

Table S1. Genes with dramatically altered lipid droplet morphology identified in screen

Class I Fewer lipid droplets			Repeat screen left primer	Repeat screen left primer
CG#	Symbol	Function		
CG10370	Tbp-1	endopeptidase activity	TAATACGACTCACTATAGGGGTCAACAAGACTGCCCTACC	TAATACGACTCACTATAGGGGGAGTACTGC'
CG31991	mdy	diacylglycerol O-acyltransferase activity	TAATACGACTCACTATAGGGCAATAAAGGATCCCCAAGATAAAGG	TAATACGACTCACTATAGGGCTGAGCTCTTC
CG1395	stg	protein tyrosine/serine/threonine phosphatase activity	TAATACGACTCACTATAGGGATAGGCTTTCGCTGAAGTCGC	TAATACGACTCACTATAGGGGAGTATCAAG1
CG5363	cdc2	cyclin-dependent protein kinase activity	TAATACGACTCACTATAGGGTTACACCCCTAGTTTTATTACGGC	TAATACGACTCACTATAGGGAAACACTACC
CG5940	CycA	cyclin-dependent protein kinase regulator activity	TAATACGACTCACTATAGGGCTCATGCTTGGTGGATCTGG	TAATACGACTCACTATAGGGTATTAGCTAAG
CG8975	RnrS	ribonucleoside-diphosphate reductase activity	TAATACGACTCACTATAGGGGTGACAATGAATTCGGAAAAGG	TAATACGACTCACTATAGGGCAGTACATTG/
CG10484	Dox-A2	endopeptidase activity	TAATACGACTCACTATAGGGAATCTGCACAGATATTACCCC	TAATACGACTCACTATAGGGATAGTGAAG1
CG4904	Pros35	endopeptidase activity	TAATACGACTCACTATAGGGACTGTGGCCATCGTCGG	TAATACGACTCACTATAGGGTTTTGTCGGTT
CG3329	Prosbeta2	endopeptidase activity; threonine endopeptidase activity	TAATACGACTCACTATAGGGGACTACGGATCTCATCTCTCC	TAATACGACTCACTATAGGGGTGACGAAAAAC
CG10938	ProsMA5	endopeptidase activity	TAATACGACTCACTATAGGGACCCTGGTTCGTCAACAACG	TAATACGACTCACTATAGGGGATCAATTTAA
CG7762	Rpn1	endopeptidase activity	TAATACGACTCACTATAGGGAAAAAGCGCTGTGAATCTGTC	TAATACGACTCACTATAGGGGAGCTGTACA/
CG1341	Rpt1	endopeptidase activity; ATPase activity	TAATACGACTCACTATAGGGTTGGTGGAGGTATAGATTTCCG	TAATACGACTCACTATAGGGTTCGACGAAA1
CG16916	Rpt3	endopeptidase activity	TAATACGACTCACTATAGGGGAGTTCAATGAAGTGCAGGAGG	TAATACGACTCACTATAGGGAGCATCGAAA1
CG3455	Rpt4	endopeptidase activity	TAATACGACTCACTATAGGGATTTTCGTCCATGAAAATGATGC	TAATACGACTCACTATAGGGATGACCCAC1
CG3328		caspace activity	TAATACGACTCACTATAGGGTCCAGCGAGAGCTAATCTATCC	TAATACGACTCACTATAGGGTGTCTAGTAG/
CG7425	eff	ubiquitin-protein ligase activity	TAATACGACTCACTATAGGGCACACAATTAATCGCATGTTCC	TAATACGACTCACTATAGGGAGTATGCTATC
CG32744	Ubi-p5E	protein binding	TAATACGACTCACTATAGGGATGTTGTAGTCCGACAGAGTGC	TAATACGACTCACTATAGGGGAGAACGTTA/
CG7292	Rrp6	3'-5' exonuclease activity	TAATACGACTCACTATAGGGTTCGACTGTTTCGATCTTTACC	TAATACGACTCACTATAGGGGTTCGACCAAC/
CG32782	tlk	protein serine/threonine kinase activity	TAATACGACTCACTATAGGGAGTACATTCAGCCACCAGATACC	TAATACGACTCACTATAGGGTAAACTCGCTT
CG8877	prp8	RNA splicing factor activity	TAATACGACTCACTATAGGGCTTGAGATACTGATGTGTGGGC	TAATACGACTCACTATAGGGCTTCAACTTGT
CG5352	SmB	RNA splicing factor activity	TAATACGACTCACTATAGGGACTTAAATAGCCACCCTGGC	TAATACGACTCACTATAGGGGAACATAGTTT
CG10753	snRNP69D	RNA splicing factor activity	TAATACGACTCACTATAGGGGCTGTACAAAGATTAACTCGCG	TAATACGACTCACTATAGGGGTGGCCATGA/
CG1249		RNA splicing factor activity	TAATACGACTCACTATAGGGTAATGGGATGTTACTGGGATGG	TAATACGACTCACTATAGGGCAGTCCGTA/
CG4849	eEF2	translation elongation factor activity	TAATACGACTCACTATAGGGCAAGACTGACAGAGACC	TAATACGACTCACTATAGGGTGTATTGTCGAA
CG14641		mRNA binding; nucleic acid binding	TAATACGACTCACTATAGGGTCTTTTGTAAATAGGGTGTCTGTC	TAATACGACTCACTATAGGGTCAACAATTTT
CG3578	bi	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGATAACCCCAACTCTCGTGGC	TAATACGACTCACTATAGGGTACTTCCACC
CG7951	slma	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGAAAGCGTATTAAAGATTTCTGTGG	TAATACGACTCACTATAGGGTAATGAAACC/
CG7552	CG33967	unknown	TAATACGACTCACTATAGGGATCTATGTAATAGGCTTCCATCCG	TAATACGACTCACTATAGGGGTAACAGCG/

Class II Smaller size lipid droplets, more dispersed

CG#	Symbol	Function		
CG10859		motor activity; dynein complex	TAATACGACTCACTATAGGGGTGATTTGATGGTGAGAATCGG	TAATACGACTCACTATAGGGGATACCCGGG.
CG10822		ATPase activity, coupled; dynein complex	TAATACGACTCACTATAGGGGAAGTATTCGCAAGTGCAGG	TAATACGACTCACTATAGGGCTTGGCATCTC
CG8732	* I(2)44DEa	long-chain-fatty-acid-CoA ligase activity	TAATACGACTCACTATAGGGATGGTAAATGATAACTGAATGCCG	TAATACGACTCACTATAGGGTGCCTTTGTA
CG8055	shrb	carrier activity	TAATACGACTCACTATAGGGTTGTTTTAGACGCATTCTTGC	TAATACGACTCACTATAGGGACAACAGCTCC
CG4916	me31B	ATP-dependent RNA helicase activity	TAATACGACTCACTATAGGGCCCTTAAAAGAGAAGCTGCTTATGGG	TAATACGACTCACTATAGGGCATCCTTTAGA
CG6718		calcium-independent phospholipase A2 activity	TAATACGACTCACTATAGGGGATATCGGTGCTATTGAGAGTGG	TAATACGACTCACTATAGGGAAGAGTAGTG/
CG1318	Hexo1	beta-N-acetylhexosaminidase activity; hydrolase activity	TAATACGACTCACTATAGGGTTCGTCAAACTGCAACACTTCC	TAATACGACTCACTATAGGGAATACATGATC
CG1100	Rpn5	endopeptidase activity	TAATACGACTCACTATAGGGGCGAGGAGTATCTTCTAAACTGG	TAATACGACTCACTATAGGGATCGAAATGTT
CG9454		serine-type endopeptidase inhibitor activity	TAATACGACTCACTATAGGGGATAGTCTTCTGCTGAACTCGG	TAATACGACTCACTATAGGGGCTACAGCTA/
CG5119	* pAbp	poly(A) binding	TAATACGACTCACTATAGGGCAATTCACGCAAGTACACGAAGC	TAATACGACTCACTATAGGGTTGCTGTTTTT.
CG11276	* RpS4	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACATTTGTGCACATTAAGGACTCG	TAATACGACTCACTATAGGGGTTCTCGGCT/
CG6501	Ngp	GTP binding; receptor binding	TAATACGACTCACTATAGGGGAATGAGGTGCAACACACAGC	TAATACGACTCACTATAGGGAAATACAACC
CG31196	14-3-3epsilon	DAG-activated phospholipid-dep. protein kinase C inhibitor	TAATACGACTCACTATAGGGGAAGTAGACCCCAACGCAGG	TAATACGACTCACTATAGGGTTGCTTCTGT/
CG3889	CSN1b	small GTPase regulator activity; signalosome	TAATACGACTCACTATAGGGCAACAACGAGGTAGTGGTCCAGC	TAATACGACTCACTATAGGGTACGTTCAAAC
CG18332	CSN3	unknown; signalosome	TAATACGACTCACTATAGGGAGCTGCTCGTATTGTTGCG	TAATACGACTCACTATAGGGAAGCTATCGG/
CG2038	CSN7	unknown; signalosome	TAATACGACTCACTATAGGGACTTCGGTTCGATATAAATTTGGC	TAATACGACTCACTATAGGGCCAAAACA/
CG5179	Cdk9	cyclin-dependent protein kinase activity	TAATACGACTCACTATAGGGGCTTGGCCAATTTTCG	TAATACGACTCACTATAGGGACACCCGGAT/
CG7035	Cbp80	RNA cap binding	TAATACGACTCACTATAGGGACTGTCGACATGATGTTTCGGG	TAATACGACTCACTATAGGGAAAAGTATTC
CG3180	RpII140	DNA-directed RNA polymerase activity	TAATACGACTCACTATAGGGCTCATGGCTTACATTTCTGTGG	TAATACGACTCACTATAGGGTCTCCACGTG/
CG7885	RpII33	DNA-directed RNA polymerase activity	TAATACGACTCACTATAGGGGAGATCTCATAATTAAGCTGCG	TAATACGACTCACTATAGGGGTTTGACAGC/
CG6711	Taf2	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGTTCGTTGACTCTCATATCTGG	TAATACGACTCACTATAGGGTACGCACTG/
CG7957	MED17	RNA polymerase II transcription mediator activity	TAATACGACTCACTATAGGGAATCGCAATGCTCAGATTTCC	TAATACGACTCACTATAGGGCTGTGTATC/
CG13867	MED8	RNA polymerase II transcription mediator activity	TAATACGACTCACTATAGGGCTTGATGTTTTCACAGCC	TAATACGACTCACTATAGGGTACACTCTCC
CG18009	Trf2	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGAAAACGTAAGATACGGAAAAGC	TAATACGACTCACTATAGGGCTGATCGTCC
CG1343	Sp1	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGACAGCTAGGTAAGCAGACAGGC	TAATACGACTCACTATAGGGCGGAGGCTAT,

CG7664	crp	RNA polymerase II transcription factor activity	TAATACGACTCACTATAGGGCTTTAATACGTAGCCCGTGTCC	TAATACGACTCACTATAGGGTCATGCCAG/
CG31666		transcription factor activity	TAATACGACTCACTATAGGGGACATGTTGAACGTATGGAACG	TAATACGACTCACTATAGGGGTGCCATCTTC
CG2252	fs(1)h	DNA binding; protein kinase activity	TAATACGACTCACTATAGGGATTTGTCTAATCGGTGGTATGG	TAATACGACTCACTATAGGGTTGCAATATCT
CG4817	Ssrp	single-stranded DNA binding; single-stranded RNA binding	TAATACGACTCACTATAGGGCAAAAACGATGGGTCTGTATCC	TAATACGACTCACTATAGGGAAGAGCAAGG
CG9007		protein binding; zinc ion binding	TAATACGACTCACTATAGGGAACGTCGAAATAGAAAAGCG	TAATACGACTCACTATAGGGACTGCTCTACC
CG4429	Rbp2	translation initiation factor activity; mRNA binding	TAATACGACTCACTATAGGGACGAGATAATCCGAGATAGAGGG	TAATACGACTCACTATAGGGTACAATGAAGC
CG9075	eIF-4a	translation initiation factor activity	TAATACGACTCACTATAGGGTACAGATGATGATCGACGAATCC	TAATACGACTCACTATAGGGCTAAATGGAT/
CG9677	Int6	translation initiation factor activity	TAATACGACTCACTATAGGGAGAGGTGGACTCTGATAGTTGC	TAATACGACTCACTATAGGGCTGGAGTACA/
CG9769	eIF3-S5	translation initiation factor activity	TAATACGACTCACTATAGGGGAACATCTGAGTGAAGTCTCG	TAATACGACTCACTATAGGGTTACCAACTGT
CG32104		ATP binding; ATPase activity; calcium ion binding	TAATACGACTCACTATAGGGTAATGTGAGGATACACCATCTCC	TAATACGACTCACTATAGGGGCACCTGTTG/
CG1715	I(3)03670	unknown	TAATACGACTCACTATAGGGAGTTTIGAGTACATCCCCATCG	TAATACGACTCACTATAGGGGAACCTCAAG/
CG6729		unknown	TAATACGACTCACTATAGGGCAACTCATAGATGCAGTCTCC	TAATACGACTCACTATAGGGGATGCAGTGT/
CG9170		unknown	TAATACGACTCACTATAGGGTAATTTTGGTGCATCAGTGTCC	TAATACGACTCACTATAGGGGAACCTTCCG/
CG9578		unknown	TAATACGACTCACTATAGGGCTGGCTCTTCCATCTTTTGC	TAATACGACTCACTATAGGGAGGAAAATCCG/
CG10933		unknown	TAATACGACTCACTATAGGGGTGATTGGTCAGGACTTAGGC	TAATACGACTCACTATAGGGCTCAGGATA/
CG14220		unknown	TAATACGACTCACTATAGGGCGACTCGATTTCTTATCATCC	TAATACGACTCACTATAGGGACTATGTGCTC
CG15009	Impl2	unknown	TAATACGACTCACTATAGGGAGCTCTATGTTGTGATGGCTCC	TAATACGACTCACTATAGGGCCTTGACTCG/

Class III Normal/larger size lipid droplets, more dispersed

CG#	Symbol	Function		
CG8385	Arf79F	GTP binding; GTPase activity	TAATACGACTCACTATAGGGTAGTTTCTCTTCTTGTGATTGG	TAATACGACTCACTATAGGGATCTTCGCATA
CG8487	garz	ARF guanyl-nucleotide exchange factor activity	TAATACGACTCACTATAGGGAGTGCCTCCAGTAAATACGC	TAATACGACTCACTATAGGGAACACCTTAG/
CG7961	alphaCop	binding; protein transporter activity; COPI complex	TAATACGACTCACTATAGGGATGGAACCTCTACTGCTCCG	TAATACGACTCACTATAGGGACTAGATGAAC
CG6223	betaCop	binding; COPI complex	TAATACGACTCACTATAGGGAATATCGTACTGATTGACATTGACG	TAATACGACTCACTATAGGGCTCCGCTTCCA
CG6699	beta'Cop	protein transporter activity; COPI complex	TAATACGACTCACTATAGGGCTCATCAAGCTTTTGGAAATTGG	TAATACGACTCACTATAGGGCCCTCTAAAGT
CG14813	deltaCOP	COPI complex	TAATACGACTCACTATAGGGGCTTGGATTTGGTGTCC	TAATACGACTCACTATAGGGGAGTACAGCC/
CG1528	gammaCop	binding; COPI complex	TAATACGACTCACTATAGGGTAAGTAGCAAGCTAGCACCTGG	TAATACGACTCACTATAGGGCACGCTCTTAC
CG3948	zetaCOP	COPI complex	TAATACGACTCACTATAGGGCATGATGATCTCCAGGTTTCC	TAATACGACTCACTATAGGGGAACGAAGAAC/

Class IV Normal/larger size lipid droplets, highly condensed

CG#	Symbol	Function		
CG8053	eIF-1A	translation initiation factor activity	TAATACGACTCACTATAGGGGAGTAACAGTTTTACCCCGTTCC	TAATACGACTCACTATAGGGTCTTCGGAAG1
CG4153	eIF-2beta	translation initiation factor activity	TAATACGACTCACTATAGGGGTCCATGCCAGATTGATCTCC	TAATACGACTCACTATAGGGGTTTTGATCC
CG8636	eIF3-S4	translation initiation factor activity	TAATACGACTCACTATAGGGGAGATACATCTTGCCTGCGG	TAATACGACTCACTATAGGGTCGACTATGG1
CG4954	eIF3-S8	translation initiation factor activity	TAATACGACTCACTATAGGGTACGTCACCGTTTTATGTGAGG	TAATACGACTCACTATAGGGATAGCATGATC
CG4878	eIF3-S9	translation initiation factor activity	TAATACGACTCACTATAGGGGACTTCTACGAGGTGAACAAGG	TAATACGACTCACTATAGGGCGGTACTCCCA1
CG7490	RpLPO	DNA-(apurinic or apyrimidinic site) lyase activity; ribosome	TAATACGACTCACTATAGGGGGACCCAGCAAGTTCC	TAATACGACTCACTATAGGGTTTACAGCATC
CG5844		hydro-lyase activity; oxidoreductase activity	TAATACGACTCACTATAGGGGATGAGGAAGTGGCTGAGGC	TAATACGACTCACTATAGGGAATGTATTTGA

Class V Fewer lipid droplets, larger size

CG#	Symbol	Function		
CG1049	Cct1	choline-phosphate cytidyltransferase activity	TAATACGACTCACTATAGGGCAATTGAATCTCTGTTCCCTCCG	TAATACGACTCACTATAGGGTTGAGGTAAT
CG18330	Cct2	choline-phosphate cytidyltransferase activity	TAATACGACTCACTATAGGGATTGAAGATGAGCGATGAATCC	TAATACGACTCACTATAGGGAGAGCGGTAG
CG2201	CK	choline kinase activity; ethanolamine kinase activity	TAATACGACTCACTATAGGGCTCAGGCTACTGATTGACTCCC	TAATACGACTCACTATAGGGTAATATACCCA
CG8522	HLH106	transcription factor activity; SREBP	TAATACGACTCACTATAGGGTGTGGATTAAAGTCTACCGGC	TAATACGACTCACTATAGGGCGCAGTAGGC
CG33131	SCAP	sterol regulatory element binding-protein (SREBP) cleavage	TAATACGACTCACTATAGGGGAAGTAGTCAAGGCCACAGACC	TAATACGACTCACTATAGGGCACAAAGTGGC
CG3523	FAS	fatty-acid synthase activity	TAATACGACTCACTATAGGGGTAATGGAGAACCCTGTTCC	TAATACGACTCACTATAGGGGTAATGTCCG

Ribosomal protein encoding genes [1]

CG#	Symbol	Function		
CG12275+	RpS10a	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTACCTCTTCAAGGAGGGTGTGC	TAATACGACTCACTATAGGGCGAGTAGTTTC
CG8332	*RpS15	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCATGTCAGAAAGCTGGTCC	TAATACGACTCACTATAGGGAAAAATCCAAT
CG8922	RpS15a	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTTCACTCATCAGGGAGCAGG	TAATACGACTCACTATAGGGAGTTGCTGAA/
CG12324	*RpS15Ab	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTTACGGAAGTTTTCAAGTAAAGG	TAATACGACTCACTATAGGGACTTTGTGAAC
CG8900	*RpS18	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAAGTACTGGCAGCTGACCTCC	TAATACGACTCACTATAGGGAACAAACTTCA
CG15693	*RpS20	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGCGCATCATCGACTTGC	TAATACGACTCACTATAGGGCAATTTTCGCA
CG15697	RpS30	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCCAACCTGGCCAGATCC	TAATACGACTCACTATAGGGCTTCTCCACC
CG14792	sta	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTGATGTAGTCCATCTGTGG	TAATACGACTCACTATAGGGCTCTATCGGT
CG8857	RpS11	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTCGAAACCGCTGTATTTGC	TAATACGACTCACTATAGGGCAACCGAAC/
CG2033	*RpS15Aa	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACTTTGTGAACATTCATCTGTCG	TAATACGACTCACTATAGGGGACCGGTAGG

CG4046	*	RpS16	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACTTCGGCTCTTTCTACCC	TAATACGACTCACTATAGGGATGCCCATT
CG3922	*	RpS17	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTTAGATCGAGTTCTCGCTGG	TAATACGACTCACTATAGGGACAGATGT
CG4464	*	RpS19a	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGATCCCGACTGGTCTATGTGC	TAATACGACTCACTATAGGGACAGATCTGC
CG8415		RpS23	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTTCTTCTCCTTGTAGAGGGC	TAATACGACTCACTATAGGGCCAAAGCAGCC
CG3751		RpS24	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTTTTGTCCGGTTGTGATTGG	TAATACGACTCACTATAGGGGAAGAAGTTCG/
CG6779	*	RpS3	DNA-(apurinic or apyrimidinic site) lyase activity; ribosome	TAATACGACTCACTATAGGGGTGCTTGGTATCAAGGTC AAGG	TAATACGACTCACTATAGGGGTTGTTTTTGT
CG2168	*	RpS3A	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTTACGGCTTGAACATCTTCTGC	TAATACGACTCACTATAGGGTCCGGTTTTATT
CG10944	*	RpS6	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCAAGACACCCTGCTTCATGG	TAATACGACTCACTATAGGGCAGTGATTGCC
CG7808	*	RpS8	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGATGTTGTGTACAACGCCTCC	TAATACGACTCACTATAGGGAAGAATACAC/
CG5920	*	sop	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTCAAAAACCTGGATTGATTGG	TAATACGACTCACTATAGGGGAGATCATCG/
CG17521		RpL10	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGATCAGCTCCAGCCGACG	TAATACGACTCACTATAGGGCTATTGCAA/
CG7283		RpL10Ab	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAAGTCTATGATGCCTTCTCGG	TAATACGACTCACTATAGGGCCGATCTAGT/
CG4651	*	RpL13	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAACCTTCGCAAGACCATCG	TAATACGACTCACTATAGGGGCTTGAAC
CG1475		RpL13A	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGCATGATCCACACAAGACC	TAATACGACTCACTATAGGGAAAAAATCTCTA
CG3203		RpL17	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACGCAACATCTTCTCTTTTGG	TAATACGACTCACTATAGGGAACACACATG/
CG8615		RpL18	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGTAAAACCTTTTTATTGCCGTGC	TAATACGACTCACTATAGGGGTTTATGAGC/
CG6846		RpL26	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACAAGCAAGATGAACAGAACC	TAATACGACTCACTATAGGGGTGACTTTGCC
CG4759		RpL27	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAAGAGCGACAATCCAGTAACC	TAATACGACTCACTATAGGGCTGAACATA/
CG15442		RpL27A	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAACCTTCTCGGCTCCGACC	TAATACGACTCACTATAGGGGAATATCAAGC
CG12740		RpL28	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAACAAGATTGATTGATCTAAAGATACC	TAATACGACTCACTATAGGGCCGTAAGGG.
CG1821		RpL31	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGATATTGAGTAGCACCGTTTCGG	TAATACGACTCACTATAGGGCCAGATGTGC
CG7939		RpL32	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAGAAAATGACAATTGAACCTCGGC	TAATACGACTCACTATAGGGAAAGGATATCG/
CG4111	*	RpL35	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAAGCAGAAGGAGAATCTGCG	TAATACGACTCACTATAGGGTCTTCAATTGTA
CG7622		RpL36	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTTATCCTTGGACACCTTCAGC	TAATACGACTCACTATAGGGTGATTTGTGCT
CG5502	*	RpL4	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGTCACCAGACCTCCGCC	TAATACGACTCACTATAGGGATGTAGCCCC/
CG2960		RpL40	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGTGGTATCATTGAGCCCTCG	TAATACGACTCACTATAGGGGTGTAATAGC/
CG11522		RpL6	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGCTGAAGAACC AAATCCATCCC	TAATACGACTCACTATAGGGACCAAGACGT/
CG4897		RpL7	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGTTCAATCAAGCTGAACAAGGC	TAATACGACTCACTATAGGGGACTAAATCAC
CG3314		RpL7A	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGAGGATCAACATCGTGGCC	TAATACGACTCACTATAGGGGATCTGTCCC
CG1263		RpL8	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGGGCGCAATTAACATTAAACCG	TAATACGACTCACTATAGGGAACTCCGCCGG/
CG6141		RpL9	structural constituent of ribosome; nucleic acid binding	TAATACGACTCACTATAGGGACGGATATCTTGTCTTGACG	TAATACGACTCACTATAGGGTTTGGATTCC

Note: * previously identified from Drosophila embryonic lipid droplet proteome (ref. 37)

[1] A subset of the most striking genes (41 of the 132) encoded ribosome components and associated proteins. These genes showed a distinct phenotype with more dispersed droplets similar to Class III. However, phase contrast images of these knockdowns revealed decreased cell numbers and multiple large vacuolar structures throughout the cells, suggesting that the cells may not be healthy. It is presently not clear whether these genes involved in protein synthesis are directly involved in lipid droplet biology, or whether their knockdowns result in a non-specific effect on cell viability.