

Table S2 Complete list of RNAi inactivations that lead to suppression of the accumulation of SQST-1::GFP aggregates in the intestine in *rpl-43* mutants

Process	Sequence name	Gene name	Brief description of gene product	Level	Larval arrest
Signaling	F54C8.5	<i>rheb-1</i>	orthologous to the mammalian Rheb and Rheb1 GTPases	3	
Signaling	R13F6.9	<i>sma-3</i>	a Smad protein	2	
Signaling	R12B2.1	<i>sma-4</i>	a Smad protein	2	
Signaling	F02A9.6	<i>glp-1</i>	N-glycosylated transmembrane protein	2	
Signaling	T20F10.1	<i>wts-1</i>	Warts/lats-like serine threonine kinase	2	
Signaling	Y11D7A.9		FGF receptor activating protein 1	2	
Signaling	F56B3.2		a protein containing Ca ²⁺ -binding EGF-like domains	2	
Signaling	Y6E2A.2	<i>str-101</i>	a seven-TM receptor	2	
Signaling	ZK1193.5	<i>dve-1</i>	a protein with a COMPASS domain and two homeodomains	2	
Signaling	M03F4.6		a protein containing Ca ²⁺ -binding EGF-like domains	2	
Signaling	F42G8.8		serine/threonine-protein phosphatase PP1	2	
Signaling	F08C6.1	<i>adt-2</i>	disintegrin metalloproteinase with thrombospondin repeats	2	
Signaling	C09D1.1	<i>unc-89</i>	Ca ²⁺ /calmodulin-dependent protein kinase	2	
Signaling	C36B1.8	<i>gls-1</i>	transducer of the stress-activated PKC1-MPK1 signaling pathway	2	
Signaling	Y54E10BL.6	<i>mek-2</i>	mitogen-activated protein kinase kinase	2	
Signaling	H04M03.8	<i>srv-21</i>	a class V serpentine receptor	2	
Signaling	C13B7.3	<i>srd-60</i>	a class D serpentine receptor	2	
Signaling	F22E5.15	<i>sri-55</i>	a class I serpentine receptor	2	
Signaling	K08G2.8	<i>srh-293</i>	a class H serpentine receptor	2	
Signaling	F47H4.3	<i>srz-46</i>	a class Z serpentine receptor	1	
Signaling	C34E10.2	<i>gop-2</i>	a member of the conserved hypothetical ATP binding protein family	2	
Signaling	R02F2.2		Rho guanine nucleotide exchange factor 17	2	
Signaling	F36A2.8	<i>phip-1</i>	14 kDa phosphohistidine	2	

			phosphatase		
Signaling	W04G3.8	<i>lpr-3</i>	a secreted protein that bind and transport lipophilic molecules	1	+
Protein turnover	Y38A8.2	<i>pbs-3</i>	a B-type subunit of the 20S protease core particle of the 26S proteasome	1	+
Protein turnover	F23F12.6	<i>rpt-3</i>	an AAA ATPase subunit of the 19S regulatory particle of the 26S proteasome	3	+
Protein turnover	C52E4.4	<i>rpt-1</i>	one of six ATPases of the 19S regulatory particle of the 26S proteasome	2	+
Protein turnover	C23G10.4	<i>rpn-2</i>	subunit RPN2/PSMD1 of the 26S proteasome regulatory complex	2	
Protein turnover	F19B6.2	<i>ufd-1</i>	protein involved in recognition of polyubiquitinated proteins	2	
Protein turnover	F59E12.5	<i>npl-4.2</i>	ubiquitin-binding protein involved in protein degradation	2	
Protein turnover	C06A1.1	<i>cdc-48.1</i>	an AAA ATPase homologous to yeast Cdc48 and mammalian p97/VCP	2	
Protein turnover	C41C4.8	<i>cdc-48.2</i>	an AAA ATPase that is one of two <i>C. elegans</i> p97/VCP/CDC48 homologs	2	
Protein turnover	D2045.6	<i>cul-1</i>	cullin	1	
Protein turnover	E01B7.1		putative ubiquitin-specific protease	2	
Protein turnover	M18.6		predicted ATP-dependent protease PIL, contains LON domain	2	
Protein turnover	H38K22.2	<i>dcn-1</i>	a protein containing UBA-like ubiquitin ligase and DUF298 domains	2	
Protein turnover	T08A9.4		a protein containing an F-box	2	
Protein turnover	Y39C12A.1		predicted proteasome-interacting protein	2	
Transcription	F47D12.4	<i>hmg-1.2</i>	HMG box-containing protein	2	
Transcription	F31E3.1	<i>ceh-20</i>	homeobox family member	2	
Transcription	K11G9.4	<i>egl-46</i>	a predicted transcription factor and member of a TFIIA-like zinc finger protein	2	
Transcription	C01B7.1	<i>ztf-12</i>	zinc finger transcription factor family	2	

Transcription	F58A4.11	<i>gei-13</i>	a protein with a BED finger domain	3	
Transcription	R06C7.7	<i>lin-61</i>	polycomb group protein SCM/L(3)MBT	2	
Transcription	C32F10.2	<i>lin-35</i>	the <i>C. elegans</i> retinoblastoma protein (Rb) ortholog	2	
Transcription	JC8.6	<i>lin-54</i>	metallothionein-like protein	2	
Transcription	T26A8.4		a component of the conserved Ccr4-Not deadenylase complex	2	
Transcription	Y65B4BR.5	<i>icd-2</i>	transcription factor containing NAC and TS-N domains	2	
Transcription	F44C4.4	<i>gon-14</i>	a protein with similarity to LIN-15B, a class B synMuv protein	2	
Transcription	F52C12.5	<i>elt-6</i>	GATA-4/5/6 transcription factor	2	
Transcription	F44C4.2	<i>nhr-37</i>	nuclear hormone receptor	1	
Transcription	D2021.1	<i>utx-1</i>	general transcriptional co-repressor	1	
Transcription	C33D3.1	<i>elt-2</i>	GATA-type transcription factor	2	+
Transcription	F57B10.1	<i>let-607</i>	CREB/ATF family transcription factor	1	+
Protein trafficking	C07G1.5	<i>hgrs-1</i>	membrane trafficking and cell signaling protein HRS	2	
Protein trafficking	ZK652.2	<i>tomm-7</i>	translocase of outer mitochondrial membrane complex	2	
Protein trafficking	W10D9.5	<i>tomm-22</i>	translocase of outer mitochondrial membrane complex	2	
Protein trafficking	E04A4.5		mitochondrial import inner membrane translocase	2	
Protein trafficking	F35H10.4	<i>vha-5</i>	subunit a of the vacuolar H ⁺ -ATPase V0 sector	3	
Protein trafficking	T14F9.1	<i>vha-15</i>	subunit H of the V1 peripheral membrane domain of the vacuolar H ⁺ -ATPase	2	+
Protein trafficking	Y54E10A.4	<i>cogc-1</i>	a subunit of lobe A of the conserved oligomeric Golgi complex	3	
Protein trafficking	C06G3.10	<i>cogc-2</i>	a subunit of lobe A of the conserved oligomeric Golgi complex	2	
Protein trafficking	Y71F9AM.4	<i>cogc-3</i>	a subunit of lobe A of the conserved oligomeric Golgi complex	3	

Protein trafficking	Y51H7C.6	<i>cogc-4</i>	a subunit of lobe A of the conserved oligomeric Golgi complex	1	
Protein trafficking	D1014.3	<i>snap-1</i>	peripheral membrane protein required for vesicular transport between ER and Golgi	2	+
Protein trafficking	K02D10.5	<i>snap-29</i>	SNAP-25	2	
Protein trafficking	CD4.4	<i>vps-37</i>	a member of the endosomal sorting ESCRT-I complex	2	
Protein trafficking	VC5.3	<i>npa-1</i>	essential protein involved in intracellular protein transport	2	
Protein trafficking	H06O01.3	<i>ctg-1</i>	phosphatidylinositol transfer protein SEC14	2	
Protein trafficking	C24H11.7	<i>gbf-1</i>	Golgi-specific brefeldin A-resistance guanine nucleotide exchange factor 1	1	
Protein trafficking	F02E8.3	<i>aps-2</i>	small subunit of the clathrin adaptor complex	1	
Protein trafficking	T20B5.1	<i>apa-2</i>	alpha subunit of the vesicle coat complex AP-2	2	
Protein trafficking	Y113G7A.3	<i>sec-23</i>	component of the Sec23p-Sec24p heterodimeric complex of the COPII vesicle coat	2	+
Protein trafficking	F12F6.6	<i>sec-24.1</i>	one of two <i>C. elegans</i> Sec24 homologs	2	+
Protein trafficking	C39F7.4	<i>rab-1</i>	an ortholog of the small Ras-like GTPase Rab1	2	+
Protein trafficking	F26H9.6	<i>rab-5</i>	GTPase Rab5/YPT51 and related small G protein superfamily GTPases	1	+
Protein trafficking	F08D12.1		a protein that functions in targeting nascent secretory proteins to the ER membrane	2	
Protein trafficking	H15N14.2	<i>nsf-1</i>	ATPase required for the release of Sec17p	1	
Metabolism	F54D8.3	<i>alh-1</i>	aldehyde dehydrogenase	2	
Metabolism	C28H8.11		tryptophan 2,3-dioxygenase	2	
Metabolism	C04C3.3	<i>pdhb-1</i>	pyruvate dehydrogenase complex E1 beta subunit	2	
Metabolism	H04M03.4	<i>glf-1</i>	UDP-galactopyranose mutase predicted to synthesize galactofuranose	2	

Metabolism	T11G6.2		permease of the major facilitator superfamily	2	
Metabolism	F52B11.2		orthologous to the human gene phosphomannomutase 2	2	
Metabolism	F07G11.9		chitinase activity	2	
Metabolism	F53F4.5	<i>fmo-4</i>	flavin-containing monooxygenase family member	2	
Metabolism	F38E9.4		a protein involved in lipid storage	2	
Metabolism	F56C11.3		mitochondrial sulfhydryl oxidase involved in the biogenesis of cytosolic Fe/S proteins	2	
Metabolism	F37E3.1	<i>ncbp-1</i>	nuclear cap-binding protein complex	2	
Metabolism	F26A3.2	<i>ncbp-2</i>	nuclear cap-binding protein complex	2	
Metabolism	K02F3.2		mitochondrial amino acid transporter	1	
Metabolism	D1009.1	<i>acs-22</i>	a protein homologous to the mammalian fatty acid transport proteins	1	
Metabolism	K04E7.2	<i>pep-2</i>	a low affinity/high capacity oligopeptide transporter	3	
Metabolism	F23B12.5	<i>dlat-1</i>	orthologous to the human gene dihydrolipoamide dehydrogenase	2	+
Metabolism	C47D12.6	<i>tars-1</i>	a threonyl-tRNA synthetase	1	+
Metabolism	F26F4.10	<i>rars-1</i>	an arginyl-tRNA synthetase	1	+
Metabolism	T11G6.1	<i>hars-1</i>	cytoplasmic and mitochondrial histidyl-tRNA synthetase	2	+
Metabolism	H19M22.3		gelatinase A and related matrix metalloprotease	2	+
Metabolism	Y43F8A.3		neutral cholesterol ester hydrolase 1	2	
Metabolism	C25A1.6	<i>nola-3</i>	H/ACA ribonucleoprotein complex subunit 3	1	
Others	F58A4.8	<i>tbg-1</i>	gamma tubulin	2	
Others	T05A7.7		keratin	1	
Others	F49C12.12		ribonuclease kappa	1	+
Others	K07C5.6		RNA splicing factor	2	+
Others	ZK617.1	<i>unc-22</i>	twitchin	1	
Others	K07D8.1	<i>mup-4</i>	a novel protein required for junctional attachments between hypodermis and muscle	2	
Others	Y43C5B.3		predicted mitochondrial carrier	2	

			protein		
Others	F28D1.5	<i>thn-2</i>	pathogenesis related protein, group 5	2	
Others	C36H8.3	<i>flp-9</i>	predicted FMRFamide-like peptide neurotransmitter	2	
Others	Y46C8AL.4	<i>clec-71</i>	C-type lectin	2	
Others	F26D10.11		an ortholog of murine TMHS	2	
Others	F30A10.9		rRNA-processing protein FCF1 homolog	2	
Others	F45F2.9		predicted hydrolase of HD superfamily	2	
Others	F41E6.10	<i>fip-4</i>	fungus induced protein	2	
Others	C34G6.6	<i>noah-1</i>	a PAN and ZP domain-containing protein	2	
Others	F20G4.1	<i>smgl-1</i>	SMG-associated and lethal	2	
Others	T02C12.1	<i>hum-5</i>	unconventional myosin	1	
Others	C27F2.8		GPI-anchored cell surface glycoprotein	3	
Others	F53F4.1		RNA-binding protein that promotes elongation	2	
Others	C33H5.7	<i>swd-2.2</i>	WD repeat-containing protein	2	
Others	K01A11.2		histidine protein methyltransferase 1 homolog	1	
Unknown	F58A6.5		uncharacterized protein	1	
Unknown	F58D2.2		uncharacterized protein	1	
Unknown	W02A2.8		uncharacterized protein	1	
Unknown	ZC168.2		uncharacterized protein	2	
Unknown	C45G9.5		uncharacterized protein	2	
Unknown	F48G7.4		uncharacterized protein	1	
Unknown	F54D11.3		uncharacterized protein	1	
Unknown	Y11D7A.1		uncharacterized protein	1	
Unknown	M88.3		uncharacterized protein	1	
Unknown	F26A1.8		uncharacterized protein	1	
Unknown	F54H12.4		uncharacterized protein	1	
Unknown	T20F10.4		uncharacterized protein	2	
Unknown	F44D12.4		uncharacterized protein	2	
Unknown	Y65B4BL.6		uncharacterized protein	3	
Unknown	F10E9.3		uncharacterized protein	2	
Unknown	ZK470.3		uncharacterized protein	2	
Unknown	Y76G2A.2		uncharacterized protein	2	
Unknown	M04D8.5		uncharacterized protein	1	

Level 1: some SQST-1::GFP aggregates are detected in some intestinal cells in *rpl-43* mutants, but

the number is much lower and expression is much weaker than in *rpl-43* single mutants.

Level 2: a few SQST-1::GFP aggregates are detected in some intestinal cells in *rpl-43* mutants.

Level 3: complete disappearance of intestinal SQST-1::GFP aggregates in *rpl-43* mutants.