN2	NM_014964	2.2
major histocompatibility complex, class II, DR beta 1	HLA-DRB1	U66825	2.2

**Supplemental Table S2. TGRL induced differential expression listed by fold change. (continued)**

<b>Gene Title</b>	<b>Gene Symbol</b>	<b>Representative Public ID</b>	<b>Fold Change</b>
TRK-fused gene	TFG	BF057492	2.1
MAP7 domain containing 3	MAP7D3	NM_024765	2.1
fatty acid binding protein 4, adipocyte	FABP4	NM_001442	2.1
caspase 10, apoptosis-related cysteine peptidase	CASP10	NM_001230	2.1
nuclear receptor co-repressor 1	NCOR1	AW771910	2.1
START domain containing 5	STARD5	T54159	2.1
tRNA aspartic acid methyltransferase 1	TRDMT1	AJ223333	2.1
SH2 domain containing 3A	SH2D3A	N71739	2.1
protein kinase, AMP-activated, beta 2 non-catalytic subunit	PRKAB2	NM_005399	2.1
PTPRF interacting protein, binding protein 1 (liprin beta 1)	PPFIBP1	NM_003622	2.1
rhomboid 5 homolog 2 (Drosophila)	RHBDLF2	NM_024599	2.1
protein phosphatase 2A activator, regulatory subunit 4	PPP2R4	X86428	2.1
melanophilin	MLPH	NM_024101	2.0
olfactory receptor, family 7, subfamily E, member 47 pseudogene	OR7E47P	AF065854	2.0
ribonuclease L (2',5'-oligoisoadenylate synthetase-dependent)	RNASEL	NM_021133	2.0
collagen, type XXI, alpha 1	COL21A1	NM_030820	2.0
ectodermal-neural cortex (with BTB-like domain)	ENC1	AF010314	2.0
protein tyrosine phosphatase type IVA, member 1	PTP4A1	BF576710	-2.0
La ribonucleoprotein domain family, member 4	LARP4	AI743740	-2.0
ribosomal protein S6 kinase, 70kDa, polypeptide 1	RPS6KB1	NM_003161	-2.0
phosphatidic acid phosphatase type 2A	PPAP2A	AF014403	-2.0
basic leucine zipper nuclear factor 1 (JEM-1)	BLZF1	NM_003666	-2.0
proliferation-associated 2G4, 38kDa	PA2G4	AL136460	-2.0
Bardet-Biedl syndrome 10	BBS10	NM_024685	-2.0
chromosome 10 open reading frame 97	C10orf97	NM_024948	-2.0
huntingtin (Huntington disease)	HD	NM_002111	-2.0
zinc finger, DHHC-type containing 3	ZDHHC3	NM_016598	-2.0
AT hook, DNA binding motif, containing 1	AHDC1	NM_015699	-2.0
B-cell CLL/lymphoma 3	BCL3	NM_005178	-2.1
KIAA1641	KIAA1641	AB046861	-2.1
similar to Putative S100 calcium-binding protein A11 pseudogene	LOC729659	NM_021039	-2.1
Centrosomal protein 152kDa	CEP152	AK025247	-2.1
zinc finger protein 257	ZNF257	AF070651	-2.1
KIAA1009	KIAA1009	AK023613	-2.1
tumor necrosis factor, alpha-induced protein 6	TNFAIP6	NM_007115	-2.1
MRNA; cDNA DKFZp564F133 (from clone DKFZp564F133)	---	AL049263	-2.1
alpha 1,4-galactosyltransferase (globotriaosylceramide synthase)	A4GALT	NM_017436	-2.1
KIAA0562	KIAA0562	AI936976	-2.1
ferredoxin 1	FDX1	NM_004109	-2.1
ARS2 protein	ARS2	BE646076	-2.1

**Supplemental Table S2. TGRL induced differential expression listed by fold change. (continued)**

<b>Gene Title</b>	<b>Gene Symbol</b>	<b>Representative Public ID</b>	<b>Fold Change</b>
enabled homolog (Drosophila)	ENAH	NM_018212	-2.1
RAS-like, family 11, member B	RASL11B	NM_023940	-2.1
ATPase, Class I, type 8B, member 1	ATP8B1	BG252666	-2.2
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	AI809967	-2.2
F-box protein 11	FBXO11	NM_025133	-2.2
methyltransferase like 7A	METTL7A	BC004492	-2.2
MANSC domain containing 1	MANSC1	NM_018050	-2.2
Solute carrier family 30 (zinc transporter), member 1	SLC30A1	AI972416	-2.2
Alstrom syndrome 1	ALMS1	AB002326	-2.2
zinc finger protein, X-linked	ZFX	R51161	-2.2
interleukin 1 receptor accessory protein	IL1RAP	AF167343	-2.2
melanoma antigen family F, 1	MAGEF1	NM_022149	-2.2
solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	NM_006931	-2.3
Yip1 domain family, member 4	YIPF4	BC004875	-2.3
chondroitin sulfate proteoglycan 4	CSPG4	BE857703	-2.3
tudor domain containing 3	TDRD3	AU156998	-2.3
Abelson helper integration site 1	AHI1	NM_017651	-2.3
SET binding protein 1	SETBP1	NM_015559	-2.4
interleukin 8	IL8	NM_000584	-2.4
polymerase (RNA) II (DNA directed) polypeptide C, 33kDa	POLR2C	AJ224143	-2.4
mitogen-activated protein kinase 13	MAPK13	BC000433	-2.4
zinc finger, X-linked, duplicated A	ZXDA	BF509566	-2.4
PHD finger protein 3	PHF3	NM_015153	-2.5
Ribosomal protein S11	RPS11	BF680255	-2.5
thrombospondin 1	THBS1	NM_003246	-2.5
dopey family member 1	DOPEY1	AL162056	-2.5
adaptor-related protein complex 3, sigma 2 subunit	AP3S2	BC002785	-2.6
chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	CXCL1	NM_001511	-2.6
zinc finger protein 623	ZNF623	NM_014789	-2.7
required for meiotic nuclear division 5 homolog A ( <i>S. cerevisiae</i> )	RMND5A	H65865	-2.8
zinc finger protein 193	ZNF193	NM_006299	-2.8
CDNA FLJ14090 fis, clone MAMMA1000264	---	AU147295	-2.8
YY2 transcription factor	YY2	U73479	-2.9
ribosomal protein S2	RPS2	L48784	-2.9
mediator of RNA polymerase II transcription, subunit 6 homolog ( <i>S. cerevisiae</i> )	MED6	NM_005466	-3.1
ADAM metallopeptidase with thrombospondin type 1 motif, 3	ADAMTS3	AB002364	-3.1
tumor protein D52	TPD52	NM_005079	-4.0

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.**

<b>Gene Title</b>	<b>Gene Symbol</b>	<b>Representative Public ID</b>	<b>Fold Change</b>
heat shock 70kDa protein 6 (HSP70B')	HSPA6	NM_002155	38.1
growth differentiation factor 15	GDF15	BC000529	21.8
serum/glucocorticoid regulated kinase	SGK	NM_005627	13.7
activating transcription factor 3	ATF3	NM_001674	13.1
pleckstrin homology-like domain, family A, member 1	PHLDA1	NM_007350	10.6
DNA-damage-inducible transcript 4	DDIT4	NM_019058	8.5
heat shock 70kDa protein 1A	HSPA1A	NM_005345	7.8
DNA-damage-inducible transcript 3	DDIT3	BC003637	7.8
v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian)	MAFF	AL021977	7.6
v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian)	MAFB	NM_005461	7.2
kelch-like 24 (Drosophila)	KLHL24	AW006750	6.5
chemokine (C-C motif) ligand 20	CCL20	NM_004591	6.5
methionyl-tRNA synthetase	MARS	AA621558	6.3
jun oncogene	JUN	BC002646	6.1
adipose differentiation-related protein	ADFP	BC005127	5.9
chemokine (C-C motif) ligand 3	CCL3	NM_002983	5.8
BCL2-related protein A1	BCL2A1	NM_004049	5.5
inhibin, beta E	INHBE	BC005161	5.5
basic helix-loop-helix domain containing, class B, 3	BHLHB3	AB044088	5.3
fatty acid binding protein 4, adipocyte	FABP4	NM_001442	5.2
serine dehydratase	SDS	NM_006843	5.1
B-cell CLL/lymphoma 6 (zinc finger protein 51)	BCL6	NM_001706	5.1
regulator of G-protein signalling 2, 24kDa	RGS2	NM_002923	5.1
heat shock 70kDa protein 1B	HSPA1B	NM_005346	5.0
Rho family GTPase 3	RND3	BG054844	5.0
heme oxygenase (decycling) 1	HMOX1	NM_002133	4.4
2'-5'-oligoadenylate synthetase-like	OASL	AF063612	4.4
oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	AF035776	4.4
vascular endothelial growth factor A	VEGFA	AF022375	4.3
nuclear protein 1	NUPR1	AF135266	4.2
tribbles homolog 3 (Drosophila)	TRIB3	NM_021158	4.0
hairy and enhancer of split 1, (Drosophila)	HES1	BE973687	4.0
polyhomeotic homolog 3 (Drosophila)	PHC3	AK023029	3.8
basic helix-loop-helix domain containing, class B, 2	BHLHB2	NM_003670	3.8
heparin-binding EGF-like growth factor	HBEGF	NM_001945	3.6
apolipoprotein L domain containing 1	APOLD1	NM_030817	3.6
BCL2-like 11 (apoptosis facilitator)	BCL2L11	AA629050	3.6
protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A	U83981	3.5
plasminogen activator, urokinase	PLAU	NM_002658	3.5
spermidine/spermine N1-acetyltransferase 1	SAT1	NM_002970	3.5
BCL2-associated athanogene 3	BAG3	NM_004281	3.5
H2.0-like homeobox 1 (Drosophila)	HLX1	M60721	3.5
hypothetical protein FLJ23861	FLJ23861	AL133053	3.4

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
golgi autoantigen, golgin subfamily a, 4	GOLGA4	AW438464	3.4
growth arrest and DNA-damage-inducible, beta	GADD45B	NM_015675	3.4
sorting nexin family member 27	SNX27	NM_030918	3.4
Kruppel-like factor 4 (gut)	KLF4	AF105036	3.4
START domain containing 13	STARD13	AA128023	3.3
HLA-B associated transcript 1	BAT1	AL525504	3.3
DnaJ (Hsp40) homolog, subfamily B, member 1	DNAJB1	NM_006145	3.3
Ubiquitin protein ligase E3 component n-recognin 2	UBR2	AK001118	3.3
human immunodeficiency virus type I enhancer binding protein 2	HIVEP2	AL023584	3.3
mitogen-activated protein kinase kinase 6	MAP2K6	U39657	3.3
dual specificity phosphatase 4	DUSP4	NM_001394	3.2
regulator of G-protein signalling 16	RGS16	BF304996	3.2
ADP-ribosylation factor-like 4A	ARL4A	NM_005738	3.2
nuclear factor of activated T-cells 5, tonicity-responsive	NFAT5	NM_006599	3.2
aminolevulinate, delta-, synthase 1	ALAS1	NM_000688	3.1
asparagine synthetase	ASNS	AK000993	3.1
phorbol-12-myristate-13-acetate-induced protein 1	PMAIP1	NM_021127	3.1
chemokine (C-X-C motif) receptor 4	CXCR4	AF348491	3.1
tec protein tyrosine kinase	TEC	NM_003215	3.1
CDC-like kinase 1	CLK1	AI251890	3.1
nuclear factor, interleukin 3 regulated	NFIL3	NM_005384	3.0
solute carrier family 38, member 2	SLC38A2	NM_018976	3.0
CCAAT/enhancer binding protein (C/EBP), beta	CEPB	AL564683	3.0
solute carrier family 7, (cationic amino acid transporter, y+ system) member 11	SLC7A11	AB040875	3.0
GRB2-associated binding protein 2	GAB2	NM_012296	3.0
son of sevenless homolog 1 (Drosophila)	SOS1	L13857	2.9
human immunodeficiency virus type I enhancer binding protein 1	HIVEP1	NM_002114	2.9
NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa	NDUFB8	AA723057	2.9
dual specificity phosphatase 10	DUSP10	N36770	2.9
early growth response 3	EGR3	NM_004430	2.8
zinc finger CCCH-type containing 11A	ZC3H11A	AI803216	2.8
complement component 3a receptor 1	C3AR1	U62027	2.8
hypothetical LOC643314	KIAA0754	AW663712	2.8
melanophilin	MLPH	NM_024101	2.8
sprouty homolog 1, antagonist of FGF signaling (Drosophila)	SPRY1	BF508662	2.7
Unidentified mRNA, partial sequence	---	U43604	2.7
F11 receptor	F11R	AF154005	2.7
caspase 4, apoptosis-related cysteine peptidase	CASP4	AL050391	2.7
zinc finger, CW type with PWPP domain 1	ZCWPW1	NM_017984	2.7

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
ral guanine nucleotide dissociation stimulator	RALGDS	AI421559	2.7
neural precursor cell expressed, developmentally down-regulated 9	NEDD9	U64317	2.7
Transcribed locus	---	AV761453	2.7
chromosome 8 open reading frame 60	C8orf60	NM_024984	2.6
zinc finger protein 36, C3H type-like 1	ZFP36L1	BG250310	2.6
nuclear receptor coactivator 2	NCOA2	NM_006540	2.6
phosphoglycerate kinase 2	PGK2	AL121974	2.6
ribosomal protein S6 kinase, 90kDa, polypeptide 5	RPS6KA5	NM_004755	2.6
uridine phosphorylase 1	UPP1	NM_003364	2.6
hemochromatosis	HFE	NM_000410	2.6
CDC42 effector protein (Rho GTPase binding) 3	CDC42EP3	AI754416	2.6
Ribonuclease H2, subunit B	RNASEH2B	AL049218	2.6
CDNA FLJ11921 fis, clone HEMBB1000318	---	AK021983	2.6
son of sevenless homolog 2 (Drosophila)	SOS2	AI276593	2.6
cystathionase (cystathione gamma-lyase)	CTH	AL354872	2.6
arginine-serine-rich coiled-coil 2	RSRC2	NM_023012	2.5
calmodulin binding transcription activator 2	CAMTA2	AB020716	2.5
CDNA: FLJ21411 fis, clone COL03986	---	AK025064	2.5
low density lipoprotein receptor (familial hypercholesterolemia)	LDLR	NM_000527	2.5
interleukin 8	IL8	AF043337	2.5
family with sequence similarity 110, member B	FAM110B	BE672313	2.5
myelin protein zero (Charcot-Marie-Tooth neuropathy 1B)	MPZ	D10537	2.5
CDNA clone IMAGE:6186815	---	AW969803	2.5
steroid sulfatase (microsomal), arylsulfatase C, isozyme S	STS	NM_000351	2.5
transforming growth factor, beta 2	TGFB2	NM_003238	2.5
ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	BG232034	2.5
monoglyceride lipase	MGLL	BC006230	2.5
chloride channel 6	CLCN6	NM_001286	2.4
CDNA: FLJ21618 fis, clone COL07487	---	AK025271	2.4
pantothenate kinase 3	PANK3	NM_024594	2.4
solute carrier family 25 (mitochondrial carrier; Graves disease autoantigen), member 16	SLC25A16	BC001407	2.4
blocked early in transport 1 homolog (S. cerevisiae)-like	BET1L	NM_016526	2.4
zinc finger and BTB domain containing 43	ZBTB43	NM_014007	2.4
phosphatase and actin regulator 1	PHACTR1	AW054711	2.4
KIAA1641	KIAA1641	NM_025190	2.4
secretogranin II (chromogranin C)	SCG2	NM_003469	2.4
Zinc finger, AN1-type domain 6	ZFAND6	AL109684	2.4
CDC-like kinase 3	CLK3	NM_003992	2.4

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
MRNA; cDNA DKFZp564P016 (from clone DKFZp564P016)	---	AL049337	2.4
glucuronidase, beta pseudogene 1	GUSBP1	AU158490	2.4
required for meiotic nuclear division 5 homolog B (S. cerevisiae)	RMND5B	AW131783	2.4
cyclin M2	CNNM2	NM_017649	2.4
collagen, type IV, alpha 2	COL4A2	X05610	2.4
zinc finger protein 335	ZNF335	AA845577	2.4
RALBP1 associated Eps domain containing 1	REPS1	AW166925	2.4
integrin, alpha 6	ITGA6	AV733308	2.4
LON peptidase N-terminal domain and ring finger 3	LONRF3	NM_024778	2.4
early growth response 1	EGR1	NM_001964	2.4
collagen, type I, alpha 1	COL1A1	Y15916	2.4
adenosine A2a receptor	ADORA2A	NM_000675	2.4
cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	U20498	2.4
integrin beta 1 binding protein 1	ITGB1BP1	NM_004763	2.3
nuclear receptor coactivator 3	NCOA3	AI438999	2.3
FAST kinase domains 2	FASTKD2	NM_014929	2.3
insulin receptor substrate 2	IRS2	AF073310	2.3
B-cell translocation gene 1, anti-proliferative	BTG1	NM_001731	2.3
Poly(rC) binding protein 2	PCBP2	AW103422	2.3
Tripartite motif-containing 33	TRIM33	AU136587	2.3
prostaglandin E receptor 4 (subtype EP4)	PTGER4	AA897516	2.3
polo-like kinase 3 (Drosophila)	PLK3	NM_004073	2.3
fem-1 homolog b (C. elegans)	FEM1B	NM_015322	2.3
Heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding protein 1, 37kDa)	HNRPD	W74620	2.3
baculoviral IAP repeat-containing 4	BIRC4	U32974	2.3
calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	AK024748	2.3
RNA binding protein with multiple splicing	RBPMS	D84109	2.3
glycogen synthase kinase 3 alpha	GSK3A	L40027	2.3
CD83 molecule	CD83	NM_004233	2.3
zinc finger protein 451	ZNF451	AU144775	2.3
CDNA FLJ31688 fis, clone NT2RI2005520	---	AI693193	2.3
chromosome 18 open reading frame 1	C18orf1	AI349506	2.3
transmembrane protein 16C	TMEM16C	AJ300461	2.3
KIAA1659 protein	KIAA1659	AB051446	2.3
zinc finger protein, X-linked	ZFX	X59740	2.3
CD9 molecule	CD9	NM_001769	2.3
Cofactor required for Sp1 transcriptional activation, subunit 7, 70kDa	CRSP7	AA463853	2.3
tight junction associated protein 1 (peripheral)	TJAP1	AK024269	2.3
zinc finger protein 143	ZNF143	AW162015	2.3

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
MRNA; cDNA DKFZp564A023 (from clone DKFZp564A023)	---	AL049233	2.3
Down syndrome critical region gene 1	DSCR1	NM_004414	2.3
CDNA FLJ12000 fis, clone HEMBB1001531	---	AU146791	2.3
zinc finger, DHHC-type containing 11	ZDHHC11	AF267859	2.2
triple functional domain (PTPRF interacting)	TRIO	AV718192	2.2
chromosome 21 open reading frame 96	C21orf96	NM_025143	2.2
pleckstrin	PLEK	AI433595	2.2
ATH1, acid trehalase-like 1 (yeast)	ATHL1	NM_025092	2.2
ras responsive element binding protein 1	RREB1	AU147182	2.2
similar to TFIID basal transcription factor complex p44 subunit (Basic transcription factor 2 44 kDa subunit) (BTF2-p44) (General transcription factor IIH polypeptide 2)	DKFZP686M0199	U21915	2.2
pleckstrin and Sec7 domain containing 3	PSD3	NM_015310	2.2
Homo sapiens, clone IMAGE:5538654, mRNA	DKFZp686O1327	U80770	2.2
PR domain containing 10	PRDM10	NM_020228	2.2
CDNA FLJ14073 fis, clone HEMBB1001812	---	AK024135	2.2
solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	AA778684	2.2
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	BF337329	2.2
RNA binding motif protein 5	RBM5	AF107493	2.2
Ras and Rab interactor 2	RIN2	AL136924	2.2
SH3 domain binding glutamic acid-rich protein	SH3BGR	NM_007341	2.2
neuroblastoma breakpoint family, member 14	NBPF14	BE732345	2.2
par-3 partitioning defective 3 homolog (C. elegans)	PARD3	AF196185	2.2
spectrin, beta, non-erythrocytic 1	SPTBN1	NM_003128	2.2
eukaryotic translation initiation factor 1	EIF1	W67644	2.2
suppressor of IKK epsilon	SIKE	NM_025073	2.2
protein phosphatase 1, regulatory (inhibitor) subunit 3C	PPP1R3C	N26005	2.2
chromosome 21 open reading frame 2	C21orf2	NM_004928	2.2
SMAD family member 7	SMAD7	NM_005904	2.2
DBF4 homolog B (S. cerevisiae)	DBF4B	NM_025104	2.2
solute carrier family 7 (cationic amino acid transporter, y+ system), member 1	SLC7A1	AW452623	2.2
ring finger protein 2	RNF2	NM_007212	2.2
WD repeat and SOCS box-containing 1	WSB1	N24643	2.2
RAB20, member RAS oncogene family	RAB20	NM_017817	2.2
Homo sapiens, clone IMAGE:4214654, mRNA	---	BG251521	2.2
insulin induced gene 1	INSIG1	BG292233	2.2
splicing factor 3b, subunit 1, 155kDa	SF3B1	AW003030	2.2
inhibitor of growth family, member 3	ING3	NM_019071	2.2
alpha thalassemia/mental retardation syndrome X-linked (RAD54 homolog, S. cerevisiae)	ATRX	BC002521	2.2

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.**  
**(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
RAB3 GTPase activating protein subunit 2 (non-catalytic)	RAB3GAP2	AK021928	2.2
hCG1789710	hCG_1789710	NM_006223	2.2
Transcribed locus	---	AL049278	2.2
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	AW131754	2.1
Folliculin	FLCN	AF090883	2.1
fucosyltransferase 2 (secretor status included)	FUT2	BC001899	2.1
v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)	MAF	BF508646	2.1
sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	SEMA3C	NM_006379	2.1
CDNA FLJ13754 fis, clone PLACE3000362	---	AK023816	2.1
CD80 molecule	CD80	NM_005191	2.1
tripartite motif-containing 23	TRIM23	AF230399	2.1
ankyrin repeat domain 28	ANKRD28	AI081194	2.1
sal-like 2 (Drosophila)	SALL2	BG285616	2.1
SMAD family member 3	SMAD3	NM_005902	2.1
cyclin-dependent kinase inhibitor 1A (p21, Cip1)	CDKN1A	NM_000389	2.1
growth hormone receptor	GHR	NM_000163	2.1
low density lipoprotein-related protein 12	LRP12	NM_024937	2.1
chromosome 6 open reading frame 106	C6orf106	AL523965	2.1
major histocompatibility complex, class I, F	HLA-F	BE138825	2.1
IBR domain containing 3	IBRDC3	W27419	2.1
cell division cycle 2-like 6 (CDK8-like)	CDC2L6	AI738802	2.1
ecotropic viral integration site 5	EVI5	NM_005665	2.1
tubulin tyrosine ligase-like family, member 5	TTLL5	AK021879	2.1
ring finger protein 41	RNF41	NM_005785	2.1
PR domain containing 2, with ZNF domain	PRDM2	NM_012231	2.1
serine/threonine kinase 4	STK4	NM_006282	2.1
potassium large conductance calcium-activated channel, subfamily M beta member 3	KCNMB3	NM_014407	2.1
chemokine (C-C motif) ligand 2	CCL2	S69738	2.1
cathepsin D	CTSD	NM_001909	2.1
peroxisomal biogenesis factor 5-like	PEX5L	W38416	2.1
solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2	SLC3A2	NM_002394	2.1
bone morphogenetic protein 2	BMP2	AA583044	2.1
Ankyrin repeat domain 12	ANKRD12	X80821	2.1
cAMP responsive element binding protein-like 1	CREBL1	U52696	2.1
BAT2 domain containing 1	BAT2D1	AI359472	2.1
cysteine rich transmembrane BMP regulator 1 (chordin-like)	CRIM1	BG546884	2.1
Epstein-Barr virus induced gene 2 (lymphocyte-specific G protein-coupled receptor)	EBI2	NM_004951	2.1
Kruppel-like factor 11	KLF11	AA149594	2.1

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
TROVE domain family, member 2	TROVE2	AK024044	2.1
chromosome 20 open reading frame 67	C20orf67	AI743331	2.1
peroxisome proliferator-activated receptor gamma	PPARG	NM_015869	2.1
zinc finger, MYM-type 5	ZMYM5	NM_016384	2.0
transcription factor 7-like 2 (T-cell specific, HMG-box)	TCF7L2	AV721430	2.0
granulysin	GNLY	M85276	2.0
plasminogen activator, urokinase receptor	PLAUR	U08839	2.0
lysosomal trafficking regulator	LYST	U84744	2.0
centaurin, gamma-like family, member 1	CTGLF1	BE672818	2.0
SMAD family member 5	SMAD5	AF010601	2.0
cell death-inducing DFFA-like effector c	CIDEc	NM_022094	2.0
cyclin T1	CCNT1	NM_001240	2.0
S100 calcium binding protein P	S100P	NM_005980	2.0
squalene epoxidase	SQLE	AA639705	2.0
coiled-coil domain containing 6	CCDC6	NM_005436	2.0
short stature homeobox 2	SHOX2	AI816713	2.0
serpin peptidase inhibitor, clade G (C1 inhibitor), member 1, (angioedema, hereditary)	SERPING1	NM_000062	2.0
structural maintenance of chromosomes 4	SMC4	AK002200	2.0
diaphanous homolog 1 (Drosophila)	DIAPH1	AU158818	2.0
polymerase (DNA directed), theta	POLQ	NM_014125	2.0
calcium channel, voltage-dependent, P/Q type, alpha 1A subunit	CACNA1A	AA769818	2.0
tumor necrosis factor receptor superfamily, member 12A	TNFRSF12A	NM_016639	2.0
ELOVL family member 5, elongation of long chain fatty acids (FEN1/Elo2, SUR4/Elo3-like, yeast)	ELOVL5	BE467941	2.0
similar to aconitase 2, mitochondrial	LOC646677	AL021877	2.0
BCL2-antagonist of cell death	BAD	U66879	2.0
zinc finger protein 36, C3H type, homolog (mouse)	ZFP36	NM_003407	2.0
inhibitor of growth family, member 1	ING1	AW193656	2.0
interferon regulatory factor 7	IRF7	NM_004030	2.0
hexokinase 2	HK2	AW975638	2.0
histone cluster 1, H1c	HIST1H1C	BC002649	2.0
fibronectin leucine rich transmembrane protein 1	FLRT1	AF169675	2.0
nuclear receptor co-repressor 1	NCOR1	AW771910	2.0
CDNA FLJ42044 fis, clone SPLEN2041304	---	AI523613	2.0
HMG-box transcription factor 1	HBP1	AF019214	2.0
transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47)	TCF3	M31222	2.0
transmembrane protein 80	TMEM80	AI742455	-2.0
ribosomal protein L15	RPL15	Z97353	-2.0
kinesin family member 11	KIF11	NM_004523	-2.0
gem (nuclear organelle) associated protein 4	GEMIN4	AF258545	-2.0
general transcription factor IIH, polypeptide 2, 44kDa	GTF2H2	AF078847	-2.0

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
protein phosphatase 2 (formerly 2A), regulatory subunit B", alpha	PPP2R3A	AI760130	-2.0
chromosome 1 open reading frame 109	C1orf109	NM_017850	-2.0
SUMO1/sentrin/SMT3 specific peptidase 3	SENP3	AK000923	-2.0
kelch-like 23 (Drosophila)	KLHL23	BE326381	-2.0
CDNA FLJ11392 fis, clone HEMBA1000575	---	W88821	-2.0
transcription elongation factor B (SIII), polypeptide 1 (15kDa, elongin C)	TCEB1	N89607	-2.0
protocadherin 8	PCDH8	NM_002590	-2.0
adaptor-related protein complex 3, mu 2 subunit	AP3M2	NM_006803	-2.0
ATPase, Class I, type 8B, member 1	ATP8B1	BG252666	-2.0
Src-like-adaptor	SLA	NM_006748	-2.0
family with sequence similarity 49, member A	FAM49A	AA243659	-2.0
chemokine (C-X3-C motif) receptor 1	CX3CR1	U20350	-2.0
hematopoietically expressed homeobox	HHEX	Z21533	-2.0
Down syndrome critical region gene 1-like 2	DSCR1L2	NM_013441	-2.0
vang-like 1 (van gogh, Drosophila)	VANGL1	NM_024062	-2.0
CTAGE family, member 5	CTAGE5	NM_005930	-2.0
core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase, 1	C1GALT1	NM_020156	-2.0
N-myristoyltransferase 1	NMT1	AI570834	-2.0
U2 small nuclear RNA auxiliary factor 2	U2AF2	NM_007279	-2.0
F-box protein 5	FBXO5	NM_012177	-2.0
CDNA FLJ34482 fis, clone HLUNG2004067	---	AI472320	-2.0
zinc finger protein 225	ZNF225	NM_013362	-2.0
eukaryotic translation initiation factor 5B	EIF5B	AB018284	-2.0
hexamethylene bis-acetamide inducible 1	HEXIM1	NM_006460	-2.0
adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1	APPL1	NM_012096	-2.1
HBS1-like (S. cerevisiae)	HBS1L	AK024258	-2.1
hypothetical protein FLJ11151	FLJ11151	NM_018340	-2.1
phosphatidylinositol glycan anchor biosynthesis, class H	PIGH	BC004100	-2.1
transmembrane emp24 protein transport domain containing 7	TMED7	BG286537	-2.1
similar to Thioredoxin-like protein 2 (PKC-interacting cousin of thioredoxin) (PKC-theta-interacting protein) (PKC $\zeta$ -interacting protein)	LOC643450	AL138831	-2.1
WW domain containing E3 ubiquitin protein ligase 1	WWP1	AU155187	-2.1
tuftelin interacting protein 11	TFIP11	NM_012143	-2.1
SEC24 related gene family, member D (S. cerevisiae)	SEC24D	NM_014822	-2.1
coagulation factor II (thrombin) receptor	F2R	NM_001992	-2.1
cold inducible RNA binding protein	CIRBP	NM_001280	-2.1
KIAA1279	KIAA1279	AB033105	-2.1
diacylglycerol kinase, zeta 104kDa	DGKZ	NM_003646	-2.1
Transcribed locus	---	AL049985	-2.1
tumor protein D52	TPD52	NM_005079	-2.1

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
splicing factor, arginine/serine-rich 10 (transformer 2 homolog, Drosophila)	SFRS10	NM_004593	-2.1
formin binding protein 1-like	FNBP1L	AW270932	-2.1
tetraspanin 32	TSPAN32	NM_005705	-2.1
aldehyde dehydrogenase 3 family, member A2	ALDH3A2	NM_000382	-2.1
BAI1-associated protein 2	BAIAP2	AB017120	-2.1
retinitis pigmentosa 2 (X-linked recessive)	RP2	NM_006915	-2.1
dystrobrevin, alpha	DTNA	NM_001392	-2.1
Wilms tumor 1	WT1	NM_024426	-2.1
caspase 8, apoptosis-related cysteine peptidase	CASP8	BF439983	-2.1
splicing factor, arginine/serine-rich 6	SFRS6	AL031681	-2.1
regulator of G-protein signalling 5	RGS5	NM_025226	-2.1
heterogeneous nuclear ribonucleoprotein A0	HNRPA0	BE966599	-2.1
mRNA from chromosome 5q21-22, clone:843Ex	---	N51708	-2.1
ferredoxin 1	FDX1	NM_004109	-2.1
FLJ20160 protein	FLJ20160	NM_017694	-2.1
EP300 interacting inhibitor of differentiation 1	EID1	AF349444	-2.1
nuclear factor (erythroid-derived 2)-like 3	NFE2L3	NM_004289	-2.1
Transcribed locus	---	BE999967	-2.1
eukaryotic translation initiation factor 1A, X-linked	EIF1AX	BE542684	-2.1
clusterin associated protein 1	CLUAP1	NM_024793	-2.1
LYR motif containing 2	LYRM2	NM_020466	-2.1
ATPase, Class II, type 9B	ATP9B	AW411030	-2.1
FLJ20105 protein	FLJ20105	NM_017669	-2.1
CD3e molecule, epsilon associated protein	CD3EAP	NM_012099	-2.1
zinc finger protein 556	ZNF556	NM_024967	-2.1
isochorismatase domain containing 1	ISOC1	NM_016048	-2.1
mago-nashi homolog, proliferation-associated (Drosophila)	MAGOH	AF067173	-2.1
heterogeneous nuclear ribonucleoprotein M	HNRPM	AK024911	-2.1
serpin peptidase inhibitor, clade B (ovalbumin), member 9	SERPINB9	BC002538	-2.1
chromosome 12 open reading frame 5	C12orf5	NM_020375	-2.1
KIAA1009	KIAA1009	AK023613	-2.1
Sec23 homolog B (S. cerevisiae)	SEC23B	BC005032	-2.1
zinc finger protein 174	ZNF174	BC001161	-2.1
EH-domain containing 1	EHD1	AF001434	-2.1
chromatin modifying protein 6	CHMP6	NM_024591	-2.1
translin	TSN	NM_004622	-2.1
solute carrier family 16, member 1 (monocarboxylic acid transporter 1)	SLC16A1	BF511091	-2.1
tubulin, beta 2A	TUBB2A	NM_001069	-2.2
SLIT and NTRK-like family, member 5	SLITRK5	AW449813	-2.2
Nipped-B homolog (Drosophila)	NIPBL	BF221673	-2.2
coiled-coil-helix-coiled-coil-helix domain containing 7	CHCHD7	NM_024300	-2.2

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide chemokine (C-C motif) receptor 2 cyclin A2	YWHAZ CCR2 CCNA2	NM_003406 NM_000647 AI346350	-2.2 -2.2 -2.2
glycine amidinotransferase (L-arginine:glycine amidinotransferase) SLAM family member 8	GATM SLAMF8	NM_001482 NM_020125	-2.2 -2.2
solute carrier family 16, member 3 (monocarboxylic acid transporter 4)	SLC16A3	AL513917	-2.2
dopey family member 1	DOPEY1	AL162056	-2.2
ribosomal protein S10	RPS10	AL118510	-2.2
metal response element binding transcription factor 2	MTF2	NM_007358	-2.2
CD58 molecule	CD58	BC005930	-2.2
hypothetical protein LOC161527	LOC161527	AI632181	-2.2
glutaminase	GLS	AI828035	-2.2
RNA binding motif protein 12	RBM12	AL514547	-2.2
interleukin 8 receptor, beta	IL8RB	NM_001557	-2.2
cullin 3	CUL3	AU145232	-2.2
UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 6	B4GALT6	AF097159	-2.2
SEH1-like (S. cerevisiae)	SEH1L	AV701173	-2.2
cathepsin S	CTSS	NM_004079	-2.2
interferon, gamma-inducible protein 16	IFI16	NM_005531	-2.2
hyaluronan binding protein 4	HABP4	AF241831	-2.2
dual specificity phosphatase 6	DUSP6	BC003143	-2.2
chromosome 19 open reading frame 29	C19orf29	AI913329	-2.2
DnaJ (Hsp40) homolog, subfamily C, member 10	DNAJC10	BG168666	-2.2
N-myristoyltransferase 2	NMT2	AW293531	-2.2
prothymosin, alpha (gene sequence 28)	PTMA	NM_016171	-2.2
zinc finger, matrin type 3	ZMAT3	NM_022470	-2.2
tetratricopeptide repeat domain 15	TTC15	NM_016030	-2.2
fibronectin leucine rich transmembrane protein 2	FLRT2	NM_013231	-2.2
microtubule associated serine/threonine kinase 3	MAST3	AB011133	-2.3
ubiquitin specific peptidase 46	USP46	BE856374	-2.3
homeobox B7	HOXB7	NM_004502	-2.3
dihydrolipoamide branched chain transacylase E2	DBT	M27093	-2.3
nucleosomal binding protein 1	NSBP1	NM_030763	-2.3
kinesin family member 3A	KIF3A	NM_007054	-2.3
DENN/MADD domain containing 4A	DENND4A	BE268538	-2.3
zinc finger protein 512B	ZNF512B	AL118506	-2.3
polo-like kinase 4 (Drosophila)	PLK4	AL043646	-2.3
cysteine dioxygenase, type I	CDO1	NM_001801	-2.3
phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	D32051	-2.3
RNA binding motif protein 25	RBM25	AI925305	-2.3

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
G protein-coupled receptor 65	GPR65	NM_003608	-2.3
cofactor required for Sp1 transcriptional activation, subunit 9, 33kDa	CRSP9	BC005250	-2.3
hypothetical protein FLJ11184	FLJ11184	NM_018352	-2.3
nucleoporin 98kDa	NUP98	U41815	-2.3
RAB, member RAS oncogene family-like 5	RABL5	NM_022777	-2.3
DAZ interacting protein 1	DZIP1	NM_014934	-2.4
similar to Putative S100 calcium-binding protein A11 pseudogene	LOC729659	NM_021039	-2.4
polymerase (RNA) III (DNA directed) polypeptide F, 39 kDa	POLR3F	NM_006466	-2.4
acyl-CoA synthetase long-chain family member 4	ACSL4	NM_022977	-2.4
v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	KIT	NM_000222	-2.4
fasciculation and elongation protein zeta 1 (zygin I)	FEZ1	NM_022549	-2.4
DCN1, defective in cullin neddylation 1, domain containing 4 ( <i>S. cerevisiae</i> )	DCUN1D4	D87466	-2.4
tubulin, gamma complex associated protein 5	TUBGCP5	AI628925	-2.4
WD repeat domain 74	WDR74	NM_018093	-2.4
KRIT1, ankyrin repeat containing	KRIT1	AL049325	-2.4
RNA binding motif protein 8A	RBM8A	AF182415	-2.4
aspartate beta-hydroxylase	ASPH	AF289489	-2.5
toll-like receptor 1	TLR1	AL050262	-2.5
Chromosome 6 open reading frame 62	C6orf62	AW972292	-2.5
RAB33B, member RAS oncogene family	RAB33B	NM_031296	-2.5
BMP2 inducible kinase	BMP2K	AI735391	-2.5
KIAA0738 gene product	KIAA0738	BF030508	-2.5
similar to TSG118.1	LOC400506	AI652058	-2.5
beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	B3GALNT1	AB050855	-2.5
potassium channel tetramerisation domain containing 12	KCTD12	AI718937	-2.5
RPGRIP1-like	RPGRIP1L	BF515597	-2.5
cisplatin resistance-associated overexpressed protein	CROP	NM_006107	-2.5
pleckstrin homology domain containing, family C (with FERM domain) member 1	PLEKHC1	Z24725	-2.5
chloride channel CLIC-like 1	CLCC1	NM_015127	-2.5
zinc finger protein 468	ZNF468	BE541042	-2.5
methyltransferase like 2B	METTL2B	NM_018396	-2.5
deleted in lymphocytic leukemia, 2	DLEU2	AA905286	-2.5
KIAA1609	KIAA1609	AA195124	-2.6
fibroblast growth factor 2 (basic)	FGF2	NM_002006	-2.6
NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5, 13kDa	NDUFA5	NM_005000	-2.6
eukaryotic translation initiation factor 1B	EIF1B	NM_005875	-2.6
RAB4A, member RAS oncogene family	RAB4A	BC002438	-2.6
hypothetical protein FLJ10357	FLJ10357	NM_018071	-2.6

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
Yip1 domain family, member 4	YIPF4	BC004875	-2.6
solute carrier family 35, member F5	SLC35F5	NM_025181	-2.6
tripartite motif-containing 58	TRIM58	AL080170	-2.6
NHL repeat containing 2	NHLRC2	NM_017687	-2.6
adaptor-related protein complex 1, sigma 2 subunit	AP1S2	AF251295	-2.6
6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	PFKFB2	AB044805	-2.6
PR domain containing 13	PRDM13	NM_021620	-2.6
Kinesin heavy chain member 2A	KIF2A	BE872563	-2.6
transmembrane protein 70	TMEM70	BC002748	-2.6
family with sequence similarity 69, member A	FAM69A	AK027146	-2.7
fibroblast growth factor receptor 3	FGFR3	NM_000142	-2.7
chromosome 10 open reading frame 56	C10orf56	AK024784	-2.7
myotubularin related protein 6	MTMR6	U47635	-2.7
chromosome 10 open reading frame 97	C10orf97	NM_024948	-2.7
protein tyrosine phosphatase type IVA, member 1	PTP4A1	BF576710	-2.7
ubiquitin-conjugating enzyme E2D 1 (UBC4/5 homolog, yeast)	UBE2D1	AL545760	-2.7
hypothetical protein FLJ35429	RP3-377H14.5	AI669379	-2.8
zinc finger protein 551	ZNF551	BC005868	-2.8
regulatory solute carrier protein, family 1, member 1	RSC1A1	AI268381	-2.8
small nuclear RNA activating complex, polypeptide 4, 190kDa	SNAPC4	AK023513	-2.9
GNAS complex locus	GNAS	AA650558	-2.9
SRY (sex determining region Y)-box 12	SOX12	NM_006943	-2.9
nucleosome assembly protein 1-like 3	NAP1L3	NM_004538	-2.9
SMT3 suppressor of mif two 3 homolog 1 ( <i>S. cerevisiae</i> )	SUMO1	U83117	-2.9
cyclin D1	CCND1	M73554	-2.9
MRNA; cDNA DKFZp667B0924 (from clone DKFZp667B0924)	---	AI192838	-3.0
suppressor of variegation 3-9 homolog 2 ( <i>Drosophila</i> )	SUV39H2	NM_024670	-3.0
ubiquitin-conjugating enzyme E2N-like	UBE2NL	AL109622	-3.0
parvin, beta	PARVB	N73272	-3.0
nuclear import 7 homolog ( <i>S. cerevisiae</i> )	NIP7	NM_016101	-3.1
Bardet-Biedl syndrome 10	BBS10	NM_024685	-3.1
polymerase (DNA directed), eta	POLH	NM_006502	-3.1
PHD finger protein 14	PHF14	NM_014660	-3.1
zinc finger DAZ interacting protein 3	DZIP3	NM_014648	-3.1
methionine adenosyltransferase II, alpha	MAT2A	BC001686	-3.1
elaC homolog 1 ( <i>E. coli</i> )	ELAC1	AI669235	-3.2
chromosome 3 open reading frame 64	C3orf64	AK023140	-3.2
zinc finger protein 623	ZNF623	NM_014789	-3.3
solute carrier organic anion transporter family, member 4C1	SLCO4C1	BE552428	-3.3
transcription termination factor, RNA polymerase II	TFIIF2	AF080255	-3.3

**Supplemental Table S3. Lipolysis product induced differential expression listed by fold change.  
(continued)**

Gene Title	Gene Symbol	Representative Public ID	Fold Change
transcription termination factor, RNA polymerase II	TTF2	AF080255	-3.3
zinc finger protein 161 homolog (mouse)	ZFP161	NM_003409	-3.3
homeobox A1	HOXA1	S79910	-3.3
frizzled homolog 3 (Drosophila)	FZD3	NM_017412	-3.3
coiled-coil domain containing 121	CCDC121	NM_024584	-3.4
tumor necrosis factor (ligand) superfamily, member 10	TNFSF10	NM_003810	-3.5
myosin regulatory light chain MRCL3	MRCL3	NM_006471	-3.5
GTPase, IMAP family member 6	GIMAP6	NM_024711	-3.6
sterile alpha motif domain containing 9	SAMD9	NM_017654	-3.9
RWD domain containing 3	RWDD3	NM_015485	-3.9
basic leucine zipper nuclear factor 1 (JEM-1)	BLZF1	NM_003666	-4.0
zinc finger protein 574	ZNF574	NM_022752	-4.2
thioredoxin interacting protein	TXNIP	NM_006472	-5.5
RIO kinase 3 (yeast)	RIOK3	NM_003831	-5.8