

Supplementary Table S1

UNIQID	NAME	Gene mane	Accession	Chromosome
200736_s_at	GPX1	glutathione peroxidase 1	NM_000581	3
201106_at	GPX4	glutathione peroxidase 4 (phospholipid hydroperoxidase)	NM_002085	19
201348_at	GPX3	glutathione peroxidase 3 (plasma)	NM_002084	5
202831_at	GPX2	glutathione peroxidase 2 (gastrointestinal)	NM_002083	14
208028_s_at	GPX5	glutathione peroxidase 5 (epididymal androgen-related protein)	NM_003996	6
213170_at	GPX7	glutathione peroxidase 7	AA406605	1
214091_s_at	GPX3	glutathione peroxidase 3 (plasma)	AW149846	5
214648_at	GPX5	glutathione peroxidase 5 (epididymal androgen-related protein)	AI207120	6
215760_s_at	GPX4	strawberry notch homolog 2 (Drosophila)	AC005390	19
239595_at	GPX2	glutathione peroxidase 2 (gastrointestinal)	AA569032	14
205770_at	GSR	glutathione reductase	NM_000637	8
225609_at	GSR	glutathione reductase	AI888037	8
237402_at	GSR	NA	H05917	NA
208864_s_at	TXN	thioredoxin	AF313911	9
216609_at	TXN	thioredoxin	AF065241	9
209078_s_at	TXN2	thioredoxin 2	AF276920	22
206662_at	GLRX	glutaredoxin (thioltransferase)	NM_002064	5
209276_s_at	GLRX	glutaredoxin (thioltransferase)	AF162769	5
219933_at	GLRX2	glutaredoxin 2	NM_016066	1
223342_at	RRM2B	ribonucleotide reductase M2 B (TP53 inducible)	AB036063	8
201266_at	TXNRD1	thioredoxin reductase 1	NM_003330	12
210803_at	TXNRD2	thioredoxin reductase 2	AF201385	22
211177_s_at	TXNRD2	thioredoxin reductase 2	AB019695	22
221906_at	TXNRD3	thioredoxin reductase 3	BF513089	3
230880_at	TXNRD2	KIAA1652 protein	AW450772	22
231292_at	TXNRD1	EP300 interacting inhibitor of differentiation 3	AI964053	12
59631_at	TXNRD3	thioredoxin reductase 3	AI247566	3
201467_s_at	NQO1	NAD(P)H dehydrogenase, quinone 1	AI039874	16
201468_s_at	NQO1	NAD(P)H dehydrogenase, quinone 1	NM_000903	16
203814_s_at	NQO2	NAD(P)H dehydrogenase, quinone 2	NM_000904	6
210519_s_at	NQO1	NAD(P)H dehydrogenase, quinone 1	BC000906	16
200642_at	SOD1	superoxide dismutase 1, soluble	NM_000454	21
205236_x_at	SOD3	superoxide dismutase 3, extracellular	NM_003102	4
215078_at	SOD2	superoxide dismutase 2, mitochondrial	AL050388	6
215223_s_at	SOD2	superoxide dismutase 2, mitochondrial	W46388	6
216841_s_at	SOD2	superoxide dismutase 2, mitochondrial	X15132	6
201432_at	CAT	catalase	NM_001752	11
211922_s_at	CAT	catalase	AY028632	11
215573_at	CAT	catalase	AU147084	11
206418_at	NOX1	NADPH oxidase 1	NM_007052	X
207217_s_at	NOX1	NADPH oxidase 1	NM_013955	X
207380_x_at	NOX1	NADPH oxidase 1	NM_013954	X
210808_s_at	NOX1	NADPH oxidase 1	AF166327	X
230399_at	NOX1	NA	AI361034	NA
203922_s_at	CYBB	cytochrome b-245, beta polypeptide	AI308863	X
203923_s_at	CYBB	cytochrome b-245, beta polypeptide	NM_000397	X
217431_x_at	CYBB	cytochrome b-245, beta polypeptide	S67289	X

233538_s_at	CYBB	cytochrome b-245, beta polypeptide	AI203028	X
221089_at	NOX3	NADPH oxidase 3	NM_015718	6
219773_at	NOX4	NADPH oxidase 4	NM_016931	11
1553023_a_at	NOX5	NADPH oxidase, EF-hand calcium binding domain 5	NM_024505	15
220641_at	NOX5	NADPH oxidase, EF-hand calcium binding domain 5	NM_024505	15
229352_at	NOX5	NA	AA885360	NA
210301_at	XDH	xanthine dehydrogenase	U06117	2
241994_at	XDH	xanthine dehydrogenase	BG260086	2
205082_s_at	AOX1	aldehyde oxidase 1	AB046692	2
205083_at	AOX1	aldehyde oxidase 1	NM_001159	2
1560587_s_at	PRDX5	peroxiredoxin 5	AI718223	11
200844_s_at	PRDX6	peroxiredoxin 6	BE869583	1
200845_s_at	PRDX6	peroxiredoxin 6	NM_004905	1
201006_at	PRDX2	peroxiredoxin 2	NM_005809	19
201619_at	PRDX3	peroxiredoxin 3	NM_006793	10
201923_at	PRDX4	peroxiredoxin 4	NM_006406	X
208680_at	PRDX1	peroxiredoxin 1	L19184	1
209766_at	PRDX3	peroxiredoxin 3	AF118073	10
211658_at	PRDX2	peroxiredoxin 2	L19185	19
215067_x_at	PRDX2	peroxiredoxin 2	AU147942	19
222994_at	PRDX5	peroxiredoxin 5	AF197952	11
238951_at	PRDX6	NA	BF843343	NA
242751_at	PRDX6	NA	N55072	NA
39729_at	PRDX2	peroxiredoxin 2	L19185	19
203665_at	HMOX1	heme oxygenase (decycling) 1	NM_002133	22
202275_at	G6PD	glucose-6-phosphate dehydrogenase	NM_000402	X
38043_at	G6PD	family with sequence similarity 3, member A	X55448	X
201118_at	PGD	phosphogluconate dehydrogenase	NM_002631	1
1555037_a_at	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	BC012846	2
201193_at	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	NM_005896	2
242001_at	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	AA825652	2
242956_at	IDH1	isocitrate dehydrogenase 1 (NADP+), soluble	AA564352	2
210045_at	IDH2	isocitrate dehydrogenase 2 (NADP+), mitochondrial	AU151428	15
210046_s_at	IDH2	isocitrate dehydrogenase 2 (NADP+), mitochondrial	U52144	15
204058_at	ME1	malic enzyme 1, NADP(+)-dependent, cytosolic	AL049699	6
204059_s_at	ME1	malic enzyme 1, NADP(+)-dependent, cytosolic	NM_002395	6
211204_at	ME1	malic enzyme 1, NADP(+)-dependent, cytosolic	L34035	6
213555_at	ME1	RWD domain containing 2A	AL049699	6
240788_at	ME1	NA	AI076834	NA
1562612_at	ME2	NA	BC020933	NA
209397_at	ME2	malic enzyme 2, NAD(+)-dependent, mitochondrial	BC000147	18
210153_s_at	ME2	malic enzyme 2, NAD(+)-dependent, mitochondrial	M55905	18
210154_at	ME2	malic enzyme 2, NAD(+)-dependent, mitochondrial	M55905	18
204663_at	ME3	malic enzyme 3, NADP(+)-dependent, mitochondrial	NM_006680	11
231295_at	ME3	malic enzyme 3, NADP(+)-dependent, mitochondrial	BE326351	11
202783_at	NNT	nicotinamide nucleotide transhydrogenase	U40490	5
202784_s_at	NNT	nicotinamide nucleotide transhydrogenase	NM_012343	5
215278_at	NNT	NA	AF052090	NA
238530_at	NNT	nicotinamide nucleotide transhydrogenase	BF695396	5
244531_at	NNT	nicotinamide nucleotide transhydrogenase	BE501279	5

200758_s_at	NFE2L1	nuclear factor (erythroid-derived 2)-like 1	AI361227	17
200759_x_at	NFE2L1	nuclear factor (erythroid-derived 2)-like 1	NM_003204	17
214179_s_at	NFE2L1	nuclear factor (erythroid-derived 2)-like 1	H93013	17
1567013_at	NFE2L2	nuclear factor (erythroid-derived 2)-like 2	AF323119	2
1567014_s_at	NFE2L2	nuclear factor (erythroid-derived 2)-like 2	AF323119	2
1567015_at	NFE2L2	nuclear factor (erythroid-derived 2)-like 2	AF323119	2
201146_at	NFE2L2	nuclear factor (erythroid-derived 2)-like 2	NM_006164	2
236213_at	NFE2L2	NA	AI809760	NA
203925_at	GCLM	glutamate-cysteine ligase, modifier subunit	NM_002061	1
234986_at	GCLM	NA	AA630626	NA
236140_at	GCLM	glutamate-cysteine ligase, modifier subunit	AI753488	1
1555330_at	GCLC	glutamate-cysteine ligase, catalytic subunit	BC022487	6
202922_at	GCLC	glutamate-cysteine ligase, catalytic subunit	BF676980	6
202923_s_at	GCLC	glutamate-cysteine ligase, catalytic subunit	NM_001498	6
201415_at	GSS	glutathione synthetase	NM_000178	20
211630_s_at	GSS	glutathione synthetase	L42531	20
209918_at	GGT2	NA	J05235	NA
207131_x_at	GGT1	gamma-glutamyltransferase 1	NM_013430	22
208284_x_at	GGT1	gamma-glutamyltransferase 1	NM_013421	22
209919_x_at	GGT1	gamma-glutamyltransferase 1	L20490	22
211417_x_at	GGT1	gamma-glutamyltransferase 1	L20493	22
215603_x_at	GGT1	NA	AI344075	NA
233837_at	GGT1	gamma-glutamyltransferase 1	AU147678	22
205970_at	MT3	metallothionein 3	NM_005954	16
203522_at	CCS	copper chaperone for superoxide dismutase	NM_005125	11
203028_s_at	CYBA	cytochrome b-245, alpha polypeptide	NM_000101	16
200748_s_at	FTH1	ferritin, heavy polypeptide 1	NM_002032	11
214211_at	FTH1	ferritin, heavy polypeptide 1	AA083483	11
237293_at	FTH1	NA	AI808844	NA
243702_at	FTH1	NA	AA722627	NA
212788_x_at	FTL	ferritin, light polypeptide	BG537190	19
213187_x_at	FTL	ferritin, light polypeptide	BG538564	19
210852_s_at	AASS	aminoadipate-semialdehyde synthase	AF229180	7
214829_at	AASS	aminoadipate-semialdehyde synthase	AK023446	7
1555284_at	ALS2	amyotrophic lateral sclerosis 2 (juvenile)	BC029174	2
1560742_at	ALS2	NA	AI985407	NA
1560743_a_at	ALS2	NA	AI985407	NA
226291_at	ALS2	amyotrophic lateral sclerosis 2 (juvenile)	AB046783	2
232184_at	ALS2	amyotrophic lateral sclerosis 2 (juvenile)	AK023024	2
203381_s_at	APOE	apolipoprotein E	N33009	19
203382_s_at	APOE	apolipoprotein E	NM_000041	19
212874_at	APOE	NA	AI358867	NA
212883_at	APOE	NA	AI358867	NA
212884_x_at	APOE	apolipoprotein E	AI358867	19
214627_at	EPX	eosinophil peroxidase	X14346	17
207347_at	ERCC6	excision repair cross-complementing rodent repair deficiency, complementation group 6	NM_000124	10
1557030_at	GAB1	GRB2-associated binding protein 1	BC030751	4
1560382_at	GAB1	GRB2-associated binding protein 1	AK074381	4
207112_s_at	GAB1	GRB2-associated binding protein 1	NM_002039	4
214987_at	GAB1	GRB2-associated binding protein 1	AL049449	4

225998_at	GAB1	GRB2-associated binding protein 1	AK022142	4
226002_at	GAB1	GRB2-associated binding protein 1	AK022142	4
229114_at	GAB1	GRB2-associated binding protein 1	AW237741	4
242572_at	GAB1	NA	BF435438	NA
203948_s_at	MPO	myeloperoxidase	J02694	17
203949_at	MPO	myeloperoxidase	NM_000250	17
1556761_at	MSRA	NA	AI057305	NA
1556762_a_at	MSRA	NA	AI057305	NA
1559586_at	MSRA	hypothetical protein LOC728868	BE504795	8
219281_at	MSRA	methionine sulfoxide reductase A	NM_012331	8
233393_at	MSRA	NA	AU146871	NA
234435_at	MSRA	NA	AL049349	NA
234837_at	MSRA	NA	AL049349	NA
237341_at	MSRA	NA	H98180	NA
237798_at	MSRA	NA	AI074612	NA
240031_at	MSRA	methionine sulfoxide reductase A	AA994467	8
209949_at	NCF2	neutrophil cytosolic factor 2	BC001606	1
235329_at	NOXO1	NADPH oxidase organizer 1	AW083983	16
1554103_at	PPP1R15B	NA	BC009873	NA
224692_at	PPP1R15B	protein phosphatase 1, regulatory (inhibitor) subunit 15B	BF796046	1
201300_s_at	PRNP	prion protein	NM_000311	20
215707_s_at	PRNP	prion protein	AV725328	20
222106_at	PRNP	prion protein 2 (duplet)	AL133396	20
210342_s_at	TPO	thyroid peroxidase	M17755	2
201008_s_at	TXNIP	thioredoxin interacting protein	AA812232	1
201009_s_at	TXNIP	thioredoxin interacting protein	AI439556	1
201010_s_at	TXNIP	thioredoxin interacting protein	NM_006472	1
207349_s_at	UCP3	uncoupling protein 3 (mitochondrial, proton carrier)	NM_022803	11
219827_at	UCP3	uncoupling protein 3 (mitochondrial, proton carrier)	NM_003356	11
205672_at	XPA	xeroderma pigmentosum, complementation group A	NM_000380	9
202723_s_at	FOXO1A	forkhead box O1	AW117498	13
202724_s_at	FOXO1A	forkhead box O1	NM_002015	13
228484_s_at	FOXO1A	forkhead box O1	AI472322	13
232882_at	FOXO1A	NA	AA079839	NA
239728_at	FOXO1A	NA	AA810830	NA
241665_x_at	FOXO1A	NA	AI307430	NA
241667_x_at	FOXO1A	NA	AI820891	NA
1569477_at	FOXO3A	NA	BC025999	NA
204131_s_at	FOXO3A	forkhead box O3	N25732	6
204132_s_at	FOXO3A	NA	NM_001455	NA
210655_s_at	FOXO3A	NA	AF041336	NA
224889_at	FOXO3A	forkhead box O3	BE888885	6
224891_at	FOXO3A	forkhead box O3	AV725666	6
233629_at	FOXO3A	NA	AK026286	NA
233674_at	FOXO3A	NA	AK026286	NA
239923_at	FOXO3A	NA	AI056872	NA
242320_at	FOXO3A	NA	AI435586	NA
205451_at	MLLT7	forkhead box O4	NM_005938	X
218498_s_at	ERO1L	ERO1-like (S. cerevisiae)	NM_014584	14
222646_s_at	ERO1L	ERO1-like (S. cerevisiae)	AW268365	14

225750_at	ERO1L	NA	BE966748	NA
220012_at	ERO1LB	ERO1-like beta (<i>S. cerevisiae</i>)	NM_019891	1
231944_at	ERO1LB	ERO1-like beta (<i>S. cerevisiae</i>)	AL045717	1
202201_at	BLVRB	biliverdin reductase B (flavin reductase (NADPH))	NM_000713	19
209531_at	GSTZ1	glutathione transferase zeta 1	BC001453	14
232913_at	GSTZ1	transmembrane emp24 protein transport domain containing 8	AC007954	14
202646_s_at	UNR	cold shock domain containing E1, RNA-binding	AA167775	1
219939_s_at	UNR	cold shock domain containing E1, RNA-binding	NM_007158	1
222975_s_at	UNR	cold shock domain containing E1, RNA-binding	AI423180	1
1553572_a_at	CYGB	cytoglobin	NM_134268	17
1570410_at	CYGB	cytoglobin	BC018822	17
226632_at	CYGB	cytoglobin	AL513673	17
1565795_at	DUOX1	dual oxidase 1	BI768821	15
215800_at	DUOX1	dual oxidase 1	AL137592	15
219597_s_at	DUOX1	dual oxidase 1	NM_017434	15
219727_at	DUOX2	dual oxidase 2	NM_014080	15
1553028_at	GPR156	G protein-coupled receptor 156	NM_153002	3
210682_at	LPO	lactoperoxidase	U39573	17
201403_s_at	MGST3	microsomal glutathione S-transferase 3	NM_004528	1
233307_x_at	MGST3	NA	AK000073	NA
244122_at	MGST3	microsomal glutathione S-transferase 3	AA129724	1
214735_at	PIP3-E	interaction protein for cytohesin exchange factors 1	AW166711	6
241188_at	PIP3-E	NA	BF223340	NA
243032_at	PIP3-E	NA	AI476542	NA
205127_at	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	NM_000962	9
205128_x_at	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	NM_000962	9
215813_s_at	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	S36219	9
238669_at	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	BE613133	9
240171_at	PTGS1	NA	AW206099	NA
1554997_a_at	PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	AY151286	1
204748_at	PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	NM_000963	1
212012_at	PXDN	peroxidasin homolog (<i>Drosophila</i>)	BF342851	2
212013_at	PXDN	peroxidasin homolog (<i>Drosophila</i>)	D86983	2
241942_at	PXDNL	peroxidasin homolog (<i>Drosophila</i>)-like	AA927870	8
1556043_a_at	TTN	NA	AK093733	NA
1557994_at	TTN	titin	BF574523	2
1561230_at	TTN	NA	BC043155	NA
208195_at	TTN	titin	NM_003319	2
240793_at	TTN	titin	BF224054	2
241791_at	TTN	titin	BF825274	2
242679_at	TTN	NA	AU127120	NA
242729_at	TTN	NA	BE551384	NA
242771_at	TTN	titin	AU149821	2
244839_at	TTN	titin	AW975934	2
1565228_s_at	ALB	albumin	D16931	4
211298_s_at	ALB	albumin	AF116645	4
214837_at	ALB	albumin	M12523	4
214842_s_at	ALB	NA	M12523	NA

223209_s_at	SELS	selenoprotein S	AF328864	15
1552657_a_at	TXNDC2	thioredoxin domain containing 2 (spermatzoa)	NM_032243	18
224168_at	TXNDC2	thioredoxin domain containing 2 (spermatzoa)	AL136742	18
204961_s_at	NCF1	NA	NM_000265	NA
214084_x_at	NCF1	neutrophil cytosolic factor 1C pseudogene	AW072388	7
207206_s_at	ALOX12	arachidonate 12-lipoxygenase	NM_000697	17
229833_at	ALOX12	NA	BF507533	NA
236433_at	ALOX12	NA	AW450397	NA
201065_s_at	GTF2I	NA	NM_001518	NA
210891_s_at	GTF2I	NA	AF035737	NA
210892_s_at	GTF2I	general transcription factor Iii	BC004472	7
215569_at	GTF2I	NA	AC004883	NA
229896_at	GTF2I	general transcription factor Iii	H41907	7
210037_s_at	NOS2A	nitric oxide synthase 2, inducible	L24553	17
224909_s_at	PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	BF308645	20
224925_at	PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	AL445192	20
220811_at	PRG3	proteoglycan 3	NM_006093	11
201848_s_at	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	U15174	10
201849_at	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	NM_004052	10
243117_at	BNIP3	NA	AL038973	NA
209368_at	EPHX2	epoxide hydrolase 2, cytoplasmic	AF233336	8
203466_at	MPV17	MpV17 mitochondrial inner membrane protein	NM_002437	2
214199_at	SFTPD	surfactant protein D	NM_003019	10
206423_at	ANGPTL7	angiopoietin-like 7	NM_021146	1
1405_i_at	CCL5	chemokine (C-C motif) ligand 5	M21121	17
1555759_a_at	CCL5	chemokine (C-C motif) ligand 5	AF043341	17
200862_at	DHCR24	24-dehydrocholesterol reductase	NM_014762	1
201041_s_at	DUSP1	dual specificity phosphatase 1	NM_004417	5
201044_x_at	DUSP1	dual specificity phosphatase 1	AA530892	5
226578_s_at	DUSP1	dual specificity phosphatase 1	AW024420	5
202580_x_at	FOXM1	forkhead box M1	NM_021953	12
205900_at	KRT1	keratin 1	NM_006121	12
207256_at	MBL2	mannose-binding lectin (protein C) 2, soluble (opsonic defect)	NM_000242	10
219786_at	MTL5	metallothionein-like 5, testis-specific (tesmin)	NM_004923	11
238246_at	MTL5	metallothionein-like 5, testis-specific (tesmin)	BE467611	11
241466_at	MTL5	NA	AI275776	NA
206197_at	NME5	non-metastatic cells 5, protein expressed in (nucleoside-diphosphate kinase)	NM_003551	5
204766_s_at	NUDT1	nudix (nucleoside diphosphate linked moiety X)-type motif 1	NM_002452	7
228231_at	NUDT1	NA	BE221804	NA
243135_x_at	NUDT1	NA	R26456	NA
218197_s_at	OXR1	oxidation resistance 1	NM_018002	8
222553_x_at	OXR1	oxidation resistance 1	AL541048	8
223879_s_at	OXR1	oxidation resistance 1	AF309387	8
238408_at	OXR1	NA	AW086258	NA
238409_x_at	OXR1	oxidation resistance 1	AW086261	8
202696_at	OXSR1	oxidative-stress responsive 1	NM_005109	3
208690_s_at	PDLIM1	PDZ and LIM domain 1	BC000915	10
213389_at	PNKP	zinc finger protein 592	BF508616	15
218961_s_at	PNKP	polynucleotide kinase 3'-phosphatase	NM_007254	19
218286_s_at	RNF7	ring finger protein 7	NM_014245	3

224394_at	RNF7	ring finger protein 7	AF312226	3
224395_s_at	RNF7	ring finger protein 7	AF312226	3
224439_x_at	RNF7	ring finger protein 7	BC005966	3
239820_at	RNF7	ring finger protein 7	AW593225	3
219416_at	SCARA3	scavenger receptor class A, member 3	NM_016240	8
223842_s_at	SCARA3	scavenger receptor class A, member 3	AB007830	8
223843_at	SCARA3	scavenger receptor class A, member 3	AB007830	8
201427_s_at	SEPP1	selenoprotein P, plasma, 1	NM_005410	5
229620_at	SEPP1	selenoprotein P, plasma, 1	BE856597	5
231669_at	SEPP1	selenoprotein P, plasma, 1	AV653290	5
242519_at	SEPP1	NA	BF432331	NA
213837_at	SGK2	l(3)mbt-like (Drosophila)	Z98752	20
220357_s_at	SGK2	serum/glucocorticoid regulated kinase 2	NM_016276	20
230573_at	SGK2	serum/glucocorticoid regulated kinase 2	AI631895	20
1558331_at	SIRT2	sirtuin (silent mating type information regulation 2 homolog) 2 (S. cerevisiae)	BG722779	19
220605_s_at	SIRT2	sirtuin (silent mating type information regulation 2 homolog) 2 (S. cerevisiae)	NM_012237	19
201314_at	STK25	serine/threonine kinase 25 (STE20 homolog, yeast)	NM_006374	2
225652_at	STK25	NA	AA046941	NA
230768_at	STK25	NA	BE672541	NA
237050_at	STK25	NA	AW207725	NA
242857_at	STK25	NA	AA748613	NA
242932_at	STK25	NA	AW292329	NA
203454_s_at	ATOX1	ATX1 antioxidant protein 1 homolog (yeast)	NM_004045	5