Supplementary Tables

Supplementary Table 1

List of genes differentially expressed in A549 cells after DAMTC treatment along with their fold changes

Upregulated Genes

Gene Symbol	Definition	Fold Change
ABHD5	abhydrolase domain containing 5 (ABHD5), mRNA.	3.70
ABTB2	ankyrin repeat and BTB (POZ) domain containing 2 (ABTB2), mRNA.	3.53
ACRC	acidic repeat containing (ACRC), mRNA.	4.14
ADIPOR2	adiponectin receptor 2 (ADIPOR2), mRNA.	2.98
ADM	adrenomedullin (ADM), mRNA.	3.04
ADPRHL2	ADP-ribosylhydrolase like 2 (ADPRHL2), mRNA.	3.70
AFF4	AF4/FMR2 family, member 4 (AFF4), mRNA.	2.59
AHR	aryl hydrocarbon receptor (AHR), mRNA.	0.87
AK3L2	adenylate kinase 3-like 2 (AK3L2), mRNA.	3.57
ALDOC	aldolase C, fructose-bisphosphate (ALDOC), mRNA.	81.63
ANKRD37	ankyrin repeat domain 37 (ANKRD37), mRNA.	9.66
ANKZF1	ankyrin repeat and zinc finger domain containing 1 (ANKZF1), mRNA.	4.20
ARID3B	AT rich interactive domain 3B (BRIGHT- like) (ARID3B), mRNA.	4.83
ARID4A	AT rich interactive domain 4A (RBP1-like) (ARID4A), transcript variant 1, mRNA.	2.98
ARIH1	ariadne homolog, ubiquitin-conjugating enzyme E2 binding protein, 1 (Drosophila) (ARIH1), mRNA.	4.12
ASRGL1	asparaginase like 1 (ASRGL1), mRNA.	3.62
ATF2	activating transcription factor 2 (ATF2), mRNA.	3.98
ATF7IP2	activating transcription factor 7 interacting protein 2 (ATF7IP2), mRNA.	2.30
ATP6V0D1	ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d isoform 1 (ATP6V0D1), mRNA.	2.63
ATP6V1D	ATPase, H+ transporting, lysosomal 34kDa, V1 subunit D (ATP6V1D), mRNA.	2.75
ATPBD1C	ATP binding domain 1 family, member C (ATPBD1C), mRNA.	3.20
AXUD1	AXIN1 up-regulated 1 (AXUD1), mRNA.	8.46

BAG3	BCL2-associated athanogene 3 (BAG3), mRNA.	3.26
BCL10	B-cell CLL/lymphoma 10 (BCL10), mRNA.	3.41
BCL2L11	BCL2-like 11 (apoptosis facilitator) (BCL2L11), transcript variant 6, mRNA.	5.97
BIN3	bridging integrator 3 (BIN3), mRNA.	3.22
BMP2	bone morphogenetic protein 2 (BMP2), mRNA.	3.74
BMP6	bone morphogenetic protein 6 (BMP6), mRNA.	3.60
BNIP1	BCL2/adenovirus E1B 19kDa interacting protein 1 (BNIP1), transcript variant BNIP1-a, mRNA.	2.78
BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3 (BNIP3), nuclear gene encoding mitochondrial protein, mRNA.	4.79
BPNT1	3'(2'), 5'-bisphosphate nucleotidase 1 (BPNT1), mRNA.	2.92
BRF2	BRF2, subunit of RNA polymerase III transcription initiation factor, BRF1-like (BRF2), mRNA.	3.74
BRP44L	brain protein 44-like (BRP44L), mRNA.	2.47
BTBD5	BTB (POZ) domain containing 5 (BTBD5), mRNA.	6.66
C10ORF35	chromosome 10 open reading frame 35 (C10orf35), mRNA.	2.25
C10ORF56	chromosome 10 open reading frame 56 (C10orf56), mRNA.	4.69
C12ORF24	chromosome 12 open reading frame 24 (C12orf24), mRNA.	2.47
C12ORF45	chromosome 12 open reading frame 45 (C12orf45), mRNA.	2.25
C12ORF5	chromosome 12 open reading frame 5 (C12orf5), mRNA.	3.50
C13ORF7	chromosome 13 open reading frame 7 (C13orf7), mRNA.	2.70
C16ORF52	chromosome 16 open reading frame 52 (C16orf52), mRNA.	4.56
C16ORF80	chromosome 16 open reading frame 80 (C16orf80), mRNA.	5.15
C18ORF19	chromosome 18 open reading frame 19 (C18orf19), mRNA.	5.68
C18ORF21	chromosome 18 open reading frame 21 (C18orf21), mRNA.	2.41
C18ORF8	chromosome 18 open reading frame 8 (C18orf8), mRNA.	2.45
C1ORF121	chromosome 1 open reading frame 121 (C1orf121), mRNA.	2.44
C1ORF128	chromosome 1 open reading frame 128 (C1orf128), mRNA.	5.89
C1ORF55	chromosome 1 open reading frame 55 (C1orf55), mRNA.	2.48
C1ORF63	chromosome 1 open reading frame 63 (C1orf63), mRNA.	3.47
C20ORF111	chromosome 20 open reading frame 111 (C20orf111), mRNA.	4.58
C21ORF91	chromosome 21 open reading frame 91 (C21orf91), mRNA.	4.30
C2ORF7	chromosome 2 open reading frame 7 (C2orf7), mRNA.	6.85
C3ORF14	chromosome 3 open reading frame 14 (C3orf14), mRNA.	3.05
C3ORF28	chromosome 3 open reading frame 28 (C3orf28), mRNA.	7.18
C3ORF38	chromosome 3 open reading frame 38 (C3orf38), mRNA.	2.48
C3ORF52	chromosome 3 open reading frame 52 (C3orf52), mRNA.	3.35
C3ORF58	chromosome 3 open reading frame 58 (C3orf58), mRNA.	4.38
C6ORF204	chromosome 6 open reading frame 204 (C6orf204), transcript variant 1, mRNA.	5.18

C8ORF41	chromosome 8 open reading frame 41 (C8orf41), mRNA.	2.48
C8ORF70	chromosome 8 open reading frame 70 (C8orf70), mRNA.	2.93
C9ORF32	chromosome 9 open reading frame 32 (C9orf32), mRNA.	3.00
C9ORF45	chromosome 9 open reading frame 45 (C9orf45), mRNA.	5.16
C9ORF80	chromosome 9 open reading frame 80 (C9orf80), mRNA.	0.90
CABC1	chaperone, ABC1 activity of bc1 complex like (S. pombe) (CABC1), mRNA.	2.39
CARF	CDKN2A interacting protein (CDKN2AIP), mRNA.	4.68
CBR3	carbonyl reductase 3 (CBR3), mRNA.	3.32
CCDC28A	coiled-coil domain containing 28A (CCDC28A), mRNA.	2.62
CCNG2	cyclin G2 (CCNG2), mRNA.	4.65
CCNYL1	cyclin Y-like 1 (CCNYL1), mRNA.	2.71
CCRN4L	CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCRN4L), mRNA.	7.89
CD83	CD83 molecule (CD83), transcript variant 1, mRNA.	8.45
CDC34	cell division cycle 34 homolog (S. cerevisiae) (CDC34), mRNA.	3.28
CDC37L1	cell division cycle 37 homolog (S. cerevisiae)-like 1 (CDC37L1), mRNA.	2.80
CDCA2	cell division cycle associated 2 (CDCA2), mRNA.	10.59
CDK5R1	cyclin-dependent kinase 5, regulatory subunit 1 (p35) (CDK5R1), mRNA.	3.74
CDK7	cyclin-dependent kinase 7 (MO15 homolog, Xenopus laevis, cdk-activating kinase) (CDK7), mRNA.	3.06
CEP68	centrosomal protein 68kDa (CEP68), mRNA.	3.61
CGGBP1	CGG triplet repeat binding protein 1 (CGGBP1), transcript variant 1, mRNA.	1.62
CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7 (CHCHD7), transcript variant 2, mRNA.	11.80
CHIC2	cysteine-rich hydrophobic domain 2 (CHIC2), mRNA.	3.44
CHMP4C	chromatin modifying protein 4C (CHMP4C), mRNA.	2.51
CIR	CBF1 interacting corepressor (CIR), mRNA.	2.65
CITED2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 (CITED2), mRNA.	3.19
CKB	creatine kinase, brain (CKB), mRNA.	13.57
CKS2	CDC28 protein kinase regulatory subunit 2 (CKS2), mRNA.	3.02
CLDN12	claudin 12 (CLDN12), mRNA.	2.29
CLDND1	claudin domain containing 1 (CLDND1), mRNA.	2.83
CLK3	CDC-like kinase 3 (CLK3), transcript variant phclk3/152, mRNA.	3.46
CNKSR3	CNKSR family member 3 (CNKSR3), mRNA.	2.20
CNNM4	cyclin M4 (CNNM4), mRNA.	5.69
COQ10B	coenzyme Q10 homolog B (S. cerevisiae) (COQ10B), mRNA.	2.62
CPA4	carboxypeptidase A4 (CPA4), mRNA.	6.32

CPEB3	cytoplasmic polyadenylation element binding protein 3 (CPEB3), mRNA.	3.49
CRABP2	cellular retinoic acid binding protein 2 (CRABP2), mRNA.	10.64
CRISPLD2	cysteine-rich secretory protein LCCL domain containing 2 (CRISPLD2), mRNA.	2.70
CRLF3	cytokine receptor-like factor 3 (CRLF3), mRNA.	2.21
CRY2	cryptochrome 2 (photolyase-like) (CRY2), mRNA.	9.37
CRYM	crystallin, mu (CRYM), transcript variant 2, mRNA.	5.46
CSRP2	cysteine and glycine-rich protein 2 (CSRP2), mRNA.	13.71
CTH	cystathionase (cystathionine gamma-lyase) (CTH), transcript variant 1, mRNA.	3.50
CTR9	Ctr9, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae) (CTR9), mRNA.	5.13
CTSL2	cathepsin L2 (CTSL2), mRNA.	9.34
CXORF26	chromosome X open reading frame 26 (CXorf26), mRNA.	2.47
CXORF33	chromosome X open reading frame 33 (CXorf33), mRNA.	2.39
CYCS	cytochrome c, somatic (CYCS), nuclear gene encoding mitochondrial protein, mRNA.	2.95
DCP1A	decapping enzyme (DCP1A), mRNA.	2.85
DCTN5	dynactin 5 (p25) (DCTN5), mRNA.	2.98
DC-UBP	dendritic cell-derived ubiquitin-like protein (DC-UbP), mRNA.	5.30
DCXR	dicarbonyl/L-xylulose reductase (DCXR), mRNA.	4.38
DDX48	eukaryotic translation initiation factor 4A, isoform 3 (EIF4A3), mRNA.	4.06
DKFZP564K142	implantation-associated protein (DKFZp564K142), mRNA.	2.62
DNAJA1	DnaJ (Hsp40) homolog, subfamily A, member 1 (DNAJA1), mRNA.	3.09
DNAJB1	DnaJ (Hsp40) homolog, subfamily B, member 1 (DNAJB1), mRNA.	2.82
DNAJC5	DnaJ (Hsp40) homolog, subfamily C, member 5 (DNAJC5), mRNA.	2.40
DUSP14	dual specificity phosphatase 14 (DUSP14), mRNA.	3.67
DUSP8	dual specificity phosphatase 8 (DUSP8), mRNA.	2.54
EAF1	ELL associated factor 1 (EAF1), mRNA.	2.45
EED	embryonic ectoderm development (EED), transcript variant 2, mRNA.	1.69
EFHD1	EF-hand domain family, member D1 (EFHD1), mRNA.	3.62
EFNB2	ephrin-B2 (EFNB2), mRNA.	29.55
EGLN1	egl nine homolog 1 (C. elegans) (EGLN1), mRNA.	9.86
EIF1B	eukaryotic translation initiation factor 1B (EIF1B), mRNA.	2.16
EIF4EBP2	eukaryotic translation initiation factor 4E binding protein 2 (EIF4EBP2), mRNA.	3.78
ELL2	elongation factor, RNA polymerase II, 2 (ELL2), mRNA.	4.42
ELOVL4	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 4 (ELOVL4), mRNA.	3.44
ENO2	enolase 2 (gamma, neuronal) (ENO2), mRNA.	7.86

ERO1L	ERO1-like (S. cerevisiae) (ERO1L), mRNA.	3.33
ERRFI1	ERBB receptor feedback inhibitor 1 (ERRFI1), mRNA.	2.28
EZH2	enhancer of zeste homolog 2 (Drosophila) (EZH2), transcript variant 2, mRNA.	3.65
FAM100B	family with sequence similarity 100, member B (FAM100B), mRNA.	4.79
FAM103A1	family with sequence similarity 103, member A1 (FAM103A1), mRNA.	2.07
FAM126B	family with sequence similarity 126, member B (FAM126B), mRNA.	4.68
FAM130A1	family with sequence similarity 130, member A1 (FAM130A1), mRNA.	2.19
FAM46A	family with sequence similarity 46, member A (FAM46A), mRNA.	3.48
FAM53C	family with sequence similarity 53, member C (FAM53C), mRNA.	7.90
FAM59A	family with sequence similarity 59, member A (FAM59A), mRNA.	4.53
FAM80A	family with sequence similarity 80, member A (FAM80A), mRNA.	17.18
FAM80B	family with sequence similarity 80, member B (FAM80B), mRNA.	3.39
FAM91A1	family with sequence similarity 91, member A1 (FAM91A1), mRNA.	3.90
FBXL12	F-box and leucine-rich repeat protein 12 (FBXL12), mRNA.	2.75
FBXL20	F-box and leucine-rich repeat protein 20 (FBXL20), mRNA.	2.73
FBXO33	F-box protein 33 (FBXO33), mRNA.	4.65
FBXO6	F-box protein 6 (FBXO6), mRNA.	2.47
FER	fer (fps/fes related) tyrosine kinase (phosphoprotein NCP94) (FER), mRNA.	2.74
FGFR1OP2	FGFR1 oncogene partner 2 (FGFR1OP2), mRNA.	4.82
FGFR3	fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3), transcript variant 1, mRNA.	15.77
FLJ12078	PREDICTED: hypothetical protein FLJ12078 (FLJ12078), misc RNA.	2.80
FLJ20366	hypothetical protein FLJ20366 (FLJ20366), mRNA.	2.20
FLJ21106	hypothetical protein FLJ21106 (FLJ21106), mRNA.	6.23
FLJ21945	chromosome 2 open reading frame 44 (C2orf44), mRNA.	2.31
FLJ39575	hypothetical protein FLJ39575 (FLJ39575), mRNA.	12.19
FNBP1	formin binding protein 1 (FNBP1), mRNA.	2.72
FOSL1	FOS-like antigen 1 (FOSL1), mRNA.	3.21
FOXD1	forkhead box D1 (FOXD1), mRNA.	4.67
FRAT2	frequently rearranged in advanced T-cell lymphomas 2 (FRAT2), mRNA.	2.39
FZD1	frizzled homolog 1 (Drosophila) (FZD1), mRNA.	3.05
FZD7	frizzled homolog 7 (Drosophila) (FZD7), mRNA.	2.26
G10	BUD31 homolog (S. cerevisiae) (BUD31), mRNA.	2.76
GABARAPL 1	GABA(A) receptor-associated protein like 1 (GABARAPL1), mRNA.	3.12
GADD45A	growth arrest and DNA-damage-inducible, alpha (GADD45A), mRNA.	3.02

GCA	grancalcin, EF-hand calcium binding protein (GCA), mRNA.	3.18
GCAT	glycine C-acetyltransferase (2-amino-3-ketobutyrate coenzyme A ligase) (GCAT), nuclear gene encoding mitochondrial protein, mRNA.	3.54
GCH1	GTP cyclohydrolase 1 (dopa-responsive dystonia) (GCH1), transcript variant 1, mRNA.	4.26
GEM	GTP binding protein overexpressed in skeletal muscle (GEM), transcript variant 1, mRNA.	4.12
GGA2	golgi associated, gamma adaptin ear containing, ARF binding protein 2 (GGA2), mRNA.	2.22
GLCE	glucuronic acid epimerase (GLCE), mRNA.	2.28
GLTP	glycolipid transfer protein (GLTP), mRNA.	2.79
GNAI2	guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 (GNAI2), mRNA.	2.83
GNAQ	guanine nucleotide binding protein (G protein), q polypeptide (GNAQ), mRNA.	2.81
GNPDA2	glucosamine-6-phosphate deaminase 2 (GNPDA2), mRNA.	2.82
GPX3	glutathione peroxidase 3 (plasma) (GPX3), mRNA.	3.07
GRPEL1	GrpE-like 1, mitochondrial (E. coli) (GRPEL1), mRNA.	3.78
GTF2B	general transcription factor IIB (GTF2B), mRNA.	4.99
GTF3C5	general transcription factor IIIC, polypeptide 5, 63kDa (GTF3C5), mRNA.	2.53
GUK1	guanylate kinase 1 (GUK1), mRNA.	3.07
GYS1	glycogen synthase 1 (muscle) (GYS1), mRNA.	5.84
HBEGF	heparin-binding EGF-like growth factor (HBEGF), mRNA.	13.66
HCFC2	host cell factor C2 (HCFC2), mRNA.	3.12
HDAC3	histone deacetylase 3 (HDAC3), mRNA.	3.20
HECA	headcase homolog (Drosophila) (HECA), mRNA.	3.28
HELZ	helicase with zinc finger (HELZ), mRNA.	2.80
HIC2	hypermethylated in cancer 2 (HIC2), mRNA.	4.66
HK2	hexokinase 2 (HK2), mRNA.	54.35
HLA-A	major histocompatibility complex, class I, A (HLA-A), mRNA.	2.59
HLA-B	major histocompatibility complex, class I, B (HLA-B), mRNA.	3.84
HLA-E	major histocompatibility complex, class I, E (HLA-E), mRNA.	2.97
HLA-H	major histocompatibility complex, class I, H (pseudogene) (HLA-H) on chromosome 6.	2.78
HMGCR	3-hydroxy-3-methylglutaryl-Coenzyme A reductase (HMGCR), mRNA.	2.83
HN1	hematological and neurological expressed 1 (HN1), transcript variant 1, mRNA.	3.33
HNRPDL	heterogeneous nuclear ribonucleoprotein D-like (HNRPDL), transcript variant 2, mRNA.	3.13
HPS1	Hermansky-Pudlak syndrome 1 (HPS1), transcript variant 3, mRNA.	3.51
HS.283402	cDNA clone IMAGE:5272804	2.44
HS.354359	cDNA clone IMAGE:5300199	4.59

HS.371060	BX093763 Soares_fetal_heart_NbHH19W cDNA clone IMAGp998N10870, mRNA sequence	4.01
HS.374278	cDNA FLJ38388 fis, clone FEBRA2004485	4.34
HS.415576	cDNA FLJ25252 fis, clone STM03814	3.28
HS.481659	cDNA FLJ27196 fis, clone SYN02831	2.75
HS.482960	partial mRNA; ID YG39-1C	4.59
HS.493947	cDNA FLJ41455 fis, clone BRSTN2012284	4.12
HS.4988	mRNA; cDNA DKFZp686B24166 (from clone DKFZp686B24166)	2.87
HS.534279	, clone IMAGE:3905596, mRNA	3.19
HS.537779	BP398340 pancreatic islet cDNA clone htp-29-07 3, mRNA sequence	4.01
HS.551847	601452348F1 NIH_MGC_66 cDNA clone IMAGE:3856355 5, mRNA sequence	4.87
HS.564805	602976638F1 NIH_MGC_12 cDNA clone IMAGE:5115800 5, mRNA sequence	2.98
HSPA4L	heat shock 70kDa protein 4-like (HSPA4L), mRNA.	3.94
HSZFP36	PREDICTED: ZFP-36 for a zinc finger protein (HSZFP36), mRNA.	5.65
IBRDC3	IBR domain containing 3 (IBRDC3), mRNA.	4.03
IL1A	interleukin 1, alpha (IL1A), mRNA.	3.67
IMPA1	inositol(myo)-1(or 4)-monophosphatase 1 (IMPA1), mRNA.	2.28
INSIG1	insulin induced gene 1 (INSIG1), transcript variant 1, mRNA.	3.74
IRS2	insulin receptor substrate 2 (IRS2), mRNA.	2.29
IRX2	iroquois homeobox protein 2 (IRX2), mRNA.	5.80
IRX5	iroquois homeobox protein 5 (IRX5), mRNA.	6.61
ISG15	ISG15 ubiquitin-like modifier (ISG15), mRNA.	3.60
ISG20	interferon stimulated exonuclease gene 20kDa (ISG20), mRNA.	5.11
ISG20L1	interferon stimulated exonuclease gene 20kDa-like 1 (ISG20L1), mRNA.	3.26
JMJD1A	jumonji domain containing 1A (JMJD1A), mRNA.	5.89
KATNA1	katanin p60 (ATPase-containing) subunit A 1 (KATNA1), mRNA.	3.85
KCNS3	potassium voltage-gated channel, delayed-rectifier, subfamily S, member 3 (KCNS3), mRNA.	3.13
KCTD5	potassium channel tetramerisation domain containing 5 (KCTD5), mRNA.	2.53
KHDRBS3	KH domain containing, RNA binding, signal transduction associated 3 (KHDRBS3), mRNA.	34.93
KIAA0241	KIAA0241 (KIAA0241), mRNA.	2.48
KIAA0247	KIAA0247 (KIAA0247), mRNA.	4.33
KIAA0674	PREDICTED: KIAA0674 (KIAA0674), mRNA.	2.61
KIAA0907	KIAA0907 (KIAA0907), mRNA.	3.00
KIAA1219	KIAA1219 protein (KIAA1219), mRNA.	3.45
KIAA1467	KIAA1467 (KIAA1467), mRNA.	3.22

KLHL18	kelch-like 18 (Drosophila) (KLHL18), mRNA.	3.17
KLHL21	kelch-like 21 (Drosophila) (KLHL21), mRNA.	3.85
LATS2	LATS, large tumor suppressor, homolog 2 (Drosophila) (LATS2), mRNA.	2.46
LHX2	LIM homeobox 2 (LHX2), mRNA.	4.48
LIFR	leukemia inhibitory factor receptor (LIFR), mRNA.	2.63
LIN10	chromosome 16 open reading frame 70 (C16orf70), mRNA.	2.39
LINCR	likely ortholog of mouse lung-inducible Neutralized-related C3HC4 RING domain protein (LINCR), mRNA.	8.45
LINS1	lines homolog 1 (Drosophila) (LINS1), transcript variant 4, mRNA.	2.49
LIPT1	lipoyltransferase 1 (LIPT1), transcript variant 1, mRNA.	3.95
LNX2	ligand of numb-protein X 2 (LNX2), mRNA.	2.94
LOC129138	ankyrin repeat domain 54 (ANKRD54), mRNA.	3.78
LOC147804	hypothetical protein LOC147804 (LOC147804), mRNA.	2.56
LOC153222	adult retina protein (LOC153222), mRNA.	2.61
LOC283464	PREDICTED: hypothetical protein LOC283464 (LOC283464), mRNA.	3.19
LOC346887	PREDICTED: similar to solute carrier family 16 (monocarboxylic acid transporters), member 14 (LOC346887), mRNA.	13.70
LOC388272	similar to RIKEN cDNA 4921524J17 (LOC388272), mRNA.	3.24
LOC389672	PREDICTED: similar to 40S ribosomal protein SA (p40) (34/67 kDa laminin receptor) , mRNA.	2.43
LOC391692	PREDICTED: similar to tubulin, beta 8 (LOC391692), mRNA.	3.11
LOC641992	PREDICTED: similar to cell division cycle 42 (LOC641992), mRNA.	2.23
LOC643025	PREDICTED: similar to Probable phosphoglycerate mutase 4, transcript variant 1 (LOC643025), mRNA.	3.74
LOC643031	PREDICTED: similar to NADH dehydrogenase subunit 5 (LOC643031), mRNA.	2.61
LOC643554	PREDICTED: similar to Ornithine aminotransferase, (LOC643554), mRNA.	2.97
LOC645058	PREDICTED: similar to hepatitis B virus x-interacting protein (LOC645058), mRNA.	2.32
LOC645385	PREDICTED: similar to heterogeneous nuclear ribonucleoprotein A1 (LOC645385), mRNA.	2.81
LOC645436	PREDICTED: similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix-destabilizing protein), mRNA.	2.67
LOC646123	PREDICTED: hypothetical protein LOC646123 (LOC646123), mRNA.	2.81
LOC646463	PREDICTED: similar to Ubiquitin-conjugating enzyme E2 H (Ubiquitin-protein ligase H), mRNA.	2.58
LOC648210	PREDICTED: similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix-destabilizing protein) (LOC648210), mRNA.	2.78
LOC649422	PREDICTED: hypothetical protein LOC649422 (LOC649422), mRNA.	3.07
LOC649639	PREDICTED: hypothetical protein LOC649639 (LOC649639), mRNA.	3.26

LOC649708	PREDICTED: similar to Chloride intracellular channel protein 4 (Intracellular chloride ion channel protein p64H1) (LOC649708), mRNA.	4.16
LOC650304	PREDICTED: similar to MAPK-interacting and spindle-stabilizing protein (LOC650304), mRNA.	4.28
LOC650526	PREDICTED: similar to Importin alpha-2 subunit (Karyopherin alpha-2 subunit) (SRP1-alpha), mRNA.	3.73
LOC650832	PREDICTED: similar to mitogen-activated protein kinase kinase 3 isoform A (LOC650832), mRNA.	3.55
LOC651423	PREDICTED: similar to mitogen-activated protein kinase kinase 3 isoform A (LOC651423), mRNA.	3.38
LOC651816	PREDICTED: similar to Ubiquitin-conjugating enzyme E2S (Ubiquitin-conjugating enzyme E2-24 kDa), mRNA.	2.98
LOC653108	PREDICTED: similar to coxsackie virus and adenovirus receptor (LOC653108), mRNA.	12.46
LOC653171	PREDICTED: similar to MAPK-interacting and spindle-stabilizing protein (LOC653171), mRNA.	4.56
LOC91614	novel 58.3 KDA protein (LOC91614), mRNA.	7.89
LPIN1	lipin 1 (LPIN1), mRNA.	2.72
LRP5L	low density lipoprotein receptor-related protein 5-like (LRP5L), mRNA.	3.98
LRRC8C	leucine rich repeat containing 8 family, member C (LRRC8C), mRNA.	3.28
LRRC8E	leucine rich repeat containing 8 family, member E (LRRC8E), mRNA.	2.89
MAFF	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian) (MAFF), transcript variant 1, mRNA.	3.25
MAP2K1	mitogen-activated protein kinase kinase 1 (MAP2K1), mRNA.	2.66
MAPRE2	microtubule-associated protein, RP/EB family, member 2 (MAPRE2), mRNA.	3.19
MARCKSL1	MARCKS-like 1 (MARCKSL1), mRNA.	2.63
MBD1	methyl-CpG binding domain protein 1 (MBD1), transcript variant 3, mRNA.	3.07
MBIP	MAP3K12 binding inhibitory protein 1 (MBIP), mRNA.	2.46
MED19	mediator complex subunit 19 (MED19), mRNA.	3.76
MFAP3	microfibrillar-associated protein 3 (MFAP3), mRNA.	2.82
MGC26963	sphingomyelin synthase 2 (MGC26963), mRNA.	8.37
MGC3121	proline rich 14 (PRR14), mRNA.	3.70
MGC40405	hypothetical protein MGC40405 (MGC40405), mRNA.	1.87
MGC5509	chromosome 2 open reading frame 49 (C2orf49), mRNA.	3.43
MICA	MHC class I polypeptide-related sequence A (MICA), mRNA.	4.36
MICB	MHC class I polypeptide-related sequence B (MICB), mRNA.	3.95
MLF1	myeloid leukemia factor 1 (MLF1), mRNA.	4.29
MRPS30	mitochondrial ribosomal protein S30 (MRPS30), nuclear gene encoding mitochondrial protein, mRNA.	2.45

MXD1	MAX dimerization protein 1 (MXD1), mRNA.	6.15
MYLIP	myosin regulatory light chain interacting protein (MYLIP), mRNA.	11.17
NAPG	N-ethylmaleimide-sensitive factor attachment protein, gamma (NAPG), mRNA.	3.14
NARF	nuclear prelamin A recognition factor (NARF), transcript variant 3, mRNA.	4.14
NAT12	N-acetyltransferase 12 (NAT12), mRNA.	3.78
NCALD	neurocalcin delta (NCALD), transcript variant 3, mRNA.	7.84
NCBP2	nuclear cap binding protein subunit 2, 20kDa (NCBP2), mRNA.	1.43
NDEL1	nudE nuclear distribution gene E homolog (A. nidulans)-like 1 (NDEL1), transcript variant 2, mRNA.	2.45
NDRG1	N-myc downstream regulated gene 1 (NDRG1), mRNA.	6.18
NEU1	sialidase 1 (lysosomal sialidase) (NEU1), mRNA.	5.54
NFIL3	nuclear factor, interleukin 3 regulated (NFIL3), mRNA.	3.03
NFKBIE	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon (NFKBIE), mRNA.	3.31
NGDN	neuroguidin, EIF4E binding protein (NGDN), transcript variant 1, mRNA.	1.15
NP	nucleoside phosphorylase (NP), mRNA.	2.75
NRAS	neuroblastoma RAS viral (v-ras) oncogene homolog (NRAS), mRNA.	2.33
NRIP3	nuclear receptor interacting protein 3 (NRIP3), mRNA.	37.58
NXF1	nuclear RNA export factor 1 (NXF1), mRNA.	6.72
OAT	ornithine aminotransferase (gyrate atrophy) (OAT), nuclear gene encoding mitochondrial protein, mRNA.	2.87
OGFRL1	opioid growth factor receptor-like 1 (OGFRL1), mRNA.	3.32
OSAP	ovary-specific acidic protein (OSAP), mRNA.	3.89
OSBPL6	oxysterol binding protein-like 6 (OSBPL6), transcript variant 1, mRNA.	3.35
OSBPL8	oxysterol binding protein-like 8 (OSBPL8), transcript variant 1, mRNA.	1.96
OSTF1	osteoclast stimulating factor 1 (OSTF1), mRNA.	2.83
P4HA1	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide I (P4HA1), transcript variant 2, mRNA.	3.84
PAG1	phosphoprotein associated with glycosphingolipid microdomains 1 (PAG1), mRNA.	9.93
PAPD5	PAP associated domain containing 5 (PAPD5), mRNA.	2.51
PCSK5	proprotein convertase subtilisin/kexin type 5 (PCSK5), mRNA.	2.96
PCTP	phosphatidylcholine transfer protein (PCTP), mRNA.	2.90
PDK3	pyruvate dehydrogenase kinase, isozyme 3 (PDK3), mRNA.	6.74
PDRG1	p53 and DNA damage regulated 1 (PDRG1), mRNA.	3.61
PDXP	pyridoxal (pyridoxine, vitamin B6) phosphatase (PDXP), mRNA.	8.28
PEG10	paternally expressed 10 (PEG10), transcript variant 1, mRNA. XM_940378	2.25

PELI1	pellino homolog 1 (Drosophila) (PELI1), mRNA.	18.06
PEX11A	peroxisomal biogenesis factor 11A (PEX11A), mRNA.	2.86
PFKFB3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 (PFKFB3), mRNA.	2.92
PFKFB4	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4 (PFKFB4), mRNA.	3.56
PGAM4	phosphoglycerate mutase family member 4 (PGAM4), mRNA.	2.79
PGBD3	piggyBac transposable element derived 3 (PGBD3), mRNA.	2.82
PGK1	phosphoglycerate kinase 1 (PGK1), mRNA.	2.37
PHACTR2	phosphatase and actin regulator 2 (PHACTR2), mRNA.	2.21
PIAS1	protein inhibitor of activated STAT, 1 (PIAS1), mRNA.	2.51
PIAS3	protein inhibitor of activated STAT, 3 (PIAS3), mRNA.	2.40
PIGH	phosphatidylinositol glycan, class H (PIGH), mRNA.	2.95
PIM2	pim-2 oncogene (PIM2), mRNA.	5.33
PIP5K2A	phosphatidylinositol-4-phosphate 5-kinase, type II, alpha (PIP5K2A), mRNA.	2.97
PLAGL1	pleiomorphic adenoma gene-like 1 (PLAGL1), transcript variant 4, mRNA.	3.46
PLAUR	plasminogen activator, urokinase receptor (PLAUR), transcript variant 1, mRNA.	5.22
PLEKHA9	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 9 (PLEKHA9), mRNA.	3.59
PLEKHQ1	pleckstrin homology domain containing, family Q member 1 (PLEKHQ1), mRNA.	6.79
PMM1	phosphomannomutase 1 (PMM1), mRNA.	2.28
PNPLA8	patatin-like phospholipase domain containing 8 (PNPLA8), mRNA.	2.95
POLG	polymerase (DNA directed), gamma (POLG), mRNA.	2.85
POLR2D	polymerase (RNA) II (DNA directed) polypeptide D (POLR2D), mRNA.	2.69
POLR2H	polymerase (RNA) II (DNA directed) polypeptide H (POLR2H), mRNA.	3.42
POLS	polymerase (DNA directed) sigma (POLS), mRNA.	2.39
PPM1D	protein phosphatase 1D magnesium-dependent, delta isoform (PPM1D), mRNA.	6.78
PPP1R13B	protein phosphatase 1, regulatory (inhibitor) subunit 13B (PPP1R13B), mRNA.	4.32
PPP1R3C	protein phosphatase 1, regulatory (inhibitor) subunit 3C (PPP1R3C), mRNA.	4.84
PPP3CC	protein phosphatase 3 (formerly 2B), catalytic subunit, gamma isoform (PPP3CC), mRNA.	2.80
PRIC285	peroxisomal proliferator-activated receptor A interacting complex 285 (PRIC285), transcript variant 2, mRNA.	2.77
PRKRIP1	PRKR interacting protein 1 (IL11 inducible) (PRKRIP1), mRNA.	2.41
PRPF38A	PRP38 pre-mRNA processing factor 38 (yeast) domain containing A (PRPF38A), transcript variant 1, mRNA.	2.59

PSPC1	paraspeckle component 1 (PSPC1), mRNA.	3.67
PTD015	chromosome 11 open reading frame 67 (C11orf67), mRNA.	5.47
PTGER4	prostaglandin E receptor 4 (subtype EP4) (PTGER4), mRNA.	4.89
PTK9	PREDICTED: PTK9 protein tyrosine kinase 9, transcript variant 3 (PTK9), mRNA.	6.99
PTTG1	pituitary tumor-transforming 1 (PTTG1), mRNA.	3.07
PTTG3	pituitary tumor-transforming 3 (PTTG3) on chromosome 8.	2.88
RAB11FIP1	RAB11 family interacting protein 1 (class I) (RAB11FIP1), transcript variant 3, mRNA.	1.34
RAB2	RAB2A, member RAS oncogene family (RAB2A), mRNA.	2.76
RAB2B	RAB2B, member RAS oncogene family (RAB2B), mRNA.	2.49
RABGGTB	Rab geranylgeranyltransferase, beta subunit (RABGGTB), mRNA.	2.32
RABL3	RAB, member of RAS oncogene family-like 3 (RABL3), mRNA.	2.35
RAET1G	retinoic acid early transcript 1G (RAET1G), mRNA.	3.71
RALY	RNA binding protein, autoantigenic (hnRNP-associated with lethal yellow homolog (mouse)) (RALY), transcript variant 1, mRNA.	3.34
RANBP10	RAN binding protein 10 (RANBP10), mRNA.	3.39
RANBP2L1	RAN binding protein 2-like 1 (RANBP2L1), transcript variant 1, mRNA.	6.48
RBBP5	retinoblastoma binding protein 5 (RBBP5), mRNA.	3.16
RBJ	rab and DnaJ domain containing (RBJ), mRNA.	3.08
RBM18	RNA binding motif protein 18 (RBM18), mRNA.	2.38
RBM33	RNA binding motif protein 33 (RBM33), mRNA.	3.41
RGS2	regulator of G-protein signalling 2, 24kDa (RGS2), mRNA.	4.80
RIOK2	RIO kinase 2 (yeast) (RIOK2), mRNA.	3.65
RIT1	Ras-like without CAAX 1 (RIT1), mRNA.	2.85
RKHD3	mex-3 homolog B (C. elegans) (MEX3B), mRNA.	9.07
RLF	rearranged L-myc fusion (RLF), mRNA.	8.35
RNF113A	ring finger protein 113A (RNF113A), mRNA.	2.17
RNF150	ring finger protein 150 (RNF150), mRNA.	3.65
RNF24	ring finger protein 24 (RNF24), mRNA.	6.15
RP1-112K5.2	TSR2, 20S rRNA accumulation, homolog (S. cerevisiae) (TSR2), mRNA.	2.13
RRAGC	Ras-related GTP binding C (RRAGC), mRNA.	2.70
RSRC2	arginine/serine-rich coiled-coil 2 (RSRC2), transcript variant 1, mRNA.	2.53
RYBP	RING1 and YY1 binding protein (RYBP), mRNA.	8.04
SAP30	sin3-associated polypeptide, 30kDa (SAP30), mRNA.	2.48
SAV1	salvador homolog 1 (Drosophila) (SAV1), mRNA.	3.13
SCNM1	sodium channel modifier 1 (SCNM1), mRNA.	2.38
SDC4	syndecan 4 (SDC4), mRNA.	6.51

SEC22L2	SEC22 vesicle trafficking protein-like 2 (S. cerevisiae) (SEC22L2), mRNA.	2.46
SELO	selenoprotein O (SELO), mRNA.	3.99
SERPINB8	serpin peptidase inhibitor, clade B (ovalbumin), member 8 (SERPINB8), transcript variant 1, mRNA.	4.41
SERPINI1	serpin peptidase inhibitor, clade I (neuroserpin), member 1 (SERPINI1), mRNA.	6.19
SERTAD1	SERTA domain containing 1 (SERTAD1), mRNA.	21.62
SERTAD2	SERTA domain containing 2 (SERTAD2), mRNA.	3.07
SESN1	sestrin 1 (SESN1), mRNA.	2.98
SFRS15	splicing factor, arginine/serine-rich 15 (SFRS15), mRNA.	2.80
SH3GLB1	SH3-domain GRB2-like endophilin B1 (SH3GLB1), mRNA.	2.12
SHB	Src homology 2 domain containing adaptor protein B (SHB), mRNA.	2.79
SIAH2	seven in absentia homolog 2 (Drosophila) (SIAH2), mRNA.	2.33
SIPA1L2	signal-induced proliferation-associated 1 like 2 (SIPA1L2), mRNA.	2.53
SLC25A19	solute carrier family 25 (mitochondrial thiamine pyrophosphate carrier), member 19 (SLC25A19), mRNA.	5.46
SLC25A36	solute carrier family 25, member 36 (SLC25A36), mRNA.	2.75
SLC25A4	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4 (SLC25A4), nuclear gene encoding mitochondrial protein, mRNA.	6.67
SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 3 (SLC2A3), mRNA.	4.28
SLC30A1	solute carrier family 30 (zinc transporter), member 1 (SLC30A1), mRNA.	7.44
SLC30A3	solute carrier family 30 (zinc transporter), member 3 (SLC30A3), mRNA.	11.24
SLC41A1	solute carrier family 41, member 1 (SLC41A1), mRNA.	4.22
SLC41A2	solute carrier family 41, member 2 (SLC41A2), mRNA.	2.67
SLC44A2	solute carrier family 44, member 2 (SLC44A2), mRNA.	2.37
SLC6A6	solute carrier family 6 (neurotransmitter transporter, taurine), member 6 (SLC6A6), mRNA.	2.87
SLC9A3R1	solute carrier family 9 (sodium/hydrogen exchanger), member 3 regulator 1 (SLC9A3R1), mRNA.	6.32
SLU7	step II splicing factor SLU7 (SLU7), mRNA.	4.01
SMAP1L	stromal membrane-associated protein 1-like (SMAP1L), mRNA.	2.76
SMARCD2	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2 (SMARCD2), mRNA.	3.18
SOX8	SRY (sex determining region Y)-box 8 (SOX8), mRNA.	7.98
SRPK2	SFRS protein kinase 2 (SRPK2), transcript variant 1, mRNA.	3.07
SSBP2	single-stranded DNA binding protein 2 (SSBP2), mRNA.	2.57
STC1	stanniocalcin 1 (STC1), mRNA.	3.85
STK35	serine/threonine kinase 35 (STK35), mRNA.	3.37
STX3A	syntaxin 3 (STX3), mRNA.	2.33

STX5A	syntaxin 5A (STX5A), mRNA.	2.36
STX7	syntaxin 7 (STX7), mRNA.	2.57
SUHW1	suppressor of hairy wing homolog 1 (Drosophila) (SUHW1), mRNA.	9.08
SURB7	SRB7 suppressor of RNA polymerase B homolog (yeast) (SURB7), mRNA.	2.55
TAB3	TAK1-binding protein 3 (TAB3), transcript variant 2, mRNA.	2.89
TA-PP2C	PTC7 protein phosphatase homolog (S. cerevisiae) (PPTC7), mRNA.	3.39
TBPL1	TBP-like 1 (TBPL1), mRNA.	5.01
TERF2IP	telomeric repeat binding factor 2, interacting protein (TERF2IP), mRNA.	2.35
TFCP2L1	transcription factor CP2-like 1 (TFCP2L1), mRNA.	2.96
THRAP6	mediator complex subunit 30 (MED30), mRNA.	5.21
TMEFF2	transmembrane protein with EGF-like and two follistatin-like domains 2 (TMEFF2), mRNA.	5.96
TMEM170	transmembrane protein 170 (TMEM170), mRNA.	3.03
TMEM38B	transmembrane protein 38B (TMEM38B), mRNA.	2.37
TMEM41A	transmembrane protein 41A (TMEM41A), mRNA.	5.31
TMEM47	transmembrane protein 47 (TMEM47), mRNA.	5.52
TMF1	TATA element modulatory factor 1 (TMF1), mRNA.	2.96
TNFRSF10D	tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain (TNFRSF10D), mRNA.	14.35
TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13B), mRNA.	5.35
TOLLIP	toll interacting protein (TOLLIP), mRNA.	2.86
TP53INP1	tumor protein p53 inducible nuclear protein 1 (TP53INP1), mRNA.	4.63
TP53INP2	tumor protein p53 inducible nuclear protein 2 (TP53INP2), mRNA.	4.15
TPI1	triosephosphate isomerase 1 (TPI1), mRNA.	2.09
TPST1	tyrosylprotein sulfotransferase 1 (TPST1), mRNA.	3.50
TRIM21	tripartite motif-containing 21 (TRIM21), mRNA.	2.23
TRIM26	tripartite motif-containing 26 (TRIM26), mRNA.	2.23
TRIM28	tripartite motif-containing 28 (TRIM28), mRNA.	2.27
TSC22D2	TSC22 domain family, member 2 (TSC22D2), mRNA.	2.26
TSPAN12	tetraspanin 12 (TSPAN12), mRNA.	4.82
TSPAN5	tetraspanin 5 (TSPAN5), mRNA.	2.51
TUBB	tubulin, beta (TUBB), mRNA.	1.53
TUBB2A	tubulin, beta 2A (TUBB2A), mRNA.	13.48
TUBB2C	tubulin, beta 2C (TUBB2C), mRNA.	3.12
TUBB3	tubulin, beta 3 (TUBB3), mRNA.	5.15
TUBB4Q	tubulin, beta polypeptide 4, member Q (TUBB4Q), mRNA.	3.24
TUFT1	tuftelin 1 (TUFT1), mRNA.	4.35
TYRO3	TYRO3 protein tyrosine kinase (TYRO3), mRNA.	2.41

UBPH	similar to ubiquitin binding protein (UBPH), mRNA.	4.09
UBQLN1	ubiquilin 1 (UBQLN1), transcript variant 2, mRNA.	1.61
UGCG	UDP-glucose ceramide glucosyltransferase (UGCG), mRNA.	2.55
UPF3B	UPF3 regulator of nonsense transcripts homolog B (yeast) (UPF3B), transcript variant 1, mRNA.	3.42
UPK1A	uroplakin 1A (UPK1A), mRNA.	14.73
USP37	ubiquitin specific peptidase 37 (USP37), mRNA.	2.25
VPS37B	vacuolar protein sorting 37 homolog B (S. cerevisiae) (VPS37B), mRNA.	4.55
WDR26	WD repeat domain 26 (WDR26), mRNA.	3.52
WDR37	WD repeat domain 37 (WDR37), mRNA.	3.36
WDR47	WD repeat domain 47 (WDR47), mRNA.	8.12
WDR55	WD repeat domain 55 (WDR55), mRNA.	2.32
WDR68	WD repeat domain 68 (WDR68), transcript variant 1, mRNA.	1.26
WHDC1	WAS protein homology region 2 domain containing 1 (WHDC1), mRNA.	4.27
YEATS2	YEATS domain containing 2 (YEATS2), mRNA.	3.49
ZBTB5	zinc finger and BTB domain containing 5 (ZBTB5), mRNA.	2.43
ZCSL3	zinc finger, CSL-type containing 3 (ZCSL3), mRNA.	2.96
ZFYVE1	zinc finger, FYVE domain containing 1 (ZFYVE1), transcript variant 1, mRNA.	7.93
ZMYM5	zinc finger, MYM-type 5 (ZMYM5), mRNA.	3.40
ZNF10	zinc finger protein 10 (ZNF10), mRNA.	4.34
ZNF133	zinc finger protein 133 (ZNF133), mRNA.	2.83
ZNF193	zinc finger protein 193 (ZNF193), mRNA.	4.02
ZNF211	zinc finger protein 211 (ZNF211), transcript variant 1, mRNA.	3.54
ZNF222	zinc finger protein 222 (ZNF222), mRNA.	3.73
ZNF224	zinc finger protein 224 (ZNF224), mRNA.	4.75
ZNF227	zinc finger protein 227 (ZNF227), mRNA.	3.58
ZNF274	zinc finger protein 274 (ZNF274), transcript variant ZNF274c, mRNA.	4.26
ZNF297B	zinc finger and BTB domain containing 43 (ZBTB43), mRNA.	5.17
ZNF30	zinc finger protein 30 (ZNF30), mRNA.	3.62
ZNF317	zinc finger protein 317 (ZNF317), mRNA.	3.05
ZNF342	zinc finger protein 342 (ZNF342), mRNA.	6.30
ZNF383	zinc finger protein 383 (ZNF383), mRNA.	4.84
ZNF430	zinc finger protein 430 (ZNF430), mRNA.	0.78
ZNF484	zinc finger protein 484 (ZNF484), transcript variant 1, mRNA.	3.57
ZNF567	zinc finger protein 567 (ZNF567), mRNA.	3.28
ZNF622	zinc finger protein 622 (ZNF622), mRNA.	3.48
ZNF627	zinc finger protein 627 (ZNF627), mRNA.	2.68

ZNF650	zinc finger protein 650 (ZNF650), mRNA.	3.11
ZNF654	PREDICTED: zinc finger protein 654 (ZNF654), mRNA.	5.97
ZNF669	zinc finger protein 669 (ZNF669), mRNA.	1.10
ZNF670	zinc finger protein 670 (ZNF670), mRNA.	6.27
ZNF684	zinc finger protein 684 (ZNF684), mRNA.	5.26
ZNF721	zinc finger protein 721 (ZNF721), mRNA.	3.13
ZNF77	zinc finger protein 77 (ZNF77), mRNA.	3.91
ZRANB1	zinc finger, RAN-binding domain containing 1 (ZRANB1), mRNA.	2.98
ZSWIM5	PREDICTED: zinc finger, SWIM-type containing 5 (ZSWIM5), mRNA.	3.63
ZSWIM6	PREDICTED: zinc finger, SWIM-type containing 6 (ZSWIM6), mRNA.	2.64

Downregulated Genes

Gene Symbol	Definition	Fold Change
ABLIM3	actin binding LIM protein family, member 3 (ABLIM3), mRNA.	4.93
ADAT1	adenosine deaminase, tRNA-specific 1 (ADAT1), mRNA.	6.51
AKNA	AT-hook transcription factor (AKNA), mRNA.	6.28
APBB3	amyloid beta (A4) precursor protein-binding, family B, member 3 (APBB3), transcript variant 2, mRNA.	6.93
ARL4C	ADP-ribosylation factor-like 4C (ARL4C), mRNA.	4.96
ASB13	ankyrin repeat and SOCS box-containing 13 (ASB13), mRNA.	5.10
ASXL1	additional sex combs like 1 (Drosophila) (ASXL1), mRNA.	5.42
ATBF1	AT-binding transcription factor 1 (ATBF1), mRNA.	4.58
C10ORF11	chromosome 10 open reading frame 11 (C10orf11), mRNA.	5.34
C11ORF70	chromosome 11 open reading frame 70 (C11orf70), mRNA.	4.06
C12ORF32	chromosome 12 open reading frame 32 (C12orf32), mRNA.	6.19
C14ORF104	chromosome 14 open reading frame 104 (C14orf104), mRNA.	4.95
C14ORF131	chromosome 14 open reading frame 131 (C14orf131), mRNA.	9.16
C14ORF4	chromosome 14 open reading frame 4 (C14orf4), mRNA.	18.45
C19ORF7	chromosome 19 open reading frame 7 (C19orf7), mRNA.	5.21
C1ORF106	chromosome 1 open reading frame 106 (C1orf106), mRNA.	5.02
C1ORF24	chromosome 1 open reading frame 24 (C1orf24), transcript variant 2, mRNA.	7.33
C20ORF72	chromosome 20 open reading frame 72 (C20orf72), mRNA.	4.97
C2ORF18	chromosome 2 open reading frame 18 (C2orf18), mRNA.	4.62
C3ORF9	KTEL (Lys-Tyr-Glu-Leu) containing 1 (KTELC1), mRNA.	4.36
C6ORF192	chromosome 6 open reading frame 192 (C6orf192), mRNA.	5.43
C9ORF103	chromosome 9 open reading frame 103 (C9orf103), mRNA.	4.39

C9ORF3	chromosome 9 open reading frame 3 (C9orf3), mRNA.	4.44
CBS	cystathionine-beta-synthase (CBS), mRNA.	6.75
CDH4	cadherin 4, type 1, R-cadherin (retinal) (CDH4), mRNA.	7.17
CENTD3	centaurin, delta 3 (CENTD3), mRNA.	4.26
CHGN	chondroitin beta1,4 N-acetylgalactosaminyltransferase (ChGn), mRNA.	6.17
CMKOR1	chemokine orphan receptor 1 (CMKOR1), mRNA.	6.08
CNNM1	cyclin M1 (CNNM1), mRNA.	4.31
CNO	cappuccino homolog (mouse) (CNO), mRNA.	6.68
COL7A1	collagen, type VII, alpha 1 (epidermolysis bullosa, dystrophic, dominant and recessive) (COL7A1), mRNA.	4.19
CPT2	carnitine palmitoyltransferase II (CPT2), nuclear gene encoding mitochondrial protein, mRNA.	8.87
CTPS	CTP synthase (CTPS), mRNA.	4.89
CUTC	cutC copper transporter homolog (E. coli) (CUTC), mRNA.	4.49
CXCL2	chemokine (C-X-C motif) ligand 2 (CXCL2), mRNA.	6.61
CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1 (CYP1B1), mRNA.	18.85
CYP26B1	cytochrome P450, family 26, subfamily B, polypeptide 1 (CYP26B1), mRNA.	4.86
CYP4V2	cytochrome P450, family 4, subfamily V, polypeptide 2 (CYP4V2), mRNA.	4.47
DARS2	aspartyl-tRNA synthetase 2 (mitochondrial) (DARS2), mRNA.	4.44
DKK1	dickkopf homolog 1 (Xenopus laevis) (DKK1), mRNA.	10.17
EDN1	endothelin 1 (EDN1), mRNA.	4.26
EID3	EP300 interacting inhibitor of differentiation 3 (EID3), mRNA.	9.16
EPM2AIP1	EPM2A (laforin) interacting protein 1 (EPM2AIP1), mRNA.	5.33
FADD	Fas (TNFRSF6)-associated via death domain (FADD), mRNA.	7.05
FAM113B	family with sequence similarity 113, member B (FAM113B), mRNA.	29.88
FJX1	four jointed box 1 (Drosophila) (FJX1), mRNA.	12.01
FLJ20628	hypothetical protein FLJ20628 (FLJ20628), mRNA.	6.70
FLJ25801	hypothetical protein FLJ25801 (FLJ25801), mRNA.	5.77
FLJ31951	ring finger protein 145 (RNF145), mRNA.	4.32
FLJ41131	FLJ41131 protein (FLJ41131), mRNA.	7.87
FOXQ1	forkhead box Q1 (FOXQ1), mRNA.	9.83
FZD2	frizzled homolog 2 (Drosophila) (FZD2), mRNA.	13.63
GPT2	glutamic pyruvate transaminase (alanine aminotransferase) 2 (GPT2), mRNA.	4.72
GTF2E1	general transcription factor IIE, polypeptide 1 (alpha subunit, 56kD) (GTF2E1), mRNA.	5.70
HKDC1	hexokinase domain containing 1 (HKDC1), mRNA.	15.52
HNRPA0	heterogeneous nuclear ribonucleoprotein A0 (HNRPA0), mRNA.	4.32

HNRPH3	heterogeneous nuclear ribonucleoprotein H3 (2H9) (HNRPH3), transcript variant 2H9, mRNA.	10.72
HOXB5	homeo box B5 (HOXB5), mRNA.	4.93
HOXB8	homeo box B8 (HOXB8), mRNA.	7.07
HPS6	Hermansky-Pudlak syndrome 6 (HPS6), mRNA.	9.86
HS.143018	BX105338 Soares_pregnant_uterus_NbHPU cDNA clone IMAGp998C114347, mRNA sequence	5.77
HS.193767	cDNA FLJ26188 fis, clone ADG04821	6.04
HS.279842	HSPC157 protein, mRNA (cDNA clone IMAGE:6672800), partial cds	7.44
HS.355933	cDNA FLJ41921 fis, clone PERIC2002766	10.71
HS.370359	mRNA; cDNA DKFZp686F09166 (from clone DKFZp686F09166)	5.84
HS.473191	cDNA FLJ34428 fis, clone HLUNG2000761	6.54
HS.532698	cDNA FLJ33115 fis, clone TRACH2001314	8.52
HS.86045	cDNA FLJ43676 fis, clone SYNOV4009129	6.75
IGF2BP3	insulin-like growth factor 2 mRNA binding protein 3 (IGF2BP3), mRNA.	4.43
IRS1	insulin receptor substrate 1 (IRS1), mRNA.	5.09
KIAA0240	KIAA0240 (KIAA0240), mRNA.	4.74
KIAA0859	KIAA0859 (KIAA0859), transcript variant 1, mRNA.	3.54
KIAA1287	integrator complex subunit 2 (INTS2), mRNA.	6.22
KIAA1840	KIAA1840 (KIAA1840), mRNA.	4.86
KLHL9	kelch-like 9 (Drosophila) (KLHL9), mRNA.	5.28
LACTB2	lactamase, beta 2 (LACTB2), mRNA.	3.96
LOC116236	hypothetical protein LOC116236 (LOC116236), mRNA.	4.50
LOC144233	BCDIN3 domain containing (BCDIN3D), mRNA.	10.06
LOC152485	hypothetical protein LOC152485 (LOC152485), mRNA.	8.26
LOC283932	hypothetical protein LOC283932 (LOC283932), mRNA.	5.46
LOC286334	PREDICTED: hypothetical protein LOC286334 (LOC286334), mRNA.	4.85
LOC339804	PREDICTED: hypothetical gene supported by AK075484; BC014578 (LOC339804), mRNA.	5.88
LOC389641	PREDICTED: hypothetical gene supported by AK124295 (LOC389641), mRNA.	4.68
LOC554203	PREDICTED: hypothetical LOC554203 (LOC554203), misc RNA.	4.91
LOC653778	PREDICTED: similar to solute carrier family 25, member 37 (LOC653778), mRNA.	5.43
LOC654103	PREDICTED: similar to solute carrier family 25, member 37 (LOC654103), mRNA.	5.18
LYPLAL1	lysophospholipase-like 1 (LYPLAL1), mRNA.	4.56
MAP3K8	mitogen-activated protein kinase kinase kinase 8 (MAP3K8), mRNA.	4.78
MGC14327	hypothetical protein MGC14327 (MGC14327), mRNA.	6.13
MGC16385	hypothetical protein MGC16385 (MGC16385), mRNA.	7.97

MGC4562	DIS3 mitotic control homolog (S. cerevisiae)-like (DIS3L), mRNA.	6.97
MGC5242	chromosome 7 open reading frame 49 (C7orf49), mRNA.	4.13
MRPS16	mitochondrial ribosomal protein S16 (MRPS16), nuclear gene encoding mitochondrial protein, mRNA.	5.15
NFIA	nuclear factor I/A (NFIA), mRNA.	4.93
NFIB	nuclear factor I/B (NFIB), mRNA.	3.97
NOPE	neighbor of Punc E11 (NOPE), mRNA.	5.23
NPAS2	neuronal PAS domain protein 2 (NPAS2), mRNA.	5.09
NUAK1	NUAK family, SNF1-like kinase, 1 (NUAK1), mRNA.	6.02
NUAK2	NUAK family, SNF1-like kinase, 2 (NUAK2), mRNA.	6.06
OBFC2A	oligonucleotide/oligosaccharide-binding fold containing 2A (OBFC2A), transcript variant 2, mRNA.	8.10
PAPPA	pregnancy-associated plasma protein A, pappalysin 1 (PAPPA), mRNA.	7.30
PDK4	pyruvate dehydrogenase kinase, isozyme 4 (PDK4), mRNA.	5.95
PGRMC2	progesterone receptor membrane component 2 (PGRMC2), mRNA.	6.67
PHF15	PHD finger protein 15 (PHF15), mRNA.	5.62
PHF23	PHD finger protein 23 (PHF23), mRNA.	5.72
PLAU	plasminogen activator, urokinase (PLAU), mRNA.	5.73
PLK2	polo-like kinase 2 (Drosophila) (PLK2), mRNA.	4.16
PNMA2	paraneoplastic antigen MA2 (PNMA2), mRNA.	7.02
PRKCH	protein kinase C, eta (PRKCH), mRNA.	6.02
PSPH	phosphoserine phosphatase (PSPH), mRNA.	4.42
PTPN4	protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte) (PTPN4), mRNA.	5.13
PURB	purine-rich element binding protein B (PURB), mRNA.	12.55
RBCK1	RanBP-type and C3HC4-type zinc finger containing 1 (RBCK1), transcript variant 1, mRNA.	3.97
RCC2	regulator of chromosome condensation 2 (RCC2), mRNA.	4.00
RIN2	Ras and Rab interactor 2 (RIN2), mRNA.	4.75
ROR1	receptor tyrosine kinase-like orphan receptor 1 (ROR1), mRNA.	6.66
RPUSD2	RNA pseudouridylate synthase domain containing 2 (RPUSD2), mRNA.	4.33
RRS1	RRS1 ribosome biogenesis regulator homolog (S. cerevisiae) (RRS1), mRNA.	4.95
RSPO3	R-spondin 3 homolog (Xenopus laevis) (RSPO3), mRNA.	5.61
RWDD2	RWD domain containing 2A (RWDD2A), mRNA.	5.35
SC65	synaptonemal complex protein SC65 (SC65), mRNA.	5.61
SEPHS2	selenophosphate synthetase 2 (SEPHS2), mRNA.	7.30
SH3BP4	SH3-domain binding protein 4 (SH3BP4), mRNA.	4.90
SLC33A1	solute carrier family 33 (acetyl-CoA transporter), member 1 (SLC33A1), mRNA.	7.65

SLC35B3	solute carrier family 35, member B3 (SLC35B3), mRNA.	4.62
SLC35C1	solute carrier family 35, member C1 (SLC35C1), mRNA.	4.58
SNF1LK	SNF1-like kinase (SNF1LK), mRNA.	4.49
SNORD36C	small nucleolar RNA, C/D box 36C (SNORD36C) on chromosome 9.	6.18
SRGAP1	SLIT-ROBO Rho GTPase activating protein 1 (SRGAP1), mRNA.	4.43
STK36	serine/threonine kinase 36, fused homolog (Drosophila) (STK36), mRNA.	6.02
STS-1	Cbl-interacting protein Sts-1 (STS-1), mRNA.	12.51
TBC1D7	TBC1 domain family, member 7 (TBC1D7), mRNA.	4.58
TFB1M	transcription factor B1, mitochondrial (TFB1M), mRNA.	5.02
THNSL1	threonine synthase-like 1 (bacterial) (THNSL1), mRNA.	5.26
TIGD2	tigger transposable element derived 2 (TIGD2), mRNA.	10.45
TM2D2	TM2 domain containing 2 (TM2D2), transcript variant 1, mRNA.	6.59
TMEM15	transmembrane protein 15 (TMEM15), mRNA.	7.93
TNFAIP2	tumor necrosis factor, alpha-induced protein 2 (TNFAIP2), mRNA.	4.26
TNS3	tensin 3 (TNS3), mRNA.	7.49
TRIB3	tribbles homolog 3 (Drosophila) (TRIB3), mRNA.	6.29
TSEN2	tRNA splicing endonuclease 2 homolog (S. cerevisiae) (TSEN2), mRNA.	7.62
TSGA14	testis specific, 14 (TSGA14), mRNA.	4.40
TTC25	tetratricopeptide repeat domain 25 (TTC25), mRNA.	5.68
TTC32	tetratricopeptide repeat domain 32 (TTC32), mRNA.	4.83
TTF2	transcription termination factor, RNA polymerase II (TTF2), mRNA.	5.23
UBAP2L	ubiquitin associated protein 2-like (UBAP2L), mRNA.	5.68
WARS	tryptophanyl-tRNA synthetase (WARS), transcript variant 1, mRNA.	4.88
XPC	xeroderma pigmentosum, complementation group C (XPC), mRNA.	4.81
ZBED5	zinc finger, BED-type containing 5 (ZBED5), mRNA.	4.26
ZFP36L1	zinc finger protein 36, C3H type-like 1 (ZFP36L1), mRNA.	5.80
ZHX2	zinc fingers and homeoboxes 2 (ZHX2), mRNA.	7.34
ZNF161	vascular endothelial zinc finger 1 (VEZF1), mRNA.	4.04
ZNF558	zinc finger protein 558 (ZNF558), mRNA.	4.50

Supplementary Table 2

Summary of all networks found to be significant by IPA analysis in DAMTC treated A549 cells *(the genes highlighted in bold are structural constituents of cytoskeleton regulated by Rho-GTPases)*

ID	Molecules in Network	Score	Focus Molecules	Top Functions
1	Adaptor protein 1, ARID4A, C2ORF18, CUTC (includes EG:51076), EAF1, EIF4A3 (includes EG:9775), ELL2, FAM46A, GCH1, GGA2, GTF2B, GTF2E1, HNRNPH3, MICA, NFkB (complex), NUAK2, NXF1, OAT, PELI1, PIM2 (includes EG:11040), PLK2, RBCK1, RLF, RNF19B, SAP30, SLC25A4, TBPL1, TFIIE, TFIIH, Tnf receptor, TNFAIP2, TNFSF13B, TOLLIP, UPF3B, ZNF274	47	30	RNA Damage and Repair, Gene Expression, Cell Cycle
2	ALP, BMP2, BMP6, BNIP3 (includes EG:664), CYCS (includes EG:54205), CYP1B1, FJX1, FOSL1, Frizzled, FZD1, FZD2, FZD7, HBEGF, hCG, Hexokinase, **HK2**, HKDC1, MBIP, NDEL1, P38 MAPK, Pkc(s), PLAU, PLAUR, Plc beta, PPM1D, RGS2, SERTAD1, SERTAD2, STC1, STX3, TNFRSF10D, TRIM28, UBQLN1, ZNF10, ZNF211	43	28	Cell Morphology, Skeletal and Muscular System Development and Function, Cardiovascular System Development and Function
3	9130409I23RIK, ABHD5, AHR, CBR3, CDC34 (includes EG:997), Ck2, CLDND1, CYB5RL, CYP4EA, DKK1, EIF1B, ERO1L, HELZ, **KATNA1**, MED19, MED21, MED30, MIR124, MSSE, NDRG1, NFIA, NFIB, Nuclear factor 1, Oxidoreductase, PGRMC2, PIP4K2A, Pka, PMM1, POLR2D, POLR2H, RNA polymerase II, SHB, Trypsin, WARS, ZCCHC24	34	24	Gene Expression, Cancer, Gastrointestinal Disease
4	ADM, Alcohol group acceptor phosphotransferase, ATYPICAL PROTEIN KINASE C, CDK7, CTH, EDN1, ERK, ERRFI1, FER (includes EG:2241), GYS1,	32	24	Cell Cycle, Hematological Disease, Metabolic

	IRS1, IRS2, JAK, **KLHL21**, LIFR, MAP2K1, MAP3K8, Mek, NRAS, p70 S6k, Pdgf, PDGF BB, PP2A, PRKCH, PSPH, PTGER4, RAB2A, RIN2, RIT1, RRS1, Shc, Sos, TMF1, TRIB3, VEZF1			Disease
5	Akt, AMPK, BAG3, Calcineurin protein(s), Calmodulin, CBS (includes EG:875), CDC37L1, CDK5R1, CTSL2, Cytochrome c, DNAJA1, DNAJB1, DNAJC5, DUSP14, FAM162A, GABARAPL1, GNAQ, HMGCR, Hsp70, Hsp90, Hsp22/Hsp40/Hsp90, INSIG1, Nos, PFKFB3, PPP3CC, Proteasome, PTTG1, **SH3GLB1**, TERF2IP, **TUBB**, **TUBB3**, **TUBB2C**, Tubulin, TYRO3, Ubiquitin	30	23	Cancer, Gastrointestinal Disease, Lipid Metabolism
6	ATF2, ATF7IP2, BCL10, CD83, CRABP2, Creb, **CSRP2**, CXCL2, Cyclin A, Cyclin E, DUSP8, E2f, EGLN1, GADD45A, Hdac, HDAC3, HISTONE, Histone h3, Histone h4, Jnk, MBD1, MXD1, N-cor, P4HA1, PEG10, PGK1, PIAS1, PIAS3, PLAGL1, Rb, SIAH2, Smad, TRIM21, VitaminD3-VDR-RXR, ZFHX3	28	22	Cell Cycle, Connective Tissue Development and Function, Cancer
7	Actin, Alpha Actinin, Alpha catenin, CDH4 (includes EG:1002), CTPS, EFHD1, FOXD1, GRPEL1, GUK1, HLA-A, HLA-B, HLA-E, HSPA4L, IFN Beta, IgG, IL12 (complex), Interferon alpha, ISG20, ISG15 (includes EG:9636), MARCKSL1, MHC Class I (complex), MHC CLASS I (family), MHC I-α, NCALD, Nfat (family), NP (includes EG:4860), PCSK5, PI3K, Ptk, RCC2, **SDC4**, STAT, **TUBB2A**, TWF1, UGCG	24	21	Cell Signaling, Nucleic Acid Metabolism, Small Molecule Biochemistry
8	ADCY, ADIPOR2, Ap1, ARL4C, Collagen(s), CRYM, CTR9, Dynamin, EFNB2, EIF4EBP2, ERK1/2, FRAT2, FSH, GEM, Glycogen synthase, GNAI2, IL1, IL1A, Insulin, LDL, LPIN1, Mapk, **MAPRE2**, Mmp, OSBPL6, PAG1, PLC, PPP1R3C, Ras, Sapk, SH3BP4, SLC2A3, SLC9A3R1, Tgf beta, Vegf	22	18	Cell Morphology, Connective Tissue Disorders, Carbohydrate Metabolism
9	ADAT1, ANKZF1, C16ORF80, C20ORF72, C20ORF111, CABC1, E2F4, EPM2AIP1, FAM103A1, FURIN, HNF4A, HPS6, HPS5 (includes EG:11234), LRRC8C, ONECUT1, PLSCR1, POLRMT, RABAC1, retinoic acid, SERPINB8, SLC25A19, SREBF1, TFB1M,	19	16	Gene Expression, Cancer, Cell Cycle

	TP53, TUFT1, ZNF133, ZNF224			
10	C12ORF34, C16ORF70, C18ORF8, CALB1, CHRAC1, DNA-directed DNA polymerase, FAM100B, FAM91A1, GNPDA2, IMPA1, KIAA0240, **KLHL18**, MIR93, MIR1-1 (includes EG:406904), MIR106B (includes EG:406900), MIR199A1, MIR20A, MIRLET7E, MYLIP, PAPD5, POFUT1, POLE4, POLG, POLG2, POLK, POLM, POLN, POLQ, POLS, RGS17, RHBDF1, RIMKLB, TP53INP2, WDR47, WDR55	19	16	Nucleic Acid Metabolism, Small Molecule Biochemistry, Genetic Disorder
11	ABTB2, ALB, AMPD3 (includes EG:272), BIN3, BTG3, CCNG2, CCRN4L, CDKN2A, CFH, COX3, CPA4, CPT2, CYP26B1, CYTB, DEK, FAM113B, FCGRT, **FNBP1**, GPD2, HNRNPA0, Integrin alpha 6 beta 1, JARID2, KRT6A, MYO9B, NKX3-1, NUAK1, PEX11A, PNPLA8, RHOV, SLCO1A1, SYNPO, testosterone, TNF, TPST1, ZFP36L1	17	15	Gene Expression, Cancer, Cell-To-Cell Signaling and Interaction
12	AATK, APPBP2, AXUD1, BNIP3L, C11ORF70, C8ORF41, CGGBP1, CHIC2, CSRNP2, EID3, FAF1, FMR1, GTF3C5, HMGB2, KIAA0907, L-carnitine, MIR362, MIR92A1, MIR92A2, NR3C1, OAT, ONECUT1, PELP1, PTP4A2, RABGGTB, RPS6KA5, RRAGC, SRPK1, TAT (includes EG:6898), THAP1, TM2D2, U2AF2 (includes EG:11338), WDR12, WDR26, ZNF317	17	15	Genetic Disorder, Metabolic Disease, Connective Tissue Disorders
13	ADPRHL2, amino acids, ATP5F1, ATP5I, ATP6V0D1, BPNT1, BRSK1, C9ORF80, CAMK1G, CDKL1, CNKSR3, CREB1, DNAJC27, IKBKE, ILK, ILKAP, KCTD5, KIAA0999, LHFPL2, METTL11A, Mg2+, MIR183 (includes EG:406959), NCBP2, PDK4, PDXK, PGGT1B, PITPNB, SIK1, SRPK2, STK11, STK36, TIPARP, TSPAN12, TSSK4, ZC3H4	17	15	Amino Acid Metabolism, Post-Translational Modification, Small Molecule Biochemistry
14	BRP44L, CCNYL1, CLCN4, CLDN11, CLDN12, CNNM4, CTTNBP2NL, CXORF26, DOCK4, FAM125A, FAM40A, FBXO33, FGFR1OP2, KCNS3, KHDRBS3, MEX3C, MIR15B (includes EG:406949), MIR24-1, MIR34A, MIRLET7B, NRIP3, PDCD10, RANBP10, ROCK1, RP5-1000E10.4, RP6-213H19.1, SLC35C1, STK25, STRN, STRN4,	17	15	Genetic Disorder, Immunological Disease, Post-Translational Modification

	TRAF3IP3, UBR3, VPS37B, ZMYM3 (includes EG:9203), ZNF654			
15	AEBP2, ASXL1, ASXL2, ASXL3, ATP, C1ORF106, CHCHD7, CXCR7, CYSLTR1, EED, EZH2, FGF17, IL13, KLHDC2, MICB, MIR25, MYT1, NAPG, NSF, P2RX1, P2RY4, PAX3, PCGF1, PDK3, POU2F3, PRAME (includes EG:23532), RAD51C, SAV1, SFN, SLC41A1 (includes EG:254428), SUZ12, TNS3, TSGA14, WDR37, WDR68	17	15	Cardiovascular System Development and Function, Post-Translational Modification, Cell Morphology
16	ABHD6, AGTPBP1, AHCYL1, APEH, C12ORF24, **DCTN5**, EXOSC2, EXOSC5, FAM53C, HNF4A, KLHL28, LAS1L, LSM5, MIPEP, NLN, NOLC1, NRD1, PKM2, PLEKHA9, PNKP, POLB, RBM18, REXO2, RIOK2, RNF113A, SLC33A1, SPCS3, SUPT16H, TRIM26, TTC25, VPS29, XRCC4, ZNF193, ZNF222, ZNF558	15	14	DNA Replication, Recombination, and Repair, Gene Expression, RNA Damage and Repair
17	ANGPTL4, ARNTL, C9ORF3, CCDC28A, CCDC85B, CITED2, CKS2, CLOCK, CRY1, CRY2, CSNK1E, DARC, HIC2, HOXB5, KRT17, LHX2, MIR153-1, MIR153-2, MIRN135B, NPAS2, NRG, PBX1, PCGF2, PDK2, PER1, PER2, PHF15, PKN1, PRC1, PSMC1, ROR1, SLU7, TGFB1, ZBTB5, ZHX2	15	14	Behavior, Nervous System Development and Function, Gene Expression
18	AK1, AK3L2 (includes EG:645619), C12ORF5, CTSW, DARS2, DGKA (includes EG:1606), EEF1E1, GART, GLCE, GOSR2, IL2, JMJD1C, KNTC1, LATS2, MCM6, MRPS16, MYBL2, NOC2L, NOX4, PDRG1, POLE2, RALY, RFFL, SCNM1, SEC22A, SESN1, SLC6A6, STX5, TP53, TP53RK (includes EG:112858), Ube3, UPP1, VHL, YKT6, ZNF622	14	14	Cell Cycle, Cellular Assembly and Organization, Cellular Function and Maintenance
19	BATF, BCL11B, BPGM, CAMK2B, CEBPA, CLP1, ENO2, ENO3, Enolase, HBD, HTT, LIPT1, LOC100129193, MIR26B, NFIL3, OSBPL8, OSTF1, P glycerolmutase, PCTP, PGAM1, PGAM2, PGAM4, PURB (includes EG:5814), SERPINI1, SRGAP1, SRGAP2, SRGAP3, ST3GAL2, SYMPK, TFCP2L1, TPI1, TSEN2, TSEN15, ZIC3	14	13	Genetic Disorder, Neurological Disease, Skeletal and Muscular Disorders
20	ATAD2, beta-estradiol, C12ORF32, C14ORF4, CALM2, CRADD, E2F1, FGF9, FGFR3, GJB2,	14	13	Infection Mechanism,

	GMFB, GPX3, GSTT1, H19, HIST2H2AA3, HN1, IRX5, LDB3, MIR16-1, NARF, PHF23, PKIB, POLA1, POLA2, POLE2, PRDM2, PRIM1, PRIM2, PRPF38A, PRSS23, PTPN4, SLC30A3, SSBP2, TRHDE, TSPAN5			Gene Expression, DNA Replication, Recombinatio n, and Repair
21	C19ORF10, CD99 (includes EG:4267), COL8A1, COQ10B, COX6C, CYB5R1, CYP4F2, DCXR, FZD7, GARS, HAS1, HNF1A, HNRPDL, JMJD1A, KIAA1219, PDIA5, PHACTR2, PNO1, PTN, RHPN2, RSRC2, RUNX2, SET, SLC25A36, SNX3, SOX8, SRC, TARS, TBCA, TRAF6, TSC22D2, UBAP2L, UBQLN4, VCL, ZRANB1	14	13	Cell Morphology, Cellular Development, Connective Tissue Development and Function
22	ASB13, C1ORF63, C3ORF38, CAMSAP1L1, CLK2, CLK3, DCP1A, DPM2, EDC3, EDC4, ELOVL6, FAM126B, GCA, HOXB8, KIAA0247, MIRN101B, PFKFB2, Phosphatidylinositol N-acetylglucosaminyltransferase, PIGA, PIGB, PIGC, PIGH, PIGP, PIGQ, PIGY (includes EG:84992), PPIG, RAB11FIP1, RAB11FIP2, SMCR7L, TTF2, USP46, USP37 (includes EG:57695), YWHAG, ZBTB34, ZFP36	14	13	Lipid Metabolism, Nucleic Acid Metabolism, Small Molecule Biochemistry
23	ARID3B, CDK4/6, CKB, CUL1, DDX11, dihydrotestosterone, ECM1, ETV3, FAM129A, FBXL12, FBXL20, FBXO2, FBXW8, FOXQ1, GAPDH (includes EG:14433), Gm-Csf Receptor, GTF3C2, HCFC2, KLK1, METTL13, MFAP1, MLF1, MYC, PPT1, RB1, RBBP5, RIMKLA, RPL27, RPS23, SEPHS2, SLC25A1, STAT5A, UBR2, ZAK, ZNF567	14	13	Hematological System Development and Function, Hematopoiesis , Organismal Development
24	ASRGL1, ATP5D, ATP5G1, ATP5H (includes EG:641434), ATP5I, ATP6AP1, ATP6V1B2, ATP6V1D, ATP6V1F, BLOC1S2, BNIP1, C3ORF58, CNN3, CNO, CTSA, DYNC1LI2, EHD4, EPS15L1, FBXO6, GCAT, GPT2, ITGB1, KIAA1467, **LNX2**, MIR23B, NEU1, NUMB, PLOD1, PTEN, RAB2B, SEC22B, SLC25A1, SLC2A4, SNAPIN, STX7	13	13	Energy Production, Nucleic Acid Metabolism, Small Molecule Biochemistry
25	AEN, AFF4, AKNA, ALDOC, BANP, BRF2, CD40, Cofilin, EIF2AK2, HIF1A, hydrogen peroxide, IKK (complex), IL4I1, MAP3K6, MAP3K5 (includes EG:293015), MTF1,	12	13	Cell Death, Hematological Disease, Immunologica

	NFKBIE, NIK, PDXP (includes EG:57026), PFKFB4, PRKRIP1, REL/RELA/RELB, RNF219, SESN1, SLC30A1, SLC39A7, TCEB3B, TIFA, TRAF2, TRAF3IP2, TTRAP, UACA, Ube3, UBE2V1, ZBTB43			l Disease
26	ADAMTS14, ASTL, CASP3, CDKN1A, CPA5, CTRL, DPEP3, ERBB4, GPN3, IGF2, IGF2BP3, IMMP2L, KITLG, MIRN351, MMP1B, NAALADL1, PAPPA, PEPC (includes EG:109616), peptidase, phosphatidylinositol 3,4-diphosphate, PRT5, PRT6, PSPC1, RNF150, SENP17, SENP5 (includes EG:303874), SLC44A2, SMARCD2, TMEFF2, TMPRSS11D, TP53INP1, UPG2, ZBED5, ZFYVE1, ZSWIM5	12	12	Protein Degradation, Cellular Growth and Proliferation, Skeletal and Muscular System Development and Function
27	ARIH1, BCL2L10, BCL2L11, C10ORF35, CAMLG, CARD8, CASP8AP2, Caspase, CDCA2, CEBPZ, DEDD, ERCC5, FADD (includes EG:8772), FDXR, FOXL2, HAGH, Igm, JAG2, KCNQ1, MAFF, MFAP3, P53AIP1, PPP1CA, PPP1R13B, RSPO3, RYBP, SFRS15, TP63, TP73, TP53BP2, TP53I3, UBE2D1, UBE2E2, UBE2H (includes EG:7328), XPC	12	12	Cancer, Cell Death, Cell Morphology
28	**ABLIM3**, APBB3, C21ORF91, CHMP4A, CHMP4B, CHMP4C, CLNK, COL7A1, COX6A1, DOLK, EGFR, Egfr dimer, Egfr-Erbb2, FKBP15, GRB2, IFNB1, KLHL9, LINGO1, MIR185 (includes EG:406961), PNMA2, RAE1, RNF24, RPL18, RPL27, RPL27A (includes EG:6157), RPS28, RPUSD2, SHKBP1, SLC25A3, SMAD3, STAMBP, TBXAS1, TPSAB1, USP6NL, VPS24	11	11	Cellular Movement, Lipid Metabolism, Small Molecule Biochemistry
29	ARAP3, ARF6, CITED2, CPEB3, FMR1, HECA, MEX3B, MIR206, MIR301A, MIR320A, MIRN291B, NARG1, NAT12, NFIB, NFYB, NKX6-1, NMT1, PCNA, PHOX2B, PLK1, PPPDE1, RWDD2A, SCARB1, TP53, UBE2D3, UBP1, ZNF484, ZNF609	10	10	Cancer, Cell Cycle, Embryonic Development
30	CAPN8, TIGD2 (includes EG:166815)	1	1	
31	INTS2, POLR2C	1	1	RNA Post-Transcriptiona l Modification, Skeletal and

				Muscular System Development and Function, Tissue Development
32	CRLF3 (includes EG:51379), WASF2	1	1	Cell Morphology, Cellular Assembly and Organization, Cancer
33	C1ORF128, CDC73	1	1	Endocrine System Disorders, Genetic Disorder, Cancer
34	KIAA1279, ZNF670	1	1	Molecular Transport
35	UPK2, UPK1A	1	1	Cell Morphology, Renal and Urological System Development and Function, Genetic Disorder
36	GLTP, MIR373	1	1	Lipid Metabolism, Molecular Transport, Small Molecule Biochemistry
37	HPS1, HPS4	1	1	Genetic Disorder, Cellular Assembly and Organization, Cellular Development
38	PDLIM1, STK35	1	1	Cellular Assembly and

				Organization, Cellular Function and Maintenance, Cancer
39	CYP4V, CYP4V2	1	1	Ophthalmic Disease
40	RBM33, SUMO3, ZNF143	1	1	Gene Expression, Post-Translational Modification, Endocrine System Disorders

Supplementary Table 3

Human specific primer sequences used for Real Time PCR

Gene	**Primer**	**Sequence**	**Amplicon size (bp)**
TOLLIP	FP	GCCAAGAATTACGGCATGACC	124
	RP	GTGGATGACCTTATTCCAGCG	
ZNF274	FP	GATCCAGGCCCTATATGCTGA	148
	RP	CGGGGACCTGTCATGTCCTTA	
TNFSF13B	FP	GGGAGCAGTCACGCCTTAC	80
	RP	CGTGGGAGGATGGAAACACAC	
FOSL1	FP	ATCTGCAAAATCCCGGAAGG	134
	RP	AGTGCCTCAGGTTCAAGCACAG	
GADD45A	FP	TCAGCGCACGATCACTGTC	83
	RP	CCAGCAGGCACAACACCAC	
EDN1	FP	CAGCAGTCTTAGGCGCTGAG	127
	RP	ACTCTTTATCCATCAGGGACGAG	

CDK7	FP	ATGGCTCTGGACGTGAAGTC	123
	RP	CTTAATGGCGACAATTTGGTTG	
RBCK1	FP	GGGGATGAACAGGTGGCAAT	77
	RP	GCTTCAGTTGCACACTCAGG	
NUAK2	FP	GATGCACATACGGAGGGAGAT	119
	RP	GCTGGCATACTCCATGACGAT	
PLK2	FP	CTCAGCAACCCAGCAAACAC	118
	RP	TCCGAATAGCATCCCCAATCT	
MAP3K8	FP	ATGGAGTACATGAGCACTGGA	117
	RP	TGGCTCTTCACTTGCATAAAGAT	
TRIB3	FP	AAGCGGTTGGAGTTGGATGAC	128
	RP	CACGATCTGGAGCAGTAGGT	
BCL2L11	FP	ATGGCAAAGCAACCTTCTGAT	118
	RP	GCTCTGTCTGTAGGGAGGTAGG	
BNIP3	FP	CAGGGCTCCTGGGTAGAACT	129
	RP	CTCCGTCCAGACTCATGCTG	
BCL10	FP	CTTGTTGAATCTATTCGGCGAGA	136
	RP	TGGAAAAGGTTCACAACTGCT	
18S	FP	GTAACCCGTTGAACCCCATT	153
	RP	CCATCCAATCGGTAGTAGCG	
RhoGDI alpha	FP	GGATGAGCACTCGGTCAACTA	103
	RP	GGCCTCCTTGTACTTTCGCAG	
RS/DJ-1	FP	AACCGGAAGGGCCTGATAG	161
	RP	CCGTCTTTTTCCACACGATTCT	
14-3-3 epsilon	FP	CTGAGCGATACGACGAAATGG	147
	RP	TGCTGCTGATTATTCTCCAGGA	

Supplementary Table 4

Experimental design for the labeling of control and DAMTC treated A549 lysate in 2D DIGE

Gel Number	Cy2 standard	Cy3	Cy5
Gel 1	Pooled Sample	Control 1	Treated 3
Gel 2	Pooled Sample	Treated 1	Control 3
Gel 3	Pooled Sample	Control 2	Treated 4
Gel 4	Pooled Sample	Treated 2	Control 4

Supplementary Table 5

Database search results of spectra acquired on MALDI-TOF/TOF (ABSCIEX TOF/TOF 5800, Applied Biosystems) mass spectrometer. The MS data were acquired in window of m/z 700 to m/z 4000. The mass spectrometer spectra were analyzed using Protein Pilot software (version 3.0) with Mascot search engine (MASCOT V2.2) in Human SWISS-PROT databases (release version 51.6 containing 257964 sequences, 93947433 residues). Maximum number of missed cleavages was set to 1. The search parameters allowed oxidation of methionine as variable modification, carboxyamidomethylation of cysteine as fixed modification. Precursor mass tolerance was set at 100 ppm and MS/MS fragment mass tolerance was set at 0.4Da. Mowse score that signifies p value< 0.05 was considered significant for successful protein identification.

S. No.	Protein Name	Accession number	Expect.	% seq. coverage	Measured mass (M+H)	Score	Peptide Sequence	Modification
1	14-3-3E	P62258	3.10E-78	58	816.46	817	K.LAEQAER.Y	
					816.46		K.LAEQAER.Y	
					1575.9		K.KVAGMDVELTVEER.N	
					1575.9		K.KVAGMDVELTVEER.N	
					1447.8		K.VAGMDVELTVEER.N	
					1447.8		K.VAGMDVELTVEER.N	
					1463.8		K.VAGMDVELTVEER.N	Oxidation (M)
					1463.8		K.VAGMDVELTVEER.N	Oxidation (M)
					917.58		R.IISSIEQK.E	
					917.58		R.IISSIEQK.E	
					1476.8		K.LICCDILDVLDK.H	2 Carbamidomethyl (C)
					1476.8		K.LICCDILDVLDK.H	2 Carbamidomethyl (C)
					1237.7		K.HLIPAANTGESK.V	
					1237.7		K.HLIPAANTGESK.V	
					719.41		K.VFYYK.M	
					906.48		K.MKGDYHR.Y	
					922.47		K.MKGDYHR.Y	Oxidation (M)
					922.47		K.MKGDYHR.Y	Oxidation (M)
					1256.7		R.YLAEFATGNDR.K	

					1256.7		R.YLAEFATGNDR.K	
					1384.8		R.YLAEFATGNDRK.E	
					1384.8		R.YLAEFATGNDRK.E	
					1385.8		R.YLAEFATGNDRK.E	Deamidated (NQ)
					1820.1		K.AASDIAMTELPPTHPIR.L	
					1820.1		K.AASDIAMTELPPTHPIR.L	
					1836		K.AASDIAMTELPPTHPIR.L	Oxidation (M)
					1836		K.AASDIAMTELPPTHPIR.L	Oxidation (M)
					719.41		R.ACRLAK.A	Carboxymethyl (C)
					2088.1		K.AAFDDAIAELDTLSEESYK.D	
					2088.1		K.AAFDDAIAELDTLSEESYK.D	
					1189.7		K.DSTLIMQLLR.D	
					1189.7		K.DSTLIMQLLR.D	
					1205.7		K.DSTLIMQLLR.D	Oxidation (M)
					1205.7		K.DSTLIMQLLR.D	Oxidation (M)
					2181.1		R.DNLTLWTSDMQGDGEEQNK.E	
					2181.1		R.DNLTLWTSDMQGDGEEQNK.E	
					2197.1		R.DNLTLWTSDMQGDGEEQNK.E	Oxidation (M)
					2197.1		R.DNLTLWTSDMQGDGEEQNK.E	Oxidation (M)
2	CH60	P10809	1.60E-133	49	2113.3	1370	R.ALMLQGVDLLADAVAVTMGPK.	

							G	
					2113.3		R.ALMLQGVDLLADAVAVTMGPK.G	
					1344.8		R.TVIIEQSWGSPK.V	
					1344.8		R.TVIIEQSWGSPK.V	
					2560.4		K.LVQDVANNTNEEAGDGTTTATVLAR.S	
					2560.4		K.LVQDVANNTNEEAGDGTTTATVLAR.S	
					855.53		K.GANPVEIR.R	
					855.53		K.GANPVEIR.R	
					1584.8		R.RGVMLAVDAVIAELK.K	
					1822.1		K.DGKTLNDELEIIEGMK.F	Deamidated (NQ); Oxidation (M)
					1822.1		K.DGKTLNDELEIIEGMK.F	Deamidated (NQ); Oxidation (M)
					1504.9		K.TLNDELEIIEGMK.F	
					1504.9		K.TLNDELEIIEGMK.F	
					1520.9		K.TLNDELEIIEGMK.F	Oxidation (M)
					1939.1		K.TLNDELEIIEGMKFDR.G	Oxidation (M)
					1389.8		R.GYISPYFINTSK.G	
					1389.8		R.GYISPYFINTSK.G	
					1860.1		K.GQKCEFQDAYVLLSEK.K	2 Deamidated (NQ)
					1860.1		K.GQKCEFQDAY	2 Deamidated

							VLLSEK.K	(NQ)
					1601.9		K.CEFQDAYVLLSEK.K	Carbamidomethyl (C)
					1601.9		K.CEFQDAYVLLSEK.K	Carbamidomethyl (C)
					1919.2		K.ISSIQSIVPALEIANAHR.K	
					1919.2		K.ISSIQSIVPALEIANAHR.K	
					2365.5		R.KPLVIIAEDVDGEALSTLVLNR.L	
					2365.5		R.KPLVIIAEDVDGEALSTLVLNR.L	
					833.45		K.APGFGDNR.K	
					833.45		K.APGFGDNR.K	
					2194.3		K.RIQEIIEQLDVTTSEYEK.E	
					2194.3		K.RIQEIIEQLDVTTSEYEK.E	
					2038.2		R.IQEIIEQLDVTTSEYEK.E	
					2038.2		R.IQEIIEQLDVTTSEYEK.E	
					2295.3		R.IQEIIEQLDVTTSEYEKEK.L	
					2295.3		R.IQEIIEQLDVTTSEYEKEK.L	
					2297.3		R.IQEIIEQLDVTTSEYEKEK.L	2 Deamidated (NQ)
					1233.7		K.VGGTSDVEVNEK.K	
					960.58		R.VTDALNATR.A	
					960.58		R.VTDALNATR.A	
					961.57		R.VTDALNATR.A	Deamidated (NQ)
					1685		R.AAVEEGIVLGG	Carbamidomethyl

							GCALLR.C	(C)
					1685		R.AAVEEGIVLGGGCALLR.C	Carbamidomethyl (C)
					1772		R.CIPALDSLTPANEDQK.I	Carbamidomethyl (C)
					1772		R.CIPALDSLTPANEDQK.I	Carbamidomethyl (C)
					1215.8		K.NAGVEGSLIVEK.I	
					1215.8		K.NAGVEGSLIVEK.I	
					2508.3		K.IMQSSSEVGYDAMAGDFVNMVEK.G	
3	ENOA	P06733	1.60E-178	71%	766.39	1820	R.EIFDSR.G	
					766.39		R.EIFDSR.G	
					1406.8		R.GNPTVEVDLFTSK.G	
					1406.8		R.GNPTVEVDLFTSK.G	
					1805		R.AAVPSGASTGIYEALELR.D	
					1805		R.AAVPSGASTGIYEALELR.D	
					748.38		R.DNDKTR.Y	
					748.38		R.DNDKTR.Y	
					810.45		K.AVEHINK.T	
					1088.6		K.KLNVTEQEK.I	
					1088.6		K.KLNVTEQEK.I	
					1280.6		K.LMIEMDGTENK.S	
					1280.6		K.LMIEMDGTENK.S	

					704.41		K.GVPLYR.H	
					704.41		K.GVPLYR.H	
					3012.6		R.HIADLAGNSEVILPVPAFNVINGGSHAGNK.L	Deamidated (NQ)
					3012.6		R.HIADLAGNSEVILPVPAFNVINGGSHAGNK.L	Deamidated (NQ)
					1908		K.LAMQEFMILPVGAANFR.E	
					1908		K.LAMQEFMILPVGAANFR.E	
					1924		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1924		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1143.6		R.IGAEVYHNLK.N	
					1143.6		R.IGAEVYHNLK.N	
					1597.8		R.IGAEVYHNLKNVIK.E	
					1961		K.DATNVGDEGGFAPNILENK.E	
					1961		K.DATNVGDEGGFAPNILENK.E	
					1540.8		K.VVIGMDVAASEFFR.S	
					1540.8		K.VVIGMDVAASEFFR.S	
					1556.8		K.VVIGMDVAASEFFR.S	Oxidation (M)
					1556.8		K.VVIGMDVAAS	Oxidation (M)

							EFFR.S	
					1072.6		R.SGKYDLDFK.S	
					1072.6		R.SGKYDLDFK.S	
					800.39		K.YDLDFK.S	
					800.39		K.YDLDFK.S	
					773.35		K.SPDDPSR.Y	
					773.35		K.SPDDPSR.Y	
					1425.8		R.YISPDQLADLYK.S	
					1425.8		R.YISPDQLADLYK.S	
					2510.2		K.DYPVVSIEDPFDQDDWGAWQK.F	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					1492.9		K.AVNEKSCNCLLLK.V	Carbamidomethyl (C); Deamidated (NQ)
					1492.9		K.AVNEKSCNCLLLK.V	Carboxymethyl (C)
					1494.8		K.AVNEKSCNCLLLK.V	Carboxymethyl (C); 2 Deamidated (NQ)
					1007.5		K.SCNCLLLK.V	2 Carbamidomethyl (C)
					1007.5		K.SCNCLLLK.V	2 Carbamidomethyl (C)
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)

					1525.8		K.LAQANGWGV MVSHR.S	
					1526.8		K.LAQANGWGV MVSHR.S	Deamidated (NQ)
					1526.8		K.LAQANGWGV MVSHR.S	Deamidated (NQ)
					1542.8		K.LAQANGWGV MVSHR.S	Deamidated (NQ); Oxidation (M)
					2297.3		R.SGETEDTFIAD LVVGLCTGQIK.T	Deamidated (NQ)
					2297.3		R.SGETEDTFIAD LVVGLCTGQIK.T	Deamidated (NQ)
					2353.2		R.SGETEDTFIAD LVVGLCTGQIK.T	Carbamidomethyl (C)
					2353.2		R.SGETEDTFIAD LVVGLCTGQIK.T	Carbamidomethyl (C)
					806.46		K.YNQLLR.I	
					806.46		K.YNQLLR.I	
4	ENOA	P06733	1.60E-136	58	766.4	1400	R.EIFDSR.G	
					766.4		R.EIFDSR.G	
					1406.8		R.GNPTVEVDLFT SK.G	
					1406.8		R.GNPTVEVDLFT SK.G	
					1805		R.AAVPSGASTGI YEALELR.D	
					1805		R.AAVPSGASTGI YEALELR.D	
					748.39		R.DNDKTR.Y	
					748.39		R.DNDKTR.Y	
					704.43		K.GVPLYR.H	
					704.43		K.GVPLYR.H	
					3011.7		R.HIADLAGNSEV ILPVPAFNVINGG	

							SHAGNK.L	
					3012.7		R.HIADLAGNSEVILPVPAFNVINGGSHAGNK.L	Deamidated (NQ)
					3012.7		R.HIADLAGNSEVILPVPAFNVINGGSHAGNK.L	Deamidated (NQ)
					1908.1		K.LAMQEFMILPVGAANFR.E	
					1908.1		K.LAMQEFMILPVGAANFR.E	
					1924.1		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1924.1		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1143.7		R.IGAEVYHNLK.N	
					1143.7		R.IGAEVYHNLK.N	
					1961		K.DATNVGDEGGFAPNILENK.E	
					1961		K.DATNVGDEGGFAPNILENK.E	
					1540.9		K.VVIGMDVAASEFFR.S	
					1540.9		K.VVIGMDVAASEFFR.S	
					1556.8		K.VVIGMDVAASEFFR.S	Oxidation (M)
					1556.8		K.VVIGMDVAASEFFR.S	Oxidation (M)
					800.4		K.YDLDFK.S	
					800.4		K.YDLDFK.S	

					773.37		K.SPDDPSR.Y	
					1425.8		R.YISPDQLADLYK.S	
					1425.8		R.YISPDQLADLYK.S	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					1492.9		K.AVNEKSCNCLLLK.V	Carbamidomethyl (C); Deamidated (NQ)
					1492.9		K.AVNEKSCNCLLLK.V	Carboxymethyl (C)
					2510.2		K.SCNCLLLKVNQIGSVTESLQACK.L	Carboxymethyl (C); Deamidated (NQ)
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)
					1525.8		K.LAQANGWGVMVSHR.S	
					1526.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ)
					1526.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ)
					1542.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ); Oxidation (M)
					2297.3		R.SGETEDTFIADLVVGLCTGQIK.T	Deamidated (NQ)
					2297.3		R.SGETEDTFIADLVVGLCTGQIK.T	Deamidated (NQ)
					2353.2		R.SGETEDTFIADLVVGLCTGQIK.T	Carbamidomethyl (C)
					2353.2		R.SGETEDTFIADLVVGLCTGQIK.T	Carbamidomethyl (C)

					806.48		K.YNQLLR.I	
					806.48		K.YNQLLR.I	
5	ENOA	P06733	1.60E-71	42	766.39	750	R.EIFDSR.G	
					766.39		R.EIFDSR.G	
					1406.8		R.GNPTVEVDLFTSK.G	
					1406.8		R.GNPTVEVDLFTSK.G	
					1805		R.AAVPSGASTGIYEALELR.D	
					1805		R.AAVPSGASTGIYEALELR.D	
					704.43		K.GVPLYR.H	
					704.43		K.GVPLYR.H	
					1908.1		K.LAMQEFMILPVGAANFR.E	
					1908.1		K.LAMQEFMILPVGAANFR.E	
					1924		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1924		K.LAMQEFMILPVGAANFR.E	Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1940		K.LAMQEFMILPVGAANFR.E	2 Oxidation (M)
					1143.7		R.IGAEVYHNLK.N	
					1143.7		R.IGAEVYHNLK.N	
					1540.8		K.VVIGMDVAASEFFR.S	
					1540.8		K.VVIGMDVAASEFFR.S	

					1556.8		K.VVIGMDVAASEFFR.S	Oxidation (M)
					1556.8		K.VVIGMDVAASEFFR.S	Oxidation (M)
					1425.8		R.YISPDQLADLYK.S	
					1425.8		R.YISPDQLADLYK.S	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					2033.1		K.FTASAGIQVVGDDLTVTNPK.R	
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)
					1633.9		K.VNQIGSVTESLQACK.L	Carbamidomethyl (C)
					1525.8		K.LAQANGWGVMVSHR.S	
					1526.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ)
					1526.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ)
					1542.8		K.LAQANGWGVMVSHR.S	Deamidated (NQ); Oxidation (M)
					2297.3		R.SGETEDTFIADLVVGLCTGQIK.T	Deamidated (NQ)
					2297.3		R.SGETEDTFIADLVVGLCTGQIK.T	Deamidated (NQ)
					2353.3		R.SGETEDTFIADLVVGLCTGQIK.T	Carbamidomethyl (C)
					2353.3		R.SGETEDTFIADLVVGLCTGQIK.T	Carbamidomethyl (C)
					806.47		K.YNQLLR.I	
					806.47		K.YNQLLR.I	
					1103.6		R.IEEELGSKAK.F	

6	ANXA5	P08758	2.00E-29	52	1340.8	329	R.GTVTDFPGFDER.A	
					1340.8		R.GTVTDFPGFDER.A	
					1705.1		K.GLGTDEESILTLLTSR.S	
					1705.1		K.GLGTDEESILTLLTSR.S	
					1143.8		K.LIVALMKPSR.L	Oxidation (M)
					1014.6		R.LYDAYELK.H	
					1014.6		R.LYDAYELK.H	
					1125.7		K.HALKGAGTNEK.V	
					1125.7		K.HALKGAGTNEK.V	
					1001.7		K.VLTEIIASR.T	
					1001.7		K.VLTEIIASR.T	
					744.46		R.TPEELR.A	
					744.46		R.TPEELR.A	
					2888.5		K.QVYEEEYGSSLEDDVVGDTSGYYQR.M	
					2888.5		K.QVYEEEYGSSLEDDVVGDTSGYYQR.M	
					1156.8		R.MLVVLLQANR.D	
					1156.8		R.MLVVLLQANR.D	
					1172.8		R.MLVVLLQANR.D	Oxidation (M)
					1172.8		R.MLVVLLQANR.D	Oxidation (M)
					864.46		K.WGTDEEK.F	

					864.46		K.WGTDEEK.F	
					1800.1		K.WGTDEEKFITIFGTR.S	
					954.64		K.FITIFGTR.S	
					954.64		K.FITIFGTR.S	
					1803.1		K.YMTISGFQIEETIDR.E	
					1819		K.YMTISGFQIEETIDR.E	Oxidation (M)
					1819		K.YMTISGFQIEETIDR.E	Oxidation (M)
					1155.7		K.GAGTDDHTLIR.V	
					1106.7		R.SEIDLFNIR.K	
					1106.7		R.SEIDLFNIR.K	
					1234.8		R.SEIDLFNIRK.E	
					1274.8		K.NFATSLYSMIK.G	
					1274.8		K.NFATSLYSMIK.G	
					1290.8		K.NFATSLYSMIK.G	Oxidation (M)
					1290.8		K.NFATSLYSMIK.G	Oxidation (M)
7	ERP29	P30040	2.50E-38	57	1324.8	418	K.GALPLDTVTFYK.V	
					1324.8		K.GALPLDTVTFYK.V	
					1247.6		K.FDTQYPYGEK.Q	
					1247.6		K.FDTQYPYGEK.Q	
					822.44		K.QDEFKR.L	

					822.44		K.QDEFKR.L	
					2468.3		R.LAENSASSDDLLVAEVGISDYGDK.L	
					1320.7		K.ESYPVFYLFR.D	
					1608.8		R.DGDFENPVPYTGAVK.V	
					1608.8		R.DGDFENPVPYTGAVK.V	
					2233.3		R.DGDFENPVPYTGAVKVGAIQR.W	
					2234.2		R.DGDFENPVPYTGAVKVGAIQR.W	Deamidated (NQ)
					2583.4		K.GQGVYLGMPGCLPVYDALAGEFIR.A	Carbamidomethyl (C)
					2583.4		K.GQGVYLGMPGCLPVYDALAGEFIR.A	Carbamidomethyl (C)
					1065.6		K.KWAEQYLK.I	
					1065.6		K.KWAEQYLK.I	
					937.52		K.WAEQYLK.I	
					937.52		K.WAEQYLK.I	
					1383.8		K.WAEQYLKIMGK.I	Deamidated (NQ); Oxidation (M)
					1708.9		K.ILDQGEDFPASEMTR.I	
					1708.9		K.ILDQGEDFPASEMTR.I	
					1724.9		K.ILDQGEDFPASEMTR.I	Oxidation (M)
					1724.9		K.ILDQGEDFPASEMTR.I	Oxidation (M)
					842.54		R.IARLIEK.N	
					1134.7		K.SLNILTAFQK.K	

					1134.7		K.SLNILTAFQK.K	
8	HSP7C	P11142	1.60E-55	43	2263.3	590	K.GPAVGIDLGTTYSCVGVFQHGK.V	Carbamidomethyl (C)
					2263.3		K.GPAVGIDLGTTYSCVGVFQHGK.V	Carbamidomethyl (C)
					1228.7		K.VEIIANDQGNR.T	
					1228.7		K.VEIIANDQGNR.T	
					1487.8		R.TTPSYVAFTDTER.L	
					1487.8		R.TTPSYVAFTDTER.L	
					1670		K.NQVAMNPTNTVFDAK.R	4 Deamidated (NQ); Oxidation (M)
					1410.8		R.RFDDAVVQSDMK.H	
					1410.8		R.RFDDAVVQSDMK.H	
					1426.8		R.RFDDAVVQSDMK.H	Oxidation (M)
					1616.9		K.SFYPEEVSSMVLTK.M	
					1982.2		K.TVTNAVVTVPAYFNDSQR.Q	
					1982.2		K.TVTNAVVTVPAYFNDSQR.Q	
					1199.8		K.DAGTIAGLNVLR.I	
					1199.8		K.DAGTIAGLNVLR.I	
					1660		R.IINEPTAAAIAYGLDK.K	
					1660		R.IINEPTAAAIAY	

							GLDK.K	
					1788.1		R.IINEPTAAAIAY GLDKK.V	
					1691.9		K.STAGDTHLGG EDFDNR.M	
					1691.9		K.STAGDTHLGG EDFDNR.M	
					1235.7		R.MVNHFIAEFK. R	
					1235.7		R.MVNHFIAEFK. R	
					1480.9		R.ARFEELNADLF R.G	
					1253.7		R.FEELNADLFR.G	
					1253.7		R.FEELNADLFR.G	
					1481.9		K.SQIHDIVLVGG STR.I	
					1450.8		K.IQKLLQDFFNG K.E	
					1081.6		K.LLQDFFNGK.E	
					1081.6		K.LLQDFFNGK.E	
					1082.6		K.LLQDFFNGK.E	Deamidated (NQ)
					1566.9		K.LLQDFFNGKEL NK.S	Deamidated (NQ)
					1566.9		K.LLQDFFNGKEL NK.S	Deamidated (NQ)
					1567.9		K.LLQDFFNGKEL NK.S	2 Deamidated (NQ)
					2774.5		K.QTQTFTTYSDN QPGVLIQVYEGE R.A	
					2774.5		K.QTQTFTTYSDN QPGVLIQVYEGE R.A	
					1126.7		R.MVQEAEKYK. A	Deamidated (NQ)

					1126.7		R.MVQEAEKYK.A	Deamidated (NQ)
					1303.7		K.NSLESYAFNMK.A	
					1303.7		K.NSLESYAFNMK.A	
					1304.7		K.CNEIINWLDK.N	Carbamidomethyl (C)
					1745.9		K.NQTAEKEEFEHQQK.E	
					1745.9		K.NQTAEKEEFEHQQK.E	
					1444.8		K.ELEKVCNPIITK.L	Carboxymethyl (C)
9	HSP7C	P11142	1.60E-167	55	2263.3	1710	K.GPAVGIDLGTTYSCVGVFQHGK.V	Carbamidomethyl (C)
					2263.3		K.GPAVGIDLGTTYSCVGVFQHGK.V	Carbamidomethyl (C)
					1228.7		K.VEIIANDQGNR.T	
					1228.7		K.VEIIANDQGNR.T	
					1487.8		R.TTPSYVAFTDTER.L	
					1487.8		R.TTPSYVAFTDTER.L	
					1649.9		K.NQVAMNPTNTVFDAK.R	
					1649.9		K.NQVAMNPTNTVFDAK.R	
					1665.9		K.NQVAMNPTNTVFDAK.R	Oxidation (M)
					1410.8		R.RFDDAVVQSDMK.H	
					1410.8		R.RFDDAVVQSD	

							MK.H	
					1426.8		R.RFDDAVVQSDMK.H	Oxidation (M)
					1670.9		K.HWPFMVVNDAGRPK.V	Deamidated (NQ); Oxidation (M)
					1670.9		K.HWPFMVVNDAGRPK.V	Deamidated (NQ); Oxidation (M)
					1616.9		K.SFYPEEVSSMVLTK.M	
					1616.9		K.SFYPEEVSSMVLTK.M	
					1632.9		K.SFYPEEVSSMVLTK.M	Oxidation (M)
					993.58		K.EIAEAYLGK.T	
					993.58		K.EIAEAYLGK.T	
					1982.1		K.TVTNAVVTVPAYFNDSQR.Q	
					1982.1		K.TVTNAVVTVPAYFNDSQR.Q	
					1199.8		K.DAGTIAGLNVLR.I	
					1199.8		K.DAGTIAGLNVLR.I	
					1660		R.IINEPTAAAIAYGLDK.K	
					1660		R.IINEPTAAAIAYGLDK.K	
					1788.1		R.IINEPTAAAIAYGLDKK.V	
					1788.1		R.IINEPTAAAIAYGLDKK.V	
					1691.8		K.STAGDTHLGGEDFDNR.M	
					1691.8		K.STAGDTHLGGEDFDNR.M	
					1235.7		R.MVNHFIAEFK.	

							R	
					1235.7		R.MVNHFIAEFK.R	
					1251.7		R.MVNHFIAEFK.R	Oxidation (M)
					2997.7		R.TLSSSTQASIEIDSLYEGIDFYTSITR.A	
					2997.7		R.TLSSSTQASIEIDSLYEGIDFYTSITR.A	
					1480.9		R.ARFEELNADLFR.G	
					1253.7		R.FEELNADLFR.G	
					1253.7		R.FEELNADLFR.G	
					1481.9		K.SQIHDIVLVGGSTR.I	
					1450.8		K.IQKLLQDFFNGK.E	
					1081.6		K.LLQDFFNGK.E	
					1082.6		K.LLQDFFNGK.E	Deamidated (NQ)
					1082.6		K.LLQDFFNGK.E	Deamidated (NQ)
					1567.9		K.LLQDFFNGKELNK.S	2 Deamidated (NQ)
					1567.9		K.LLQDFFNGKELNK.S	2 Deamidated (NQ)
					2260.3		K.SINPDEAVAYGAAVQAAILSGDK.S	
					2774.5		K.QTQTFTTYSDNQPGVLIQVYEGER.A	
					2774.5		K.QTQTFTTYSDNQPGVLIQVYEGER.A	
					1197.7		K.FELTGIPPAPR.G	

					1303.7		K.NSLESYAFNMK.A	
					1319.7		K.NSLESYAFNMK.A	Oxidation (M)
					1304.7		K.CNEIINWLDK.N	Carbamidomethyl (C)
					1304.7		K.CNEIINWLDK.N	Carbamidomethyl (C)
					1745.9		K.NQTAEKEEFEHQQK.E	
					1745.9		K.NQTAEKEEFEHQQK.E	
					1074.6		K.EEFEHQQK.E	
					1074.6		K.EEFEHQQK.E	
					1444.8		K.ELEKVCNPIITK.L	Carboxymethyl (C)
10	HSPB1	P04792	1.20E-30	40	831.55	341	R.VPFSLLR.G	
					831.55		R.VPFSLLR.G	
					961.5		R.GPSWDPFR.D	
					961.5		R.GPSWDPFR.D	
					960.49		R.DWYPHSR.L	
					1163.7		R.LFDQAFGLPR.L	
					1163.7		R.LFDQAFGLPR.L	
					1075.6		R.QLSSGVSEIR.H	
					1075.6		R.QLSSGVSEIR.H	
					1784		R.VSLDVNHFAPDELTVK.T	
					1784		R.VSLDVNHFAPDELTVK.T	
					1785		R.VSLDVNHFAPDELTVK.T	Deamidated (NQ)
					1104.6		R.QDEHGYISR.C	

					1104.6		R.QDEHGYISR.C	
					1906.1		K.LATQSNEITIPVTFESR.A	
					1906.1		K.LATQSNEITIPVTFESR.A	
11	K1C18	P05783	1.60E-198	72	975.49	2020	R.STFSTNYR.S	
					975.49		R.STFSTNYR.S	
					2261.2		R.GGMGSGGLATGIAGGLAGMGGIQNEK.E	
					2261.2		R.GGMGSGGLATGIAGGLAGMGGIQNEK.E	
					2277.2		R.GGMGSGGLATGIAGGLAGMGGIQNEK.E	Oxidation (M)
					2277.2		R.GGMGSGGLATGIAGGLAGMGGIQNEK.E	Oxidation (M)
					3337.9		R.GGMGSGGLATGIAGGLAGMGGIQNEKETMQSLNDR.L	2 Deamidated (NQ)
					3337.9		R.GGMGSGGLATGIAGGLAGMGGIQNEKETMQSLNDR.L	2 Deamidated (NQ)
					1093.6		K.ETMQSLNDR.L	
					1109.5		K.ETMQSLNDR.L	Oxidation (M)
					1109.5		K.ETMQSLNDR.L	Oxidation (M)
					837.47		R.LASYLDR.V	
					837.47		R.LASYLDR.V	
					924.55		K.IREHLEK.K	
					924.55		K.IREHLEK.K	
					982.47		R.DWSHYFK.I	

					982.47		R.DWSHYFK.I	
					758.48		K.IIEDLR.A	
					758.48		K.IIEDLR.A	
					1319.7		R.AQIFANTVDNAR.I	
					1319.7		R.AQIFANTVDNAR.I	
					1041.7		R.IVLQIDNAR.L	
					1041.7		R.IVLQIDNAR.L	
					807.42		R.LAADDFR.V	
					807.42		R.LAADDFR.V	
					1239.7		R.VKYETELAMR.Q	
					1239.7		R.VKYETELAMR.Q	
					1255.7		R.VKYETELAMR.Q	Oxidation (M)
					1012.5		K.YETELAMR.Q	
					1028.5		K.YETELAMR.Q	Oxidation (M)
					1028.5		K.YETELAMR.Q	Oxidation (M)
					1267.7		R.QSVENDIHGLR.K	
					1267.7		R.QSVENDIHGLR.K	
					1395.8		R.QSVENDIHGLRK.V	
					1395.8		R.QSVENDIHGLRK.V	
					1046.6		K.VIDDTNITR.L	
					2177.3		R.LQLETEIEALKEELLFMK.K	
					2177.3		R.LQLETEIEALKEELLFMK.K	

					2193.3		R.LQLETEIEALKEELLFMK.K	Oxidation (M)
					2193.3		R.LQLETEIEALKEELLFMK.K	Oxidation (M)
					1012.5		K.KNHEEEVK.G	
					1884.1		K.GLQAQIASSGLTVEVDAPK.S	
					1884.1		K.GLQAQIASSGLTVEVDAPK.S	
					718.42		K.IMADIR.A	
					718.42		K.IMADIR.A	
					965.51		R.AQYDELAR.K	
					965.51		R.AQYDELAR.K	
					1093.6		R.AQYDELARK.N	
					3428.8		K.YWSQQIEESTTVVTTQSAEVGAAETTLTELR.R	
					3428.8		K.YWSQQIEESTTVVTTQSAEVGAAETTLTELR.R	
					1506.8		R.TVQSLEIDLDSMR.N	
					1506.8		R.TVQSLEIDLDSMR.N	
					1522.8		R.TVQSLEIDLDSMR.N	Oxidation (M)
					1522.8		R.TVQSLEIDLDSMR.N	Oxidation (M)
					889.51		K.ASLENSLR.E	
					889.51		K.ASLENSLR.E	
					2670.5		R.YALQMEQLNGILLHLESELAQTR.A	
					2670.5		R.YALQMEQLNGILLHLESELAQTR.A	

					2671.5		R.YALQMEQLNGILLHLESELAQTR.A	Deamidated (NQ)
					2686.5		R.YALQMEQLNGILLHLESELAQTR.A	Oxidation (M)
					2686.5		R.YALQMEQLNGILLHLESELAQTR.A	Oxidation (M)
					1419.8		R.QAQEYEALLNIK.V	
					1419.8		R.QAQEYEALLNIK.V	
					1292.7		K.VKLEAEIATYR.R	
					1292.7		K.VKLEAEIATYR.R	
					1065.6		K.LEAEIATYR.R	
					1065.6		K.LEAEIATYR.R	
					2740.4		R.LLEDGEDFNLGDALDSSNSMQTIQK.T	
					2740.4		R.LLEDGEDFNLGDALDSSNSMQTIQK.T	
12	K1C19	P08727	5.00E-94	68	1554.9	975	R.QSSATSSFGGLGGGSVR.F	
					1554.9		R.QSSATSSFGGLGGGSVR.F	
					850.51		R.FGPGVAFR.A	
					850.51		R.FGPGVAFR.A	
					995.57		R.APSIHGGSGGR.G	
					1104.6		K.LTMQNLNDR.L	
					1104.6		K.LTMQNLNDR.L	
					1499.8		K.VRALEAANGE	Deamidated (NQ)

							LEVK.I	
					1499.8		K.VRALEAANGELEVK.I	Deamidated (NQ)
					1008.6		K.IRDWYQK.Q	
					1008.6		K.IRDWYQK.Q	
					1419.9		R.DWYQKQGPGPSR.D	Deamidated (NQ)
					1419.9		R.DWYQKQGPGPSR.D	Deamidated (NQ)
					1674.9		R.DYSHYYTTIQDLR.D	
					1674.9		R.DYSHYYTTIQDLR.D	
					1041.7		R.IVLQIDNAR.L	
					1041.7		R.IVLQIDNAR.L	
					807.45		R.LAADDFR.T	
					807.45		R.LAADDFR.T	
					1222.7		R.TKFETEQALR.M	
					1029.7		R.VLDELTLAR.T	
					1029.7		R.VLDELTLAR.T	
					1277.8		R.TDLEMQIEGLK.E	Deamidated (NQ)
					1292.8		R.TDLEMQIEGLK.E	Oxidation (M)
					1292.8		R.TDLEMQIEGLK.E	Oxidation (M)
					1227.7		K.NHEEEISTLR.G	
					1227.7		K.NHEEEISTLR.G	
					2730.5		R.GQVGGQVSVEVDSAPGTDLAKILSDMR.S	Deamidated (NQ)
					1354.7		R.SQYEVMAEQNR.K	

					1354.7		R.SQYEVMAEQNR.K	
					1370.7		R.SQYEVMAEQNR.K	Oxidation (M)
					1370.7		R.SQYEVMAEQNR.K	Oxidation (M)
					1210.7		R.KDAEAWFTSR.T	
					1210.7		R.KDAEAWFTSR.T	
					1082.6		K.DAEAWFTSR.T	
					1082.6		K.DAEAWFTSR.T	
					2231.2		R.TEELNREVAGHTEQLQMSR.S	3 Deamidated (NQ)
					1485.8		R.EVAGHTEQLQMSR.S	
					1485.8		R.EVAGHTEQLQMSR.S	
					1974.1		R.RTLQGLEIELQSQLSMK.A	
					1977.1		R.RTLQGLEIELQSQLSMK.A	3 Deamidated (NQ)
					1977.1		R.RTLQGLEIELQSQLSMK.A	3 Deamidated (NQ)
					1389.8		K.AALEDTLAETEAR.F	
					1389.8		K.AALEDTLAETEAR.F	
					965.53		R.QNQEYQR.L	
					965.53		R.QNQEYQR.L	
					1365.8		K.SRLEQEIATYR.S	
					1122.7		R.LEQEIATYR.S	
					1122.7		R.LEQEIATYR.S	
					1905		R.SLLEGQEDHYN	

							NLSASK.V	
					1905		R.SLLEGQEDHYNNLSASK.V	
13	K2C8	P05787	1.20E-60	62	703.44	641	K.VSTSGPR.A	
					911.51		R.SYTSGPGSR.I	
					911.51		R.SYTSGPGSR.I	
					870.51		R.ISSSSFSR.V	
					766.46		R.VGSSNFR.G	
					766.46		R.VGSSNFR.G	
					827.5		K.FASFIDK.V	
					827.5		K.FASFIDK.V	
					906.55		R.FLEQQNK.M	
					1030.7		K.WSLLQQQK.T	
					1030.7		K.WSLLQQQK.T	
					1848		R.SNMDNMFESYINNLR.R	
					1848		R.SNMDNMFESYINNLR.R	
					1864		R.SNMDNMFESYINNLR.R	Oxidation (M)
					1864		R.SNMDNMFESYINNLR.R	Oxidation (M)
					1880		R.SNMDNMFESYINNLR.R	2 Oxidation (M)
					1880		R.SNMDNMFESYINNLR.R	2 Oxidation (M)
					1045.7		R.QLETLGQEK.L	
					2034.3		K.LKLEAELGNMQGLVEDFK.N	
					2034.3		K.LKLEAELGNMQGLVEDFK.N	

					1793.1		K.LEAELGNMQG LVEDFK.N	
					1153.7		K.NKYEDEINK.R	Deamidated (NQ)
					1066.6		K.YEDEINKR.T	
					1352.8		R.TEMENEFVLIK. K	
					1352.8		R.TEMENEFVLIK. K	
					1368.8		R.TEMENEFVLIK. K	Oxidation (M)
					1368.8		R.TEMENEFVLIK. K	Oxidation (M)
					1798		K.DVDEAYMNKV ELESR.L	
					1419.9		R.LEGLTDEINFL R.Q	
					1419.9		R.LEGLTDEINFL R.Q	
					1079.6		R.QLYEEEIR.E	
					1079.6		R.QLYEEEIR.E	
					2109.2		R.ELQSQISDTSV VLSMDNSR.S	
					2109.2		R.ELQSQISDTSV VLSMDNSR.S	
					2125.2		R.ELQSQISDTSV VLSMDNSR.S	Oxidation (M)
					2125.2		R.ELQSQISDTSV VLSMDNSR.S	
					1320.8		R.SLDMDSIIAEV K.A	
					1320.8		R.SLDMDSIIAEV K.A	
					1412.8		R.SRAEAESMYQI K.Y	
					1169.7		R.AEAESMYQIK. Y	

					1137.7		K.YEELQSLAGK.H	
					1137.7		K.YEELQSLAGK.H	
					712.4		K.HGDDLR.R	
					712.4		K.HGDDLR.R	
					868.51		K.HGDDLRR.T	
					868.51		K.HGDDLRR.T	
					1208.7		R.TKTEISEMNR.N	
					1208.7		R.TKTEISEMNR.N	
					1000.7		R.LQAEIEGLK.G	
					1000.7		R.LQAEIEGLK.G	
					1344.8		R.ASLEAAIADAEQR.G	
					1344.8		R.ASLEAAIADAEQR.G	
					1129.7		K.LSELEAALQR.A	
					1129.7		K.LSELEAALQR.A	
					1153.7		R.EYQELMNVK.L	
					1277.8		K.LALDIEIATYR.K	
					1060.7		R.KLLEGEESR.L	
					932.55		K.LLEGEESR.L	
					932.55		K.LLEGEESR.L	
					3726		K.TTSGYAGGLSSAYGGLTSPGLSYSLGSSFGSGAGSSSFSR.T	
					3726		K.TTSGYAGGLSSAYGGLTSPGLSYSLGSSFGSGAGSSSFSR.T	

14	LDHB	P07195	1.60E-22	37	1695	260	K.LIAPVAEEEATVPNNK.I	
					1695		K.LIAPVAEEEATVPNNK.I	
					913.62		K.IVVVTAGVR.Q	
					913.62		K.IVVVTAGVR.Q	
					833.41		R.QQEGESR.L	
					833.41		R.QQEGESR.L	
					742.48		R.LNLVQR.N	
					742.48		R.LNLVQR.N	
					720.42		R.NVNVFK.F	
					720.42		R.NVNVFK.F	
					957.64		K.FIIPQIVK.Y	
					957.64		K.FIIPQIVK.Y	
					1248.7		R.VIGSGCNLDSAR.F	Carbamidomethyl (C)
					1248.7		R.VIGSGCNLDSAR.F	Carbamidomethyl (C)
					1250.7		R.VIGSGCNLDSAR.F	Carboxymethyl (C); Deamidated (NQ)
					1267.7		K.MVVESAYEVIK.L	
					1267.7		K.MVVESAYEVIK.L	
					2239.2		K.GMYGIENEVFLSLPCILNAR.G	
					2239.2		K.GMYGIENEVFLSLPCILNAR.G	
					2297.3		K.GMYGIENEVFLSLPCILNAR.G	Carboxymethyl (C)
					2297.3		K.GMYGIENEVFLSLPCILNAR.G	Carbamidomethyl (C); Deamidated

								(NQ)
					1201.7		R.GLTSVINQKLK.D	Deamidated (NQ)
					1158.6		K.LKDDEVAQLK.K	
					1158.6		K.LKDDEVAQLK.K	
					1045.6		K.DDEVAQLKK.S	
					1176.6		K.SADTLWDIQK.D	
					1176.6		K.SADTLWDIQK.D	
15	MLRM	P19105	2.00E-07	29	1237.7	109	K.EAFNMIDQNR.D	
					1237.7		K.EAFNMIDQNR.D	
					1253.6		K.EAFNMIDQNR.D	Oxidation (M)
					1253.6		K.EAFNMIDQNR.D	Oxidation (M)
					2350.2		R.NAFACFDEEATGTIQEDYLR.E	Carbamidomethyl (C)
					2350.2		R.NAFACFDEEATGTIQEDYLR.E	Carbamidomethyl (C)
					1415.7		R.FTDEEVDELYR.E	
					1415.7		R.FTDEEVDELYR.E	
					1260.7		K.GNFNYIEFTR.I	
					1260.7		K.GNFNYIEFTR.I	
16	PGAM1	P18669	5.00E-89	64	1193.6	925	-.MAAYKLVLIR.H	Oxidation (M)
					1312.7		R.HGESAWNLENR.F	

					1312.7		R.HGESAWNLENR.F	
					1980		R.FSGWYDADLSPAGHEEAK.R	
					1980		R.FSGWYDADLSPAGHEEAK.R	
					2136.1		R.FSGWYDADLSPAGHEEAKR.G	
					757.47		K.RGGQALR.D	
					757.47		K.RGGQALR.D	
					1779.9		R.DAGYEFDICFTSVQK.R	Carbamidomethyl (C)
					1779.9		R.DAGYEFDICFTSVQK.R	Carbamidomethyl (C)
					1059.6		R.HYGGLTGLNK.A	
					1059.6		R.HYGGLTGLNK.A	
					768.43		K.HGEAQVK.I	
					768.43		K.HGEAQVK.I	
					2417.2		R.SYDVPPPPMEPDHPFYSNISK.D	
					2417.2		R.SYDVPPPPMEPDHPFYSNISK.D	
					2433.2		R.SYDVPPPPMEPDHPFYSNISK.D	Oxidation (M)
					1868.9		R.YADLTEDQLPSCESLK.D	Carbamidomethyl (C)
					1868.9		R.YADLTEDQLPSCESLK.D	Carbamidomethyl (C)
					2369.3		R.YADLTEDQLPSCESLKDTIAR.A	Deamidated (NQ)
					2369.3		R.YADLTEDQLPSCESLKDTIAR.A	Deamidated (NQ)
					2425.3		R.YADLTEDQLPSCESLKDTIAR.A	Carbamidomethyl (C)

					1684		R.ALPFWNEEIVPQIK.E	
					1684		R.ALPFWNEEIVPQIK.E	
					1150.7		R.VLIAAHGNSLR.G	
					1150.7		R.VLIAAHGNSLR.G	
					2115.2		K.NLKPIKPMQFLGDEETVR.K	
					2115.2		K.NLKPIKPMQFLGDEETVR.K	
					2131.2		K.NLKPIKPMQFLGDEETVR.K	Oxidation (M)
					2131.2		K.NLKPIKPMQFLGDEETVR.K	Oxidation (M)
17	PDIA1	P07237	1.60E-132	60	1286.7	1360	R.KSNFAEALAAHK.Y	
					1286.7		R.KSNFAEALAAHK.Y	
					1158.6		K.SNFAEALAAHK.Y	
					1158.6		K.SNFAEALAAHK.Y	
					862.49		K.ALAPEYAK.A	
					1002.6		K.LKAEGSEIR.L	
					1002.6		K.LKAEGSEIR.L	
					1780.9		K.VDATEESDLAQQYGVR.G	
					1780.9		K.VDATEESDLAQQYGVR.G	
					1240.7		K.FFRNGDTASPK.E	Deamidated (NQ)
					1240.7		K.FFRNGDTASPK.E	Deamidated (NQ)

					1202.7		R.EADDIVNWLK.K	
					1202.7		R.EADDIVNWLK.K	
					2713.5		K.QFLQAAEAIDDIPFGITSNSDVFSK.Y	
					1424.8		K.YQLDKDGVVLFK.K	
					1424.8		K.YQLDKDGVVLFK.K	
					751.41		K.KFDEGR.N	
					751.41		K.KFDEGR.N	
					1642.8		K.FDEGRNNFEGEVTK.E	Deamidated (NQ)
					1037.6		R.NNFEGEVTK.E	
					1965.1		K.HNQLPLVIEFTEQTAPK.I	
					1965.1		K.HNQLPLVIEFTEQTAPK.I	
					763.45		K.IFGGEIK.T	
					1081.7		K.THILLFLPK.S	
					1081.7		K.THILLFLPK.S	
					1460.8		K.SVSDYDGKLSNFK.T	Deamidated (NQ)
					1460.8		K.SVSDYDGKLSNFK.T	Deamidated (NQ)
					1834		K.ILFIFIDSDHTDNQR.I	
					1834		K.ILFIFIDSDHTDNQR.I	
					966.61		R.ILEFFGLK.K	
					988.55		K.KEECPAVR.L	Carbamidomethyl (C)
					988.55		K.KEECPAVR.L	Carbamidomethyl

								(C)
					1451.8		K.YKPESEELTAER.I	
					1451.8		K.YKPESEELTAER.I	
					962.5		R.ITEFCHR.F	Carbamidomethyl (C)
					962.5		R.ITEFCHR.F	Carbamidomethyl (C)
					2418.4		K.IKPHLMSQELPEDWDKQPVK.V	
					2418.4		K.IKPHLMSQELPEDWDKQPVK.V	
					2434.4		K.IKPHLMSQELPEDWDKQPVK.V	Oxidation (M)
					2434.4		K.IKPHLMSQELPEDWDKQPVK.V	Oxidation (M)
					1213.6		K.NFEDVAFDEK.K	
					1213.6		K.NFEDVAFDEK.K	
					1927.9		K.KNVFVEFYAPWCGHCK.Q	
					970.57		K.QLAPIWDK.L	
					1730		K.LGETYKDHENIVIAK.M	
					1730		K.LGETYKDHENIVIAK.M	
					928.56		K.VHSFPTLK.F	
					928.56		K.VHSFPTLK.F	
					910.49		K.FFPASADR.T	
					910.49		K.FFPASADR.T	
					1066.6		R.TVIDYNGER.T	

18	PARK7	Q99497	7.90E-41	71	2384.1	443	R.ALVILAKGAEEMETVIPVDVMR.R	
					1675.9		K.GAEEMETVIPVDVMR.R	
					1675.9		K.GAEEMETVIPVDVMR.R	
					1691.9		K.GAEEMETVIPVDVMR.R	Oxidation (M)
					1691.9		K.GAEEMETVIPVDVMR.R	Oxidation (M)
					1707.9		K.GAEEMETVIPVDVMR.R	2 Oxidation (M)
					1658		K.VTVAGLAGKDPVQCSR.D	Carbamidomethyl (C)
					1659.9		K.VTVAGLAGKDPVQCSR.D	Carboxymethyl (C); Deamidated (NQ)
					861.43		K.DPVQCSR.D	Carbamidomethyl (C)
					861.43		K.DPVQCSR.D	Carbamidomethyl (C)
					2261.3		K.DPVQCSRDVVICPDASLEDAK.K	Deamidated (NQ)
					1531.8		R.DVVICPDASLEDAK.K	Carbamidomethyl (C)
					1531.8		R.DVVICPDASLEDAK.K	Carbamidomethyl (C)
					1659.9		R.DVVICPDASLEDAKK.E	Carbamidomethyl (C)
					2584.5		K.EGPYDVVVLPGGNLGAQNLSESAAVK.E	
					2584.5		K.EGPYDVVVLPGGNLGAQNLSESAAVK.E	
					2267.3		K.GLIAAICAGPTALLAHEIGFGSK.V	Carbamidomethyl (C)

					2267.3		K.GLIAAICAGPTALLAHEIGFGSK.V	Carbamidomethyl (C)
					1835.8		K.DKMMNGGHYTYSENR.V	Deamidated (NQ); 2 Oxidation (M)
					1835.8		K.DKMMNGGHYTYSENR.V	Deamidated (NQ); 2 Oxidation (M)
					1559.7		K.MMNGGHYTYSENR.V	
					1560.7		K.MMNGGHYTYSENR.V	Deamidated (NQ)
					1560.7		K.MMNGGHYTYSENR.V	Deamidated (NQ)
					1575.7		K.MMNGGHYTYSENR.V	Oxidation (M)
					1576.7		K.MMNGGHYTYSENR.V	Deamidated (NQ); Oxidation (M)
					1576.7		K.MMNGGHYTYSENR.V	Deamidated (NQ); Oxidation (M)
					1592.7		K.MMNGGHYTYSENR.V	Deamidated (NQ); 2 Oxidation (M)
					1592.7		K.MMNGGHYTYSENR.V	Deamidated (NQ); 2 Oxidation (M)
					1921.1		R.GPGTSFEFALAIVEALNGK.E	
					1921.1		R.GPGTSFEFALAIVEALNGK.E	
19	KPYM	P14618	1.60E-94	55	1197.7	980	R.LDIDSPPITAR.N	
					1197.7		R.LDIDSPPITAR.N	
					1359.8		R.NTGIICTIGPASR.S	Carbamidomethyl (C)
					1359.8		R.NTGIICTIGPASR.S	Carbamidomethyl (C)
					2019.3		R.NTGIICTIGPASRSVETLK.E	Carboxymethyl (C); Deamidated (NQ)

					1884		R.LNFSHGTHEYHAETIK.N	
					1884		R.LNFSHGTHEYHAETIK.N	
					2465.5		R.TATESFASDPILYRPVAVALDTK.G	
					2465.5		R.TATESFASDPILYRPVAVALDTK.G	
					1468.8		K.CDENILWLDYK.N	Carbamidomethyl (C)
					1468.8		K.CDENILWLDYK.N	Carbamidomethyl (C)
					1462.9		K.IYVDDGLISLQVK.Q	
					1780		K.GADFLVTEVENGGSLGSK.K	
					1781		K.GADFLVTEVENGGSLGSK.K	Deamidated (NQ)
					1781		K.GADFLVTEVENGGSLGSK.K	Deamidated (NQ)
					1860		K.FGVEQDVDMVFASFIR.K	
					1040.6		R.KASDVHEVR.K	
					912.51		K.ASDVHEVR.K	
					912.51		K.ASDVHEVR.K	
					1040.6		K.ASDVHEVRK.V	
					953.54		K.IENHEGVR.R	
					953.54		K.IENHEGVR.R	
					1822.1		R.RFDEILEASDGIMVAR.G	
					1822.1		R.RFDEILEASDGIMVAR.G	
					1838		R.RFDEILEASDGIMVAR.G	Oxidation (M)

					1838		R.RFDEILEASDGIMVAR.G	Oxidation (M)
					2211.3		R.CNRAGKPVICATQMLESMIK.K	2 Deamidated (NQ); Oxidation (M)
					2225.3		R.CNRAGKPVICATQMLESMIK.K	2 Oxidation (M)
					2225.3		R.CNRAGKPVICATQMLESMIK.K	2 Oxidation (M)
					2283.3		R.CNRAGKPVICATQMLESMIK.K	Carboxymethyl (C); 2 Oxidation (M)
					1019.6		K.GDYPLEAVR.M	
					1019.6		K.GDYPLEAVR.M	
					868.53		R.MQHLIAR.E	
					868.53		R.MQHLIAR.E	
					884.52		R.MQHLIAR.E	Oxidation (M)
					884.52		R.MQHLIAR.E	Oxidation (M)
					1932.1		R.EAEAAIYHLQLFEELR.R	
					1932.1		R.EAEAAIYHLQLFEELR.R	
					2175.3		R.LAPITSDPTEATAVGAVEASFK.C	
					2175.3		R.LAPITSDPTEATAVGAVEASFK.C	
					1165.7		K.CCSGAIIVLTK.S	Carboxymethyl (C)
					768.45		R.SAHQVAR.Y	
					768.45		R.SAHQVAR.Y	
					840.58		R.APIIAVTR.N	
					840.58		R.APIIAVTR.N	
					1456.9		R.NPQTARQAHLYR.G	2 Deamidated (NQ)

					1456.9		R.NPQTARQAHLYR.G	2 Deamidated (NQ)
					787.46		R.QAHLYR.G	
					787.46		R.QAHLYR.G	
					1645.9		R.QAHLYRGIFPVLCK.D	Deamidated (NQ)
					1642.9		K.DPVQEAWAEDVDLR.V	
					1642.9		K.DPVQEAWAEDVDLR.V	
20	AL1A1	P00352	1.60E-96	38	2283.2	1000	K.FPVFNPATEEELCQVEEGDK.E	2 Deamidated (NQ)
					1189.6		R.QAFQIGSPWR.T	
					1189.6		R.QAFQIGSPWR.T	
					829.49		K.LADLIER.D	
					829.49		K.LADLIER.D	
					1365.7		R.LLLATMESMNGGK.L	Deamidated (NQ)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					970.43		R.YCAGWADK.I	Carbamidomethyl (C)
					970.43		R.YCAGWADK.I	Carbamidomethyl (C)
					1544.8		R.TIPIDGNFFTYTR.H	
					1544.8		R.TIPIDGNFFTYTR.H	
					1645.9		R.IFVEESIYDEFVR.R	
					1645.9		R.IFVEESIYDEFVR.R	

					2674.4		K.YILGNPLTPGVTQGPQIDKEQYDK.I	
					2674.4		K.YILGNPLTPGVTQGPQIDKEQYDK.I	
					1117.6		K.LECGGGPWGNK.G	
					1117.6		K.LECGGGPWGNK.G	
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1990		K.GYFVQPTVFSNVTDEMR.I	
					1990		K.GYFVQPTVFSNVTDEMR.I	
					2006		K.GYFVQPTVFSNVTDEMR.I	Oxidation (M)
					2006		K.GYFVQPTVFSNVTDEMR.I	Oxidation (M)
					1731.9		R.IAKEEIFGPVQQIMK.F	Deamidated (NQ)
					1418.8		K.EEIFGPVQQIMK.F	
					1418.8		K.EEIFGPVQQIMK.F	
					1434.8		K.EEIFGPVQQIMK.F	Oxidation (M)
					1589.8		R.ANNTFYGLSAGVFTK.D	
					1589.8		R.ANNTFYGLSAGVFTK.D	
					1700.8		R.ELGEYGFHEYTEVK.T	
					1700.8		R.ELGEYGFHEYTEVK.T	

21	AL1A1	P00352	2.00E-96	49	1189.7	999	R.QAFQIGSPWR.T	
					1189.7		R.QAFQIGSPWR.T	
					829.51		K.LADLIER.D	
					1365.7		R.LLLATMESMNGGK.L	Deamidated (NQ)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					1716.9		K.LYSNAYLNDLAGCIK.T	Carboxymethyl (C); Deamidated (NQ)
					970.45		R.YCAGWADK.I	Carbamidomethyl (C)
					970.45		R.YCAGWADK.I	Carbamidomethyl (C)
					1544.9		R.TIPIDGNFFTYTR.H	
					1544.9		R.TIPIDGNFFTYTR.H	
					3067.7		K.EAGFPPGVVNIVPGYGPTAGAAISSHMDIDK.V	
					829.51		K.LIKEAAGK.S	
					3929		K.SPCIVLADADLDNAVEFAHHGVFYHQGQCCIAASR.I	3 Carbamidomethyl (C)
					3929		K.SPCIVLADADLDNAVEFAHHGVFYHQGQCCIAASR.I	3 Carbamidomethyl (C)
					1645.9		R.IFVEESIYDEFVR.R	
					1645.9		R.IFVEESIYDEFVR.R	
					2674.5		K.YILGNPLTPGV	

							TQGPQIDKEQYDK.I	
					2674.5		K.YILGNPLTPGVTQGPQIDKEQYDK.I	
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1990.1		K.GYFVQPTVFSNVTDEMR.I	
					1990.1		K.GYFVQPTVFSNVTDEMR.I	
					2006		K.GYFVQPTVFSNVTDEMR.I	Oxidation (M)
					2006		K.GYFVQPTVFSNVTDEMR.I	Oxidation (M)
					1731.9		R.IAKEEIFGPVQQIMK.F	Deamidated (NQ)
					1731.9		R.IAKEEIFGPVQQIMK.F	Deamidated (NQ)
					1418.8		K.EEIFGPVQQIMK.F	
					1418.8		K.EEIFGPVQQIMK.F	
					1434.8		K.EEIFGPVQQIMK.F	Oxidation (M)
					1589.9		R.ANNTFYGLSAGVFTK.D	
					1589.9		R.ANNTFYGLSAGVFTK.D	
					1700.9		R.ELGEYGFHEYTEVK.T	
					1700.9		R.ELGEYGFHEYTEVK.T	
22	AL1A1	P00352	1.60E-97	41	2283.3	1010	K.FPVFNPATEEELCQVEEGDK.E	2 Deamidated (NQ)

					1189.7		R.QAFQIGSPWR.T	
					1189.7		R.QAFQIGSPWR.T	
					809.39		R.TMDASER.G	
					829.52		K.LADLIER.D	
					1365.7		R.LLLATMESMNGGK.L	Deamidated (NQ)
					1659.9		K.LYSNAYLNDLAGCIK.T	2 Deamidated (NQ)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					1714.9		K.LYSNAYLNDLAGCIK.T	Carbamidomethyl (C)
					970.46		R.YCAGWADK.I	Carbamidomethyl (C)
					970.46		R.YCAGWADK.I	Carbamidomethyl (C)
					1544.9		R.TIPIDGNFFTYTR.H	
					1544.9		R.TIPIDGNFFTYTR.H	
					829.52		K.LIKEAAGK.S	
					1645.9		R.IFVEESIYDEFVR.R	
					1645.9		R.IFVEESIYDEFVR.R	
					2674.5		K.YILGNPLTPGVTQGPQIDKEQYDK.I	
					2674.5		K.YILGNPLTPGVTQGPQIDKEQYDK.I	
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1174.6		K.LECGGGPWGNK.G	Carbamidomethyl (C)
					1990.1		K.GYFVQPTVFSN	

							VTDEMR.I	
					1990.1		K.GYFVQPTVFSN VTDEMR.I	
					2006		K.GYFVQPTVFSN VTDEMR.I	Oxidation (M)
					2006		K.GYFVQPTVFSN VTDEMR.I	Oxidation (M)
					1731		R.IAKEEIFGPVQQ IMK.F	
					1731		R.IAKEEIFGPVQQ IMK.F	
					1418.8		K.EEIFGPVQQIM K.F	
					1418.8		K.EEIFGPVQQIM K.F	
					1434.8		K.EEIFGPVQQIM K.F	Oxidation (M)
					1589.9		R.ANNTFYGLSA GVFTK.D	
					1589.9		R.ANNTFYGLSA GVFTK.D	
					1700.9		R.ELGEYGFHEYT EVK.T	
					1700.9		R.ELGEYGFHEYT EVK.T	
23	GDIR	P52565	3.10E-45	40	1918	487	K.SIQEIQELDKD DESLR.K	
					1918		K.SIQEIQELDKD DESLR.K	
					721.43		K.QSFVLK.E	
					721.43		K.QSFVLK.E	
					752.39		K.EGVEYR.I	
					752.39		K.EGVEYR.I	
					980.54		K.YIQHTYR.K	

					980.54		K.YIQHTYR.K	
					1601.8		K.IDKTDYMVGSYGPR.A	
					1601.8		K.IDKTDYMVGSYGPR.A	
					1617.8		K.IDKTDYMVGSYGPR.A	Oxidation (M)
					1617.8		K.IDKTDYMVGSYGPR.A	Oxidation (M)
					1245.6		K.TDYMVGSYGPR.A	
					1245.6		K.TDYMVGSYGPR.A	
					1261.6		K.TDYMVGSYGPR.A	Oxidation (M)
					1261.6		K.TDYMVGSYGPR.A	Oxidation (M)
					1751.9		R.AEEYEFLTPVEEAPK.G	
					1751.9		R.AEEYEFLTPVEEAPK.G	
					2364.2		R.FTDDDKTDHLSWEWNLTIK.K	
					2364.2		R.FTDDDKTDHLSWEWNLTIK.K	
24	TBCB	Q99426	3.90E-19	39	2023	226	K.LDQEDALLGSYPVDDGCR.I	Carbamidomethyl (C)
					2023		K.LDQEDALLGSYPVDDGCR.I	Carbamidomethyl (C)
					1104.7		R.IHVIDHSGAR.L	
					1104.7		R.IHVIDHSGAR.L	
					1067.6		R.LGEYEDVSR.V	
					1067.6		R.LGEYEDVSR.V	
					1373.7		K.YTISQEAYDQR	

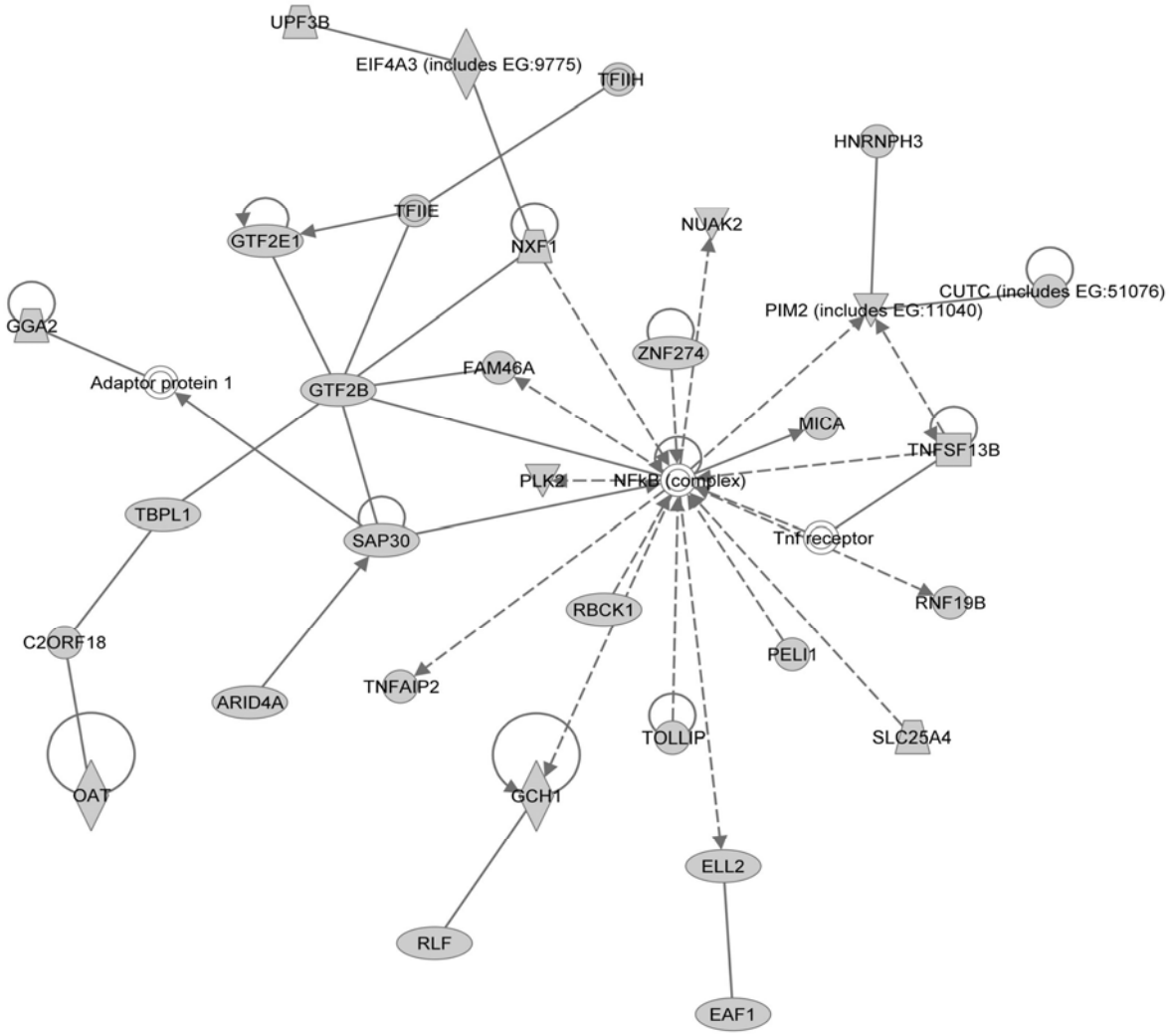
							.Q	
					1165.7		K.LGRYNEEER.A	
					839.41		R.YNEEER.A	
					839.41		R.YNEEER.A	
					1101.6		R.AQQEAEAAQR.L	
					1072.6		K.AQASSIPVGSR.C	
					1231.7		R.CEVRAAGQSPR.R	Carbamidomethyl (C); Deamidated (NQ)
					1231.7		R.CEVRAAGQSPR.R	Carboxymethyl (C)
					842.56		R.AAGQSPRR.G	
					945.47		R.YFECQAK.Y	Carbamidomethyl (C)
					945.47		R.YFECQAK.Y	Carbamidomethyl (C)

Supplementary Figures

Supplementary Figure 1

The top five networks identified in IPA analysis of differentially expressed genes after DAMTC treatment in A549 cells

Network 1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NXF1
NUAK2
CUTC (includes EG:51076)
PIM2 (includes EG:11040)
GGA2
ZNF274
Adaptor protein 1
GTF2B
FAM46A
MICA
TNFSF13B
PLK2
NFkB (complex)
TBPL1
SAP30
Tnf receptor
RNF19B
RBCK1
C2ORF18
PELI1
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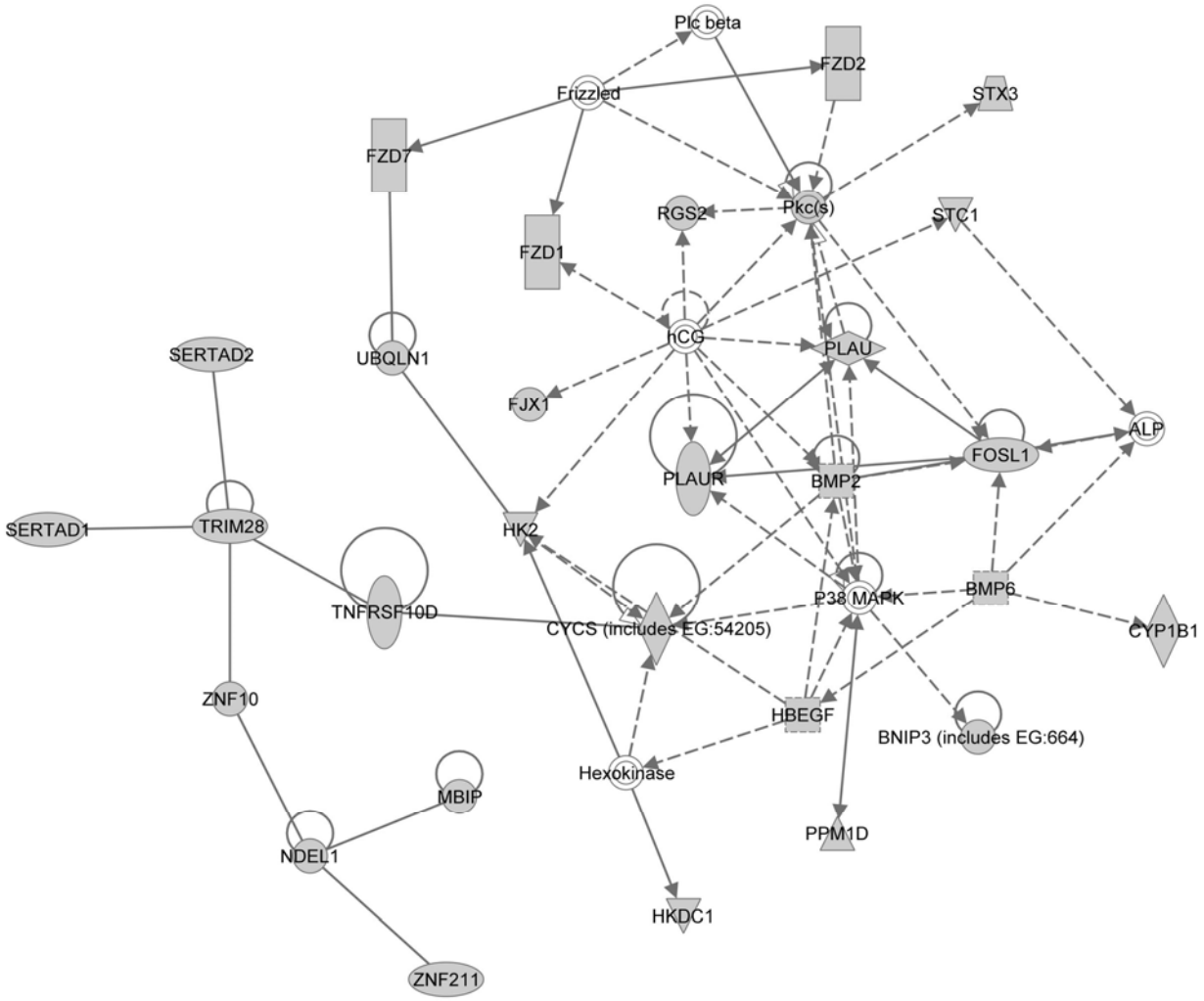
ARID4A
TOLLIP
SLC25A4
OAT
GCH1
ELL2
RLF
EAF1

Network 2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hCG
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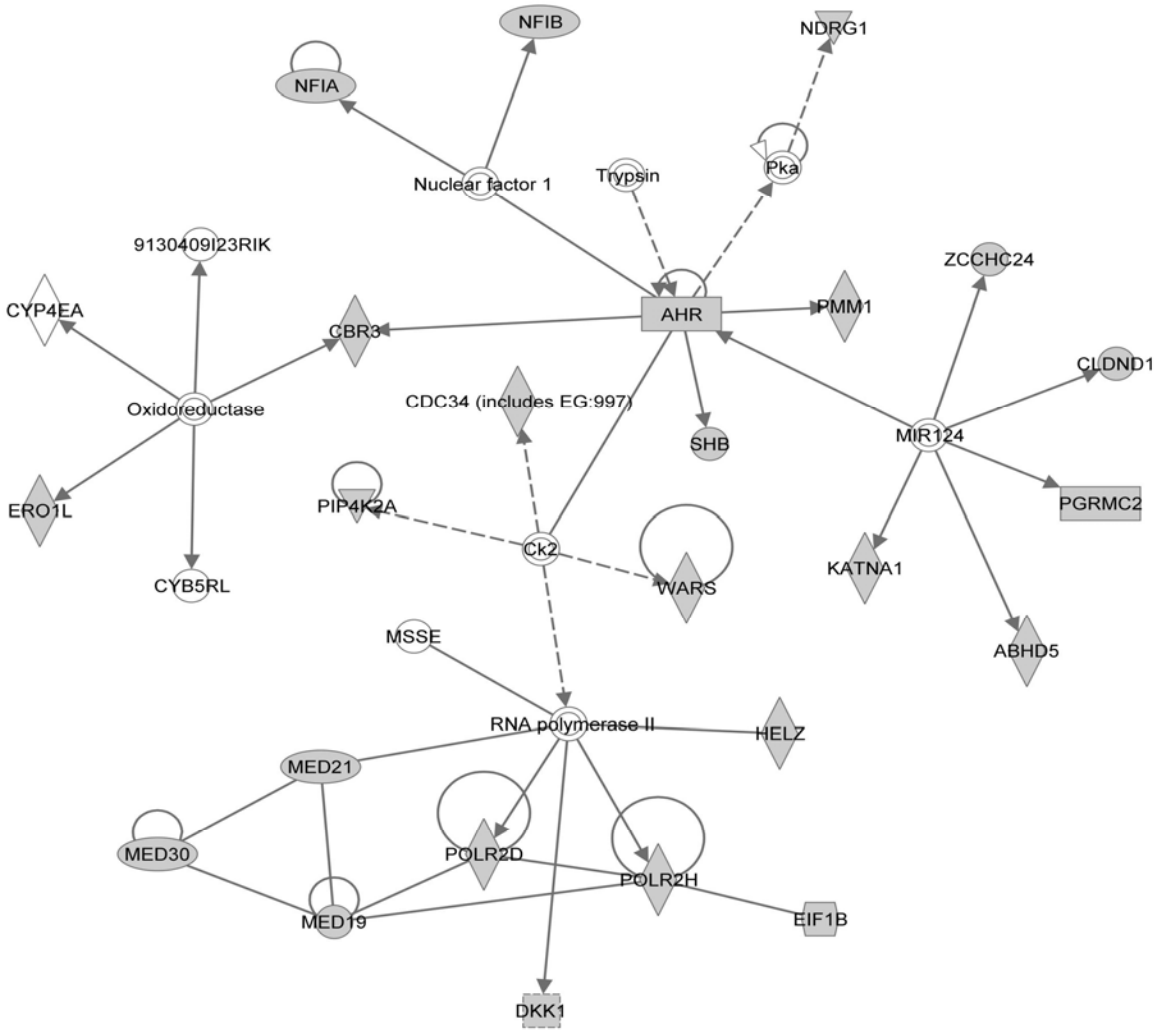
UBQLN1
FJX1
ALP
FOSL1
PLAUR
BMP2
SERTAD1
TRIM28
HK2
BMP6
P38 MAPK
TNFRSF10D
CYCS (includes EG:54205)
CYP1B1
ZNF10
HBEGF
BNIP3 (includes EG:664)
Hexokinase
MBIP
PPM1D
NDEL1
HKDC1
ZNF211

Network 3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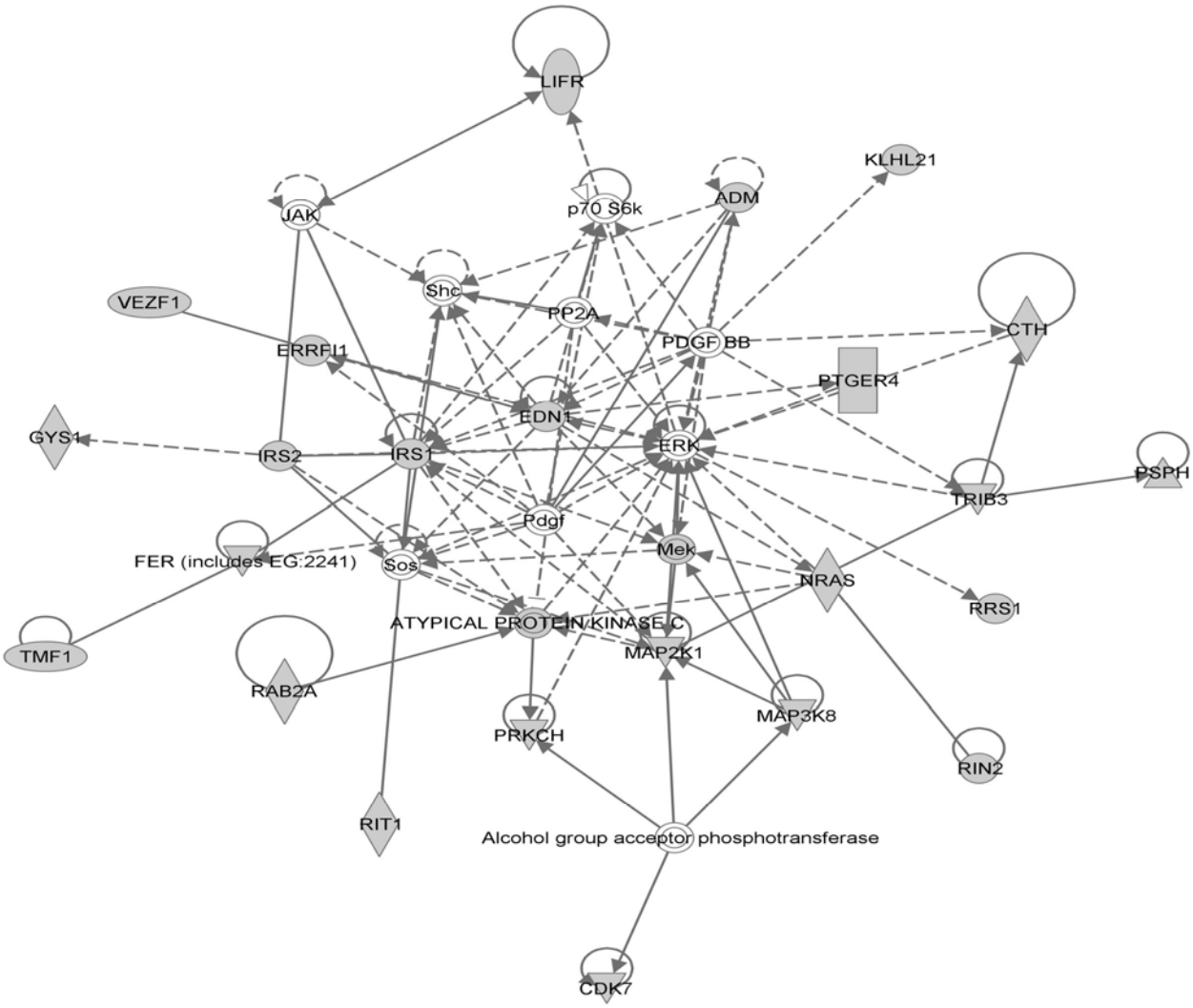
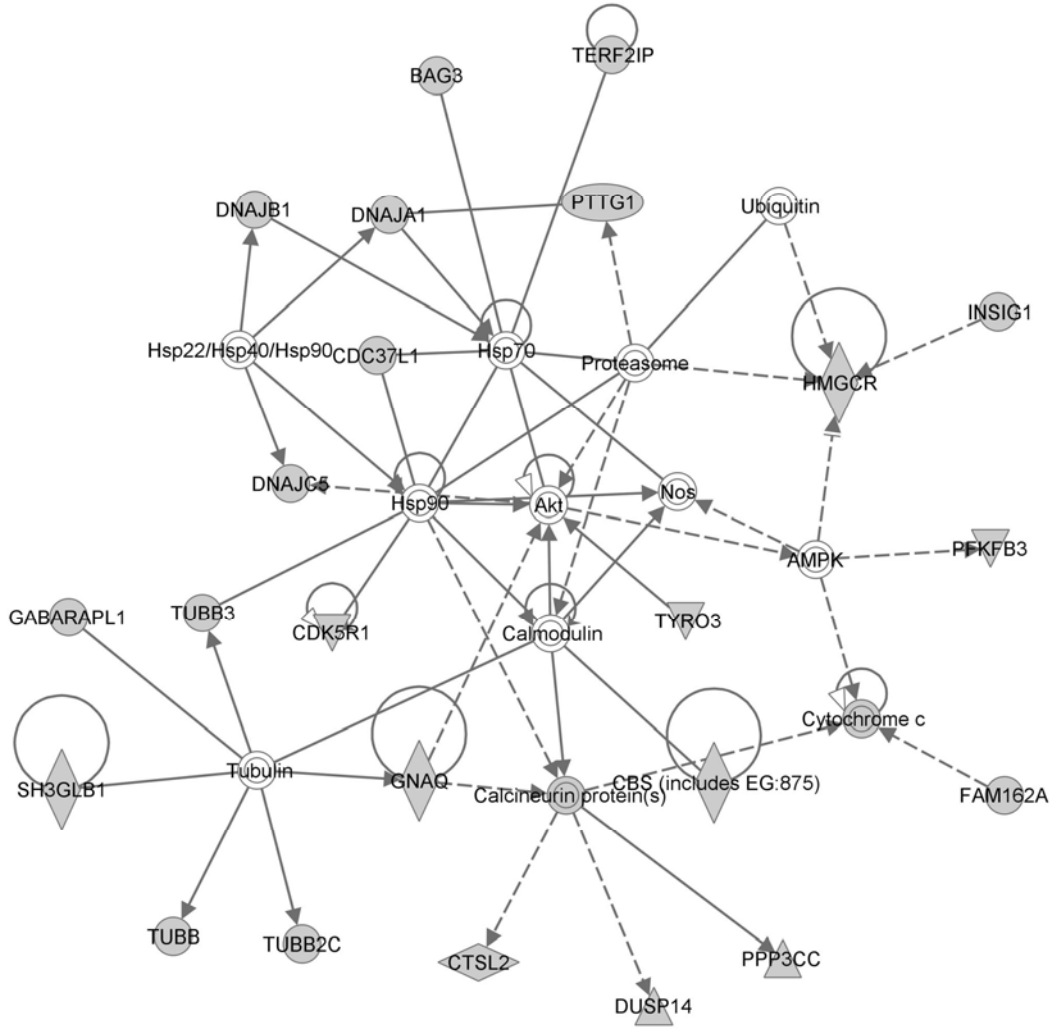
NFIA
Nuclear factor 1
Trypsin
Pka
9130409I23RIK
ZCCHC24
CYP4EA
CBR3
AHR
PMM1
CLDND1
Oxidoreductase
CDC34 (includes EG:997)
SHB
MIR124
ERO1L
PIP4K2A
PGRMC2
Ck2
KATNA1
CYB5RL
WARS
MSSE
ABHD5
RNA polymerase II
HELZ
MED21
MED30
POLR2D
POLR2H
MED19
EIF1B
DKK1

Network 4

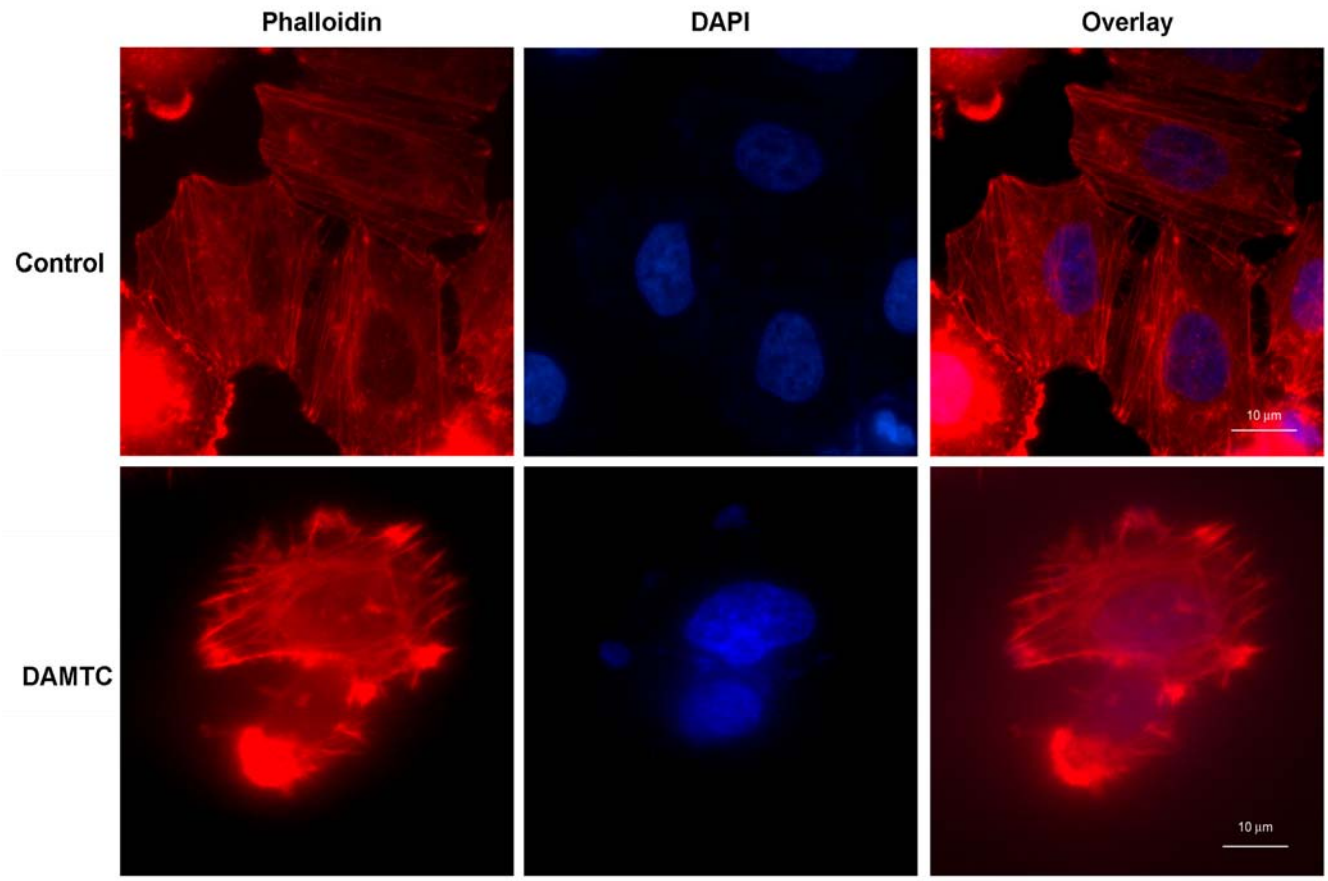

LIFR
KLHL21
JAK
p70 S6k
ADM
Shc
VEZF1
PP2A
CTH
ERRFI1
PDGF BB
PTGER4
EDN1
GYS1
IRS2
IRS1
ERK
PSPH
TRIB3
Pdgf
FER (includes EG:2241)
Sos
Mek
NRAS
RRS1
ATYPICAL PROTEIN KINASE C
TMF1
MAP2K1
RAB2A
MAP3K8
PRKCH
RIN2
RIT1
Alcohol group acceptor phosphotransferase
CDK7

Network 5


TERF2IP
BAG3
DNAJB1
DNAJA1
PTTG1
Ubiquitin
INSIG1
Hsp22/Hsp40/Hsp90
CDC37L1
Hsp70
Proteasome
HMGCR
DNAJC5
Hsp90
Akt
Nos
AMPK
PFKFB3
GABARAPL1
TUBB3
CDK5R1
Calmodulin
TYRO3
Cytochrome c
SH3GLB1
Tubulin
GNAQ
Calcineurin protein(s)
CBS (includes EG:875)
FAM162A
TUBB
TUBB2C
CTSL2
PPP3CC
DUSP14

Supplementary Figure 2

Microscopic images of Phalloidin (red) and DAPI (blue) stained control NCI-H460 and DAMTC treated cells clearly indicate the changes in cytoskeleton induced by DAMTC treatment. The images were taken at 60X using Nikon microscope.



Supplementary Figure 3

Wound healing assay in control and DAMTC treated NCI-H460 cells. The number of cells migrating in the wound increased in control NCI-H460 cells whereas fewer cells migrated in the wound area in DAMTC treated NCI-H460 cells and this migration was dose dependent.