

Appendices

Table A1. Mutant strains isolated in this work

Strain	Genotype
AA528	<i>dre-1(dh99)V; daf-12(rh61rh411) X</i>
AA251	<i>dre-1(dh190)V; daf-12(rh61rh411)X</i>
AA461	<i>dre1(dh172)V; daf-12(rh61rh411)X</i>
AA684	<i>dre-1(dh278)V; daf-12(rh61rh411)X</i>
AA682	<i>dre1(dh279)V; daf-12(rh61rh411)X</i>
AA681	<i>dre1(dh280)V; daf-12(rh61rh411)X</i>
AA683	<i>dre-1(dh284)V; daf-12(rh61rh411)X</i>
AA693	<i>dre-1(dh292)V; daf-12(rh61rh411)X</i>
AA247	<i>dre-2(dh184)I; daf-12(rh61rh411)</i>
AA460	<i>lin-29(dh171) II; dre-1(dh99)V</i>
AA588	<i>daf-12(dh222)X; dre-1(dh99)V</i>
AA628	<i>daf-12(dh150)X; dre-1(dh99)V</i>
AA819	<i>dre-1(hd60)V/dpy-11(e224);unc-42(e270)V</i>

Table A2. Strains obtained by injection

Strain	Genotype
AA362	<i>dre-1(dh99)V; daf-12(rh61rh411)X; dhEx108(Y43G5 pTG96+)</i>
AA368	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx109(Y51B4 pTg96+)</i>
AA369	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx110(Y43G5 pTG96+)</i>
AA370	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx111(Y43G5 pTG96+)</i>
AA371	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx112(Y40G12 pTG96+)</i>
AA372	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx113(Y51B4 pTG96+)</i>
AA389	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx131(Y38A10 pTG96+)</i>
AA390	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx132(Y43G5 pTG96+)</i>
AA391	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx133(Y43G5 pTG96+)</i>
AA392	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx134(F17A9 pTG96+)</i>
AA399	<i>dre-1(dh99)V; dhEx139(Y51B4 pTG96+)</i>
AA400	<i>dre-1(dh99)V; dhEx140(F17A9 pTG96+)</i>
AA401	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx141(Y38A10 pTG96+)</i>
AA402	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx142(Y38A10 pTG96+)</i>
AA403	<i>daf-12(rh61rh411)X; dre-1(dh99)V; dhEx143(Y38A10 pTG96+)</i>

Table A2. Strains obtained by injection continued

Strain	Genotype
AA413	<i>dre-1(dh99)V</i> ; <i>dhEx146(Y51B4 pTG96+)</i>
AA479	<i>dre-1(dh99)V</i> ; <i>dhEx185(Y40G12 pTG96+)</i>
AA480	<i>dre-1(dh99)V</i> ; <i>daf-12(rh61rh411)X</i> ; <i>dhEx185</i>
AA551	<i>dre-1(dh99)V</i> ; <i>dhEx231(Y40G12 pTG96+)</i>
AA557	<i>dre-1(dh99)V</i> ; <i>dhEx232(K02A7 pTG96+)</i>
AA564	<i>dre-1(dh99)V</i> ; <i>dhEx238(K02A7 pTG96+)</i>
AA627	<i>dre-1(dh99)V</i> ; <i>dhEx217</i>
AA725	<i>dre-1(dh99)V</i> ; <i>dhEx314(K04A8 pTG96+)</i>
AA796	<i>lin-15(n765)X</i> ; <i>dhEx344 (dre-1::GFP lin-15+)</i>
AA797	<i>lin-15(n765)X</i> ; <i>dhEx345 (dre-1::GFP lin-15+)</i>
AA801	<i>dre-1(dh99)V</i> ; <i>lin-15(n765)X</i> ; <i>dhEx346(dre-1::GFP lin-15+)</i>
AA810	<i>lin-15(n765)X</i> ; <i>dhEx352 (dre-1p::GFP lin15+)</i>
AA811	<i>lin-15(n765)X</i> ; <i>dhEx353(dre-1::gfp lin-15+)</i>
AA845	<i>dre-1(dh99)V</i> ; <i>lin-15(n765)X</i> ; <i>dhEx376 (dre-1::GFP lin-15+)</i>
AA846	<i>lin-15(n765)X</i> ; <i>dhEx377 (dre-1p::GFP lin-15+)</i>
AA849	<i>dre-1(dh99)V</i> ; <i>lin-15(n765)X</i> ; <i>dhls378(dre-1::GFP lin-15+)</i>

Table A3. Strains made in this work by crosses

Strain	Genotype
AA426	<i>dre-1(dh99)V</i>
AA461	<i>dre-1(dh172)V</i>
AA487	<i>dre-1(dh190)V</i> <i>dre1(dh278)</i>
AA718	<i>dre-1(dh279)V</i>
AA685	<i>dre-1(dh288)V</i> <i>dre1(dh284)</i>
AA717	<i>dre-1(dh292)V</i>
AA708	<i>dre-2(dh184)I</i>
AA840	<i>dre-1(hd60)VI+</i>
AA245	<i>dre-1(dh99)V</i> ; <i>daf-12(sa156)X</i>
AA252	<i>dre-1(dh99)V</i> ; <i>daf-12(m421)X</i>
AA669	<i>dre-1(dh99)V</i> ; <i>lin-29(n546)II</i>

Table A3. Strains made in this work by crosses continued

Strain	Genotype
AA885	<i>daf-12(rh61rh411); lin-29(n546)</i> <i>dre-1(dh99); lin-4(e912)</i>
AA848	<i>daf-12(rh61rh411)X; lin-4(912)II</i>
AA343	<i>dre-1(dh99); lin-14(ma135)/+</i>
AA425	<i>lin-14(ma135)X; dre-1(dh99)V</i>
AA882	<i>dre-1(dh99)V; let-7(n2853ts)X</i>
AA346	<i>dre-1(dh99); lin-42(n1089)</i>
AA395	<i>lin-28(n719)I; dpy-11(e224) unc-42(e270)V</i> <i>daf-12(rh61rh411); lin-42(n1089)II</i> <i>daf-12(rh61); lin-42(n1089)II</i> <i>dre-1(dh99); lin-41(n2914)</i>
AA847	<i>lin-41(n2914)/lin-11 unc-29; ajm-1::gfp</i>
AA820	<i>dre-1(dh99); ajm-1::gfp</i>
AA837	<i>dre-1(dh279); ajm-1::gfp</i>
AA791	<i>dre-1(dh99)V; lin-29(n546)II; ajm-1::gfp</i>
AA869	<i>lin-29(n546); ajm-1::gfp</i>
AA851	<i>lin-4(e912)II; dre-1(dh99); ajm-1::gfp</i>
AA833	<i>lin-4(e912); ajm-1::gfp</i> <i>let-7(n2853); dre-1(dh99); ajm-1::gfp</i> <i>let-7(n2853); ajm-1::gfp</i>
AA828	<i>dre-1(dh99)V; daf-12(rh61rh411)X; ajm-1::gfp</i>
AA836	<i>lin-42(n1089)II; dre-1(dh99)V; ajm-1::gfp</i>
AA832	<i>lin-42(n1089)II; ajm-1::gfp</i>
AA847	<i>lin-41n2914)/lin-11 unc29; ajm-1::gfp</i>
AA900	<i>dre-1(hd60) Ex346 dre-1::gfp</i>
AA268	<i>dre-1(dh99)V; daf-2(e1368)III</i>
AA356	<i>dre-1(dh99)V; daf-2(e1370)III</i>
AA478	<i>dre-2(dh184)</i>
AA854	<i>dre-2(dh184)I; lin-42(n1089)II</i>
AA294	<i>dre-1(dh99)V unc-42(e270)V</i>
AA475	<i>dre-1(dh99)V; unc-46(e177)V</i>
AA388	<i>daf-12(rh193)X; lin-46(ma164) unc-76(e911)/unc-42(e270) dpy-11(e224)V</i>
AA548	<i>dre-1(dh99)V; lin-15(n765)X</i>
AA652	<i>dre-1(dh99)V; unc-42(e270)V; daf-12(rh61rh411)X</i>

Table A4. Strains used in this work

Strain	Genotype
AA655	<i>dre-1(dh99)V; col-19::gfp</i>
AA827	<i>dre-1(dh99)V; unc-119(+/-)III; Is(SCM GFP_{unc-119+})</i>
AA834	<i>dre-1(dh99)V; dhls23(daf-12A::gfp)</i>
AA839	<i>dre-1(dh99)V; daf-9(k182)X</i>
AA853	<i>dre-2(dh184)I; col-19::gfp</i>
AA003	<i>daf-12(rh61rh411)</i>
AA034	<i>daf-12(rh61)</i>
VT516	<i>lin-29(n546)</i>
AA149	<i>lin-14(ma135)</i>
AA915	<i>lin-41(n2914)/lin11;unc29I</i>
MT3316	<i>lin-4(e912)/mnC1 dyp-10(e128);unc-52(e444)II</i>
AA263	<i>lin-46(ma164)V;unc-76(e911)</i>
MT2257	<i>lin-42(n1089)II</i>
AA027	<i>lin-28(n719)I</i>
MT7626	<i>let-7(n2853ts)X</i>
AA813	<i>ajm-1::gfp</i>
DR1572	<i>daf-2(e1368)III</i>
CB1370	<i>daf-2(e1370)III</i>
	<i>daf-2(e1368)III;daf-12(rh61rh411)X</i>
AA047	<i>daf-2(e1370)III;daf-12(rh61rh411)X</i>
NL2099	<i>rrf-3(pk1426)II</i>
DR108	<i>dpy-11(e224);unc-42(e270)</i>
BC277	<i>unc-46(e177) dpy-11(e224)</i>
BC1287	<i>dpy-18(e364)/eT1III;sDf26/eT1V</i>
BC1785	<i>dpy-18(e364)/eT1III;unc-46(e177)sDf30/eT1V</i>
BC1784	<i>dpy-18(e364)/eT1III;unc-46(e177)sDf36/eT1V</i>

Table A5. RNAi strains used of Ahringer library

(Kamath and Ahringer, 2003)

Construct/ gene	Clone number
L4440	
<i>skr-1</i>	I-4N11
<i>skr-2</i>	I-4N09
<i>skr-3</i>	V-10B10
<i>skr-5</i>	V-11J19
<i>skr-6</i>	V-12C07
<i>skr-8</i>	IV-8M05
<i>skr-9</i>	IV-8M01
<i>skr-11</i>	V-10P12
<i>skr-12</i>	IV-8K23
<i>skr-13</i>	IV-8M03
<i>skr-15</i>	II-3D05
<i>skr-17</i>	II-5F18
<i>skr-18</i>	IV-1E08
<i>skr-19</i>	X-6O03
<i>skr-20</i>	X-6O07
<i>skp-1</i> component C16D2.1	II-6F23
<i>skp-1</i> component F18A11.5	II-8H05
<i>elc-2</i>	X-1H15
<i>cul-1</i>	III-5J03
<i>cul-4</i>	II-5F15
<i>cul-5</i>	V-7G05
<i>cul-6</i>	IV-6P15
<i>rbx-1</i>	V-6D08
<i>hbl-1</i>	X-3003
<i>lin-29</i>	II-8G15

Table A6. Primer for SNP chromosome mapping

Cosmid	Chromosom/ Map position	Enzyme	Product size	Allele	N2 (bp)	CB4856 (bp)	Forward Primer	Reverse Primer
ZC123	I -18.593	Ssp1	643	pkP1051	643	(324, 319)	178928	17892
K04F10	I 0.954	Nde1	594	pkP1057	594	(294, 300)	178930	178931
C37A5	I 23.540	EcoR1	526	pkP1071	(241, 285)	526	178932	178933
T01D1	II -17.857	Dra1	618	pkP2101	(402, 172, 44)	(574, 44)	178934	178935
T13C2	II 0.097	Dra1	495	pkP2107	(299, 125, 70)	(369, 125)	178936	178937
Y48E1b	II 18.082	Ssp1	514	pkP2117	514	(277, 237)	178938	178939
K02F3	III -24.407	Mse1	307	pkP3045	(184, 123)	(184, 60, 63)	178940	178941
F10E9	III -0.307	Acc1	854	pkP3049	(598, 255)	854	178942	178943
Y75B8A	III 16.425	Hind3	330	pkP3075	330	(259, 71)	178944	178945
Y66H1A	IV -26.285	Sau3A1	493	pkP4049	(465, 28)	(291, 174, 28)	178946	178947
R105	IV 0.936	Hind2	620	pkP4034	620	(303, 317)	178948	178949
M199	IV 12.500	Ava1	848		848	(396, 451)	178950	178951
F36H9	V -17.474	Dra1	493	pkP5076	(332, 82, 79)	(411, 82)	178952	178953
F29G9	V -0.395	BspH1	576	pkP5059	(207, 370)	576	V114 F	V114 B
T01C4	V 0.550	Apo1	482	pkP5060	(186, 296)	(78, 108, 296)	V115 F	V115 B
F20D6	V 1.138	Alu1	304	pkP5062	(211, 93)	304	178954	178955
Y51A2D	V 16.674	Dra1	393	pkP5082	393	(119, 274)	178956	178957
F28C10	X -19.761	BspH1	364	pkP6100	(208, 156)	364	178958	178959
F45E1	X -0.760	EcoR1	776	pkP6110	(516, 259)	776	178960	178961
F23D12	X 16.708	Ssp1	287	pkP6124	287	(201, 86)	178962	178963

Table A7. Primer for SNP fine mapping

Cosmid	Chrom. V Map pos	Enzyme	Product size (bp)	Allele	N2 (bp)	CB4856 (bp)	Forward Primer	Reverse Primer
F46E10	-0.023	Hinfl	303		(1, 150, 152)	(1, 302)	F46E10.1- snip-left	F46E10.1- snip- right
W01A11	-0.049	Apo1	480		(37, 120, 140, 203)	(37, 120, 323)	W01A11.2- snip-left	W01A11.2- snip- right
T05H4	-0.077	Tsp 509I	400		(25, 25, 41, 116, 193)	(25, 25, 41, 309)	T05H4.1- snip-left	T05H4.1- snip- right
F13H6	-0.153	Msc1	511	pkP5112	511	(213, 298)	pkP5112- left	pkP5112- right
K12B6	-0.210	Hpy 188I	375	pkP5111	(63, 92, 220)	(92, 283)	pkP5111- left	pkP5111- right
W06H8	-0.260	Apo1	303		(15, 20, 26, 26, 27, 29, 32, 32 37, 59)	(15, 20, 26, 27, 29, 32, 32, 37, 85)	W06H8.2- snip-left	W06H8.2- snip- right
Y38A10	-0.358	HphI	330		(149, 181)	330	Y38A10.2- snip-left	Y38A10.2- snip- right
F29G9	-0.404	BspH1	576	pkP5059	(207, 370)	576	V114	V114
C13D9	-2.100	Dra1	515		(171, 344)	515	V112 F	V112 B
C35A11	-2.215	HhaI	350	pkP5110	350	(97, 253)	pkP5110- left	pkP5110- right
C52A10	-2.684	HpaII	209	pkP5109	(70, 139)	209	pkP5109- left	pkP5109- right
K04A8	0.006	Aci1	510		(26, 44, 68, 70, 98, 204)	(26, 68, 70, 98, 248)	K04A8.1- snip-left	K04A8.1- snip- right
K11G9	0.110	BsmFI	399		(194, 205)	399	K11G9.4- left	K11G9.4- right
F44C4	0.119	Sal1	342	pkP5113	342	(98, 244)	pkP5113- left	pkP5113- right
VC5	0.147	Dra1	511	pkP5097	(432, 79)	(297, 135, 79)	pkP5097-left	pkP5097-right
ZC404	0.211	MseI	400		(25, 25, 150, 200)	(25, 150, 225)	ZC404.4- snip-left	ZC404.4- snip- right
T01C4	0.468	Apo1	482	pkP5060	(186, 296)	(78, 108, 296)	V115for	V115rev
Cosmid	V Map pos	Enzyme	Product size (bp)	Allele	N2 (bp)	CB4856 (bp)	Forward Primer	Reverse Primer
C13A2	0.596	Mnl1	499		(251, 166, 82)	(251, 248)	C13A2- left	C13A2- right
F07G11	0.616	HpyC H4V	498		(27, 168, 303)	(27, 471)	F07G11- left	F07G11- right
C18B10	0.700	AseI	216		(102, 114)	216	V116 F	V116 B
F18E3	0.725	Apo1	495		(33, 59, 94, 147, 171)	(33, 59, 147, 256)	F18E3- left	F18E3- right
ZK1055		Snip search					ZK1055-snip-left	ZK1055-snip-right
EGAP9		Snip search					EGAP9 snip1-left	EGAP9 snip1-right
ZK40		Snip search					ZK40 snip1-left	ZK40 snip1-right

Table A7. Primer for SNP fine mapping continued

Cosmid	Chrom. V Map pos	Enzy- me	Product size (bp)	Allele	N2 (bp)	CB4856 (bp)	Forward Primer	Reverse Primer
F25E5	0.744	Seq SNP	309				F25E5- left	F25E5- right
C04F2	0.780	BsmI	487		(237, 250)	487	C04F2- left	C04F2- right
C54F6	0.800	BstNI	301		(97, 204)	301	C54F6- left	C54F6- right
F19F10	0.850	Sau3A I	349		(6, 44, 82, 98, 119)	(6, 82, 119, 142)	F19F10.1- left	F19F10.1- right
C50E3	0.859	AluI	434	pkP5114	(271, 163)	434	pkP5114-left	pkP5114-right
C12D5	0.938	ApoI	355		(35, 39, 52, 104, 125)	(35, 39, 104, 177)	C12D5.5- left	C12D5.5- right
Zk105	0.954	Seq SNP	329				Zk105- left	Zk105- right
Y97E10 C	0.973	Seq SNP	311				Y97E10C- left	Y97E10C- right
T05B11	0.975	Seq SNP	434				T05B11.3- left	T05B11.3- right
Zk742	0.992	HgaI	466		(240, 226)	466	Zk742.2- left	Zk742.2- right
C26F1	0.995	BsI1	488		(242, 246)	488	C26F1.1- left	C26F1.1- right
C37C3	1.010	MaellI	462		(70, 163, 229)	(70, 392)	C37C3.3- left	C37C3.3- right
F40A3	1.033	SmlI	471		(123, 348)	471	F40A3.1- left	F40A3.1- right
Y97E10A L	1.101	Seq SNP	273				Y97E10AL- left	Y97E10AL- right
Y97E10A R	1.117	Seq SNP	271				Y97E10AR- left2	Y97E10AR- right2
C09H5	1.149	Seq SNP	368				C09H5- left	C09H5- right
D1014	1.204	Tsp50 9I	620		(9, 12, 18, 29, 34, 48, 52, 55, 55, 75, 77, 156)	(9, 29, 30, 34, 48, 52, 55, 55, 75, 77, 156)	D1014.2- left	D1014.2- right
F20D6	1.216	AluI	304	pkP5062	(211, 93)	304	178954	178955
F21F8	1.272	Tsp 509I	346	pkP5115	(211, 83, 52)	(137, 83, 74, 52)	F21F8 F	F21F8 B
K06C4	1.731	HinfI	790	pkP5063	(51, 92, 148, 199, 300)	(51, 92, 148, 499)	V117 F	V117 B
E02C12	1.920	AseI	355	pkP5117	355	(289, 46)	pkP5117-left	pkP5117-right
K09G1	2.066	SspI	256	pkP5118	(207, 49)	256	K09G1_F	K09G1_B

Table A8. SNP primer (all)

Gene	Cosmid	Name	Sequence	Tm
	ZC123	178928	CCTACAACAGGCAAAGAAGC	
	ZC123	178929	AATTCCTACCAAAGCTCCGC	
	K04F10	178930	ATCATTCTCCAGGCCACGTTAC	
	K04F10	178931	CTGAACTAGTCGAACAAACCCC	
	C37A5	178932	CTCATGCATGATTTTCGAGGG	
	C37A5	178933	AAATCCAACAGGAGCAGGAC	
	T01D1	178934	AAGAGGTGTTCTTCTGCAGC	
	T01D1	178935	ACCATCCACGCAGTTCATTC	
	T13C2	178936	TCCACACTATTTCCCTCGTG	
	T13C2	178937	GAGCAATCAAGAACCGGATC	
	Y48E1b	178938	AAAAGAGGGAGTTTTGGCAG	
	Y48E1b	178939	GTTTGGAGATGAGGGTTGAG	
	K02F3	178940	GGCATACCATAGTATGCGGTAC	
	K02F3	178941	GACTCTTGGGATTCTTGGGAAC	
	F10E9	178942	AGCAGATGAAAGTTCCGACG	
	F10E9	178943	CCCCGCTGTGGTTATTATAC	
	Y75B8A	178944	AAACAGCATTGTGCGACGAGC	
	Y75B8A	178945	AGCCTAAGCCCAAGCTTTAG	
	Y66H1A	178946	TTTCAATACGGCGTCCTG	
	Y66H1A	178947	GATTCCGTCACTGGTTACTGAG	
	R105	178948	GTGATCCTATGTGGTGTGAAC	
	R105	178949	GACAGCATGTAGTTCAGTTGTC	
	M199	178950	GGAATTCTTCTGATCCAGGGTG	
	M199	178951	AGTTATTCCAGGCTTGAGACGC	
	F36H9	178952	CGGAAAATTGCGACTGTC	
	F36H9	178953	ATTAGGACTGCTTGGCTTCC	
	F20D6	178954	CGAGGAATGAGCAGTTCAGTAG	
	F20D6	178955	GAGAGTTCACTGACTATGGC	
	Y51A2D	178956	CAGGCATATTACATGGGATAGG	
	Y51A2D	178957	CAATCTCACCTCCATTCTGTG	
	F28C10	178958	GGTATCCGATCCCTTCAACAAG	
	F28C10	178959	TGGCAAACACATCCCTGTG	
	F45E1	178960	TTTCTTGACACCTCCGGTAG	

Table A8. SNP primer (all) continued

Gene	Cosmid	Name	Sequence	Tm
	F45E1	178961	CTCACTCTGGTCTTTTTCCG	
	F23D12	178962	AGGCATAGAAAGCTTGTACGC	
	F23D12	178963	ACTTAAATTGCAGCCGTCTG	
	T01C4	V115 F	TGGAATCTCGTGCACCATAG	
	T01C4	V115 B	CCCTGAGTTTTACGATATCG	
	F29G9	V114 F	GTTGTGAAAGTCGCGTTGAG	
	F29G9	V114 B	TTCGGTGTGTTGTCTGTAGTCG	
	C52A10	pkP5109- left	TCT TGT GCC TTC CAT CCA AG	56,9
	C52A10	pkP5109- right	ATG GTC TCA GTT TAC CAG GAA G	54,0
	C35A11	pkP5110- left	ACT AGG CTT CTC ACG ATG ACC	54,9
	C35A11	pkP5110- right	CAT ATT CAA CTT CGT CAT TCG G	54,6
	K12B6	pkP5111- left	CTT GTG GAA AAG CGG GAA TAT G	58,8
	K12B6	pkP5111- right	CCG GAG GCG GTA ATA ATC ACT C	59,9
	F13H6	pkP5112- left	TTA TTC CCA GTG ACG ATT CTC C	55,5
	F13H6	pkP5112- right	TTA GAT GGT ACT GTC GCT GTT C	53,2
	F44C4	pkP5113- left	CGG GAA CCT GAC TCT TCT ATT G	56,3
	F44C4	pkP5113- right	TCT CGA GAA AAT TGC TGA TGC	55,4
	C18B10	V116 F	CAT TCC CAA TCC AAT AGC C	
	C18B10	V116 B	TGATATTGCTGCCACAACGG	
	K06C4	V117 F	ACCACGGCCTTCAAAAGAGTAC	
	K06C4	V117 B	TTCTGCAAGAGAGTGACAGGTC	
	F21F8	F21F8 F	GCACGGACATTCTAGTTTGC	
	F21F8	F21F8 B	TTTCGATGTTTTCAGTGCG	
	E02C12	pkP5117-left	CAGACTCCCAAATGCTCAG	
	E02C12	pkP5117-right	ATGCATAATGAGATGTGACTGG	
	C13D9	V112 F	TTCGCAGTTCACTCTTGTGCTC	
	C13D9	V112 B	GGCCAAATTCTCCGTTTCAC	
	C50E3	pkP5114-left	AAAACTGGCGTTGACGAAATC	
	C50E3	pkP5114-right	AGAGCGAGATCTTCACAGCAAG	
	F20D6	178954	CGAGGAATGAGCAGTTCAGTAG	
	F20D6	178955	GAGAGTTCACTGACTATGGC	
	K09G1	K09G1_F	CAAATAAGGAATGAAGCACACG	
	K09G1	K09G1_B	CAGGAACATTTTCAGGATGG	

Table A8. SNP primer (all) continued

Gene	Cosmid	Name	Sequence	Tm
	VC5	pkP5097-left	GTGCTAATTCCAGAAATGATCC	
	VC5	pkP5097-right	TAGTGTTTCATAGCATCCCATTG	
F25E5	F25E5	F25E5- left	TAC GCT TCC AAG TGA GC	56
F25E5	F25E5	F25E5- right	AGT TGT TCC CTC GGA CTC G	57
Zk105	Zk105	Zk105- left	CCG AGC TCA AAT TAG GTA GGG	57
Zk105	Zk105	Zk105- right	TAC ATT TTG GGC GAT GTT CC	56
Y97E10	Y97E10AL	Y97E10AL- left	GAT CCA TCA TGT TCT CTT AAG GTT C	55
Y97E10	Y97E10AL	Y97E10AL right	AAG TGG GGC CTT TCA TTT G	57
Y97E10	Y97E10AR	Y97E10AR- left2	GAA GAA GGA AAA CCG ACC TTT C	57
Y97E10	Y97E10AR	Y97E10AR- right2	ATG ACG AAA AGG GAC CAT TG	56
C09H5	C09H5	C09H5- left	CCC AAT ACT GCA ATG CAA CG	59
C09H5	C09H5	C09H5- right	GTA TCC GGA AAA CCC AGT GC	58
T05H4.1	T05H4	T05H4.1- snp- left	TCA AAG GTG TTA GAA AGT TGG	52
T05H4.1	T05H4	T05H4.1- snp- right	AAC TAT TTT TCA TCG AGC AG	49
W01A11.2	W01A11	W01A11.2- snip- left	TTT TTG ATC AAT TTT GGT ACG	51
W01A11.2	W01A11	W01A11.2- snip- right	AAA AGC TCA ATG AAA TTT ACG	51
K04A8.1	K04A8	K04A8.1- snip- left	ACA AAC ATC ACG AGA AAC G	51
K04A8.1	K04A8	K04A8.1- snip- right	AAT TGC AGT TTT TGC TTT G	51
K11G9.4	K11G9	K11G9.4- left	TTG AAT TTC ACA CGC TTT C	51
K11G9.4	K11G9	K11G9.4- right	ACA AGT CCC CGA AGA ATC	51
	pKP5109	pKP5109-left	TCT TGT GCC TTC CAT CCA AG	56,9
	pKP5109	pKP5109-right	ATG GCT TCA GTT TAC CAG GAA	54
	pKP5110	pKP5110-left	ACT AGG CTT CTC ACG ATG ACC	54,9
	pKP5109	pKP5110-right	CAT ATT CAA CTT CGT CAT TCG G	54,6
	K12B6	K12B6-left	CTT GTG GAA AAG CGG GAA TAT	58,8
	K12B6	K12B6-right	CCG GAG GCG GTA ATA ATC ACT	59,9
	F13H6	pKP5112-left	TTA TTC CCA GTG ACG ATT CTC C	55,5
	F13H6	pKP5112-right	TTA GAT GGT ACT GTC GCT GTT C	53,2

Table A8. SNP primer (all) continued

Gene	Cosmid	Name	Sequence	Tm
ZC404.4	ZC404	ZC404.4- snip- left	ACA ATA AAA TCG TGC TTG C	50,4
ZC404.4	ZC404	ZC404.4- snip- right	CTC AGC CTC GCA TTG AAC	54,1
F46E10.1	F46E10	F46E10.1- snip- left	GAA AAC CAG AAA TTA AAA TGG	49,6
F46E10.1	F46E10	F46E10.1- snip- right	AAA AAG GTT GGA ATT GAG G	51,0
W06H8.2	W06H8	W06H8.2- snip- left	TTT TTA AAC TGA GAA TAA TGG AG	48,7
W06H8.2	W06H8	W06H8.2- snip- right	ATC ATG AAT TCT TTG GGA AG	49,5
Y38A10A.2	Y38A10A	Y38A10A.2- snip- left	CTT ACC TGC CAC AAA TCG	51,8
Y38A10A.2	Y38A10A	Y38A10A.2- snip- right	GAT GAG CGT GAG TAC ATC G	50,6
Zk1055	Zk1055	Zk1055- snip- left	ATC GTG GTG AGA CCC TTC	52,1
Zk1055	Zk1055	Zk1055- snip- right	ACA TTT TCC GGT CCT TTC	51,4
EGAP9	EGAP9	EGAP9- snip-1 left	TCC GTT CAC ATA CTC GAT G	50,5
EGAP9	EGAP9	EGAP9- snip-1 right	ACA CTC AGT TGG GGT AAA AC	51,8
Zk40	Zk40	Zk40- snip1- left	TTC CAA CGT TTT GTT AAT TG	50,4
Zk40	Zk40	Zk40- snip1- right	TAC GTC CAT TCG TAA CCT G	50,8
C13A2	C13A2	C13A2- left	GGT GCA ACG TTC AGT GGA AG	59
C13A2	C13A2	C13A2- right	GAT TGG GCC AAA CAA AAA TC	55
C26F1.1	C26F1	C26F1.1- left	GTT GTG CGC TCT TCG ATG	55
C26F1.1	C26F1	C26F1.1- right	TGA TGG AGC AAC TTG CGA AC	58
F07G11	F07G11	F07G11- right	TGT TTT GGG AGT TTG TGG TG	56
F07G11	F07G11	F07G11- left	GTG GGC CTC AGT GAA GTT CC	59
Zk742.2	Zk742	Zk742.2- right	CAA GAA CGA TGA AAA CAA CAG C	56
Zk742.2	Zk742	Zk742.2- left	GCA CGT GAC ACA CTA CAC ACC	57
F40A3.1	F40A3	F40A3.1- left	TTC CCA AAT GGC TCT CTA ATG	55
F40A3.1	F40A3	F40A3.1- right	AGC AAG AGA TTT CAA GGT GGT C	56
C37C3.3	C37C3	C37C3.3- left	CCA GAA GTT GAT CAA ATC GAA G	54
C37C3.3	C37C3	C37C3.3- right	TTC CAG TGA GGA AAC TGT TGC	57
C54F6	C54F6	C54F6- left	GCA ACC TAT GTT TAT TGG GAA C	54
C54F6	C54F6	C54F6- right	TTG CTT TCT GCC AGT ATT GC	55
F19F10.1	F19F10	F19F10.1- left	CAG CGA AGA ATT GGG AAT TC	55

Table A8. SNP primer (all) continued

Gene	Cosmid	Name	Sequence	Tm
F19F10.1	F19F10	F19F10.1- right	GCA TAT CTG GAC GAC GAA TC	53
F18E3	F18E3	F18E3- left	TTG AAC CGT GAT TCC AAA TG	55
F18E3	F18E3	F18E3- right	TGC GGC CAC CTT ATA AGA AC	57
C04F2	C04F2	C04F2- left	ACG GGC CTA CAA CAT TGA TG	57
C04F2	C04F2	C04F2- right	TCA AAC CAA TCT GGG AAT CTG	55
C12D5.5	C12D5	C12D5.5- left	TTT GTC TCC TTG CTC CAA TG	55
C12D5.5	C12D5	C12D5.5- right	GGG AGG AAT ATG TGG AGC TG	55
D1014.2	D1014	D1014.2- left	AAA GAA ATT GGT CGC TCT CG	56
D1014.2	D1014	D1014.2- right	TTT GGC CAC TGA TTC TGT TC	55
T05B11.3	T05B11	T05B11.3- left	TTC ATC TGC CAG TTT CAC AC	53
T05B11.3	T05B11	T05B11.3- right	TCC CGA TTT GGT TGT CAT TC	56
Y97E10C	Y97E10C	Y97E10C- left	CTA TAC GGG CGT GAA TTT GG	57
Y97E10C	Y97E10C	Y97E10C- right	CGA GAA TCG AGG AAG AAT TGC	56

Table A8. SNP primer (all) continued

Cosmid	Name	Sequence
W04C9	pkP1099	TCGGAGCGTGTTTGCATGTATG
W04C9	pkP1099	TTCTCGTGCAGCTGGAAATG
Y18H1A	pkP1100	TCACGCCAAAATTAATGGG
Y18H1A	pkP1100	AAGCGAACCAATCAGCAG
ZC123	pkP1051	AATTCCTACCAAAGCTCCGC
ZC123	pkP1051	CCTACAACAGGCAAAGAAGC
C54G6	pkP1101	GAACTTCCAGGTCACTCTGG
C54G6	pkP1101	CGCGTTTCGTAATGTATCG
F56C11	I_1 F	AGGTCGCTCCAACTTTCTAGG
F56C11	I_1 B	ATCGAAATCCCCTTGTACCC
F53G12	I_2 F	GCGTCGTTCCACGTGTTATGC
F53G12	I_2 B	GTATCCTCATCCTTCTACCACC
Y65B4	I_3 F	TTTGTTCTCGGATCTCACG
Y65B4	I_3B	AGAAATTGAGGAGAACCTCG
ZC123	ZC123-F(I_17.9L)	CCTACAACAGGCAAAGAAGC
ZC123	ZC123-B(I_17.9L)	AATTCCTACCAAAGCTCCGC
Y92H12A	Y92H12A-snp1-for	CTTGACAAGTCG GTCAAAT
Y92H12A	Y92H12A-snp1-rev	TAACCATACAAAATCAGATGAGA
Y71G12	I_4 F	GACAATGACCAATAAGACG
Y71G12	I_4 B	GATCCGTGAAATTGTTCCG
Y71G12A	Y71G12A.3-for	GATCCGTGAAATTGTTCCG
Y71G12A	Y71G12A.3-rev	GACAATGACCAATAAGACG
Y71G12A	pkP1103	TTTGGCTTATTGCCGATATGC
Y71G12A	pkP1103	ACCTAGAATAAGAATGGGCAGG
K07A3	I_5 F	TTCACGCCAAGAAGTTCACC
K07A3	I_5 B	CCAACCACGTACTTGTTCAGG
W03D8	I_6 F	CGAACTTTTATCCGTCACCG
W03D8	I_6 B	CACCCCAATTAATCTGTGCG
K09H9	I_7 F	CATAAAGAGTGACAGCTGGGTG
K09H9	I_7 B	TTCGCACTGCTCCAATTTGC

Table A8. SNP primer (all) continued

Cosmid	Name	Sequence
F57C9	I_8 F	ATGTGTCTGCAATGTGGTGG
F57C9	I_8 B	AAATCTCGCGGTCTCGAAAC
C09D4	I_9 F	AATTCCGATGATGGAGACGG
C09D4	I_9 B	TCGTGCAGTATTTTCGTGAGG
	I_10 F	CCTCGGAGGAATTTCAAACG
	I_10 B	AGCTCCGTAAAGCAGCTTC
	KO4F10-F(I_0.9R)	ATCATTCTCCAGGCCACGTTAC
	KO4F10-B(I_0.9R)	CTGAACTAGTCGAACAAACCCC
	I_11 F	GAATCACCGCCAACATGAGA
	I_11 B	CCAGTGTCCCGATAGAAAAC
	I_12 F	TTCAGGCTCCACTTTATGCC
	I_12 B	CATCTGGGACGTTCTTTAC
	I_13 F	TAGGTGCGAAATGAACGGTG
	I_13 B	GCCTTTTCATCCTCAGGATC
	I_14 F	TTTGGATAGGTCTCGAAGCG
	I_14 B	AGGGTAGCCAACACAATGAC
	I_15 F	TAGTTCGGGTGCTTTCCTTG
	I_15 B	TTTGCAACAGACCTGGTAGG
	I_16 F	ATTTGGGGGAGTTCACCAAG
	I_16 B	AAATACGGTAACCGGTCTCG
	I_17 F	AGCATTTCCAGATCCGACTC
	I_17 B	TTCACTCCAGCCGATCAATG
	I_18 F	TTTGTGTACAGACGTGGCAG
	I_18	CTCCGGATAGTTTTGAACGG
	I_19 F	AGCTTTCCGTCTATTTGCAG
	I_19 B	GGTACCGAATTTTCCGACTG
	I_20 F	CCCATTTCTTGGCTTTTCTG
	I_20 B	AGCAGGTTTGTGTTGACTCG
	I_21 F	AAAAGCACCTGAATTTTCGCG
	I_21 B	AAAGATCAGACGGGCATCG
	I_22 F	TCTTTTGTTCGTCCCTCTCC
	I_22 B	TCATCATCAACCATGGAGCC
	I_23 F	GCACCTCGTCTTTGAATCTG

Table A8. SNP primer (all) continued

Cosmid	Name	Sequence
	I_23 B	AGAACTTCTTGCGTCAGCTC
	I_24 F	GAGGTACAGAAAATGCTGCC
	I_24 B	AGGAGCAGTAGAGTCTGAAACG
	I_25 F	CTTGGTGTGGGGAGAATATAGG
	I_25 B	TTTGTCCGGATTGACTCTGC
	I_26 F	GCGACGCAATTCTTCCTATG
	I_26 B	CGCCAAAATTGGTCAGTTGG
	I_27 F	GGAATGCCAGCTATGCCAGG
	I_27 B	GCTCCCTTCACAAGACCAGC
C37A5-F(I_22.5R)		CTCATGCATGATTTTCGAGGG
C37A5-B(I_22.5R)		AAATCCAACAGGAGCAGGAC
	I_28 F	CACAAGTGGTTTGGGAAGTACCG
	I_28 B	CAACAAAGGGATAGATCACGGG

Table A9. Primer for sequencing

Gene	Cosmid	Name	Sequence	Tm
Zk40.1	Zk40	Zk40.1- left	GTCTTGCTGTTCCCTGAAGCC	56,7
Zk40.1	Zk40	Zk40.1- right	GCCCAGTAGAACATGAAGGC	56,1
T05H4.1	T05H4	T05H4.1- left	AATCTCTCTCCAACAGAATGACG	55,2
T05H4.1	T05H4	T05H4.1- right	AAACTTTTTTCAGTCGCTTCTCCT	57,2
Zk1055.3	Zk1055	Zk1055.3- left	CAATCAAGGATTATTTCCACTGC	55,3
Zk1055.3	Zk1055	Zk1055.3- right	CATTTTCCCAACGTGTTGATATT	55,9
F44C4.2	F44C4	F44C4.2- left	AGGACGAATTCTCTACGCCA	55,9
F44C4.2	F44C4	F44C4.2- right	AGCAATTTCTGCTCGCATTT	56,4
F57F4.2	F57F4	F57F4.2- l	GGTATGACTTGGTTTCAGGATCA	55,5
F57F4.2	F57F4	F57F4.2- r	TAAAAGAGTTCCTCGTCTTCGTG	56,2
F13H6.1	F13H6	F13H6.1- l	CTCCAACAGTCTCCAGCTC	56,5
F13H6.1	F13H6	F13H6.1- r	TGCTGTAGGCGTACTGTTGC	57,2
T05H4.7	T05H4	T05H4.7- l	AAACAGTCCGAAAATGGCTG	56,7
T05H4.7	T05H4	T05H4.7- r	GAAAGTTGGAGAGCACCTCG	56,5
T10H9.2	T10H9	T10H9.2- l	GAGACCCGATTGAGCAATGT	55,7
T10H9.2	T10H9	T10H9.2- r	TTGAGTTTGAACCACCACAC	56,1
T10H9.5	T10H9	T10H9.5- l	ATATCCTCCGAGCTCTGCAA	55,4
T10H9.5	T10H9	T10H9.5- r	CCTACCCTTTTCCGTGTCAA	56,6
T05H4.6	T05H4	T05H4.6- l	ATTCGCTGATCATTCCACC	55,0
T05H4.6	T05H4	T05H4.6- r	GACGATTTCCAAAGCTGCTC	55,9
T05H4.4	T05H4	T05H4.4 l	CGCCTTTTCAGTAGTTGTCCATAC	56,7
T05H4.4	T05H4	T05H4.4 r	TGCAAAAACAATGAGAAAAGTTGAA	55,4
W01A11.3	W01A11	W01A11.3- l	TTCACCTTTCCCTCCCTCTT	56,6
W01A11.3	W01A11	W01A11.3- r	ACTCCATCTCATCCGCAATC	54,9
F46E10.8	F46E10	F46E10.8- l	AAGCGAGAATCAAGATCAAAGTG	55,6
F46E10.8	F46E10	F46E10.8- r	TGAGCAGACCCGTAACAACACTAT	56,7
F46E10.11	F46E10	F46E10.11- l	TGTGACGCTTTACTCCTTCTCTC	56,2
F46E10.11	F46E10	F46E10.11- r	TACAAATAGTTACGGTCGCGTCT	56,9
K04A8.5	K04A8	K04A8.5 l	TTGGCCACTCTTTTTGTTCC	56,6
K04A8.5	K04A8	K04A8.5 r	GATGGGAACATCCGCAATAC	55,2
K04A8.10	K04A8	K04A8.10- l	CCCTTGGTAAGCAATCTCCA	56,1

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
K04A8.10	K04A8	K04A8.10- r	AATCCAGCTTTTGGTGCAAG	57,0
EGAP9.3	EGAP9	EGAP9.3- l	GTTGTTGGTAAGGTTTGCCTTAG	57,5
EGAP9.3	EGAP9	EGAP9.3- r	TACAGACAGATTCCCACGAAAGT	56,1
Zk1055.7	Zk1055	Zk1055.7- l	CGATAAAACGGAAATGGGAA	55,2
Zk1055.7	Zk1055	Zk1055.7- r	GTGACTTTGGCTCCACCAAT	56,6
F44C4.3	F44C4	F44C4.3- l	AGATAACGAGCACTCCCGAA	55,9
F44C4.3	F44C4	F44C4.3- r	CGGAGACGGGTACATCAAAT	55,8
T05H4.5	T05H4	T05H4.5 left	CACTTCCGTTGATTGAAAAGTTC	56,1
T05H4.5	T05H4	T05H4.5 right	CATCGTCTTCTTTTCAAATTGG	55,7
Zk1055.5	Zk1055	Zk1055.5 left	AAAATATATGCAATGAGCGAGGA	55,2
Zk1055.5	Zk1055	Zk1055.5 right	AGGCATTAAATTACCTGCAATCA	55,8
Zk1055.4	Zk1055	Zk1055.4 left	GCCGTGCTATTTTTAGACGC	56,6
Zk1055.4	Zk1055	Zk1055.4 right	GACGTTGTTTCGTTGGTCT	57,1
Zk1055.2	Zk1055	Zk1055.2 left	ATGAATTTGTTCTCGCAGTTGAT	55,7
Zk1055.2	Zk1055	Zk1055.2 right	ACCATCGTTTGCGTTTTATGTAG	57,0
F44C4.4	F44C4	F44C4.4 left	TTTTCAATCGGGAACCTGAC	55,5
F44C4.4	F44C4	F44C4.4 right	GTGCAAAACACATTTGTCGG	56,5
K12B6.5	K12B6	K12B6.5 left	CCCATTGAGCTCTTTTTGGA	56,0
K12B6.5	K12B6	K12B6.5 right	GTGAAGCTCACGCATTTTCA	55,7
K08B12.2	K08B12	K08B12.2 left	TAATTTTGCAGGGTGCATCA	55,4
K08B12.2	K08B12	K08B12.2 right	CGGAAAATGGCAAGTCAAAT	56,0
pJB8	pJB8	pJB8- left	TCCGGAATTCTCATGTTTG	52
pJB8	pJB8	pJB8- right	GAAAGGGCCTCGTGATAC	52
F17A9.6	F17A9	F17A9.6 left	CAAACCTTGGGGTTCCTTGA	56,5
F17A9.6	F17A9	F17A9.6 right	ATTGAATTTGGCACC TCTGC	56,1
F17A9.6	F17A9	F17A9.6 left1	CCACCAGTCAATTGTGATGAG	54,5
F17A9.6	F17A9	F17A9.6 right1	CGTGTCGGGACCAGGTACCGT	65,7
F17A9.6	F17A9	F17A9.6 right2	GGTAAAATGTCCGACTTCTCG	54,9
C50E3	C50E3	C50E3-PI	AAAACCTGGCGTTGACGAAATC	57,9
C50E3	C50E3	C50E3-Pr	AGAGCGAGATCTTCACAGCAAG	57,3
F17A9.3	F17A9	F17A9.3 for1	CCCACACACACACTTATACAC	50,8

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
F17A9.3	F17A9	F17A9.3 for2	GCTGAAATACGGTATTAGG	46,6
F17A9.3	F17A9	F17A9.3 for3	CCCATCCCAGAAATATACC	49,7
F17A9.3	F17A9	F17A9.3 rev	CGAGTACTGGCTCAACTAATC	50,9
F29G9.4	F29G9	F29G9.4 for1	CCCAGCAATCCCGACTAATC	57,3
F29G9.4	F29G9	F29G9.4 for2	CAGAGGGGAAAATGAGCCAC	58
F29G9.4	F29G9	F29G9.4 for3	GGGCCTAGTTCCAAGAATTTAG	55,1
F29G9.4	F29G9	F29G9.4 rev1	GTAATAATGAGAGCTGGACGG	52,5
F29G9.4	F29G9	F29G9.4 rev2	CGCGATGAGACTCAGATTTAG	53,1
F29G9.4	F29G9	F29G9.4 rev3	CTGTGAGTCATTTGAGAGGAG	50,8
F29G9.4	F29G9	F29G9.4 rev4	CGGCATTTCTGAATCTAGAAC	52,3
F44C4	F44C4	F44C4- for1	CAACACCCAATTTGCATATTAC	53,1
F44C4	F44C4	F44C4- rev1	GATGTGCACGATATGCACTTG	55,3
F44C4	F44C4	F44C4- for2	CTGCAAATTTTACAGAGTCC	49,3
F44C4	F44C4	F44C4- rev2	GTAGGCTTTTCAGAACATTGAC	52,1
F44C4	F44C4	F44C4- rev3	GAAATTATCATGACTGGTTGTG	50
F44C4.2	F44C4	F44C4.2- for1.1	CGGTGGTCACTTGATCTTTTCC	58,9
F44C4.2	F44C4	F44C4.2- rev1.1	GATCATTGAGCCAATCAATAGC	53,3
F44C4	F44C4	F44C4_F	CGGGAACCTGACTCTTCTATTG	56,3
F44C4	F44C4	F44C4_B	TCTCGAGAAAATTGCTGATGC	55,4
W01A11.1	W01A11	W01A11.1- for1	CTGTTCCATTTTCGTCAACCG	57,5
W01A11.1	W01A11	W01A11.1- rev1	GTTTTGAGAACGCCAGTCGG	59,6
W01A11.1	W01A11	W01A11.1- for1.1	CCATTTTCGTCAACCGTTTTTC	56,5
W01A11.1	W01A11	W01A11.1- rev1.1	CGTCACACCTAAATGCCACTG	58
W01A11.1	W01A11	W01A11.1- rev1.11	CCATCATGGTGAGACCCATC	56
W01A11.1	W01A11	W01A11.1- for2	GACTACAAACTATGGACAGACC	49,5
W01A11.1	W01A11	W01A11.1- rev2	CAAGAACACTGACGATGGCAG	57,8
W01A11.1	W01A11	W01A11.1- rev1.11	CCATCATGGTGAGACCCATC	56
W01A11.1	W01A11	W01A11.1- for2.1	ACAAACTATGGACAGACCCACAC	56,8
W01A11.1	W01A11	W01A11.1- rev2.1	AATGCTGGGATACCCTGGAG	57,4
W01A11.1	W01A11	W01A11.1- for3	AGGAGATTGGGAGCAATTATC	56,2
W01A11.2	W01A11	W01A11.2- left1	TTGGGGGTACTCATGTTTTTG	56

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
W01A11.2	W01A11	W01A11.2- right1	TACATTAACCTTGGCGATAAAAC	50,4
W01A11.2	W01A11	W01A11.2- left2	CCAGCTACTTCCCATTGAG	52,3
W01A11.4	W01A11	W01A11.4- left-1	AATAAACTCGCCTGATGTC	50,6
W01A11.4	W01A11	W01A11.4- right-1	AAAACAACCTTGACAATTAACG	49,5
W01A11.6	W01A11	moc-2-seq-for-1	TGAATTCAGACTTTTACAGCAA GC	57,3
W01A11.6	W01A11	moc-2-seq-rev-1	CCAAAACCACTCGCTCAATC	56,7
W01A11.6	W01A11	moc-2-seq-for-2	ATTTTGCCTACCGGAACCTC	58,2
W01A11.6	W01A11	moc-2-seq-for-3	GCAGAGCAAGTTTGCTGGTATG	58,7
W01A11.5	W01A11	W01A11.5- for1	GCAATAAGTGTAGACGGAGACTG G	57,8
W01A11.5	W01A11	W01A11.5- rev1	TGGTCATGAGTCATTTTCAGGTG	55,8
W01A11.5	W01A11	W01A11.5- for2	TCCCCACCAATCCTTGAATC	56,9
W01A11.5	W01A11	W01A11.5- rev2	CGTTTTCCAGAACTCATGTGC	58
W01A11.5	W01A11	W01A11.5- for3	AATGTCAGCAACTTGCCAAAC	57
W01A11.5	W01A11	W01A11.5- rev3	TCGCATTTTTTCAGCATCTCTG	56,4
W01A11.5	W01A11	W01A11.5- for4	GATGCGGTGGAACAACACTGAG	57,7
W01A11.5	W01A11	W01A11.5- for5	TTGTGGAAGCTATGTTGAATGC	55,7
W01A11.5	W01A11	W01A11.5- rev-4	AGTTGAAATTGGCAGGATAG	50,8
W01A11.7	W01A11	W01A11.7- left-1	GACACCCAGAACTATCCAC	50,8
W01A11.7	W01A11	W01A11.7- right-1	CAGAATGCGGTACAAAGAG	50,9
Y40G12A	Y40G12A	Y40G12A- for1	GGAAATTTGCGAGAACACAAC	55,8
Y40G12A	Y40G12A	Y40G12A- rev1	TTTCTCCAAAAGTCGAAAAAG	52,8
Y40G12A	Y40G12A	Y40G12A- no2left	CAAATTTGCGAGAACACAAC	53,2
Y40G12A	Y40G12A	Y40G12A- no2right	TTCTCCAAAAGTCGAAAAAG	51,2
Y40G12A.1	Y40G12A	Y40G12A.1- left-1	CGATCTCCGTAATTTACTTTTC	51,1
Y40G12A.1	Y40G12A	Y40G12A.1- right-1	GGAAAACTCAAAAATTGATTC	50,6
Y40G12A.1	Y40G12A	Y40G12A.1- left-2	GATGAGCGGTCTGATTTG	50,3
Y40G12A.1	Y40G12A	Y40G12A.1- left-3	GCGTCGTTGTTTATTTTTG	51,1
Y40G12A.1	Y40G12A	Y40G12A.1- right-3	TTATGGTTTCTCGATTTTTG	48,7
Y40G12A.1	Y40G12A	Y40G12A.1- for1.1	CGTTATATTTGTCTGGTAATCG	50,2
Y40G12A.1	Y40G12A	Y40G12A.1- rev1.1	TTCAGAAGAACAACCTCACGAC	49,8

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
Y40G12A.2	Y40G12A	Y40G12A.2- left-1	TGATTGCAATTTTCATTAACC	48,8
Y40G12A.2	Y40G12A	Y40G12A.2- right-1	ATTTGATTCCAAAGCTTGC	51,6
Y40G12A.2	Y40G12A	Y40G12A.2- for1.1	AGTATTTTTTCAGACAGTGATTTG	48,4
Y40G12A.2	Y40G12A	Y40G12A.2- rev1.1	ACCGGGTTGATAGTTTCTG	51,9
Y40G12A.2	Y40G12A	Y40G12A.1- left-4	TATTTGTCTGGTAATCGAATC	47,1
Y40G12A.2	Y40G12A	Y40G12A.1- left-5	CAGTGCAAATGAAATCGTG	51,9
Y40G12A.2	Y40G12A	Y40G12A.1- right-2	TTCAGTGCAAATGAAATCG	50,9
Y40G12A.2	Y40G12A	Y40G12A.2- for2	GCACTCGTTGGGATTTAG	50,6
Y40G12A.2	Y40G12A	Y40G12A.2- rev2	AGGTGTCCGAATAAATTGG	51,3
F46E10.8	F46E10	F46E10.8- left-1	CATAGGAAGATTTTCATAAACAG	48,6
F46E10.8	F46E10	F46E10.8- right-1	AAAATCACAGGCGTAAAGC	52,5
T05H4.1	T05H4	T05H4.1- left-1	CCTCTGTCTCTTTCTATTTTCG	49,7
T05H4.1	T05H4	T05H4.1- right-1	TGGCATATAAATACTGATTTTTG	49,5
T05H4.1	T05H4	T05H4.1- left-2	CGGTTGGGCTATGAGCAG	56,8
T05H4.1	T05H4	T05H4.2- right-2	TTTAGTTTTTGCTACGTTGG	50,8
T05H4.2	T05H4	T05H4.2 left1	TTTAAGTGAGCGTGAAACG	51,8
T05H4.2	T05H4	T05H4.2 right1	TTTCGACACTGAAATAGTTTG	49,3
T05H4.2	T05H4	T05H4.2 left2	GAGATCACTTTATGGAATACCG	50,9
T05H4.2	T05H4	T05H4.2 left3	ACCATTGGAGGTTGCTATG	52,4
T05H4.3	T05H4	T05H4.3- left1	CGCTCACCGTCATTTGTGCT	61,1
T05H4.3	T05H4	T05H4.3- right-1	AAGCACATCGGATACCTTC	51,2
T05H4.3	T05H4	T05H4.3- left-2	CTTTGGCAGACAACAAAAT	50,8
T05H4.3	T05H4	T05H4.3- left-3	ACTTTCTGAATACATTCGATCTC	49,7
T05H4.3	T05H4	T05H4.3- left-4	GAGAGACACAGACGAAACG	50,7
T05H4.3	T05H4	T05H4.3- left-5	CTTCTGCTTCATCGAAATC	48,7
T05H4.3	T05H4	T05H4.3- left-6	TCGATTGCAGTAAACGATG	51,1
T05H4.3	T05H4	T05H4.3- right-2	GACAGACTCTCCACATAATTG	47,8
T05H4.3	T05H4	T05H4.3- right1.1	CCTCGTTTTCGTCTGTGTC	51,7
T05H4.3	T05H4	T05H4.3- left-2 (genomic)	TACGCAAATTGGAAGTTACC	51,9
T05H4.3	T05H4	T05H4.3- left-3 (genomic)	CAACTAGAACCTAGGAAAAAC	47,8

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
T05H4.4	T05H4	T05H4.4- left-1	TTCTGATTCTTTTCTTTTCG	48,2
T05H4.4	T05H4	T05H4.4- right-1	GAAGTCTGATGCCTCTGATG	51
T05H4.15	T05H4	T05H4.15 left1	TGAGCAAAATATTGTATATCAGA C	48,3
T05H4.15	T05H4	T05H4.15 right1	TTTCTTCGTCCTCATTTATTC	49,1
T05H4.15	T05H4	T05H4.15 left2	GACTTCAACTCTGGAAAACG	51,6
T05H4.15	T05H4	T05H4.15- right-2	TAGTCTGCTTCTCGTCCAG	50,5
Zk40	Zk40	Zk40- left-1	GTGGCCGGACAGTTTATC	52,8
Zk40	Zk40	Zk40- right-1	GAGAATTGGGATGGCAAG	51,9
Zk40	Zk40	Zk40- left-2	GCCTCGTACATCTTTTTGG	52,3
K04A8.6	K04A8	K04A8.6- left1	ACGATCAACTCGCAGAGG	53,7
K04A8.6	F46E10	K04A8.6- right1	ACAAAACACGAACATGAGAG	50,3
K04A8.6	K04A8	K04A8.6- left2	ACCCACGATGAAAAAGTTC	51,6
K04A8.6	K04A8	K04A8.6- left3	CATTTCTCCTGATAAATCG	47,7
K04A8.6	K04A8	K04A8.6- left4	TCATCACAGTCCGGTTTC	50,8
K04A8.6	K04A8	K04A8.6- left5	AATTCAGACATGGTCAGG	49,3
K04A8.6	K04A8	K04A8.6- left6	AATTCATTCTGGAAAACAGG	50,4
K04A8.6	K04A8	K04A8.6- left7	GGTCTTCTCGAGGACAATG	51,4
K04A8.6	K04A8	K04A8.6- check- right2	TGTAGACTCCACCCTGTTG	51,2
K04A8.6	K04A8	dre1- dh190 rev	ATTCTGACCTCCCCAAATC	52,1
K04A8.6	K04A8	34-4-1 check- rev1	TTACGTTCCGTCGTGTTAC	51,5
K04A8.6	K04A8	21-2-1 check- for1	CTGTTCCGATTTCGCTAC	50,5
K04A8.6	K04A8	21-2-1 check- rev1	CGCATATATCCGATTCTCC	50,1
VIT-1		vit1for1	AGATGAAGTGGTTCTAAAAATC	48
VIT-1		vit1for2	CAGCACCTGGGAAAGTGG	57
VIT-1		vit1for3	GAAATAGGATAGCAGGCTTTG	52
VIT-1		vit1for4	GATACACAGTGGCAAGCAG	52
VIT-1		vit1for5	TTTAACAACCGGTTTGGAG	53
K04A8.6		yk1132c12- for1	TTAATTACCCAAGTTTGAGC	48,9
K04A8.6	F46E10	yk1132c12- rev1	GAACAAGGCAGGGAGAAAG	54,2

Table A9. Primer for sequencing continued

Gene	Cosmid	Name	Sequence	Tm
K04A8.6	K04A8	dre-1 cDNA-heck- for1	GCAATGCCATATATTGAAAG	48,7
K04A8.6	F46E10	dre-1 cDNA-heck- rev1	TTGAAGAGAATGAAGTTTATGG	49,4
		L3781-GFP-check- for1	CCCTGTCCTTTTACCAGAC	51,7
		L3781rev	GTGCCACCTGACGTCGGCGC	
K04A8.6	K04A8	di-3	ATGCGTTTCTTGTTTTCTCAAT	60
K04A8.6	K04A8	di-4	TTCAATATATGGCATTGCATCC	60
K04A8.6	K04A8	dre1-2Hcheck-for1	GCAGACAATCCGACACTC	51
K04A8.6	K04A8	dre1-2Hcheck-for2	TCGAATTCCACTTTTCCAC	52
K04A8.6	K04A8	dre1-2Hcheck-for3	CAGCAGGCTCAACAAATG	53
K04A8.6	K04A8	dre1-2Hcheck-for4	GTTTCATGAGAGAGGACGTG	50
K04A8.6	K04A8	dre1-2Hcheck-for5	ATATTTTCAATCATTTGTATTCC	47
K04A8.6	K04A8	dre1-2Hcheck-for6	GCAACGTGGAAATCGTATC	52
		pACT2-for	AAGTGAACCTTGCGGGGTTTTTCA GTATCTAC	65
		pACT2-rev	CTATTCGATGATGAAGATACCCC ACCAAACCC	68
Y71G12B.15	Y71G12B	ubc3 for1	CAGTCTCTCGTGCCCTCAT	55
Y71G12B.15	Y71G12B	ubc3 for2	TGTAGATCAGAACGAAATGG	49
Y71G12B.15	Y71G12B	ubc3 for3	GAACATTCTGACATCACGTGG	54
Y71G12B.15	Y71G12B	ubc3 rev1	AGAAGCGCCAAGATTTTCGT	57

Table A10. Primer for cloning

Gene	Cosmid	Name	Sequence	Tm (°C)	Restriction site
W01A11.6	W01A11	moc-2-GFP-for	ACCGGTTTGAATCGAACCCAGAGAC	67,8	
W01A11.6	W01A11	moc-2-GFP-rev	ACCGGTGCTTTCATGCGGGCGTGTGTTGGC	79,6	
W01A11.6	W01A11	moc-2-rescue-for1	CGAGCTTGATCGAGAGAATCC	56,2	
W01A11.6	W01A11	moc-2-rescue-rev1	ATTCCCGCCAAATATTTTCAC	55,9	
F11A1.3	F11A1	pBTM117c-LP5	GGggtaccTCCATTGACATCCCCAGTC	55	KpnI
F11A1.3	F11A1	pBTM117c-LP3-2	GGggtaccTTTGATTTGAAAAATTC TCCTGGCAG	63	KpnI
K04A8.6	K04A8	<i>dre-1</i> - 2Hyb- rev1- Not1	CAGACACgcgccgcTTAAATTTCCGGTGCCAGTC	79,8	NotI
K04A8.6	K04A8	<i>dre-1</i> - 2Hyb- for1- Kpn1	GgtacctATGTCGTCCTCTTCGTCAC	61,3	KpnI
K04A8.6	K04A8	K04A8.6- prom3kb- for1	TTTCCATTCTTCAATGACCAC	52,6	
K04A8.6	K04A8	K04A8.6- prom5kb- for2	TCAGTGTAGCATGTTCTACCAAG	53,3	
K04A8.6	F46E10	K04A8.6- prom- rev1	GAGAACAAGGCAGGGAGAAAG	56,9	
K04A8.6	K04A8	<i>dre-1</i> - rescue- for1	CTTAGCTGATCGGTGTTTG	50,9	
K04A8.6	F46E10	<i>dre-1</i> - rescue- rev1	CCACTCCACACAGTTTTAGC	53,1	
K04A8.6	K04A8	<i>dre-1</i> GFPprom(Kpn1)- for-1	GgtaccCGAGGGACATCGAGATAG	64,4	KpnI
K04A8.6	K04A8	<i>dre-1</i> GFPprom(Kpn1)- rev-1	GgtacctTCCTGGCCAACCAGAGAC	65,7	KpnI
K04A8.6	K04A8	<i>dre-1</i> GFP(Nhe1)- for1	GctagcATGTCGTCCTCTTCGTCAC	63,3	NheI
K04A8.6	F46E10	<i>dre-1</i> GFP(Spe1)- rev1	actagtTACTTACTCCACTCCACACAG	55,8	SpeI
VIT-1		vit1- GFP(Nhe1)- for1	GctagcATGGTTGCAGAAGAATCAG	61,2	NheI

Table A10. Primer for cloning continued

Gene	Cosmid	Name	Sequence	Tm (°C)	Restriction site
VIT-1		vit1- GFP(Spe1)- rev1-neu	actagtGTTGTGCTGCAATGTATTAG A	56,8	SpeI
F13D11.2	F13D11	hbl-1-Bgl2- for2	agatctCGAAATTCCACTTCAACAG	57,7	BglII
F13D11.2	F13D11	hbl-1-Bgl2- rev2	agatctACAACCTCCTAATGCGGAAG	57,5	BglII
K04A8.6	K04A8	dre-1-RNAi (Bgl2)- for1	AgatctCGAATAGTCATGAAGTGTG G	57,1	BglII
K04A8.6	K04A8	dre-1-RNAi (Bgl2)- rev1	AgatctCTGCTGCCTGCACACTGG	65,4	BglII
BE0003N10. 3	BE0003N1 0	BE3N10.3R-f	AgatctATTCCTCGACGAAAACGAC	58,8	BglII
BE0003N10. 3	BE0003N1 0	BE3N10.3R-r	AgatctAGCGTGATCCTTGACAAC	56,8	BglII
VIT-1		vit-stop-for	cttaagGAAAAACAGAATATTTGATG G	55,9	AflII
VIT-1		vit-sop-rev	actagtTCAGTTGTGCTGCAATGTAT TAGA	59,7	SpeI
Y71G12B.15	Y71G12B	ubc3-RNAi-bgl2-f	agatctGCTTCGTTTCAGTGTGTGTG	60,9	BglII
Y71G12B.15	Y71G12B	ubc3-RNAi-bgl2-r	agatctCATCGACGGTGGCGAGTA	63,5	BglII

Table A11. Plasmids, cosmids and YACs used

Clone	Resistance	Source
L4440	Amp	A. Fire
L3781	Amp	A. Fire
pBTM117c	Kan	(Wanker et al., 1997)
pACT2	Amp	Clontech
Yk1132c12	Amp	Y. Kohara
Yk87b4	Amp	Y. Kohara
T05H4	Kan	A. Coulson
Zk40	Kan	A. Coulson
W01A11	Kan	A. Coulson
F46E10	Kan	A. Coulson
K04A8	Kan	A. Coulson
Zk1055	Kan	A. Coulson
F44C4	kan	A. Coulson
K07B12	Kan	A. Coulson
F52F4	Kan	A. Coulson
M01D7	Amp	A. Coulson
F40B4	Kan	A. Coulson
C53H9	Amp	A. Coulson
Y38A10	-Ura	A. Coulson
Y43G5	-Ura	A. Coulson
Y51B4	-Ura	A. Coulson
Y40G12	-Ura	A. Coulson
Y92H12	-Ura	A. Coulson
Y71G12	-Ura	A. Coulson