Supplemental Material to:

Glòria Mas Martín, Devin A King, Erin M Green, Pablo E Garcia-Nieto, Richard Alexander, Sean R Collins, Nevan J Krogan, Or P Gozani, and Ashby J Morrison

Set5 and Set1 cooperate to repress gene expression at telomeres and retrotransposons
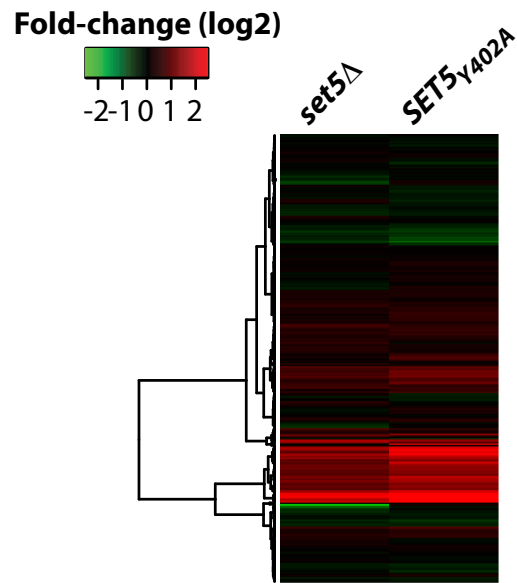
Supplementary Figure S1

Figure S1. The catalytic activity of Set5 is required for Set5-dependent gene repression. Expression heatmap and hierarchical clustering was performed as described in Fig. 1B. The same 37 genes that are up-regulated in the *set5Δ* mutant compared to wild-type, are up-regulated in a mutant strain harboring a catalytic inactive allele of Set5, *SET5Y402A*, compared to its corresponding *SET5WT*.

Supplementary Figure S2
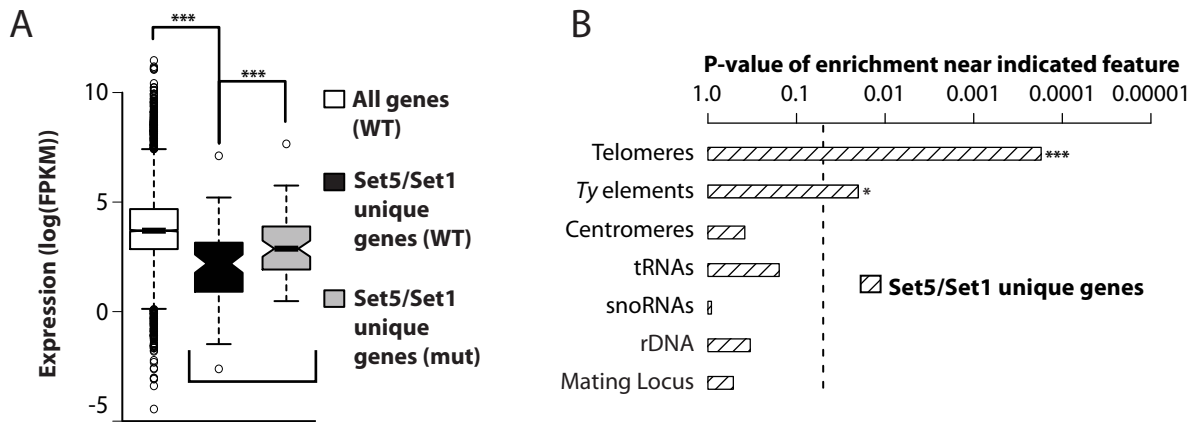
Figure S2. The "Set5/Set1 unique" genes are lowly expressed in wildtype cells and are enriched near telomeres and Ty retrotransposons. (**A** and **B**) Analysis of the 72 genes uniquely up-regulated in the double mutant –excluding genes also repressed in either of the single mutants– (referred to as "Set5/Set1 unique" genes) was performed as described in Fig. 1D and 1E for S2A and S2B, respectively. Dashed vertical line denotes p=0.05. P-values represent the two-sided probability value from the Wilcoxon rank sum test, $^*p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

Supplementary Figure S3
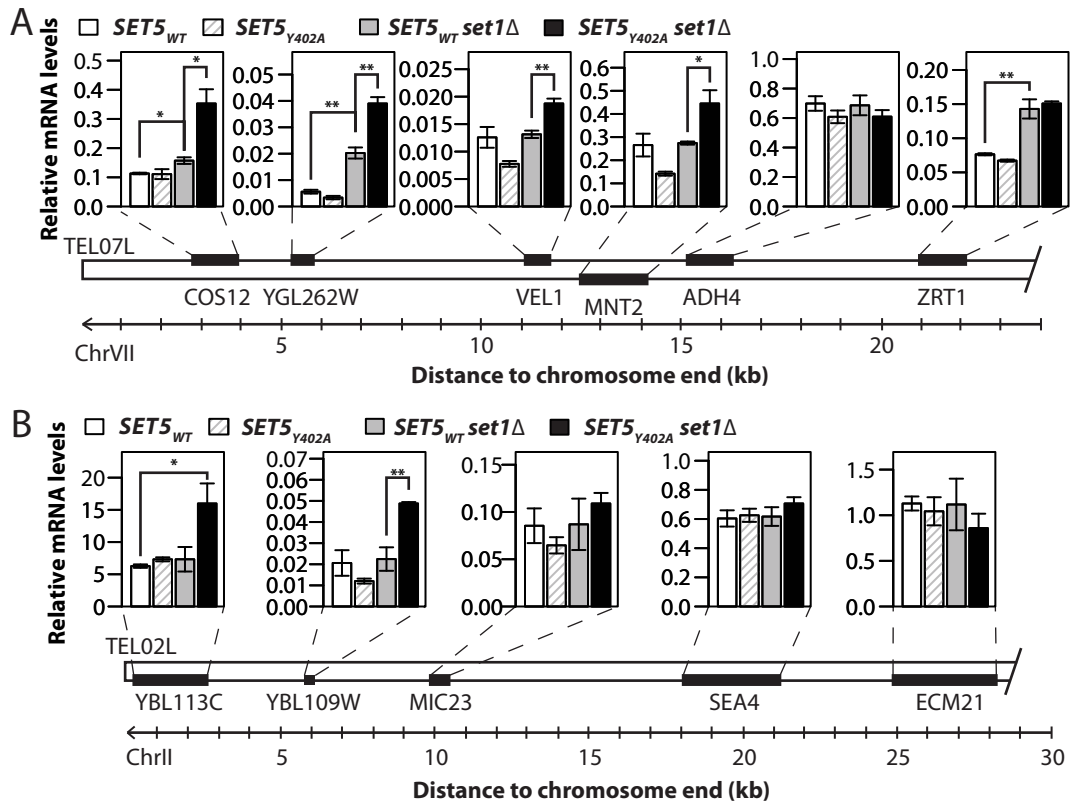
Supplementary Figure S3. The catalytic activity of Set5 is required for *SET5*-mediated gene repression at subtelomeric regions. (A and **B)** qRT-PCR measurements of mRNA levels of the indicated ORFs on the left arm of chromosome VII (A) or the left arm of chromosome II (B). Relative mRNA values were calculated according to the *TFC1* reference gene, as described in Methods. Data are represented as mean ± SEM (standard error of the mean) for 3 biological replicates, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. *SET5$_{Y402A}$*, catalytic inactive mutant of Set5.

Supplementary Figure S4
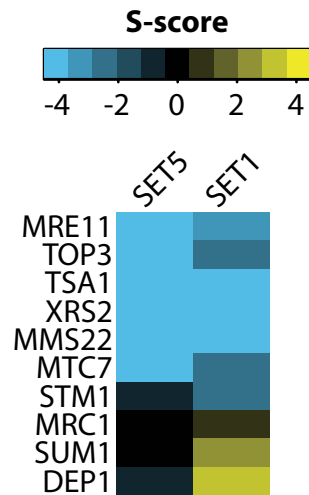
Supplementary Figure S4. Set1 and Set5 functionally interact with factors related to telomere maintenance. Heatmap representing all significant genetic interactions (S-scores) of *SET1-DAmP* and *set5Δ* mutants with genes involved in telomere maintenance.

Supplementary Figure S5
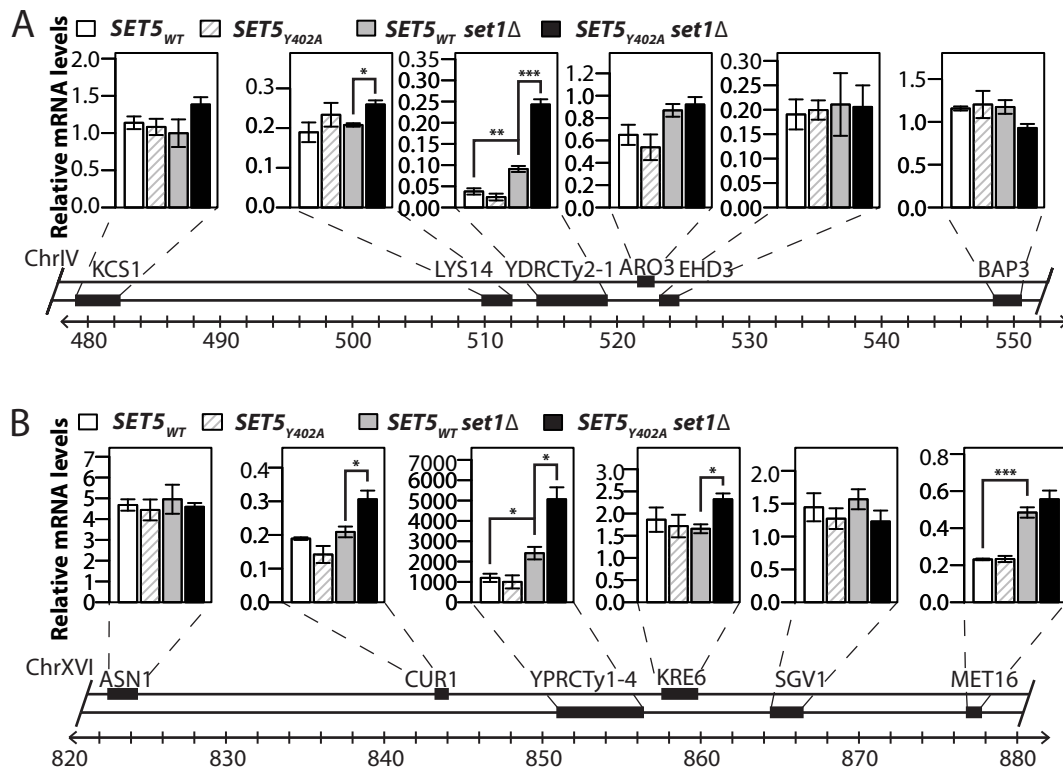
Supplementary Figure S5. The catalytic activity of Set5 is required for *SET5*-mediated gene repression of transposable elements. (A and **B)** Real-time PCR measurements of mRNA levels of the indicated ORFs flanking the Ty elements YDRCTy2-1 (A) and YPRCTy1-4 (B). Relative mRNA values were calculated according to *TFC1*, as described in Methods. Data are represented as mean ± SEM (standard error of the mean) for 3 biological replicates, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$. *SET5$_{Y402A}$*, catalytic inactive mutant of Set5.

Supplementary Figure S6
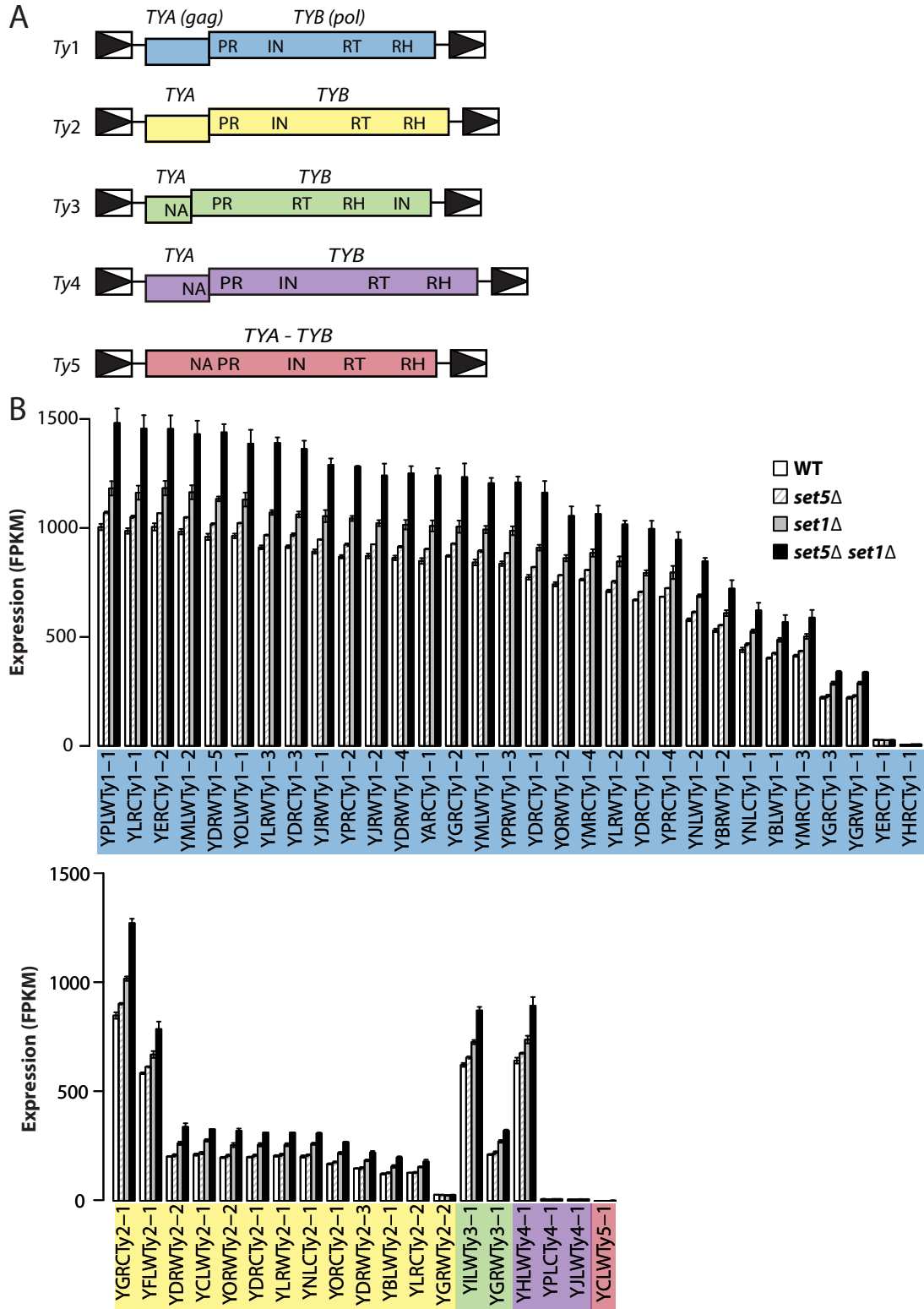
Supplementary Figure S6. *SET5* **and** *SET1* **deletion results in elevated expression of transposable elements.** (**A**) Genomic structure of full-length Ty retrotransposon families currently annotated in budding yeast, classified on the basis of sequence homology (Ty1-5) is shown.[1] Ty1 and Ty2 families are the most abundant and highly transcribed. Full length retrotransposons are about 6 kb long and consist of two long terminal repeat sequences (LTRs, depicted as black arrows) that function as promoter and terminator, respectively, flanking a central coding region containing the TYA (*GAG)* and TYB (*POL)* genes. These genes encode proteins necessary for reverse transcription and integration of the resulting Ty cDNA into a new genomic location (PR: Protease, IN: Integrase, RT: Reverse Transcriptase, RH: RNAse H, NA: RNA binding coding domain). Schematic was adapted from ref. 2. (**B**) *SET5* and *SET1* deletion results in elevated expression of transposable elements. RNA-Seq FPKM expression of each currently annotated Ty element in the indicated wildtype (WT) and mutant strains**.** Each color represents one Ty family as depicted in (A).

Supplementary Figure S7
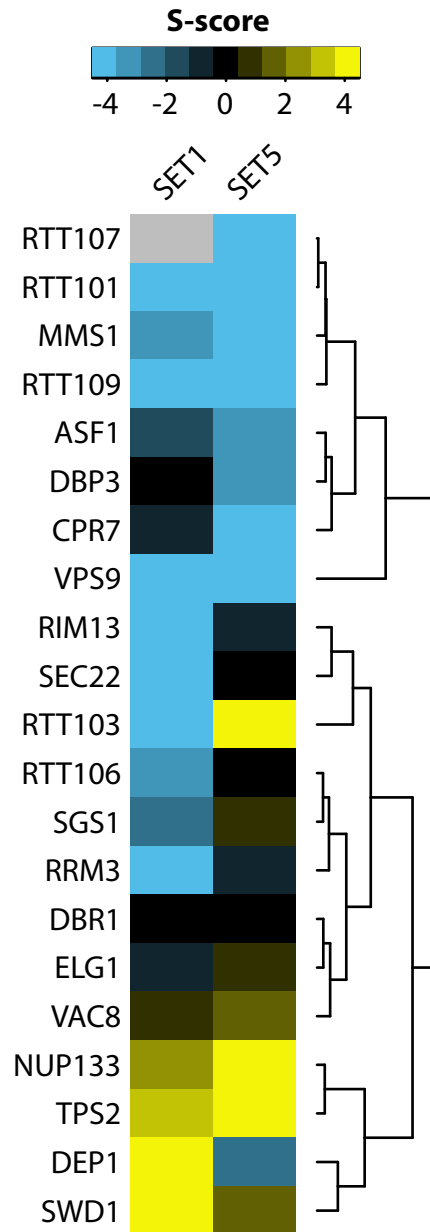
Supplementary Figure S7. *SET1* and *SET5* have Ty retrotransposon-related genetic interactions. Heatmap representation of E-MAP genetic interaction scores (S-scores) of both *SET1* and *SET5* with genes known to be involved in Ty element regulation.

Supplementary Table 1

E-MAP data. List of processed E-MAP genetic interaction scores (S-scores) for the strains *SET5::NAT* (*SET5 - DEL*) and *SET1 – DAmP*. E-MAP experiments and analyses were performed as described in refs. 3 and 4. NaN represent missing values in computation.

ORF	Gene Name	Mutation	SET1 - DAMP	SET5 - DEL
YAL002W	VPS8	DELETION	-7.368572	0.270083
YAL007C	ERP2	DELETION	-0.186821	-0.144824
YAL010C	MDM10	DELETION	0.408309	1.309119
YAL011W	SWC3	DELETION	-6.998205	-0.326764
YAL013W	DEP1	DELETION	4.170796	-1.256243
YAL019W	FUN30	DELETION	0.822687	0.038944
YAL020C	ATS1	DELETION	0.225533	1.151878
YAL021C	CCR4	DELETION	-0.131788	1.017379
YAL023C	PMT2	DELETION	0.12867	-1.163732
YAL024C	LTE1	DELETION	-0.251343	0.437678
YAL026C	DRS2	DELETION	1.467723	3.112327
YAL027W	SAW1	DELETION	0.441614	0.968075
YAL040C	CLN3	DELETION	0.536964	0.61742
YAL042W	ERV46	DELETION	-0.348864	-0.030709
YAL048C	GEM1	DELETION	3.575664	1.795677
YAL051W	OAF1	DELETION	-0.149448	-0.876834
YAL053W	FLC2	DELETION	0.440837	-3.543995
YAL055W	PEX22	DELETION	2.301246	0.116533
YAR002C-A	ERP1	DELETION	-0.650772	-0.048431
YAR002W	NUP60	DELETION	NaN	NaN
YAR003W	SWD1	DELETION	4.495931	0.756593
YAR014C	BUD14	DELETION	-1.68551	-2.85529
YAR018C	KIN3	DELETION	-3.040251	-0.573017
YBL007C	SLA1	DELETION	1.708576	-3.037011
YBL008W	HIR1	DELETION	-0.093822	-1.125041
YBL011W	SCT1	DELETION	-0.187537	-1.113733
YBL016W	FUS3	DELETION	NaN	NaN
YBL017C	PEP1	DELETION	-0.61843	-0.318619
YBL021C	HAP3	DELETION	-0.869304	-1.257147
YBL024W	NCL1	DELETION	0.288603	-0.93947
YBL025W	RRN10	DELETION	NaN	NaN
YBL027W	RPL19B	DELETION	-1.735227	1.787424
YBL032W	HEK2	DELETION	-1.154873	-0.539002
YBL036C	YBL036C	DELETION	-0.205666	-0.726365
YBL046W	PSY4	DELETION	0.174643	-1.165753
YBL047C	EDE1	DELETION	2.169031	0.320927

YBL051C	PIN4	DELETION	0.469301	0.137317
YBL052C	SAS3	DELETION	-1.034478	0.418459
YBL058W	SHP1	DELETION	2.503552	0.968004
YBL061C	SKT5	DELETION	1.322112	-4.346532
YBL066C	SEF1	DELETION	0.874461	-0.653016
YBL067C	UBP13	DELETION	-4.001988	0.29759
YBL072C	RPS8A	DELETION	2.522455	-0.636136
YBL075C	SSA3	DELETION	0.601851	-1.039212
YBL078C	ATG8	DELETION	0.655448	2.218412
YBL079W	NUP170	DELETION	-0.275742	1.638771
YBL081W	YBL081W	DELETION	-3.875693	-0.522871
YBL082C	ALG3	DELETION	1.293472	-0.413497
YBL084C	CDC27	DAmP	NaN	NaN
YBL085W	BOI1	DELETION	0.114988	-0.110372
YBL086C	YBL086C	DELETION	0.50238	-0.885276
YBL087C	RPL23A	DELETION	0.530242	-0.565567
YBL088C	TEL1	DELETION	-0.160007	-1.030484
YBL093C	ROX3	DELETION	NaN	NaN
YBL101C	ECM21	DELETION	1.700162	0.276439
YBL103C	RTG3	DELETION	-3.448986	-1.811428
YBR009C	HHF1	DELETION	0.691433	-2.732609
YBR010W	HHT1	DELETION	0.614709	-0.463546
YBR015C	MNN2	DELETION	0.430822	-1.641189
YBR022W	POA1	DELETION	-0.181743	-0.305869
YBR023C	CHS3	DELETION	-0.181872	-0.625527
YBR025C	OLA1	DELETION	-1.953429	-2.058175
YBR031W	RPL4A	DELETION	1.729886	1.459146
YBR034C	HMT1	DELETION	0.588568	0.64419
YBR036C	CSG2	DELETION	-5.212202	NaN
YBR041W	FAT1	DELETION	-1.013158	-1.057496
YBR057C	MUM2	DELETION	0.046489	-0.680005
YBR058C	UBP14	DELETION	-3.74848	0.138597
YBR061C	TRM7	DELETION	-0.758547	-0.186506
YBR065C	ECM2	DELETION	-0.823287	-0.100063
YBR069C	TAT1	DELETION	0.580636	-1.360636
YBR073W	RDH54	DELETION	-1.509133	-0.21186
YBR076W	ECM8	DELETION	-0.069363	-0.526426
YBR078W	ECM33	DELETION	-0.496154	0.713354
YBR081C	SPT7	DELETION	NaN	-1.275986
YBR082C	UBC4	DELETION	0.019641	0.409599
YBR083W	TEC1	DELETION	1.197943	-0.197617
YBR084C-A	RPL19A	DELETION	-0.83982	0.413422
YBR088C	POL30	DAmP	NaN	NaN
YBR093C	PHO5	DELETION	0.220828	1.292329
YBR094W	PBY1	DELETION	-2.695629	-3.225936
YBR095C	RXT2	DELETION	-5.329354	0.946835
YBR098W	MMS4	DELETION	0.52802	0.149834

YBR103W	SIF2	DELETION	-4.182633	0.720987
YBR106W	PHO88	DELETION	-0.386128	-0.780787
YBR107C	IML3	DELETION	-0.315067	1.384893
YBR108W	AIM3	DELETION	0.934884	-0.364524
YBR112C	CYC8	DELETION	0.51856	-0.423327
YBR114W	RAD16	DELETION	0.785193	0.176116
YBR119W	MUD1	DELETION	0.381056	-0.73191
YBR122C	MRPL36	DELETION	0.467034	-0.250314
YBR125C	PTC4	DELETION	-0.313361	0.455216
YBR126C	TPS1	DELETION	-3.880945	1.391521
YBR131W	CCZ1	DELETION	-0.128137	0.499749
YBR132C	AGP2	DELETION	0.897192	-0.125882
YBR135W	CKS1	DAmP	NaN	NaN
YBR141C	YBR141C	DELETION	-0.431268	-1.122421
YBR150C	TBS1	DELETION	0.234002	-1.064974
YBR154C	RPB5	DAmP	NaN	NaN
YBR156C	SLI15	DELETION	0.758738	-0.426551
YBR159W	IFA38	DELETION	0.103409	0.248866
YBR160W	CDC28	DAmP	NaN	NaN
YBR162C	TOS1	DELETION	-0.81894	0.249757
YBR162W-A	YSY6	DELETION	0.013933	-1.511416
YBR164C	ARL1	DELETION	0.152789	0.714475
YBR166C	TYR1	DELETION	0.398881	0.346804
YBR168W	PEX32	DELETION	-8.167176	1.113697
YBR170C	NPL4	DELETION	0.351929	0.74354
YBR171W	SEC66	DELETION	0.725003	-0.694269
YBR175W	SWD3	DELETION	4.004935	0.404259
YBR181C	RPS6B	DELETION	0.994395	-2.748882
YBR186W	PCH2	DELETION	-0.173788	-0.918068
YBR193C	MED8	DAmP	NaN	NaN
YBR194W	AIM4	DELETION	1.058607	0.749276
YBR195C	MSI1	DELETION	-2.453971	-0.347648
YBR200W	BEM1	DELETION	-4.186118	-1.157074
YBR201W	DER1	DELETION	-0.855966	-0.026528
YBR212W	NGR1	DELETION	NaN	NaN
YBR215W	HPC2	DELETION	-3.133268	-0.199085
YBR221C	PDB1	DELETION	1.64224	0.706163
YBR223C	TDP1	DELETION	0.799041	0.331254
YBR228W	SLX1	DELETION	1.590674	0.38631
YBR229C	ROT2	DELETION	0.96234	-2.89132
YBR231C	SWC5	DELETION	NaN	NaN
YBR238C	YBR238C	DELETION	NaN	NaN
YBR245C	ISW1	DELETION	1.848147	-0.175304
YBR255W	MTC4	DELETION	-2.601813	-0.524355
YBR260C	RGD1	DELETION	-0.22996	0.709282
YBR266C	SLM6	DELETION	NaN	NaN
YBR269C	FMP21	DELETION	-0.118714	1.158121

YBR270C	BIT2	DELETION	0.614292	-0.772633
YBR272C	HSM3	DELETION	0.658769	-1.37314
YBR273C	UBX7	DELETION	-0.749173	0.100534
YBR274W	CHK1	DELETION	-0.280251	-0.577538
YBR275C	RIF1	DELETION	-0.259346	-0.091834
YBR278W	DPB3	DELETION	-0.383342	0.897929
YBR280C	SAF1	DELETION	1.157036	-0.413569
YBR281C	DUG2	DELETION	0.176939	0.017129
YBR283C	SSH1	DELETION	-0.48731	1.311304
YBR286W	APE3	DELETION	0.589449	1.037554
YBR288C	APM3	DELETION	-0.862264	0.302198
YBR289W	SNF5	DELETION	NaN	NaN
YBR290W	BSD2	DELETION	0.101545	0.543117
YBR291C	CTP1	DELETION	-0.245572	-0.430021
YBR295W	PCA1	DELETION	0.508254	0.572518
YBR298C	MAL31	DELETION	0.918211	0.134083
YCL001W	RER1	DELETION	-0.367849	-3.290646
YCL001W-A	YCL001W-A	DELETION	0.052978	-0.117783
YCL008C	STP22	DELETION	NaN	-1.415002
YCL010C	SGF29	DELETION	4.671651	0.121097
YCL011C	GBP2	DELETION	0.378124	-0.603737
YCL014W	BUD3	DELETION	0.232232	-0.32153
YCL016C	DCC1	DELETION	-3.796429	-0.143772
YCL018W	WT_LEU2	WT_leu2D::KAN-GFP	NaN	NaN
YCL018W	WT_LEU2	WT_leu2D::KAN-GFP	NaN	NaN
YCL029C	BIK1	DELETION	-0.009228	1.263105
YCL032W	STE50	DELETION	NaN	5.167896
YCL033C	MXR2	DELETION	NaN	NaN
YCL036W	GFD2	DELETION	-0.047647	-0.747197
YCL037C	SRO9	DELETION	-3.09256	3.666234
YCL045C	EMC1	DELETION	NaN	NaN
YCL050C	APA1	DELETION	0.322859	-0.438677
YCL056C	PEX34	DELETION	NaN	NaN
YCL061C	MRC1	DELETION	0.893336	0.39411
YCR008W	SAT4	DELETION	-0.186506	-0.56631
YCR009C	RVS161	DELETION	-0.319661	-1.629601
YCR014C	POL4	DELETION	0.319298	-1.118013
YCR017C	CWH43	DELETION	0.300374	-1.312305
YCR019W	MAK32	DELETION	0.801532	-0.401733
YCR020C	PET18	DELETION	-0.528959	-0.071968
YCR020C-A	MAK31	DELETION	-0.719175	0.284191
YCR024C-A	PMP1	DELETION	-0.095153	-0.221322
YCR026C	NPP1	DELETION	0.971135	0.7989
YCR027C	RHB1	DELETION	0.669709	0.016798
YCR028C-A	RIM1	DELETION	0.825341	-0.812427
YCR031C	RPS14A	DELETION	0.171407	-0.279072

YCR033W	SNT1	DELETION	0.805054	-0.182572
YCR034W	FEN1	DELETION	-2.275112	-1.929964
YCR036W	RBK1	DELETION	0.347821	-0.87044
YCR044C	PER1	DELETION	0.122054	-2.310331
YCR050C	YCR050C	DELETION	0.337437	-0.480834
YCR053W	THR4	DELETION	0.383642	1.074972
YCR061W	YCR061W	DELETION	0.296015	-1.111676
YCR063W	BUD31	DELETION	-3.072759	0.863673
YCR065W	HCM1	DELETION	0.534178	-0.657953
YCR066W	RAD18	DELETION	-0.43713	-1.670012
YCR067C	SED4	DELETION	0.03432	-1.10572
YCR071C	IMG2	DELETION	0.528316	-0.219948
YCR077C	PAT1	DELETION	0.146331	-0.597096
YCR081W	SRB8	DELETION	NaN	-4.581984
YCR082W	AHC2	DELETION	0.667012	0.207798
YCR084C	TUP1	DELETION	0.644404	-0.289027
YCR086W	CSM1	DELETION	-4.536085	-0.119004
YCR087C-A	YCR087C-A	DELETION	NaN	NaN
YCR088W	ABP1	DELETION	0.312781	-0.765444
YCR089W	FIG2	DELETION	0.141058	-0.511016
YCR093W	CDC39	DAmP	NaN	NaN
YDL002C	NHP10	DELETION	-5.810785	1.448767
YDL006W	PTC1	DELETION	-0.295571	-7.739508
YDL008W	APC11	DAmP	NaN	NaN
YDL013W	SLX5	DELETION	1.94169	1.621644
YDL020C	RPN4	DELETION	-3.291716	1.351696
YDL025C	RTK1	DELETION	NaN	NaN
YDL033C	SLM3	DELETION	0.265016	-0.52246
YDL040C	NAT1	DELETION	1.259102	1.649513
YDL048C	STP4	DELETION	0.495048	-0.046233
YDL051W	LHP1	DELETION	-0.065454	0.621351
YDL052C	SLC1	DELETION	-0.150433	-2.022002
YDL056W	MBP1	DELETION	0.383148	1.16815
YDL059C	RAD59	DELETION	-0.117753	-1.00787
YDL061C	RPS29B	DELETION	-1.340785	-0.066402
YDL065C	PEX19	DELETION	0.054862	-0.154231
YDL070W	BDF2	DELETION	1.659005	2.596101
YDL074C	BRE1	DELETION	4.036738	-0.597397
YDL076C	RXT3	DELETION	-1.662686	1.036959
YDL077C	VAM6	DELETION	0.267459	2.238531
YDL080C	THI3	DELETION	1.592495	-1.370884
YDL082W	RPL13A	DELETION	1.511185	-0.921236
YDL083C	RPS16B	DELETION	-0.034693	0.942716
YDL088C	ASM4	DELETION	0.04945	-1.043091
YDL089W	NUR1	DELETION	NaN	NaN
YDL091C	UBX3	DELETION	-0.305245	0.480678
YDL093W	PMT5	DELETION	-2.305992	0.840722

YDL095W	PMT1	DELETION	1.229015	-0.305441
YDL099W	BUG1	DELETION	-0.777882	0.550856
YDL100C	GET3	DELETION	-3.780383	0.622874
YDL102W	POL3	DAmP	NaN	NaN
YDL115C	IWR1	DELETION	2.405421	0.44055
YDL117W	CYK3	DELETION	-1.198057	-0.040117
YDL122W	UBP1	DELETION	-2.029444	1.12496
YDL125C	HNT1	DELETION	-1.248142	-0.67242
YDL126C	CDC48	DAmP	NaN	NaN
YDL130W	RPP1B	DELETION	-2.283714	1.062322
YDL132W	CDC53	DAmP	NaN	NaN
YDL133C-A	RPL41B	DELETION	-0.633893	0.37661
YDL134C	PPH21	DELETION	0.367826	-0.884002
YDL135C	RDI1	DELETION	-1.52523	0.029402
YDL136W	RPL35B	DELETION	-0.177146	0.702075
YDL140C	RPO21	DAmP	NaN	NaN
YDL142C	CRD1	DELETION	0.289325	1.449072
YDL155W	CLB3	DELETION	-0.533226	0.322362
YDL165W	CDC36	DAmP	NaN	NaN
YDL167C	NRP1	DELETION	-1.193063	-0.659255
YDL170W	UGA3	DELETION	0.146995	-0.651793
YDL175C	AIR2	DELETION	0.006773	0.231417
YDL176W	YDL176W	DELETION	0.665722	-0.1643
YDL185W	TFP1	DELETION	NaN	NaN
YDL188C	PPH22	DELETION	0.170379	0.331484
YDL190C	UFD2	DELETION	-1.466775	-0.115701
YDL191W	RPL35A	DELETION	-1.730624	0.413492
YDL192W	ARF1	DELETION	-0.509878	-3.991995
YDL194W	SNF3	DELETION	-0.478512	1.459869
YDL203C	ACK1	DELETION	-0.513591	-5.192709
YDL204W	RTN2	DELETION	0.187019	-0.20294
YDL213C	NOP6	DELETION	0.479055	0.070356
YDL223C	HBT1	DELETION	0.543609	-0.295052
YDL224C	WHI4	DELETION	0.78238	0.706141
YDL226C	GCS1	DELETION	-0.173757	1.009843
YDL230W	PTP1	DELETION	-0.084358	-0.406561
YDL232W	OST4	DELETION	0.532615	0.293423
YDL243C	AAD4	DELETION	-0.353137	0.034356
YDR004W	RAD57	DELETION	-2.590562	-11.590237
YDR005C	MAF1	DELETION	-2.480535	1.428708
YDR009W	GAL3	DELETION	0.133515	0.28952
YDR014W	RAD61	DELETION	-0.175723	1.131514
YDR025W	RPS11A	DELETION	-0.625173	-1.074341
YDR049W	VMS1	DELETION	NaN	NaN
YDR054C	CDC34	DAmP	NaN	NaN
YDR057W	YOS9	DELETION	0.764204	0.669928
YDR059C	UBC5	DELETION	0.859756	-0.009013

YDR061W	YDR061W	DELETION	0.666734	0.214981
YDR069C	DOA4	DELETION	NaN	NaN
YDR072C	IPT1	DELETION	0.278157	-0.937737
YDR073W	SNF11	DELETION	-0.721605	-0.06867
YDR074W	TPS2	DELETION	2.034733	2.236377
YDR075W	PPH3	DELETION	-2.935816	-1.977679
YDR076W	RAD55	DELETION	-3.415708	-10.426466
YDR080W	VPS41	DELETION	-2.802531	-3.583635
YDR083W	RRP8	DELETION	0.003778	0.72527
YDR092W	UBC13	DELETION	-0.571336	-1.00809
YDR096W	GIS1	DELETION	0.285883	-0.63305
YDR097C	MSH6	DELETION	0.004552	-0.449607
YDR099W	BMH2	DELETION	0.037361	1.437582
YDR101C	ARX1	DELETION	-3.894226	0.348288
YDR108W	GSG1	DELETION	-6.940397	-0.133236
YDR118W	APC4	DAmP	NaN	NaN
YDR120C	TRM1	DELETION	-0.940778	-0.195639
YDR121W	DPB4	DELETION	-0.797436	0.649508
YDR122W	KIN1	DELETION	1.34977	0.183917
YDR125C	ECM18	DELETION	0.063483	-0.205894
YDR126W	SWF1	DELETION	-2.305678	0.515876
YDR127W	ARO1	DELETION	-7.748569	-1.170547
YDR128W	MTC5	DELETION	-1.686252	-3.887093
YDR131C	YDR131C	DELETION	-0.096733	-0.683168
YDR144C	MKC7	DELETION	0.217467	-0.870024
YDR145W	TAF12	DAmP	NaN	NaN
YDR146C	SWI5	DELETION	0.360055	-1.221368
YDR150W	NUM1	DELETION	3.619512	1.481601
YDR153C	ENT5	DELETION	0.29928	0.532495
YDR155C	CPR1	DELETION	-0.536133	-0.000588
YDR156W	RPA14	DELETION	-0.852457	0.485051
YDR159W	SAC3	DELETION	-1.915583	-1.566464
YDR161W	YDR161W	DELETION	-0.339228	0.970754
YDR162C	NBP2	DELETION	0.494521	-1.397446
YDR163W	CWC15	DELETION	0.134062	-1.731434
YDR167W	TAF10	DAmP	NaN	NaN
YDR171W	HSP42	DELETION	0.659664	-0.722914
YDR173C	ARG82	DELETION	1.646504	0.215367
YDR174W	HMO1	DELETION	NaN	NaN
YDR176W	NGG1	DELETION	NaN	NaN
YDR177W	UBC1	DAmP	NaN	NaN
YDR181C	SAS4	DELETION	0.694967	-0.218229
YDR183W	PLP1	DELETION	0.419208	0.00853
YDR191W	HST4	DELETION	-0.688504	-0.251183
YDR192C	NUP42	DELETION	-0.337791	-0.025198
YDR202C	RAV2	DELETION	0.085404	1.47283
YDR207C	UME6	DELETION	NaN	1.886844

YDR217C	RAD9	DELETION	0.23721	0.265813
YDR219C	MFB1	DELETION	1.213875	0.57187
YDR221W	GTB1	DELETION	0.468345	-2.000417
YDR225W	HTA1	DELETION	0.256498	-1.347573
YDR233C	RTN1	DELETION	0.296233	-0.253842
YDR244W	PEX5	DELETION	0.123814	-0.619998
YDR245W	MNN10	DELETION	-2.295516	-5.370949
YDR254W	CHL4	DELETION	1.138767	0.037835
YDR255C	RMD5	DELETION	-1.116156	-1.195316
YDR257C	RKM4	DELETION	NaN	NaN
YDR260C	SWM1	DELETION	-1.685262	1.20281
YDR265W	PEX10	DELETION	-0.48271	0.032464
YDR266C	YDR266C	DELETION	-0.865377	-1.349435
YDR276C	PMP3	DELETION	1.472121	-1.668984
YDR279W	RNH202	DELETION	0.754838	0.823343
YDR289C	RTT103	DELETION	-3.493118	2.751506
YDR293C	SSD1	DELETION	-5.174787	4.611766
YDR294C	DPL1	DELETION	0.105739	0.276893
YDR297W	SUR2	DELETION	0.170145	-0.382627
YDR303C	RSC3	DAmP	NaN	NaN
YDR304C	CPR5	DELETION	0.299179	0.195711
YDR306C	YDR306C	DELETION	-0.275871	0.168395
YDR308C	SRB7	DAmP	NaN	NaN
YDR310C	SUM1	DELETION	2.755647	0.422323
YDR311W	TFB1	DAmP	NaN	NaN
YDR312W	SSF2	DELETION	-0.30505	0.379793
YDR313C	PIB1	DELETION	0.358274	-0.53865
YDR315C	IPK1	DELETION	-3.641665	-1.188236
YDR318W	MCM21	DELETION	1.463313	0.025277
YDR320C	SWA2	DELETION	-3.817169	-0.570575
YDR329C	PEX3	DELETION	-0.410717	-0.633728
YDR330W	UBX5	DELETION	-0.676857	-1.863133
YDR332W	IRC3	DELETION	-0.055176	0.164011
YDR334W	SWR1	DELETION	-6.289484	-0.006839
YDR335W	MSN5	DELETION	-6.076372	-0.412715
YDR358W	GGA1	DELETION	-0.116915	0.521446
YDR359C	EAF1	DELETION	-0.61972	-1.231286
YDR363W	ESC2	DELETION	-2.450442	0.670515
YDR363W-A	SEM1	DELETION	-1.529875	0.339441
YDR369C	XRS2	DELETION	-9.203645	-8.582214
YDR372C	VPS74	DELETION	-0.378729	-1.993744
YDR378C	LSM6	DELETION	1.475677	2.88219
YDR382W	RPP2B	DELETION	-0.6605	-4.802521
YDR383C	NKP1	DELETION	-0.313651	0.248512
YDR385W	EFT2	DELETION	0.253385	-0.157267
YDR386W	MUS81	DELETION	-2.408555	-3.051157
YDR388W	RVS167	DELETION	1.056962	-1.99945

YDR389W	SAC7	DELETION	-3.276586	-10.688388
YDR392W	SPT3	DELETION	NaN	-2.862429
YDR393W	SHE9	DELETION	1.441103	-1.128276
YDR395W	SXM1	DELETION	-2.700469	0.360878
YDR404C	RPB7	DAmP	NaN	NaN
YDR409W	SIZ1	DELETION	-1.098037	-0.305072
YDR414C	ERD1	DELETION	0.319341	-0.251476
YDR420W	HKR1	DELETION	0.746706	0.302476
YDR421W	ARO80	DELETION	1.693434	-2.910197
YDR422C	SIP1	DELETION	-0.285263	-1.105045
YDR423C	CAD1	DELETION	-0.633997	-1.087977
YDR424C	DYN2	DELETION	0.416522	-0.046912
YDR435C	PPM1	DELETION	2.057024	0.149272
YDR439W	LRS4	DELETION	-0.454263	-0.566527
YDR440W	DOT1	DELETION	0.416424	-0.231772
YDR443C	SSN2	DELETION	-3.95865	1.158879
YDR448W	ADA2	DELETION	NaN	-3.302051
YDR451C	YHP1	DELETION	-0.006743	0.442062
YDR460W	TFB3	DAmP	NaN	NaN
YDR463W	STP1	DELETION	-0.509594	-1.160683
YDR466W	PKH3	DELETION	1.158395	0.123797
YDR469W	SDC1	DELETION	4.509931	0.055208
YDR477W	SNF1	DELETION	0.297163	0.44069
YDR479C	PEX29	DELETION	0.425482	-0.436234
YDR482C	CWC21	DELETION	0.019993	0.069305
YDR485C	VPS72	DELETION	-9.442651	1.312653
YDR488C	PAC11	DELETION	0.730387	0.329225
YDR490C	PKH1	DELETION	-0.055706	-0.383802
YDR496C	PUF6	DELETION	-0.386413	0.298103
YDR497C	ITR1	DELETION	-0.332143	-1.012504
YDR500C	RPL37B	DELETION	NaN	NaN
YDR505C	PSP1	DELETION	-0.801808	-1.339899
YDR508C	GNP1	DELETION	-1.727496	0.139632
YDR510W	SMT3	DAmP	NaN	NaN
YDR512C	EMI1	DELETION	2.26287	-1.982265
YDR527W	RBA50	DAmP	NaN	NaN
YDR532C	KRE28	DELETION	NaN	NaN
YEL003W	GIM4	DELETION	1.959552	0.150945
YEL007W	MIT1	DELETION	NaN	NaN
YEL012W	UBC8	DELETION	-1.228262	0.152396
YEL013W	VAC8	DELETION	0.240907	1.08878
YEL015W	EDC3	DELETION	-0.09663	-0.686341
YEL031W	SPF1	DELETION	-2.795258	-1.898774
YEL033W	MTC7	DELETION	-3.165304	-4.965451
YEL037C	RAD23	DELETION	-1.264534	0.651646
YEL041W	YEF1	DELETION	1.223938	0.517328
YEL042W	GDA1	DELETION	-0.088992	-0.939608

YEL043W	YEL043W	DELETION	0.343246	1.448171
YEL047C	YEL047C	DELETION	0.664091	0.971569
YEL048C	TCA17	DELETION	NaN	NaN
YEL053C	MAK10	DELETION	0.19287	0.915205
YEL056W	HAT2	DELETION	0.288296	-0.778821
YEL060C	PRB1	DELETION	NaN	NaN
YEL061C	CIN8	DELETION	NaN	NaN
YEL062W	NPR2	DELETION	-0.39764	1.624067
YEL064C	AVT2	DELETION	-1.293517	0.582707
YER002W	NOP16	DELETION	-0.73571	-1.136407
YER005W	YND1	DELETION	-0.078139	-0.120621
YER007W	PAC2	DELETION	0.304158	0.600793
YER016W	BIM1	DELETION	2.775666	2.693054
YER019W	ISC1	DELETION	-0.945026	0.971108
YER020W	GPA2	DELETION	-3.039808	-0.592991
YER022W	SRB4	DAmP	NaN	NaN
YER030W	CHZ1	DELETION	0.833323	0.657424
YER031C	YPT31	DELETION	-1.979002	1.232706
YER032W	FIR1	DELETION	-0.364469	0.291597
YER048C	CAJ1	DELETION	0.41698	-0.574678
YER051W	JHD1	DELETION	-0.148908	-1.738344
YER052C	HOM3	DELETION	0.101472	-1.139648
YER061C	CEM1	DELETION	2.105096	1.178069
YER064C	VHR2	DELETION	NaN	NaN
YER068W	MOT2	DELETION	NaN	NaN
YER072W	VTC1	DELETION	1.005908	-0.5692
YER075C	PTP3	DELETION	-0.176562	-1.255971
YER077C	YER077C	DELETION	0.792025	0.086778
YER083C	GET2	DELETION	NaN	NaN
YER088C	DOT6	DELETION	0.097644	-0.907492
YER089C	PTC2	DELETION	0.1191	0.06498
YER092W	IES5	DELETION	NaN	NaN
YER095W	RAD51	DELETION	NaN	NaN
YER098W	UBP9	DELETION	0.900398	0.547778
YER111C	SWI4	DELETION	NaN	-5.501658
YER114C	BOI2	DELETION	0.281589	-1.450674
YER116C	SLX8	DELETION	1.419216	2.038068
YER120W	SCS2	DELETION	-0.853452	-0.5173
YER123W	YCK3	DELETION	0.660988	-0.407242
YER125W	RSP5	DAmP	NaN	NaN
YER129W	SAK1	DELETION	1.456492	0.485201
YER139C	RTR1	DELETION	-10.701333	1.283022
YER144C	UBP5	DELETION	0.629174	-0.248302
YER149C	PEA2	DELETION	1.418121	-0.264722
YER151C	UBP3	DELETION	-6.162482	-6.582976
YER155C	BEM2	DELETION	-0.444166	1.794442
YER156C	YER156C	DELETION	-2.302506	-1.302535

YER161C	SPT2	DELETION	0.091341	0.953493
YER162C	RAD4	DELETION	-4.08688	-5.460147
YER164W	CHD1	DELETION	-0.942263	-0.181969
YER166W	DNF1	DELETION	1.36954	-0.336814
YER167W	BCK2	DELETION	-1.466465	-0.212884
YER173W	RAD24	DELETION	0.971138	-0.283346
YER174C	GRX4	DELETION	0.267896	-0.877545
YER177W	BMH1	DELETION	-1.138934	1.221822
YER178W	PDA1	DELETION	-0.909526	0.281428
YFL001W	DEG1	DELETION	-4.298334	0.026651
YFL003C	MSH4	DELETION	-1.60408	0.698693
YFL007W	BLM10	DELETION	-1.002532	1.95302
YFL009W	CDC4	DAmP	NaN	NaN
YFL011W	HXT10	DELETION	-0.378313	-0.890758
YFL013C	IES1	DELETION	-5.347516	2.723195
YFL018C	LPD1	DELETION	3.218845	2.266633
YFL023W	BUD27	DELETION	-9.901201	1.120754
YFL024C	EPL1	DAmP	NaN	NaN
YFL025C	BST1	DELETION	NaN	NaN
YFL027C	GYP8	DELETION	-0.96723	1.676494
YFL027C	GYP8	DELETION	-0.96723	1.676494
YFL030W	AGX1	DELETION	-0.44428	0.014055
YFL031W	HAC1	DELETION	NaN	NaN
YFL033C	RIM15	DELETION	-0.317958	0.864202
YFL036W	RPO41	DELETION	NaN	NaN
YFL049W	SWP82	DELETION	0.323305	-1.784607
YFR009W	GCN20	DELETION	1.3501	-0.279268
YFR010W	UBP6	DELETION	-0.281065	-1.417799
YFR013W	IOC3	DELETION	1.928754	0.152352
YFR019W	FAB1	DELETION	-0.047583	1.098595
YFR031C-A	RPL2A	DELETION	0.717488	0.809938
YFR036W	CDC26	DELETION	-3.379289	1.389902
YFR040W	SAP155	DELETION	-0.658537	0.422016
YFR041C	ERJ5	DELETION	-0.35693	-1.658235
YFR048W	RMD8	DELETION	0.107882	1.141588
YFR053C	HXK1	DELETION	-0.312182	-0.09545
YGL003C	CDH1	DELETION	-5.71312	-2.783821
YGL005C	COG7	DELETION	-1.385457	-1.063431
YGL014W	PUF4	DELETION	-1.743189	-0.519048
YGL016W	KAP122	DELETION	-1.158503	1.376201
YGL019W	CKB1	DELETION	2.230324	1.06394
YGL020C	GET1	DELETION	-6.614609	-0.435545
YGL025C	PGD1	DELETION	-0.103091	-0.396171
YGL027C	CWH41	DELETION	0.024019	-2.877455
YGL028C	SCW11	DELETION	-1.333715	0.505986
YGL029W	CGR1	DELETION	-0.239841	-0.331743
YGL031C	RPL24A	DELETION	-1.441172	0.50745

YGL035C	MIG1	DELETION	-0.761769	0.931654
YGL043W	DST1	DELETION	-1.346671	2.060946
YGL045W	RIM8	DELETION	-4.887408	-5.090521
YGL049C	TIF4632	DELETION	-0.058848	0.881617
YGL054C	ERV14	DELETION	-2.21288	0.699645
YGL058W	RAD6	DELETION	2.809304	0.547092
YGL060W	YBP2	DELETION	-2.062363	-0.957373
YGL066W	SGF73	DELETION	-4.611825	2.166867
YGL067W	NPY1	DELETION	-0.253749	-0.427687
YGL070C	RPB9	DELETION	4.914765	0.203419
YGL078C	DBP3	DELETION	-0.113352	-1.851115
YGL081W	YGL081W	DELETION	0.5288	-0.781275
YGL084C	GUP1	DELETION	-1.514049	-0.365106
YGL086W	MAD1	DELETION	1.460645	1.405977
YGL087C	MMS2	DELETION	2.046229	-0.535572
YGL090W	LIF1	DELETION	0.91722	-2.062135
YGL105W	ARC1	DELETION	-3.905746	1.260098
YGL110C	CUE3	DELETION	0.551983	1.100632
YGL115W	SNF4	DELETION	1.400906	0.663815
YGL116W	CDC20	DAmP	NaN	NaN
YGL124C	MON1	DELETION	-0.851763	2.15534
YGL126W	SCS3	DELETION	0.592966	0.539554
YGL127C	SOH1	DELETION	NaN	NaN
YGL131C	SNT2	DELETION	-0.278645	-0.180645
YGL133W	ITC1	DELETION	0.583723	-1.06655
YGL136C	MRM2	DELETION	NaN	NaN
YGL141W	HUL5	DELETION	-0.296947	-0.961282
YGL147C	RPL9A	DELETION	0.00637	0.477907
YGL151W	NUT1	DELETION	-0.694966	1.634693
YGL153W	PEX14	DELETION	0.106642	-1.390408
YGL161C	YIP5	DELETION	-0.421341	0.17845
YGL163C	RAD54	DELETION	-1.474424	-10.254979
YGL167C	PMR1	DELETION	1.493684	5.138305
YGL168W	HUR1	DELETION	0.67923	3.874841
YGL173C	KEM1	DELETION	-1.89662	1.201428
YGL174W	BUD13	DELETION	-0.361041	-0.786682
YGL175C	SAE2	DELETION	-0.161103	-0.105886
YGL194C	HOS2	DELETION	0.513843	0.116841
YGL195W	GCN1	DELETION	1.317477	-2.07739
YGL196W	DSD1	DELETION	0.102456	-0.727629
YGL197W	MDS3	DELETION	0.392811	-0.898803
YGL203C	KEX1	DELETION	-0.957652	-1.379851
YGL211W	NCS6	DELETION	-0.898467	2.57268
YGL212W	VAM7	DELETION	1.115789	3.152421
YGL213C	SKI8	DELETION	NaN	NaN
YGL216W	KIP3	DELETION	-2.400889	2.246977
YGL219C	MDM34	DELETION	4.298566	3.302847

YGL226C-A	OST5	DELETION	0.066066	-0.24234
YGL227W	VID30	DELETION	-0.120407	0.344313
YGL228W	SHE10	DELETION	-0.41085	-0.101788
YGL232W	TAN1	DELETION	-0.047673	-0.12839
YGL237C	HAP2	DELETION	-4.200129	-3.488335
YGL240W	DOC1	DELETION	-5.805154	1.73444
YGL242C	YGL242C	DELETION	0.471426	-1.677468
YGL244W	RTF1	DELETION	3.767536	0.905928
YGL250W	RMR1	DELETION	-0.232921	0.927793
YGL252C	RTG2	DELETION	-4.474844	-2.196676
YGL253W	HXK2	DELETION	-2.395204	0.245809
YGL255W	ZRT1	DELETION	-0.81291	0.849623
YGR003W	CUL3	DELETION	0.564312	-0.061414
YGR019W	UGA1	DELETION	1.107853	0.632037
YGR037C	ACB1	DELETION	-1.569601	-0.296398
YGR038W	ORM1	DELETION	-0.068157	0.277339
YGR054W	YGR054W	DELETION	0.121968	0.821938
YGR056W	RSC1	DELETION	NaN	-3.100531
YGR058W	PEF1	DELETION	0.405955	-1.587225
YGR071C	ENV11	DELETION	NaN	NaN
YGR072W	UPF3	DELETION	-0.309978	0.767457
YGR077C	PEX8	DELETION	-1.22539	-0.40143
YGR078C	PAC10	DELETION	2.305033	-0.202082
YGR081C	SLX9	DELETION	-0.156419	-0.025626
YGR085C	RPL11B	DELETION	-0.31695	0.351687
YGR086C	PIL1	DELETION	0.398628	0.207029
YGR089W	NNF2	DELETION	0.116492	1.189046
YGR092W	DBF2	DELETION	1.913331	1.02839
YGR097W	ASK10	DELETION	0.039536	1.093557
YGR101W	PCP1	DELETION	1.035914	-0.528861
YGR104C	SRB5	DELETION	NaN	-11.50986
YGR105W	VMA21	DELETION	-2.75648	0.845997
YGR108W	CLB1	DELETION	0.489686	-0.676311
YGR109C	CLB6	DELETION	-0.068112	0.741638
YGR118W	RPS23A	DELETION	-0.075594	0.68897
YGR122W	YGR122W	DELETION	-5.14294	-3.874031
YGR123C	PPT1	DELETION	-0.690853	-1.522193
YGR129W	SYF2	DELETION	-0.35596	-0.964508
YGR133W	PEX4	DELETION	-0.834986	-0.915413
YGR134W	CAF130	DELETION	-1.971413	-0.699708
YGR135W	PRE9	DELETION	-2.089121	-3.810422
YGR157W	CHO2	DELETION	-1.120841	-0.89347
YGR163W	GTR2	DELETION	-0.207914	-0.296861
YGR166W	KRE11	DELETION	0.06642	-5.793424
YGR170W	PSD2	DELETION	0.109618	-0.098513
YGR174C	CBP4	DELETION	2.785312	-0.060409
YGR178C	PBP1	DELETION	2.033909	0.480957

YGR181W	TIM13	DELETION	0.420484	-0.401967
YGR184C	UBR1	DELETION	-1.070886	-0.960379
YGR186W	TFG1	DAmP	NaN	NaN
YGR188C	BUB1	DELETION	2.564485	4.898574
YGR196C	FYV8	DELETION	0.270925	-2.352261
YGR197C	SNG1	DELETION	-0.448743	-1.088312
YGR200C	ELP2	DELETION	-6.413695	0.95858
YGR202C	PCT1	DELETION	0.122408	-0.182957
YGR203W	YCH1	DELETION	NaN	NaN
YGR208W	SER2	DELETION	-0.106712	-1.494026
YGR214W	RPS0A	DELETION	1.443376	-0.939427
YGR214W	RPS0A	DELETION	1.443376	-0.939427
YGR217W	CCH1	DELETION	-0.562463	-3.551586
YGR223C	HSV2	DELETION	-0.682881	1.14134
YGR227W	DIE2	DELETION	1.039652	0.287424
YGR229C	SMI1	DELETION	-0.641308	-0.30513
YGR231C	PHB2	DELETION	0.020285	-1.164359
YGR237C	YGR237C	DELETION	-0.253388	0.721298
YGR252W	GCN5	DELETION	NaN	NaN
YGR261C	APL6	DELETION	0.511739	0.42467
YGR270W	YTA7	DELETION	-0.362603	2.024091
YGR275W	RTT102	DELETION	-0.932126	-0.579695
YGR284C	ERV29	DELETION	0.147162	-0.44355
YGR295C	COS6	DELETION	-0.261568	-0.857344
YHL002W	HSE1	DELETION	0.503566	1.131855
YHL003C	LAG1	DELETION	0.61515	-0.605355
YHL009C	YAP3	DELETION	-0.000877	0.893366
YHL020C	OPI1	DELETION	-0.354025	0.277912
YHL023C	NPR3	DELETION	NaN	NaN
YHL025W	SNF6	DELETION	NaN	0.702239
YHL027W	RIM101	DELETION	-7.310231	-2.921806
YHL028W	WSC4	DELETION	0.226337	0.689488
YHL029C	OCA5	DELETION	1.863031	-1.31208
YHL031C	GOS1	DELETION	-0.809978	-5.788848
YHL033C	RPL8A	DELETION	-2.116896	-3.121631
YHR001W-A	QCR10	DELETION	0.428246	-0.700997
YHR004C	NEM1	DELETION	-0.318006	2.027121
YHR005C	GPA1	DELETION	NaN	NaN
YHR006W	STP2	DELETION	-0.030982	0.300156
YHR009C	TDA3	DELETION	NaN	NaN
YHR012W	VPS29	DELETION	-0.857701	0.204318
YHR021C	RPS27B	DELETION	-0.742463	1.737727
YHR025W	THR1	DELETION	-3.742331	1.89305
YHR030C	SLT2	DELETION	-1.985654	-19.525068
YHR031C	RRM3	DELETION	-2.137157	-0.509599
YHR034C	PIH1	DELETION	1.811088	0.456312
YHR039C	MSC7	DELETION	-1.613899	-1.165944

YHR041C	SRB2	DELETION	-5.593798	1.974025
YHR058C	MED6	DAmP	NaN	NaN
YHR066W	SSF1	DELETION	-3.600792	-0.310993
YHR067W	HTD2	DELETION	-0.577993	1.009948
YHR077C	NMD2	DELETION	NaN	-0.600066
YHR078W	YHR078W	DELETION	NaN	1.252553
YHR079C	IRE1	DELETION	NaN	-5.510115
YHR081W	LRP1	DELETION	NaN	NaN
YHR082C	KSP1	DELETION	NaN	-0.119294
YHR086W	NAM8	DELETION	NaN	0.367986
YHR090C	YNG2	DELETION	NaN	0.13751
YHR108W	GGA2	DELETION	NaN	NaN
YHR111W	UBA4	DELETION	NaN	1.507313
YHR114W	BZZ1	DELETION	NaN	-1.363941
YHR115C	DMA1	DELETION	NaN	1.20921
YHR129C	ARP1	DELETION	NaN	0.54253
YHR134W	WSS1	DELETION	NaN	-2.440412
YHR135C	YCK1	DELETION	NaN	-2.121091
YHR142W	CHS7	DELETION	NaN	-1.928804
YHR151C	MTC6	DELETION	NaN	-2.218555
YHR154W	RTT107	DELETION	NaN	-4.00444
YHR156C	LIN1	DELETION	NaN	-2.359229
YHR157W	REC104	DELETION	NaN	-0.540435
YHR158C	KEL1	DELETION	NaN	NaN
YHR166C	CDC23	DAmP	NaN	NaN
YHR167W	THP2	DELETION	NaN	NaN
YHR178W	STB5	DELETION	3.511358	NaN
YHR179W	OYE2	DELETION	-2.948729	NaN
YHR181W	SVP26	DELETION	-2.924769	NaN
YHR185C	PFS1	DELETION	-2.697407	NaN
YHR187W	IKI1	DELETION	-7.079373	NaN
YHR189W	PTH1	DELETION	-2.177301	NaN
YHR194W	MDM31	DELETION	-0.918447	NaN
YHR200W	RPN10	DELETION	-11.913214	NaN
YHR203C	RPS4B	DELETION	NaN	NaN
YHR204W	MNL1	DELETION	-1.091828	NaN
YHR206W	SKN7	DELETION	-1.314102	NaN
YHR207C	SET5	DELETION	0.190594	NaN
YIL002C	INP51	DELETION	-0.706985	0.405819
YIL008W	URM1	DELETION	-1.366659	1.34444
YIL011W	TIR3	DELETION	NaN	NaN
YIL021W	RPB3	DAmP	NaN	NaN
YIL027C	EMC5	DELETION	NaN	NaN
YIL029C	YIL029C	DELETION	-0.84668	0.165728
YIL030C	SSM4	DELETION	-0.071636	-1.730066
YIL034C	CAP2	DELETION	0.253407	0.734355
YIL035C	CKA1	DELETION	1.608147	0.446773

YIL036W	CST6	DELETION	0.905914	0.395648
YIL037C	PRM2	DELETION	0.541291	-1.22904
YIL038C	NOT3	DELETION	-0.750834	0.159352
YIL039W	TED1	DELETION	0.320635	0.581004
YIL040W	APQ12	DELETION	-0.432547	0.81432
YIL044C	YIL044C	DELETION	NaN	NaN
YIL046W	MET30	DAmP	NaN	NaN
YIL047C	SYG1	DELETION	0.378537	-0.479558
YIL049W	DFG10	DELETION	0.088206	0.552874
YIL052C	RPL34B	DELETION	0.688855	0.098676
YIL076W	SEC28	DELETION	-3.802408	0.725337
YIL079C	AIR1	DELETION	1.038089	0.622436
YIL084C	SDS3	DELETION	1.520765	0.802042
YIL084C	SDS3	DELETION	1.520765	0.802042
YIL090W	ICE2	DELETION	-4.670589	-5.56155
YIL095W	PRK1	DELETION	-0.173397	-0.238803
YIL105C	SLM1	DELETION	1.24061	-1.207429
YIL110W	MNI1	DELETION	0.03753	-0.259358
YIL112W	HOS4	DELETION	-0.688369	0.540419
YIL119C	RPI1	DELETION	0.252007	-0.755427
YIL125W	KGD1	DELETION	NaN	NaN
YIL126W	STH1	DAmP	NaN	NaN
YIL128W	MET18	DELETION	0.998264	2.275529
YIL131C	FKH1	DELETION	0.186158	0.857395
YIL133C	RPL16A	DELETION	1.094311	0.635079
YIL134W	FLX1	DELETION	-0.102523	0.288497
YIL138C	TPM2	DELETION	0.54983	0.641561
YIL139C	REV7	DELETION	-0.646519	-0.672823
YIL149C	MLP2	DELETION	-0.609261	-0.428563
YIL153W	RRD1	DELETION	-4.543782	-1.098737
YIL154C	IMP2	DELETION	NaN	NaN
YIL156W	UBP7	DELETION	-0.56709	-0.132645
YIL159W	BNR1	DELETION	NaN	NaN
YIR001C	SGN1	DELETION	0.174393	-0.035644
YIR002C	MPH1	DELETION	0.024058	0.013805
YIR003W	AIM21	DELETION	0.084642	-0.450786
YIR004W	DJP1	DELETION	0.187385	0.531681
YIR005W	IST3	DELETION	2.283129	-0.048659
YIR009W	MSL1	DELETION	NaN	NaN
YIR018W	YAP5	DELETION	-0.555769	0.637535
YIR023W	DAL81	DELETION	-3.834003	-7.165396
YIR033W	MGA2	DELETION	0.832765	2.778606
YJL004C	SYS1	DELETION	0.174794	-0.823816
YJL013C	MAD3	DELETION	1.019901	0.123285
YJL020C	BBC1	DELETION	-1.773262	-0.313678
YJL023C	PET130	DELETION	-2.08295	-0.132088
YJL024C	APS3	DELETION	-0.756954	-0.024787

YJL029C	VPS53	DELETION	-2.856588	-2.525711
YJL030W	MAD2	DELETION	0.699155	0.805413
YJL036W	SNX4	DELETION	-2.650474	1.226467
YJL046W	AIM22	DELETION	2.372504	1.979646
YJL047C	RTT101	DELETION	-2.417273	-3.918173
YJL048C	UBX6	DELETION	-0.063172	-0.89724
YJL053W	PEP8	DELETION	-1.150182	-2.326941
YJL055W	YJL055W	DELETION	-0.35059	-0.81749
YJL062W	LAS21	DELETION	-1.528411	-1.305372
YJL073W	JEM1	DELETION	-0.77807	0.14998
YJL081C	ARP4	DAmP	NaN	NaN
YJL082W	IML2	DELETION	0.691259	0.915638
YJL090C	DPB11	DAmP	NaN	NaN
YJL092W	SRS2	DELETION	-2.242239	-4.495652
YJL095W	BCK1	DELETION	1.123937	-16.224689
YJL098W	SAP185	DELETION	0.232161	-0.765435
YJL099W	CHS6	DELETION	0.657467	0.357118
YJL103C	GSM1	DELETION	0.397424	0.200611
YJL105W	SET4	DELETION	-0.928769	-0.519374
YJL115W	ASF1	DELETION	-0.952573	-1.947069
YJL117W	PHO86	DELETION	0.750162	-0.298031
YJL122W	ALB1	DELETION	0.286471	-0.944591
YJL123C	MTC1	DELETION	0.250986	-0.850756
YJL124C	LSM1	DELETION	0.019031	1.531625
YJL128C	PBS2	DELETION	0.956143	0.627962
YJL134W	LCB3	DELETION	0.484421	-0.08195
YJL136C	RPS21B	DELETION	0.272632	0.689497
YJL138C	TIF2	DELETION	-3.780485	1.684406
YJL139C	YUR1	DELETION	-0.942288	-1.726197
YJL140W	RPB4	DELETION	1.351096	-0.216625
YJL148W	RPA34	DELETION	0.120689	1.241678
YJL149W	DAS1	DELETION	1.081409	-0.67931
YJL154C	VPS35	DELETION	-0.26114	0.430854
YJL157C	FAR1	DELETION	0.206809	0.213877
YJL165C	HAL5	DELETION	-0.172328	-0.438799
YJL168C	SET2	DELETION	0.67584	0.86966
YJL176C	SWI3	DELETION	NaN	NaN
YJL177W	RPL17B	DELETION	-0.734707	0.181583
YJL183W	MNN11	DELETION	-1.128791	1.939455
YJL187C	SWE1	DELETION	-0.517442	-0.18087
YJL190C	RPS22A	DELETION	NaN	NaN
YJL197W	UBP12	DELETION	-0.73167	2.064815
YJL198W	PHO90	DELETION	1.145418	1.154686
YJL204C	RCY1	DELETION	NaN	NaN
YJL208C	NUC1	DELETION	-0.228643	0.227855
YJL208C	NUC1	DELETION	-0.228643	0.227855
YJL210W	PEX2	DELETION	-1.019398	-0.896533

YJL210W	PEX2	DELETION	-1.019398	-0.896533
YJL214W	HXT8	DELETION	-0.2623	0.530462
YJR010C-A	SPC1	DELETION	0.016519	0.819312
YJR011C	YJR011C	DELETION	-8.077303	-4.93702
YJR017C	ESS1	DAmP	NaN	NaN
YJR032W	CPR7	DELETION	-0.519485	-3.221785
YJR033C	RAV1	DELETION	0.401168	1.568415
YJR035W	RAD26	DELETION	-0.000459	-0.276594
YJR036C	HUL4	DELETION	0.025604	-1.075095
YJR040W	GEF1	DELETION	-0.957113	0.222619
YJR040W	GEF1	DELETION	-0.957113	0.222619
YJR043C	POL32	DELETION	0.55281	0.207151
YJR050W	ISY1	DELETION	-0.890313	2.14222
YJR052W	RAD7	DELETION	1.348323	0.277681
YJR053W	BFA1	DELETION	0.709662	0.331889
YJR054W	YJR054W	DELETION	NaN	NaN
YJR059W	PTK2	DELETION	0.156231	-0.589193
YJR060W	CBF1	DELETION	1.609745	-1.691781
YJR066W	TOR1	DELETION	0.795327	-0.383448
YJR069C	HAM1	DELETION	0.155459	0.281472
YJR070C	LIA1	DELETION	-3.390205	0.634177
YJR073C	OPI3	DELETION	-5.003462	-0.775403
YJR074W	MOG1	DELETION	NaN	NaN
YJR075W	HOC1	DELETION	-1.086361	-2.481619
YJR082C	EAF6	DELETION	-0.589094	1.282497
YJR084W	CSN12	DELETION	0.318585	0.903838
YJR088C	EMC2	DELETION	NaN	NaN
YJR090C	GRR1	DELETION	-1.920117	-2.404198
YJR094C	IME1	DELETION	1.035372	-0.4051
YJR117W	STE24	DELETION	-2.670517	-2.358877
YJR118C	ILM1	DELETION	1.889562	3.743779
YJR119C	JHD2	DELETION	0.944698	-0.168931
YJR125C	ENT3	DELETION	0.364223	0.966714
YJR126C	VPS70	DELETION	-1.111511	0.726547
YJR131W	MNS1	DELETION	0.273815	-0.937133
YJR134C	SGM1	DELETION	-0.279623	-0.895502
YJR135C	MCM22	DELETION	1.807759	0.905098
YJR139C	HOM6	DELETION	0.102175	-0.311089
YJR140C	HIR3	DELETION	-2.564325	0.350961
YJR145C	RPS4A	DELETION	4.752271	3.005436
YKL005C	BYE1	DELETION	0.562447	-0.1984
YKL007W	CAP1	DELETION	1.486382	0.822014
YKL009W	MRT4	DELETION	-0.646732	-0.675562
YKL020C	SPT23	DELETION	0.488325	1.430112
YKL022C	CDC16	DAmP	NaN	NaN
YKL023W	YKL023W	DELETION	1.309328	-2.590899
YKL025C	PAN3	DELETION	0.090733	-0.109772

YKL028W	TFA1	DAmP	NaN	NaN
YKL032C	IXR1	DELETION	NaN	0.876184
YKL037W	AIM26	DELETION	-0.546993	1.254478
YKL041W	VPS24	DELETION	-0.311766	-4.556016
YKL048C	ELM1	DELETION	-0.707083	-0.353442
YKL053C-A	MDM35	DELETION	2.835276	1.047518
YKL056C	TMA19	DELETION	0.698913	0.937051
YKL059C	MPE1	DAmP	NaN	NaN
YKL068W	NUP100	DELETION	-0.815374	0.323697
YKL073W	LHS1	DELETION	-0.338833	-0.115192
YKL074C	MUD2	DELETION	1.363607	-0.502996
YKL079W	SMY1	DELETION	-0.841612	-0.02054
YKL081W	TEF4	DELETION	-0.820993	-2.441625
YKL090W	CUE2	DELETION	-0.936525	-1.135326
YKL092C	BUD2	DELETION	-0.119228	0.182389
YKL101W	HSL1	DELETION	-0.743109	0.48411
YKL109W	HAP4	DELETION	-0.267406	1.985665
YKL110C	KTI12	DELETION	0.803682	0.71559
YKL112W	ABF1	DAmP	NaN	NaN
YKL113C	RAD27	DELETION	-3.286536	-0.574881
YKL120W	OAC1	DELETION	0.332537	-0.44658
YKL121W	DGR2	DELETION	NaN	NaN
YKL139W	CTK1	DELETION	-1.440459	2.170203
YKL140W	TGL1	DELETION	-0.596483	-0.926012
YKL149C	DBR1	DELETION	-0.054416	-0.160252
YKL160W	ELF1	DELETION	-0.487305	1.119031
YKL166C	TPK3	DELETION	-0.054036	0.316063
YKL176C	LST4	DELETION	-4.256371	0.025654
YKL179C	COY1	DELETION	0.693772	0.648524
YKL185W	ASH1	DELETION	0.282069	0.263897
YKL190W	CNB1	DELETION	1.165264	-1.973946
YKL197C	PEX1	DELETION	-1.083245	-1.030759
YKL201C	MNN4	DELETION	0.990141	1.093728
YKL204W	EAP1	DELETION	-3.744249	-0.87425
YKL205W	LOS1	DELETION	-2.530722	-0.006743
YKL206C	ADD66	DELETION	-0.320094	0.332141
YKL207W	AIM27	DELETION	NaN	NaN
YKL208W	CBT1	DELETION	0.2137	0.972844
YKL211C	TRP3	DELETION	-0.403648	0.251788
YKL212W	SAC1	DELETION	-0.094183	1.205514
YKL213C	DOA1	DELETION	-7.51727	-0.947493
YKR001C	VPS1	DELETION	-0.104608	-2.124116
YKR007W	MEH1	DELETION	-3.311673	-1.665848
YKR008W	RSC4	DAmP	NaN	NaN
YKR010C	TOF2	DELETION	-0.255313	1.133894
YKR019C	IRS4	DELETION	-2.199761	-2.178611
YKR020W	VPS51	DELETION	0.848561	-4.603232

YKR024C	DBP7	DELETION	NaN	NaN
YKR028W	SAP190	DELETION	-0.632131	0.578549
YKR029C	SET3	DELETION	0.050899	-0.938086
YKR030W	GMH1	DELETION	-0.201992	-0.042682
YKR042W	UTH1	DELETION	NaN	NaN
YKR043C	SHB17	DELETION	NaN	NaN
YKR048C	NAP1	DELETION	0.123776	0.430519
YKR054C	DYN1	DELETION	1.38514	0.793461
YKR055W	RHO4	DELETION	0.788574	-0.364582
YKR059W	TIF1	DELETION	-0.10312	0.456867
YKR061W	KTR2	DELETION	0.277811	-0.004106
YKR062W	TFA2	DAmP	NaN	NaN
YKR065C	PAM17	DELETION	NaN	NaN
YKR067W	GPT2	DELETION	-0.230731	-0.231197
YKR072C	SIS2	DELETION	-1.430687	-0.063623
YKR074W	AIM29	DELETION	-0.629163	1.853044
YKR077W	MSA2	DELETION	-0.457535	-0.249991
YKR082W	NUP133	DELETION	1.298076	2.416709
YKR092C	SRP40	DELETION	1.270271	1.533575
YKR093W	PTR2	DELETION	1.769306	0.720586
YKR095W	MLP1	DELETION	-0.245066	0.259357
YKR096W	YKR096W	DELETION	-0.271656	-0.191234
YKR098C	UBP11	DELETION	1.238751	1.020785
YKR099W	BAS1	DELETION	-3.17626	-0.946345
YKR100C	SKG1	DELETION	0.311588	-0.209589
YKR101W	SIR1	DELETION	1.800034	2.370629
YKR103W	NFT1	DELETION	0.128853	-0.651077
YLL001W	DNM1	DELETION	1.105547	0.68442
YLL002W	RTT109	DELETION	-2.583988	-4.651936
YLL019C	KNS1	DELETION	-0.768137	-0.464511
YLL021W	SPA2	DELETION	0.172166	0.642662
YLL024C	SSA2	DELETION	1.076411	-0.221959
YLL038C	ENT4	DELETION	0.67216	1.452769
YLL039C	UBI4	DELETION	-0.531129	4.128478
YLL040C	VPS13	DELETION	0.214732	0.172646
YLL043W	FPS1	DELETION	-3.787355	-8.343255
YLL045C	RPL8B	DELETION	4.557707	0.152345
YLL049W	LDB18	DELETION	0.191831	-0.502466
YLR006C	SSK1	DELETION	0.921611	-0.361316
YLR015W	BRE2	DELETION	4.38396	0.018644
YLR018C	POM34	DELETION	-5.166592	0.780653
YLR021W	IRC25	DELETION	-4.075864	-0.07016
YLR024C	UBR2	DELETION	-2.039039	-2.178112
YLR032W	RAD5	DELETION	-2.215138	-5.028918
YLR033W	RSC58	DAmP	NaN	NaN
YLR039C	RIC1	DELETION	-0.581242	-0.007704
YLR044C	PDC1	DELETION	0.71528	-0.223702

YLR055C	SPT8	DELETION	NaN	NaN
YLR056W	ERG3	DELETION	0.789141	-3.02228
YLR071C	RGR1	DAmP	NaN	NaN
YLR079W	SIC1	DELETION	-0.273194	0.208057
YLR082C	SRL2	DELETION	-1.062242	-0.27087
YLR083C	EMP70	DELETION	0.215356	-0.339702
YLR085C	ARP6	DELETION	NaN	NaN
YLR087C	CSF1	DELETION	NaN	NaN
YLR089C	ALT1	DELETION	-5.748011	1.066297
YLR091W	GEP5	DELETION	NaN	NaN
YLR095C	IOC2	DELETION	0.442248	0.655482
YLR096W	KIN2	DELETION	0.929677	-0.551389
YLR097C	HRT3	DELETION	0.047659	-0.167293
YLR102C	APC9	DELETION	-0.150423	-0.773085
YLR110C	CCW12	DELETION	-2.619765	-0.744544
YLR110C	CCW12	DELETION	-2.619765	-0.744544
YLR113W	HOG1	DELETION	1.173628	1.305273
YLR114C	AVL9	DELETION	-1.352016	1.18796
YLR119W	SRN2	DELETION	-5.838454	1.316549
YLR127C	APC2	DAmP	NaN	NaN
YLR128W	DCN1	DELETION	-1.500499	1.335546
YLR131C	ACE2	DELETION	0.933	0.250379
YLR133W	CKI1	DELETION	0.266567	-0.252178
YLR135W	SLX4	DELETION	-0.521007	-0.715024
YLR146C	SPE4	DELETION	0.214247	0.20137
YLR150W	STM1	DELETION	-3.275835	-0.600123
YLR154C	RNH203	DELETION	-1.342805	-0.07944
YLR177W	YLR177W	DELETION	1.179327	-0.603625
YLR180W	SAM1	DELETION	-0.258681	-1.68213
YLR181C	VTA1	DELETION	0.506252	-0.865943
YLR182W	SWI6	DELETION	-9.197483	-2.699814
YLR185W	RPL37A	DELETION	0.331163	-1.103239
YLR190W	MMR1	DELETION	3.177041	-1.230551
YLR191W	PEX13	DELETION	-1.562899	-0.032543
YLR192C	HCR1	DELETION	-2.553026	-0.480367
YLR200W	YKE2	DELETION	2.799372	2.481989
YLR206W	ENT2	DELETION	0.030052	-0.863973
YLR207W	HRD3	DELETION	0.01367	-0.641144
YLR210W	CLB4	DELETION	-0.283949	0.611519
YLR216C	CPR6	DELETION	-2.487407	0.320859
YLR219W	MSC3	DELETION	-1.672327	0.38463
YLR221C	RSA3	DELETION	1.459347	0.02011
YLR224W	YLR224W	DELETION	0.784144	0.107677
YLR228C	ECM22	DELETION	0.393291	0.108967
YLR233C	EST1	DELETION	0.209916	-0.519354
YLR234W	TOP3	DELETION	-2.801468	-10.903455
YLR238W	FAR10	DELETION	0.149702	-0.406271

YLR239C	LIP2	DELETION	1.582489	1.862995
YLR242C	ARV1	DELETION	2.174425	2.637259
YLR262C	YPT6	DELETION	-1.137973	-0.135274
YLR264W	RPS28B	DELETION	0.953745	0.41801
YLR265C	NEJ1	DELETION	-0.280358	-0.00429
YLR266C	PDR8	DELETION	1.538612	0.681886
YLR267W	BOP2	DELETION	0.47108	0.327021
YLR268W	SEC22	DELETION	-3.388507	-0.169587
YLR273C	PIG1	DELETION	1.07526	0.843132
YLR278C	YLR278C	DELETION	0.561006	0.087352
YLR287C	YLR287C	DELETION	-0.129036	0.215745
YLR287C-A	RPS30A	DELETION	0.332133	0.135502
YLR289W	GUF1	DELETION	-0.284322	0.765364
YLR292C	SEC72	DELETION	0.438667	-0.051451
YLR306W	UBC12	DELETION	0.392252	-0.01862
YLR312C	QNQ1	DELETION	0.885365	-2.386016
YLR315W	NKP2	DELETION	-2.842047	1.007734
YLR318W	EST2	DELETION	0.499814	0.396744
YLR319C	BUD6	DELETION	1.45128	0.283806
YLR320W	MMS22	DELETION	-8.446058	-5.990156
YLR324W	PEX30	DELETION	0.005235	0.386966
YLR330W	CHS5	DELETION	0.507108	-1.142908
YLR335W	NUP2	DELETION	-0.011815	0.566436
YLR337C	VRP1	DELETION	1.329973	-8.129076
YLR342W	FKS1	DELETION	-5.517817	2.772453
YLR350W	ORM2	DELETION	-1.821184	-0.463998
YLR353W	BUD8	DELETION	0.32957	0.493831
YLR357W	RSC2	DELETION	NaN	-5.986378
YLR360W	VPS38	DELETION	0.645521	0.660126
YLR361C	DCR2	DELETION	0.176902	0.244556
YLR363C	NMD4	DELETION	0.339832	-0.090148
YLR368W	MDM30	DELETION	NaN	NaN
YLR370C	ARC18	DELETION	1.56602	0.658295
YLR371W	ROM2	DELETION	NaN	NaN
YLR372W	SUR4	DELETION	-5.43895	-0.207396
YLR373C	VID22	DELETION	0.328424	0.825935
YLR376C	PSY3	DELETION	0.012114	0.533585
YLR381W	CTF3	DELETION	0.28203	-0.637391
YLR384C	IKI3	DELETION	-6.218331	2.293059
YLR386W	VAC14	DELETION	2.927654	2.917541
YLR388W	RPS29A	DELETION	0.771199	1.200052
YLR393W	ATP10	DELETION	0.061556	-0.274455
YLR394W	CST9	DELETION	-1.179627	0.963339
YLR398C	SKI2	DELETION	0.369287	-0.296259
YLR399C	BDF1	DELETION	1.082351	-8.508285
YLR401C	DUS3	DELETION	0.31353	0.202108
YLR410W	VIP1	DELETION	-8.383802	1.291215

YLR418C	CDC73	DELETION	3.843433	0.487502
YLR421C	RPN13	DELETION	0.045502	1.073673
YLR423C	ATG17	DELETION	0.759522	-0.111654
YLR425W	TUS1	DELETION	0.092813	0.099599
YLR426W	TDA5	DELETION	NaN	NaN
YLR429W	CRN1	DELETION	-0.210024	0.054755
YLR435W	TSR2	DELETION	NaN	-3.604215
YLR436C	ECM30	DELETION	-1.791569	-0.63
YLR442C	SIR3	DELETION	NaN	NaN
YLR450W	HMG2	DELETION	-0.362562	-0.274281
YLR452C	SST2	DELETION	1.023501	-1.087586
YLR454W	FMP27	DELETION	-0.463701	0.440538
YML001W	YPT7	DELETION	-0.274281	3.069473
YML007W	YAP1	DELETION	0.889523	-0.005614
YML008C	ERG6	DELETION	0.301641	-0.086858
YML012W	ERV25	DELETION	0.35489	-0.23597
YML013W	UBX2	DELETION	1.150242	0.953442
YML015C	TAF11	DAmP	NaN	NaN
YML016C	PPZ1	DELETION	NaN	NaN
YML017W	PSP2	DELETION	-1.909412	0.374326
YML019W	OST6	DELETION	-0.44482	-2.064544
YML022W	APT1	DELETION	0.930474	1.621877
YML028W	TSA1	DELETION	-8.336366	-14.827876
YML029W	USA1	DELETION	0.431668	0.249506
YML032C	RAD52	DELETION	-5.050514	-10.639408
YML034W	SRC1	DELETION	1.634332	-0.224826
YML035C	AMD1	DELETION	0.922198	-0.681414
YML038C	YMD8	DELETION	0.065584	-0.15582
YML041C	VPS71	DELETION	NaN	NaN
YML047C	PRM6	DELETION	0.559984	1.310458
YML048W	GSF2	DELETION	-3.029113	-0.137207
YML050W	AIM32	DELETION	0.047675	-0.96014
YML051W	GAL80	DELETION	NaN	NaN
YML055W	SPC2	DELETION	-0.836803	-1.408525
YML057W	CMP2	DELETION	-0.031258	-0.43959
YML059C	NTE1	DELETION	-0.060635	-0.477415
YML062C	MFT1	DELETION	-0.752683	-1.401714
YML063W	RPS1B	DELETION	NaN	NaN
YML065W	ORC1	DAmP	NaN	NaN
YML066C	SMA2	DELETION	0.009962	0.413172
YML067C	ERV41	DELETION	0.230594	-1.527397
YML071C	COG8	DELETION	-0.900908	0.309772
YML072C	TCB3	DELETION	0.24653	-0.6552
YML075C	HMG1	DELETION	0.413839	0.619044
YML088W	UFO1	DELETION	0.507511	0.008888
YML094W	GIM5	DELETION	5.686072	1.939478
YML095C	RAD10	DELETION	0.634313	0.191372

YML097C	VPS9	DELETION	-6.819236	-2.267079
YML098W	TAF13	DAmP	NaN	NaN
YML100W	TSL1	DELETION	0.899969	-0.020032
YML101C	CUE4	DELETION	0.728541	-0.715968
YML102W	CAC2	DELETION	NaN	-1.434175
YML103C	NUP188	DELETION	-4.774335	3.086122
YML107C	PML39	DELETION	-0.901939	-1.279674
YML108W	YML108W	DELETION	0.557676	-0.476027
YML111W	BUL2	DELETION	-0.244298	0.01219
YML112W	CTK3	DELETION	-3.01002	-2.818249
YML114C	TAF8	DAmP	NaN	NaN
YML117W	NAB6	DELETION	-0.484722	-1.455225
YML119W	YML119W	DELETION	0.446214	0.031257
YML121W	GTR1	DELETION	-1.838564	1.587326
YML123C	PHO84	DELETION	-0.11063	-0.297953
YML124C	TUB3	DELETION	2.807968	1.242034
YML128C	MSC1	DELETION	NaN	-1.602887
YMR003W	AIM34	DELETION	0.547936	0.125842
YMR004W	MVP1	DELETION	0.505077	-2.456412
YMR005W	TAF4	DAmP	NaN	NaN
YMR010W	YMR010W	DELETION	-0.483464	0.648753
YMR015C	ERG5	DELETION	-1.019094	-2.772171
YMR016C	SOK2	DELETION	0.93493	1.951192
YMR022W	UBC7	DELETION	-0.016822	-0.493588
YMR026C	PEX12	DELETION	0.004652	-0.70388
YMR029C	FAR8	DELETION	-0.511065	1.279305
YMR035W	IMP2	DELETION	NaN	NaN
YMR036C	MIH1	DELETION	0.085735	1.251077
YMR038C	CCS1	DELETION	NaN	NaN
YMR039C	SUB1	DELETION	-0.644087	0.25765
YMR042W	ARG80	DELETION	0.677098	0.367055
YMR048W	CSM3	DELETION	-0.573396	1.351104
YMR052W	FAR3	DELETION	0.02837	0.155657
YMR054W	STV1	DELETION	-1.497848	-0.525508
YMR055C	BUB2	DELETION	0.529534	-0.753166
YMR058W	FET3	DELETION	-0.098769	1.439168
YMR060C	SAM37	DELETION	0.898751	0.996003
YMR065W	KAR5	DELETION	0.304816	-0.609238
YMR067C	UBX4	DELETION	-1.654404	-0.030883
YMR068W	AVO2	DELETION	-0.306377	-0.44219
YMR070W	MOT3	DELETION	-1.150035	0.932151
YMR073C	IRC21	DELETION	-2.807091	-3.105209
YMR075W	RCO1	DELETION	2.730859	-0.186187
YMR078C	CTF18	DELETION	NaN	NaN
YMR080C	NAM7	DELETION	-1.925453	-1.259639
YMR092C	AIP1	DELETION	-1.295174	0.42306
YMR100W	MUB1	DELETION	0.568572	-1.163526

YMR102C	YMR102C	DELETION	1.585338	-0.412949
YMR106C	YKU80	DELETION	-0.084156	0.453893
YMR109W	MYO5	DELETION	0.230722	-0.7913
YMR111C	YMR111C	DELETION	-1.690911	0.196571
YMR116C	ASC1	DELETION	NaN	-4.482619
YMR119W	ASI1	DELETION	1.088893	0.223016
YMR121C	RPL15B	DELETION	1.163517	1.610148
YMR123W	PKR1	DELETION	-0.100807	-1.290594
YMR127C	SAS2	DELETION	0.516136	-0.708193
YMR129W	POM152	DELETION	0.887865	0.007266
YMR133W	REC114	DELETION	-0.051785	-0.520508
YMR138W	CIN4	DELETION	-0.788168	0.926946
YMR143W	RPS16A	DELETION	-0.360674	0.004339
YMR153W	NUP53	DELETION	-0.237207	-0.142285
YMR154C	RIM13	DELETION	-4.763853	-0.529001
YMR161W	HLJ1	DELETION	-0.146178	-0.779256
YMR172W	HOT1	DELETION	-0.315819	0.518157
YMR176W	ECM5	DELETION	-0.614068	0.840372
YMR179W	SPT21	DELETION	-2.903431	1.126801
YMR186W	HSC82	DELETION	-1.06337	0.266741
YMR190C	SGS1	DELETION	-1.536466	0.494046
YMR198W	CIK1	DELETION	-4.491977	-0.681722
YMR199W	CLN1	DELETION	-1.24813	-1.191225
YMR201C	RAD14	DELETION	-2.97779	-1.018825
YMR202W	ERG2	DELETION	1.063172	-2.12661
YMR205C	PFK2	DELETION	-0.080518	0.112498
YMR209C	YMR209C	DELETION	-0.550289	0.34355
YMR214W	SCJ1	DELETION	-0.185871	-1.576159
YMR216C	SKY1	DELETION	-2.797276	0.248074
YMR219W	ESC1	DELETION	-0.071826	0.642564
YMR223W	UBP8	DELETION	0.685959	0.58747
YMR224C	MRE11	DELETION	-4.310476	-10.497706
YMR227C	TAF7	DAmP	NaN	NaN
YMR230W	RPS10B	DELETION	1.202483	0.788897
YMR231W	PEP5	DELETION	-0.694605	1.527041
YMR236W	TAF9	DAmP	NaN	NaN
YMR247C	RKR1	DELETION	-0.399509	0.400462
YMR255W	GFD1	DELETION	0.859806	1.319185
YMR263W	SAP30	DELETION	-10.103703	1.250255
YMR264W	CUE1	DELETION	-0.896711	-0.223326
YMR266W	RSN1	DELETION	-0.17674	-0.344674
YMR269W	TMA23	DELETION	-0.173673	0.093861
YMR272C	SCS7	DELETION	-1.973265	-1.543941
YMR273C	ZDS1	DELETION	-1.453198	0.194441
YMR274C	RCE1	DELETION	-1.729446	1.334016
YMR275C	BUL1	DELETION	-3.42755	-0.951941
YMR277W	FCP1	DAmP	NaN	NaN

YMR280C	CAT8	DELETION	-0.415314	-0.677367
YMR282C	AEP2	DELETION	-0.650789	-1.446822
YMR283C	RIT1	DELETION	-1.198278	0.389682
YMR284W	YKU70	DELETION	-0.884211	0.199739
YMR285C	NGL2	DELETION	0.542441	1.411618
YMR292W	GOT1	DELETION	0.349962	-0.204978
YMR294W	JNM1	DELETION	2.853592	0.445348
YMR299C	DYN3	DELETION	0.694536	-0.085722
YMR304W	UBP15	DELETION	-2.714281	-1.029655
YMR307W	GAS1	DELETION	-3.402495	-1.566533
YMR312W	ELP6	DELETION	-5.102987	1.210012
YNL001W	DOM34	DELETION	-1.008384	0.969351
YNL008C	ASI3	DELETION	0.685535	-0.152596
YNL016W	PUB1	DELETION	-0.493802	1.178188
YNL021W	HDA1	DELETION	2.397234	0.316241
YNL025C	SSN8	DELETION	-1.491255	3.445448
YNL027W	CRZ1	DELETION	1.15431	-1.604325
YNL030W	HHF2	DELETION	0.373743	0.07055
YNL031C	HHT2	DELETION	-0.419988	-0.408743
YNL032W	SIW14	DELETION	2.654089	0.173098
YNL037C	IDH1	DELETION	-0.418563	0.593662
YNL041C	COG6	DELETION	-0.449725	0.684646
YNL044W	YIP3	DELETION	0.48691	-0.047002
YNL049C	SFB2	DELETION	0.488777	-0.827873
YNL051W	COG5	DELETION	-1.375825	-0.609228
YNL053W	MSG5	DELETION	1.076753	-0.667639
YNL054W	VAC7	DELETION	1.701568	0.488296
YNL064C	YDJ1	DELETION	0.296401	-0.486106
YNL068C	FKH2	DELETION	-0.236654	0.679349
YNL069C	RPL16B	DELETION	0.643253	-1.09986
YNL070W	TOM7	DELETION	-0.30202	0.150476
YNL071W	LAT1	DELETION	-0.320133	1.656632
YNL072W	RNH201	DELETION	-0.413027	0.2178
YNL076W	MKS1	DELETION	-3.754923	0.676077
YNL079C	TPM1	DELETION	-4.259455	2.224791
YNL080C	EOS1	DELETION	NaN	NaN
YNL082W	PMS1	DELETION	NaN	NaN
YNL086W	SNN1	DELETION	NaN	NaN
YNL087W	TCB2	DELETION	-0.173727	0.274855
YNL097C	PHO23	DELETION	-5.010898	1.5526
YNL098C	RAS2	DELETION	0.368873	0.741653
YNL099C	OCA1	DELETION	1.87108	-0.766651
YNL106C	INP52	DELETION	-0.855111	2.015049
YNL107W	YAF9	DELETION	NaN	NaN
YNL116W	DMA2	DELETION	1.93933	-0.532141
YNL119W	NCS2	DELETION	NaN	NaN
YNL128W	TEP1	DELETION	NaN	NaN

YNL135C	FPR1	DELETION	-1.665232	-0.816572
YNL136W	EAF7	DELETION	NaN	NaN
YNL147W	LSM7	DELETION	-4.505081	0.861577
YNL153C	GIM3	DELETION	2.043472	0.275302
YNL154C	YCK2	DELETION	-0.234156	0.165999
YNL166C	BNI5	DELETION	0.176995	0.75355
YNL167C	SKO1	DELETION	-0.185172	0.48133
YNL172W	APC1	DAmP	NaN	NaN
YNL183C	NPR1	DELETION	-2.119944	0.600443
YNL192W	CHS1	DELETION	-0.258321	-1.33491
YNL197C	WHI3	DELETION	-7.517496	-7.968208
YNL199C	GCR2	DELETION	-6.481941	0.027959
YNL201C	PSY2	DELETION	-2.629532	-0.367671
YNL206C	RTT106	DELETION	-2.0033	0.138875
YNL214W	PEX17	DELETION	-0.493939	1.62975
YNL215W	IES2	DELETION	-0.338696	2.727295
YNL218W	MGS1	DELETION	-1.649769	1.694953
YNL219C	ALG9	DELETION	-0.863859	-0.556922
YNL224C	SQS1	DELETION	0.960251	1.565473
YNL227C	JJJ1	DELETION	-0.871636	1.556761
YNL229C	URE2	DELETION	0.164506	0.708551
YNL230C	ELA1	DELETION	-0.228968	-0.162786
YNL231C	PDR16	DELETION	-0.839177	-1.300676
YNL233W	BNI4	DELETION	-1.299135	0.279108
YNL236W	SIN4	DELETION	NaN	NaN
YNL238W	KEX2	DELETION	0.36476	1.434888
YNL246W	VPS75	DELETION	2.605592	2.093228
YNL253W	TEX1	DELETION	-2.109392	-0.864284
YNL255C	GIS2	DELETION	0.26165	1.869771
YNL262W	POL2	DAmP	NaN	NaN
YNL270C	ALP1	DELETION	NaN	NaN
YNL271C	BNI1	DELETION	NaN	NaN
YNL273W	TOF1	DELETION	-0.748038	1.481873
YNL278W	CAF120	DELETION	0.016623	-0.192027
YNL284C	MRPL10	DELETION	0.759579	1.672527
YNL288W	CAF40	DELETION	1.796735	1.772435
YNL291C	MID1	DELETION	1.203431	-2.874629
YNL292W	PUS4	DELETION	-0.612815	-0.486502
YNL294C	RIM21	DELETION	-5.18198	-2.703728
YNL297C	MON2	DELETION	-0.740408	0.872485
YNL298W	CLA4	DELETION	-5.72933	0.118174
YNL299W	TRF5	DELETION	0.394818	1.040406
YNL302C	RPS19B	DELETION	-1.619383	-0.1017
YNL307C	MCK1	DELETION	-0.538559	1.264765
YNL309W	STB1	DELETION	1.14318	0.390034
YNL311C	SKP2	DELETION	NaN	NaN
YNL315C	ATP11	DELETION	0.081296	-0.58511

YNL322C	KRE1	DELETION	-0.393849	0.187339
YNL323W	LEM3	DELETION	-0.414548	-1.252149
YNL325C	FIG4	DELETION	0.193765	0.680085
YNL329C	PEX6	DELETION	0.821984	-0.008406
YNL330C	RPD3	DELETION	-0.840419	-0.48333
YNR004W	SWM2	DELETION	NaN	NaN
YNR006W	VPS27	DELETION	-4.623396	-2.465668
YNR010W	CSE2	DELETION	-7.182154	-4.290287
YNR020C	ATP23	DELETION	1.016473	-0.443641
YNR030W	ALG12	DELETION	0.007727	-0.315491
YNR031C	SSK2	DELETION	0.219815	-0.049323
YNR032W	PPG1	DELETION	1.375713	-0.023006
YNR041C	COQ2	DELETION	0.113802	-0.635663
YNR047W	FPK1	DELETION	NaN	NaN
YNR051C	BRE5	DELETION	-2.455164	-0.519881
YNR052C	POP2	DELETION	NaN	NaN
YNR060W	FRE4	DELETION	0.169724	0.280312
YNR065C	YNR065C	DELETION	0.84409	-0.07476
YNR072W	HXT17	DELETION	0.441648	1.638884
YOL001W	PHO80	DELETION	NaN	NaN
YOL003C	PFA4	DELETION	-0.233107	-0.704116
YOL004W	SIN3	DELETION	-2.771279	1.60773
YOL005C	RPB11	DAmP	NaN	NaN
YOL006C	TOP1	DELETION	-0.875079	-2.9716
YOL009C	MDM12	DELETION	2.754212	2.647554
YOL011W	PLB3	DELETION	-0.314217	0.151015
YOL012C	HTZ1	DELETION	-9.49752	1.359543
YOL013C	HRD1	DELETION	0.972662	-0.231855
YOL017W	ESC8	DELETION	-0.136625	-0.808515
YOL018C	TLG2	DELETION	-0.496012	-2.831357
YOL020W	TAT2	DELETION	NaN	NaN
YOL027C	MDM38	DELETION	0.458505	1.508432
YOL031C	SIL1	DELETION	0.091734	-0.138414
YOL032W	OPI10	DELETION	-0.621802	-1.331929
YOL041C	NOP12	DELETION	0.511034	-0.538315
YOL044W	PEX15	DELETION	-1.732112	-0.890001
YOL045W	PSK2	DELETION	0.696618	1.449798
YOL049W	GSH2	DELETION	-0.693415	0.744353
YOL051W	GAL11	DELETION	0.291111	0.033647
YOL054W	PSH1	DELETION	0.790591	0.581371
YOL061W	PRS5	DELETION	1.253125	-0.55153
YOL062C	APM4	DELETION	-0.047057	-0.902812
YOL064C	MET22	DELETION	-0.641747	1.403247
YOL065C	INP54	DELETION	0.75182	0.557954
YOL067C	RTG1	DELETION	-2.501888	-1.356246
YOL068C	HST1	DELETION	2.863917	0.751101
YOL080C	REX4	DELETION	-0.257289	0.28722

YOL081W	IRA2	DELETION	-2.391934	-9.095616
YOL090W	MSH2	DELETION	-0.585849	0.574253
YOL093W	TRM10	DELETION	0.115509	0.42339
YOL108C	INO4	DELETION	0.337529	-1.117854
YOL111C	MDY2	DELETION	NaN	NaN
YOL115W	PAP2	DELETION	1.392707	-0.007853
YOL116W	MSN1	DELETION	0.048477	-0.06343
YOL133W	HRT1	DAmP	NaN	NaN
YOL135C	MED7	DAmP	NaN	NaN
YOL148C	SPT20	DELETION	NaN	NaN
YOR001W	RRP6	DELETION	NaN	NaN
YOR002W	ALG6	DELETION	-0.388683	-0.367908
YOR006C	TSR3	DELETION	0.016009	0.948097
YOR008C	SLG1	DELETION	0.056149	-0.023284
YOR014W	RTS1	DELETION	-1.398408	-0.537508
YOR016C	ERP4	DELETION	-0.378531	-0.442738
YOR023C	AHC1	DELETION	0.906622	0.24092
YOR025W	HST3	DELETION	-0.002306	-0.733979
YOR026W	BUB3	DELETION	2.386151	3.309648
YOR027W	STI1	DELETION	0.167374	1.258863
YOR030W	DFG16	DELETION	NaN	NaN
YOR033C	EXO1	DELETION	NaN	NaN
YOR034C	AKR2	DELETION	1.309699	-1.165315
YOR035C	SHE4	DELETION	NaN	NaN
YOR038C	HIR2	DELETION	-1.214292	-1.057861
YOR039W	CKB2	DELETION	NaN	NaN
YOR042W	CUE5	DELETION	0.360251	-0.332898
YOR043W	WHI2	DELETION	0.309101	-2.233052
YOR047C	STD1	DELETION	0.65573	-0.72013
YOR057W	SGT1	DAmP	NaN	NaN
YOR058C	ASE1	DELETION	-7.008133	NaN
YOR061W	CKA2	DELETION	1.345752	-0.266512
YOR064C	YNG1	DELETION	0.377954	0.554221
YOR065W	CYT1	DELETION	-0.637709	-1.025602
YOR067C	ALG8	DELETION	-0.423491	0.037175
YOR068C	VAM10	DELETION	-2.320055	-3.199994
YOR069W	VPS5	DELETION	-1.559693	0.517672
YOR070C	GYP1	DELETION	0.679309	-0.85363
YOR076C	SKI7	DELETION	-0.062759	0.604642
YOR078W	BUD21	DELETION	0.912707	-0.735376
YOR080W	DIA2	DELETION	-1.656743	1.481005
YOR083W	WHI5	DELETION	-1.558211	-0.060148
YOR085W	OST3	DELETION	-2.09988	-3.232497
YOR089C	VPS21	DELETION	-1.113145	3.223016
YOR101W	RAS1	DELETION	0.715362	0.332974
YOR106W	VAM3	DELETION	0.272897	-2.689811
YOR109W	INP53	DELETION	0.179648	-0.24459

YOR112W	CEX1	DELETION	0.905621	0.503271
YOR113W	AZF1	DELETION	-0.447004	-0.896272
YOR115C	TRS33	DELETION	0.04063	-0.346441
YOR123C	LEO1	DELETION	-0.195031	-1.300891
YOR124C	UBP2	DELETION	-1.367402	0.175455
YOR127W	RGA1	DELETION	0.26947	-0.211615
YOR132W	VPS17	DELETION	-1.703698	-1.1787
YOR140W	SFL1	DELETION	1.591365	0.944808
YOR141C	ARP8	DELETION	NaN	NaN
YOR144C	ELG1	DELETION	-0.273173	0.415005
YOR151C	RPB2	DAmP	NaN	NaN
YOR154W	SLP1	DELETION	0.286247	0.534545
YOR156C	NFI1	DELETION	-0.400818	1.535956
YOR158W	PET123	DELETION	-2.142548	0.219957
YOR165W	SEY1	DELETION	-0.049078	0.810671
YOR171C	LCB4	DELETION	0.570623	-0.10911
YOR174W	MED4	DAmP	NaN	NaN
YOR178C	GAC1	DELETION	1.201618	1.123865
YOR179C	SYC1	DELETION	-1.681703	-0.494866
YOR184W	SER1	DELETION	0.97784	-0.777515
YOR189W	IES4	DELETION	NaN	NaN
YOR191W	ULS1	DELETION	1.075517	-0.573305
YOR195W	SLK19	DELETION	NaN	NaN
YOR202W	WT_HIS3	WT_his3D::KAN	NaN	NaN
YOR202W	WT_HIS3	WT_his3D::KAN	NaN	NaN
YOR208W	PTP2	DELETION	-0.285541	-4.84271
YOR209C	NPT1	DELETION	NaN	NaN
YOR213C	SAS5	DELETION	0.941515	0.282672
YOR216C	RUD3	DELETION	-1.601882	-0.308812
YOR224C	RPB8	DAmP	NaN	NaN
YOR231W	MKK1	DELETION	-0.585877	-0.442403
YOR233W	KIN4	DELETION	0.059028	-0.069499
YOR234C	RPL33B	DELETION	-0.752044	0.41109
YOR243C	PUS7	DELETION	-0.866461	1.033638
YOR244W	ESA1	DAmP	NaN	NaN
YOR249C	APC5	DAmP	NaN	NaN
YOR264W	DSE3	DELETION	-0.456627	-0.329804
YOR265W	RBL2	DELETION	1.308359	-0.789889
YOR266W	PNT1	DELETION	-1.567508	1.354944
YOR269W	PAC1	DELETION	2.541759	0.507412
YOR275C	RIM20	DELETION	-8.055753	-1.770642
YOR284W	HUA2	DELETION	-0.646705	0.406088
YOR288C	MPD1	DELETION	0.708934	1.315822
YOR290C	SNF2	DELETION	NaN	NaN
YOR297C	TIM18	DELETION	0.603532	-0.106849
YOR298C-A	MBF1	DELETION	0.282467	0.014669
YOR303W	CPA1	DELETION	NaN	NaN

YOR304W	ISW2	DELETION	-0.479326	-0.035628
YOR307C	SLY41	DELETION	-0.027493	-0.546029
YOR308C	SNU66	DELETION	1.098774	1.237393
YOR311C	DGK1	DELETION	-0.344406	-0.065544
YOR312C	RPL20B	DELETION	1.113656	-3.684463
YOR321W	PMT3	DELETION	0.807994	0.144395
YOR322C	LDB19	DELETION	-2.540603	1.481695
YOR327C	SNC2	DELETION	2.530405	0.336297
YOR330C	MIP1	DELETION	-1.759965	0.672569
YOR339C	UBC11	DELETION	0.047753	-0.728278
YOR342C	YOR342C	DELETION	0.524115	-0.545518
YOR344C	TYE7	DELETION	-0.040624	-0.200669
YOR346W	REV1	DELETION	-0.102709	-0.769826
YOR349W	CIN1	DELETION	1.18091	0.063712
YOR355W	GDS1	DELETION	-3.754285	-0.329196
YOR358W	HAP5	DELETION	-1.394826	-3.194707
YOR360C	PDE2	DELETION	-2.080973	-4.263327
YOR368W	RAD17	DELETION	0.669785	-0.942942
YOR371C	GPB1	DELETION	0.006034	-0.937149
YPL001W	HAT1	DELETION	1.59482	0.320571
YPL008W	CHL1	DELETION	0.380443	0.566257
YPL011C	TAF3	DAmP	NaN	NaN
YPL017C	IRC15	DELETION	-0.135617	0.016262
YPL018W	CTF19	DELETION	1.624735	0.785996
YPL022W	RAD1	DELETION	-0.25835	-2.479805
YPL024W	RMI1	DELETION	-0.229641	-1.14559
YPL037C	EGD1	DELETION	0.523603	-0.542734
YPL041C	YPL041C	DELETION	0.036612	-0.01042
YPL042C	SSN3	DELETION	NaN	NaN
YPL046C	ELC1	DELETION	0.462883	0.8987
YPL047W	SGF11	DELETION	1.100026	-0.513452
YPL051W	ARL3	DELETION	0.008182	-1.327201
YPL055C	LGE1	DELETION	3.666449	0.486144
YPL057C	SUR1	DELETION	-0.252903	-2.902233
YPL068C	YPL068C	DELETION	-1.062032	0.831591
YPL069C	BTS1	DELETION	4.802655	5.548292
YPL072W	UBP16	DELETION	0.297027	-0.184165
YPL079W	RPL21B	DELETION	-5.807298	-6.544859
YPL086C	ELP3	DELETION	-3.919586	1.977073
YPL089C	RLM1	DELETION	0.671406	0.805649
YPL090C	RPS6A	DELETION	-2.869618	2.027934
YPL100W	ATG21	DELETION	0.062619	0.163023
YPL101W	ELP4	DELETION	-8.184383	1.611163
YPL106C	SSE1	DELETION	-2.101482	0.656551
YPL113C	YPL113C	DELETION	0.32701	-1.839996
YPL115C	BEM3	DELETION	0.127554	1.063784
YPL116W	HOS3	DELETION	0.48517	-0.861844

YPL119C	DBP1	DELETION	0.148096	-0.522877
YPL120W	VPS30	DELETION	-0.583208	1.43023
YPL122C	TFB2	DAmP	NaN	NaN
YPL125W	KAP120	DELETION	-1.529336	0.873625
YPL127C	HHO1	DELETION	1.579359	-0.828053
YPL138C	SPP1	DELETION	1.658599	-0.433677
YPL138C	SPP1	DELETION	1.658599	-0.433677
YPL139C	UME1	DELETION	-3.16657	0.547362
YPL140C	MKK2	DELETION	0.412989	0.822531
YPL141C	FRK1	DELETION	NaN	NaN
YPL144W	POC4	DELETION	-7.806606	-6.989074
YPL150W	YPL150W	DELETION	-0.070166	-0.703175
YPL152W	RRD2	DELETION	-1.310434	-1.579454
YPL155C	KIP2	DELETION	0.380806	-0.535657
YPL157W	TGS1	DELETION	-0.322104	-2.918468
YPL158C	AIM44	DELETION	1.561318	-0.243467
YPL161C	BEM4	DELETION	-1.423045	1.244986
YPL165C	SET6	DELETION	0.354515	1.725483
YPL167C	REV3	DELETION	-0.103898	-1.453373
YPL172C	COX10	DELETION	0.082757	0.178828
YPL174C	NIP100	DELETION	1.66271	0.755161
YPL177C	CUP9	DELETION	-1.643501	-0.718304
YPL178W	CBC2	DELETION	NaN	NaN
YPL180W	TCO89	DELETION	-2.93906	2.007348
YPL181W	CTI6	DELETION	-1.24786	-0.254061
YPL183C	RTT10	DELETION	-1.015428	0.119796
YPL184C	MRN1	DELETION	0.429789	0.151672
YPL189W	GUP2	DELETION	0.096066	-0.945646
YPL192C	PRM3	DELETION	0.05059	-0.374867
YPL194W	DDC1	DELETION	0.2856	-1.041847
YPL195W	APL5	DELETION	-0.428954	-1.024077
YPL196W	OXR1	DELETION	-0.443951	-0.818326
YPL212C	PUS1	DELETION	0.653045	1.182057
YPL213W	LEA1	DELETION	1.30024	0.04146
YPL214C	THI6	DELETION	2.026002	0.633957
YPL226W	NEW1	DELETION	0.685597	-0.436415
YPL227C	ALG5	DELETION	-0.695541	-0.481214
YPL239W	YAR1	DELETION	-0.281041	1.256782
YPL241C	CIN2	DELETION	1.643912	0.638608
YPL244C	HUT1	DELETION	-0.222112	-0.020695
YPL244C	HUT1	DELETION	-0.222112	-0.020695
YPL248C	GAL4	DELETION	0.262092	1.173411
YPL253C	VIK1	DELETION	0.552788	-0.160785
YPL254W	HFI1	DELETION	NaN	NaN
YPL256C	CLN2	DELETION	-0.811315	1.143029
YPL269W	KAR9	DELETION	0.502338	0.894154
YPR009W	SUT2	DELETION	0.366343	-0.026855

YPR017C	DSS4	DELETION	-0.277331	-0.942437
YPR018W	RLF2	DELETION	-3.4195	-0.076867
YPR022C	YPR022C	DELETION	-0.329815	-0.221898
YPR023C	EAF3	DELETION	2.430474	0.871984
YPR024W	YME1	DELETION	2.603511	-0.987978
YPR030W	CSR2	DELETION	-0.175583	0.849061
YPR031W	NTO1	DELETION	0.098753	-1.016887
YPR032W	SRO7	DELETION	-0.413011	-4.634259
YPR034W	ARP7	DAmP	NaN	NaN
YPR043W	RPL43A	DELETION	-4.489801	2.677059
YPR045C	MNI2	DELETION	-6.31256	2.560165
YPR046W	MCM16	DELETION	0.710449	-0.18826
YPR051W	MAK3	DELETION	-3.485016	-0.356538
YPR052C	NHP6A	DELETION	-1.344229	-0.330854
YPR054W	SMK1	DELETION	0.49414	0.14553
YPR056W	TFB4	DAmP	NaN	NaN
YPR057W	BRR1	DELETION	0.693635	1.831421
YPR063C	YPR063C	DELETION	-1.008408	-0.612553
YPR065W	ROX1	DELETION	-0.172441	-1.585276
YPR066W	UBA3	DELETION	1.902823	0.851152
YPR068C	HOS1	DELETION	-0.111097	-0.498567
YPR069C	SPE3	DELETION	-0.68366	-0.125473
YPR070W	MED1	DELETION	-0.718475	4.796885
YPR072W	NOT5	DELETION	0.917293	-0.300523
YPR075C	OPY2	DELETION	0.406354	-0.438991
YPR084W	YPR084W	DELETION	-4.543114	2.338415
YPR086W	SUA7	DAmP	NaN	NaN
YPR093C	ASR1	DELETION	-0.158043	0.638162
YPR106W	ISR1	DELETION	0.663264	1.750769
YPR119W	CLB2	DELETION	-1.276967	0.434406
YPR120C	CLB5	DELETION	-2.095114	-1.090817
YPR129W	SCD6	DELETION	-0.051238	-0.351466
YPR134W	MSS18	DELETION	-0.588134	0.104571
YPR135W	CTF4	DELETION	-4.704362	-2.607789
YPR140W	TAZ1	DELETION	0.52276	0.807175
YPR141C	KAR3	DELETION	0.474419	-0.641333
YPR152C	URN1	DELETION	1.168623	0.939408
YPR164W	MMS1	DELETION	-1.761746	-4.432447
YPR167C	MET16	DELETION	-5.848694	0.118538
YPR168W	NUT2	DAmP	NaN	NaN
YPR173C	VPS4	DELETION	0.408887	-0.35725
YPR174C	YPR174C	DELETION	-0.992869	0.570888
YPR175W	DPB2	DAmP	NaN	NaN
YPR189W	SKI3	DELETION	-0.936914	1.075287

Supplementary Table 2.

Set5 genetic interactions. List of genes that have significant genetic interactions (S >

2.0 or S < -2.5) with *SET5*. Manually-curated categories were described in ref. 5.

ORF	Gene Name	Category
YAL001C	TOP1	DNA replication
YAL002W	TLG2	OTHER
YAL003W	TGS1	Splicing and mRNA processing
YAL004W	SWI4	Transcription RNA pol II
YAL005C	SUR1	Metabolism
YAL007C	STE50	signal transduction
YAL008W	SSN8	Transcription RNA pol II
YAL009W	SRS2	DNA Recombination or Repair
YAL010C	SRO7	OTHER
YAL011W	SRB8	Transcription RNA pol II
YAL012W	SRB5	Transcription RNA pol II
YAL013W	SPT3	Transcription RNA pol II
YAL014C	SLX8	DNA Recombination or Repair
YAL015C	SLT2	signal transduction
YAL016C-A	SKT5	Morphogenesis and Wall Integrity
YAL016C-B	SIR1	Chromatin Modification or Remodeling
YAL016W	SLA1	Morphogenesis and Wall Integrity
YAL017W	RTT107	DNA Recombination or Repair
YAL018C	RTT101	DNA Recombination or Repair
YAL019W	RSC4	Chromatin Modification or Remodeling
YAL019W-A	RSC2	Chromatin Modification or Remodeling
YAL020C	RSC1	Chromatin Modification or Remodeling
YAL021C	RPS6B	Ribosome
YAL022C	RPP2B	Ribosome
YAL023C	RPL8A	Ribosome
YAL024C	RPL20B	Ribosome
YAL025C	RPB8	Transcription RNA pol II
YAL026C	ROT2	Morphogenesis and Wall Integrity
YAL026C-A	RER1	OTHER
YAL027W	RAD54	DNA Recombination or Repair
YAL028W	RAD5	DNA Recombination or Repair
YAL029C	PTP2	signal transduction
YAL030W	PTC1	signal transduction
YAL031C	PRE9	proteasome or ubiquitin cycle
YAL031W-A	PMR1	signal transduction
YAL032C	PDE2	signal transduction
YAL033W	OST3	Metabolism
YAL034C	NUP133	protein folding or transport
YAL034C-B	NEM1	Morphogenesis and Wall Integrity
YAL035W	NCS6	Morphogenesis and Wall Integrity

YAL036C	MUS81	DNA Recombination or Repair
YAL037C-A	MON1	protein folding or transport
YAL037C-B	MNN10	Metabolism
YAL037W	MTC5	OTHER
YAL038W	MMS1	DNA Recombination or Repair
YAL040C	MID1	signal transduction
YAL041W	MGA2	Transcription RNA pol II
YAL042C-A	MED1	Transcription RNA pol II
YAL042W	MET18	Transcription RNA pol II
YAL043C	LSM6	OTHER
YAL044C	KIP3	chromosome segregation
YAL044W-A	ISY1	OTHER
YAL045C	IRE1	signal transduction
YAL046C	IRA2	signal transduction
YAL047C	INP52	OTHER
YAL047W-A	ILM1	Mitochondria
YAL048C	IKI1	Transcription RNA pol II
YAL049C	IES2	Chromatin Modification or Remodeling
YAL051W	HUR1	DNA replication
YAL053W	HHF1	Chromatin Modification or Remodeling
YAL054C	HAP5	Transcription RNA pol II
YAL055W	HAP2	Transcription RNA pol II
YAL056C-A	FLC2	Morphogenesis and Wall Integrity
YAL056W	GOS1	OTHER
YAL058W	ERG5	Metabolism
YAL059C-A	DST1	Transcription RNA pol II
YAL059W	ERG3	Metabolism
YAL060W	DRS2	OTHER
YAL061W	CWH41	Morphogenesis and Wall Integrity
YAL062W	CTK1	Transcription RNA pol II
YAL063C	CPR7	protein folding or transport
YAL063C-A	CCH1	signal transduction
YAL064C-A	BDF2	Chromatin Modification or Remodeling
YAL064W	BUD14	Morphogenesis and Wall Integrity
YAL064W-B	BDF1	Transcription RNA pol II
YAL065C	BCK1	signal transduction
YAL066W	ATG8	OTHER
YAL067C	ASC1	Ribosome
YAL067W-A	ARO80	Transcription RNA pol II
YAL068C	ARF1	OTHER
YAL068W-A	ADA2	Transcription RNA pol II
YAL069W	ACK1	Morphogenesis and Wall Integrity
YAR002C-A	TSR2	OTHER
YAR003W	UBI4	proteasome or ubiquitin cycle
YAR007C	UBP12	proteasome or ubiquitin cycle
YAR008W	VAM10	OTHER
YAR014C	VAM3	OTHER

YAR015W	VAM6	OTHER
YAR018C	VAM7	OTHER
YAR019C	VPS21	protein folding or transport
YAR019W-A	VPS24	protein folding or transport
YAR020C	VPS51	protein folding or transport
YAR023C	VRP1	cell cycle
YAR027W	YPT7	OTHER
YAR028W	YTA7	Chromatin Modification or Remodeling
YBR094W	PBY1	OTHER
YCL037C	SRO9	OTHER
YDR004W	RAD57	DNA Recombination or Repair
YDR074W	TPS2	Metabolism
YDR076W	RAD55	DNA Recombination or Repair
YDR080W	VPS41	Protein Folding or Transport
YDR289C	RTT103	Transcription RNA pol II
YDR293C	SSD1	Morphogenesis and Cell Wall Integrity
YDR308C	SRB7 - DAmP	Transcription RNA pol II
YDR369C	XRS2	Telomere Maintenance
YDR389W	SAC7	Signal Transduction
YEL033W	MTC7	Telomere Maintenance
YER016W	BIM1	Cell Cycle
YER151C	UBP3	Proteasome OR Ubiquitin Cycle
YER162C	RAD4	DNA Recombination or Repair
YFL013C	IES1	Chromatin Modification or Remodeling
YFL018C	LPD1	Metabolism
YGL003C	CDH1	Cell Cycle
YGL045W	RIM8	Metabolism
YGL066W	SGF73	Transcription RNA pol II
YGL219C	MDM34	Mitochondria
YGL237C	HAP2	Transcription RNA pol II
YGR122W	YGR122W	OTHER
YGR188C	BUB1	Cell Cycle
YHL027W	RIM101	Transcription RNA pol II
YIL090W	ICE2	OTHER
YIR023W	DAL81	Transcription RNA pol II
YJL029C	VPS53	Protein Folding or Transport
YJR011C	YJR011C	DNA Recombination or Repair
YJR145C	RPS4A	Ribosome
YLL002W	RTT109	DNA Recombination or Repair
YLL043W	FPS1	OTHER
YLR182W	SWI6	Transcription RNA pol II
YLR200W	YKE2	Protein Folding OR Transport
YLR234W	TOP3	Telomere Maintenance
YLR242C	ARV1	Protein Folding or Transport
YLR320W	MMS22	Telomere Maintenance
YLR342W	FKS1	Morphogenesis and Cell Wall Integrity
YLR384C	IKI3	Transcription

YLR386W	VAC14	Protein Folding or Transport
YML028W	TSA1	Telomere Maintenance
YML032C	RAD52	DNA Recombination or Repair
YML103C	NUP188	Protein Folding or Transport
YML112W	CTK3	Transcription RNA pol II
YMR073C	IRC21	Uncharacterized
YMR224C	MRE11	Telomere Maintenance
YNL079C	TPM1	Morphogenesis and Wall Integrity
YNL197C	WHI3	Cell Cycle
YNL246W	VPS75	Chromatin Modification or Remodeling
YNL294C	RIM21	Morphogenesis and Cell Wall Integrity
YNR010W	CSE2	Transcription RNA pol II
YOL009C	MDM12	Mitochondria
YOR026W	BUB3	Cell Cycle
YPL069C	BTS1	Metabolism
YPL079W	RPL21B	Ribosome
YPL090C	RPS6A	Ribosome
YPL144W	POC4	Proteasome OR Ubiquitin Cycle
YPL180W	TCO89	Metabolism
YPR043W	RPL43A	Ribosome
YPR045C	MNI2	Transcription
YPR084W	YPR084W	Uncharacterized
YPR135W	CTF4	Chromosome Segregation

Supplementary Table 3.

Set1 genetic interactions. List of genes that have significant genetic interactions (S >

2.0 or S < -2.5) with *SET1*. Manually-curated categories were described in ref. 5.

ORF	Gene Name	Category
YAL001C	OYE2	Metabolism
YAL002W	OPI3	Metabolism
YAL003W	NUM1	OTHER
YAL004W	NKP2	chromosome segregation
YAL005C	NHP10	Chromatin Modification or Remodeling
YAL007C	MTC4	Uncharacterized
YAL008W	MSN5	protein folding or transport
YAL009W	MMS2	DNA Recombination or Repair
YAL010C	MMR1	Mitochondria
YAL011W	MKS1	Metabolism
YAL012W	MET16	Metabolism
YAL013W	MEH1	OTHER
YAL014C	MDM35	Mitochondria
YAL015C	MAK3	OTHER
YAL016C-A	LSM7	OTHER
YAL016C-B	LOS1	OTHER
YAL016W	LST4	OTHER
YAL017W	LIA1	OTHER
YAL018C	LGE1	Chromatin Modification or Remodeling
YAL019W	LDB19	OTHER
YAL019W-A	KIN3	Uncharacterized
YAL020C	JNM1	chromosome segregation
YAL021C	IWR1	Transcription RNA pol II
YAL022C	IST3	OTHER
YAL023C	IRC25	protein folding or transport
YAL024C	IPK1	Metabolism
YAL025C	IKI1	Transcription RNA pol II
YAL026C	HTZ1	Chromatin Modification or Remodeling
YAL026C-A	HST1	Chromatin Modification or Remodeling
YAL027W	HPC2	Transcription RNA pol II
YAL028W	HIR3	Transcription RNA pol II
YAL029C	HDA1	Chromatin Modification or Remodeling
YAL030W	HCR1	OTHER
YAL031C	HAP2	Transcription RNA pol II
YAL031W-A	GSF2	OTHER
YAL032C	GPA2	signal transduction
YAL033W	GIM5	protein folding or transport
YAL034C	GIM3	protein folding or transport
YAL034C-B	GET1	signal transduction
YAL034W-A	GET3	OTHER

YAL035W	GEM1	Mitochondria
YAL036C	GDS1	Uncharacterized
YAL037C-A	GAS1	Morphogenesis and Wall Integrity
YAL037W	GCR2	Transcription RNA pol II
YAL038W	EMI1	Transcription RNA pol II
YAL039C	ELP6	Transcription RNA pol II
YAL040C	ELP4	Transcription RNA pol II
YAL041W	ELP3	Transcription RNA pol II
YAL042C-A	EDE1	OTHER
YAL042W	ELP2	Transcription RNA pol II
YAL043C	EAP1	OTHER
YAL044C	EAF3	Chromatin Modification or Remodeling
YAL044W-A	DOC1	proteasome or ubiquitin cycle
YAL045C	DOA1	proteasome or ubiquitin cycle
YAL046C	DEP1	Chromatin Modification or Remodeling
YAL047C	DEG1	OTHER
YAL047W-A	DCC1	chromosome segregation
YAL048C	CSM1	chromosome segregation
YAL049C	CSG2	OTHER
YAL051W	CLA4	reg prog cell cyc
YAL053W	CKB1	Transcription RNA pol II
YAL054C	CIK1	chromosome segregation
YAL055W	CEM1	Mitochondria
YAL056C-A	CDC28	cell cycle
YAL056W	CDC73	Chromatin Modification or Remodeling
YAL058W	CDC26	proteasome or ubiquitin cycle
YAL059C-A	CBP4	Mitochondria
YAL059W	CCW12	Morphogenesis and Wall Integrity
YAL060W	BUL1	proteasome or ubiquitin cycle
YAL061W	BUD31	OTHER
YAL062W	BUD27	OTHER
YAL063C	BRE2	Chromatin Modification or Remodeling
YAL063C-A	BRE1	Chromatin Modification or Remodeling
YAL064C-A	BAS1	Transcription RNA pol II
YAL064W	BEM1	Morphogenesis and Wall Integrity
YAL064W-B	ASE1	chromosome segregation
YAL065C	ARX1	Ribosome
YAL066W	ARP4	Chromatin Modification or Remodeling
YAL067C	ARO1	Metabolism
YAL067W-A	ARC1	OTHER
YAL068C	APC2	chromosome segregation
YAL068W-A	ALT1	Metabolism
YAL069W	AIM22	Mitochondria
YAR002C-A	PAC10	protein folding or transport
YAR002W	PAC1	chromosome segregation
YAR003W	PBP1	OTHER
YAR007C	PEX22	protein folding or transport

YAR008W	PEX32	Metabolism
YAR014C	PFS1	Morphogenesis and Wall Integrity
YAR015W	PHO23	Chromatin Modification or Remodeling
YAR018C	POM34	cell cycle
YAR019C	PPH3	Chromatin Modification or Remodeling
YAR019W-A	PPM1	OTHER
YAR020C	PSY2	Chromatin Modification or Remodeling
YAR023C	RAD14	DNA Recombination or Repair
YAR027W	RAD27	DNA Recombination or Repair
YAR028W	RAD6	Transcription RNA pol II
YAR029W	RCO1	Chromatin Modification or Remodeling
YAR030C	RIM13	OTHER
YAR031W	RIM20	OTHER
YAR033W	RLF2	proteasome or ubiquitin cycle
YAR035C-A	RPL8B	Ribosome
YAR035W	RPB9	Transcription RNA pol II
YAR042W	RPN10	proteasome or ubiquitin cycle
YAR047C	RPN4	proteasome or ubiquitin cycle
YAR050W	RPS8A	Ribosome
YAR053W	RRD1	Transcription RNA pol II
YAR060C	RSC3	Chromatin Modification or Remodeling
YAR064W	RTF1	Chromatin Modification or Remodeling
YAR066W	RTG1	signal transduction
YAR068W	RTG2	signal transduction
YAR069C	RTG3	signal transduction
YAR070C	RTR1	Transcription RNA pol II
YAR071W	RXT2	Chromatin Modification or Remodeling
YAR073W	SAP30	Chromatin Modification or Remodeling
YAR075W	SDC1	Chromatin Modification or Remodeling
YBL072C	YME1	Mitochondria
YBL073W	VPS9	OTHER
YBL074C	VPS8	OTHER
YBL075C	VPS72	Chromatin Modification or Remodeling
YBL076C	VPS27	OTHER
YBL077W	VMA21	OTHER
YBL078C	VIP1	Metabolism
YBL079W	UME1	Transcription RNA pol II
YBL080C	UBP15	proteasome or ubiquitin cycle
YBL081W	UBP14	proteasome or ubiquitin cycle
YBL082C	UBP13	proteasome or ubiquitin cycle
YBL083C	TUB3	chromosome segregation
YBL085W	TPS1	Metabolism
YBL086C	TIF2	OTHER
YBL087C	THR1	Metabolism
YBL088C	THI6	Metabolism
YBL089W	TAF13	Transcription RNA pol II
YBL090W	SXM1	protein folding or transport

YBL091C	SWR1	Chromatin Modification or Remodeling
YBL091C-A	SWD3	Chromatin Modification or Remodeling
YBL092W	SWD1	Chromatin Modification or Remodeling
YBL093C	SWC3	Chromatin Modification or Remodeling
YBL094C	SWA2	OTHER
YBL095W	SVP26	OTHER
YBL096C	SUR4	Metabolism
YBL097W	SUM1	Transcription RNA pol II
YBL098W	STM1	Ribosome
YBL099W	STE24	OTHER
YBL100C	STB5	reg prog cell cyc
YBL100W-C	SSN2	Transcription RNA pol II
YBL101C	SRN2	proteasome or ubiquitin cycle
YBL102W	SRB2	Transcription RNA pol II
YBL103C	SPT21	Transcription RNA pol II
YBL105C	SPF1	OTHER
YBL106C	SNX4	OTHER
YBL107C	SNC2	OTHER
YBL107W-A	SKY1	protein folding or transport
YBL108C-A	SIN3	Chromatin Modification or Remodeling
YBL108W	SIW14	OTHER
YBL109W	SIF2	Chromatin Modification or Remodeling
YBL111C	SHP1	proteasome or ubiquitin cycle
YBL112C	SGF29	Transcription RNA pol II
YBL113C	SEC22	protein folding or transport
YBL113W-A	SEC28	protein folding or transport
YBR094W	PBY1	OTHER
YCL037C	SRO9	OTHER
YDR004W	RAD57	DNA Recombination or Repair
YDR074W	TPS2	Metabolism
YDR076W	RAD55	DNA Recombination or Repair
YDR080W	VPS41	Protein Folding or Transport
YDR289C	RTT103	Transcription RNA pol II
YDR293C	SSD1	Morphogenesis and Cell Wall Integrity
YDR308C	SRB7 - DAmP	Transcription RNA pol II
YDR369C	XRS2	Telomere Maintenance
YDR389W	SAC7	Signal Transduction
YEL033W	MTC7	Telomere Maintenance
YER016W	BIM1	Cell Cycle
YER151C	UBP3	Proteasome OR Ubiquitin Cycle
YER162C	RAD4	DNA Recombination or Repair
YFL013C	IES1	Chromatin Modification or Remodeling
YFL018C	LPD1	Metabolism
YGL003C	CDH1	Cell Cycle
YGL045W	RIM8	Metabolism
YGL066W	SGF73	Transcription RNA pol II
YGL219C	MDM34	Mitochondria

YGL237C	HAP2	Transcription RNA pol II
YGR122W	YGR122W	OTHER
YGR188C	BUB1	Cell Cycle
YHL027W	RIM101	Transcription RNA pol II
YIL090W	ICE2	OTHER
YIR023W	DAL81	Transcription RNA pol II
YJL029C	VPS53	Protein Folding or Transport
YJR011C	YJR011C	DNA Recombination or Repair
YJR145C	RPS4A	Ribosome
YLL002W	RTT109	DNA Recombination or Repair
YLL043W	FPS1	OTHER
YLR182W	SWI6	Transcription RNA pol II
YLR200W	YKE2	Protein Folding OR Transport
YLR234W	TOP3	Telomere Maintenance
YLR242C	ARV1	Protein Folding or Transport
YLR320W	MMS22	Telomere Maintenance
YLR342W	FKS1	Morphogenesis and Cell Wall Integrity
YLR384C	IKI3	Transcription
YLR386W	VAC14	Protein Folding or Transport
YML028W	TSA1	Telomere Maintenance
YML032C	RAD52	DNA Recombination or Repair
YML103C	NUP188	Protein Folding or Transport
YML112W	CTK3	Transcription RNA pol II
YMR073C	IRC21	Uncharacterized
YMR224C	MRE11	Telomere Maintenance
YNL079C	TPM1	Morphogenesis and Wall Integrity
YNL197C	WHI3	Cell Cycle
YNL246W	VPS75	Chromatin Modification or Remodeling
YNL294C	RIM21	Morphogenesis and Cell Wall Integrity
YNR010W	CSE2	Transcription RNA pol II
YOL009C	MDM12	Mitochondria
YOR026W	BUB3	Cell Cycle
YPL069C	BTS1	Metabolism
YPL079W	RPL21B	Ribosome
YPL090C	RPS6A	Ribosome
YPL144W	POC4	Proteasome OR Ubiquitin Cycle
YPL180W	TCO89	Metabolism
YPR043W	RPL43A	Ribosome
YPR045C	MNI2	Transcription
YPR084W	YPR084W	Uncharacterized
YPR135W	CTF4	Chromosome Segregation

Supplementary Table 4.

RNA-Seq data. List of significantly differentially expressed genes in *set5Δ* mutant.

FPKM values calculated with FDR-adjusted p-value < 0.05 and fold-change relative to

WT > 1.7 (see Materials and Methods for details) are indicated for each gene.

ORF	WT	*set5Δ*	*SET5*$_{Y402A}$	*set1Δ*	*set5Δset1Δ*
YBR005W	36.0993	110.608	149.404	46.8462	52.1699
YBR054W	44.3476	78.1997	119.384	137.334	111.942
YBR056C-B	195.267	1061.37	1496.86	182.937	160.216
YBR085C-A	249.554	443.763	465.572	447.6	482.96
YCR021C	17.881	93.5086	179.628	11.1627	11.3979
YDL048C	34.0942	82.4487	95.609	38.6493	43.2097
YDR171W	28.9979	153.285	253.704	26.7428	29.0107
YDR247W	18.4482	32.3665	41.5916	12.6091	13.636
YER053C	28.8603	87.8684	114.971	27.3777	26.6993
YER130C	57.5173	120.317	142.69	44.6372	47.1437
YER150W	38.3362	90.389	135.405	38.9603	42.0256
YGL037C	243.468	484.374	577.974	246.636	236.43
YGL263W	1.85623	7.06358	2.49492	7.52776	24.708
YGR138C	22.6952	69.452	122.359	34.7411	34.3878
YGR142W	29.3053	98.3753	169.483	19.0079	17.1554
YGR161C	33.8117	74.3929	94.5592	33.4427	44.2178
YGR249W	2.86228	6.25995	12.066	4.2986	5.19529
YGR254W	660.031	1196.52	1456.87	512.07	460.417
YHL021C	20.4504	39.0559	58.5166	21.3523	20.7149
YHR087W	31.9916	70.0051	82.5134	54.4601	50.7461
YHR138C	93.5963	173.562	185.93	148.603	151.772
YJL052W	183.922	398.263	533.8	202.678	181.694
YJL144W	36.7865	98.9025	118.753	17.2363	17.7915
YKL109W	47.4642	89.8738	107.698	27.3481	27.4932
YLR120C	49.3398	92.1459	126.595	49.3574	57.9744
YLR194C	150.422	318.565	397.768	137.736	157.145
YLR297W	27.2148	78.7909	88.2777	37.6606	42.0562
YLR414C	82.1494	153.251	183.697	78.7502	73.3864
YMR316C-A	30.7706	107.061	154.884	20.2561	20.8771
YMR316W	17.4926	80.7439	118.3	12.7195	12.8784
YNR014W	17.4693	33.2588	49.0074	23.9065	28.177
YOL014W	79.9811	252.229	303.09	47.1364	39.7611
YOL016C	35.7422	180.715	291.857	31.1056	32.6574
YOR052C	180.29	329.351	343.661	211.054	214.574
YOR220W	48.1974	109.532	142.903	48.3193	47.5237
YOR273C	11.5709	20.3741	44.1603	15.0991	14.1102
YPL014W	20.9205	62.5249	107.644	20.8985	21.1571
YPR156C	65.821	117.751	149.525	77.4197	78.208

YPR157W	6.47344	19.8237	25.3895	9.73122	11.2071
YPR158W	37.4082	68.877	81.111	35.9615	35.2346
YDL042C	31.3593	16.1674	23.6764	22.4007	18.9086
YHR207C	34.5605	0.0544822	42.426	37.8453	0.0167172

Supplementary Table 5.

RNA-Seq data. List of significantly differentially expressed genes in *set1Δ* mutant.

FPKM values calculated with FDR-adjusted p-value < 0.05 and fold-change relative to

WT > 1.7 (see Materials and Methods for details) are indicated for each gene.

ORF	WT	*set5Δ*	*SET5$_{Y402A}$*	*set1Δ*	*set5Δset1Δ*
YAL018C	0.0989603	0.24413	0.21155	4.36186	3.66659
YAL040C	32.5494	40.7001	47.5245	63.5912	80.0391
YAL067C	1.62132	0.708136	1.71988	4.77548	5.1927
YBL043W	7.23649	10.6077	8.38588	16.4046	15.4732
YBL098W	22.0038	19.3684	21.7079	41.1082	36.8815
YBR040W	1.6225	1.48259	1.46872	5.18527	5.31411
YBR045C	2.99914	2.71003	3.12905	6.7683	7.13104
YBR047W	21.3166	26.2106	25.4722	48.9828	47.8333
YBR054W	44.3476	78.1997	119.384	137.334	111.942
YBR085C-A	249.554	443.763	465.572	447.6	482.96
YBR093C	130.053	114.46	114.299	241.789	155.533
YBR105C	49.3838	64.174	57.2734	84.7269	114.254
YBR139W	35.6033	41.3843	50.2212	61.9783	61.0965
YBR200W-A	0	0	5.20344	94.902	98.6069
YBR208C	9.45171	11.2855	11.7614	16.8478	16.6602
YBR226C	9.14916	10.8842	11.4213	21.0115	17.2822
YBR285W	5.24807	5.28344	7.13844	11.9559	13.2688
YBR296C	10.9046	11.897	11.3972	24.5847	27.9867
YCL007C	8.77824	17.3507	17.9056	19.9453	22.1662
YDL199C	4.16978	4.98112	6.22796	8.16005	7.99161
YDL209C	19.2606	20.225	17.964	35.0865	35.4292
YDL211C	10.6814	11.1927	12.8084	20.328	21.7369
YDL244W	1.78802	1.92674	2.13026	3.9146	4.72105
YDL245C	4.75461	4.58043	4.50911	9.23865	9.08407
YDR018C	3.10313	4.03393	3.67111	6.34389	7.07058
YDR031W	29.803	33.808	35.9696	53.1639	42.0671
YDR119W-A	8.74332	19.9399	16.0422	65.5564	46.5153
YDR191W	9.42849	7.99911	8.87936	18.375	18.7481
YDR218C	0.856855	1.01749	0.714749	3.25919	4.06426
YDR230W	14.0763	18.1851	22.2932	30.2931	32.685
YDR231C	37.7273	46.7323	42.4358	67.7876	65.5079
YDR281C	69.1224	69.015	49.8801	126.105	86.7942
YDR402C	2.27634	2.53012	2.29242	4.93776	4.90666
YDR403W	2.88797	2.86585	3.56296	8.76687	10.0129
YDR461C-A	107.072	112.729	104.727	203.048	178.813
YDR491C	33.5056	34.1142	28.905	65.5225	62.4213
YDR523C	2.50579	2.07459	2.01369	5.20145	5.31918
YDR528W	21.7206	18.1265	19.1207	46.0636	44.4086

YEL039C	8.51484	5.60808	9.74282	19.704	19.3413
YEL059C-A	65.2756	76.5132	87.9942	209.971	190.279
YEL070W	1.14924	1.85512	1.29543	4.89042	5.35383
YER058W	54.807	73.7526	63.5716	107.2	84.5039
YER084W	2.51291	1.74259	3.61692	11.5775	11.1411
YER096W	3.08994	2.71897	3.23377	8.03561	9.05107
YER106W	1.20497	0.645073	1.19335	3.8146	3.92461
YFL011W	0.754899	0.578687	0.749684	3.13547	3.29548
YFL012W	2.58046	1.75166	2.19035	10.1311	9.9746
YFL014W	46.9638	70.6051	73.0639	91.8058	127.369
YFL058W	0.703261	0.679616	0.66298	2.48214	3.74747
YFR023W	0.371344	0.339371	0.33009	4.1315	3.53309
YGL010W	30.3625	31.2614	30.7676	53.4962	49.6913
YGL121C	17.4201	17.8263	22.1511	31.8153	31.1316
YGL138C	0.0458749	0.199476	0.0469354	2.46052	1.59893
YGL158W	1.81103	1.35374	1.43246	4.04129	3.86509
YGL175C	5.44795	7.26731	8.06786	10.6928	11.9245
YGL184C	1.98302	2.03814	1.78824	4.99338	5.411
YGL209W	58.3768	62.6767	53.3504	152.203	179.189
YGL263W	1.85623	7.06358	2.49492	7.52776	24.708
YGR023W	6.61009	10.4791	13.2167	14.5101	15.4255
YGR035C	117.11	79.5549	67.7712	227.298	240.171
YGR043C	5.30165	5.7293	6.38184	10.0744	11.0587
YGR052W	3.17189	6.58117	10.4271	8.54093	7.99948
YGR053C	4.50564	6.66757	8.95717	9.34472	8.27565
YGR059W	0.981812	0.881018	0.655095	3.01131	3.20868
YGR079W	64.0307	40.2903	35.4731	145.313	173.453
YGR087C	1.03812	0.973788	0.787617	5.08569	5.8263
YGR144W	5.40007	5.63136	6.31839	12.8073	12.4957
YGR146C	87.5289	106.812	106.174	158.699	210.835
YGR225W	0.737461	0.682236	0.845069	2.17371	2.16725
YGR256W	3.38467	4.14781	3.40668	6.87654	5.47854
YGR260W	213.697	214.148	218.115	391.387	468.021
YHL029C	32.0009	33.896	36.1076	56.8251	59.4804
YHL036W	2.00986	3.82624	6.71758	13.314	15.3618
YHL044W	13.2287	16.3786	16.0588	24.2689	23.2462
YHR001W-A	202.421	240.555	255.99	351.688	278.736
YHR015W	2.67077	2.4201	2.81366	6.9597	6.06345
YHR054C	23.4016	21.0784	25.1729	44.9702	43.8387
YHR075C	8.69094	9.86791	10.3468	16.5984	13.1799
YHR126C	0	0.273576	0.577326	4.46947	4.38922
YHR140W	7.426	6.8485	7.4228	13.4636	12.5408
YHR151C	19.9228	19.8546	18.3766	39.1053	40.5671
YHR171W	8.17131	7.90125	9.14438	14.791	15.9591
YIL006W	5.61207	9.12768	10.2958	18.3376	19.6992
YIL011W	37.3382	37.9168	38.3751	72.1217	79.7029
YIL042C	12.1848	16.966	18.3448	27.0388	32.2771

YIL066C	3.90209	4.13731	4.4431	7.98639	9.30262
YIL099W	2.41591	2.45145	2.24507	5.77471	9.38728
YIR014W	7.05463	9.11004	9.2156	14.5654	15.6917
YIR017W-A	3.33234	4.08716	4.05675	9.78813	9.79062
YIR027C	2.83553	2.0774	3.34633	7.26534	7.88925
YIR039C	3.51415	3.70734	6.27387	9.44376	11.2988
YIR042C	7.02464	11.1111	16.4351	13.6302	15.4937
YJL037W	1.60259	1.64912	1.845	7.26388	8.56514
YJL038C	9.05712	7.7669	8.87208	27.6379	29.0873
YJL045W	2.1692	2.17328	2.02678	5.46944	5.75208
YJL088W	5.98601	5.08754	3.8434	12.0564	12.9291
YJL163C	7.43297	8.29816	9.23969	14.588	15.0631
YJL181W	8.8101	7.8669	8.18578	15.7948	15.0216
YJL194W	9.65256	8.61752	8.55512	26.4025	27.6353
YJL219W	2.55743	3.10063	2.38238	5.4313	6.24199
YJL221C	2.35312	2.6833	2.85373	5.25766	5.00277
YJR078W	3.05035	2.44567	2.37824	14.7145	14.9836
YJR159W	6.09307	5.8289	6.62107	11.3411	10.5746
YKL162C	6.41942	6.53954	6.95494	12.5248	12.0283
YKR034W	0.349479	0.690523	0.58562	3.41094	3.22852
YKR039W	11.9769	11.8627	12.9452	26.8859	23.3448
YKR102W	4.02058	4.24601	4.82362	7.70354	8.83959
YLL046C	0.733465	0.684601	1.29863	3.04922	3.07317
YLR013W	0	0.166102	0	1.45465	2.06326
YLR108C	21.5127	20.4678	19.9764	45.5951	50.6643
YLR218C	34.9172	57.5021	55.298	61.764	52.8613
YLR307C-A	0	1.22156	2.07527	16.5622	21.9909
YLR307W	1.29255	1.09213	1.13144	13.7947	13.8625
YLR312C	1.76155	1.26337	1.65167	4.52624	3.93251
YLR346C	25.6379	34.4823	39.9503	49.3604	47.8132
YLR356W	42.8543	45.8643	43.5308	73.7038	81.9767
YML043C	31.4433	25.6724	22.3086	60.2597	63.8319
YML058W-A	250.104	279.032	375.287	1573.39	2554.22
YMR034C	7.87566	9.58207	11.8907	17.0057	17.9055
YMR085W	2.97704	3.09258	3.69159	5.95951	5.84854
YMR101C	1.20988	1.24935	1.26306	4.50825	4.36997
YMR120C	54.0657	43.806	37.0736	101.127	93.8788
YMR122C	11.5226	11.7056	13.8128	22.4698	25.8851
YMR244W	1.87204	1.07161	1.44537	7.98412	7.96361
YMR323W	0.189814	0.150608	0.0779624	1.1745	2.83346
YNL018C	1.97809	1.35914	1.30145	5.07357	5.32193
YNL065W	77.2841	76.5062	66.7039	158.028	204.728
YNL277W-A	0	0	2.42782	22.1702	13.5417
YNL332W	1.65134	1.84542	1.33056	4.26839	5.3193
YNR064C	11.0307	11.5816	9.66717	27.5251	36.0053
YNR071C	3.91144	3.85212	3.18879	7.43017	7.93845
YNR073C	3.01979	3.60464	3.71286	6.71154	7.33169

YOL024W	1.78201	1.85895	1.58312	6.81176	5.91012
YOL047C	3.06813	3.87115	4.09888	7.70734	8.96954
YOL084W	0.933572	1.01906	1.36993	2.42404	2.52648
YOL126C	78.0088	98.4738	95.7408	179.332	202.711
YOL132W	2.41606	2.396	2.54071	6.259	6.93241
YOL162W	2.52149	3.0534	2.9892	6.76708	7.2288
YOR020W-A	169.728	199.437	219.786	308.044	291.881
YOR062C	8.53486	14.2408	16.2923	16.1286	18.1808
YOR338W	13.9784	16.4486	14.7744	37.0195	56.2758
YOR388C	2.45225	2.32298	2.31352	5.54017	5.886
YOR391C	0.444721	0.263393	0.432521	2.97084	2.96174
YOR393W	0.585543	0.357541	0.461932	1.96796	2.69752
YPL054W	6.08123	7.03021	5.97119	12.0055	10.8317
YPL171C	3.54777	4.05858	4.10919	8.46389	9.60676
YPL187W	1.18503	2.86225	2.21805	6.70915	8.83258
YPL280W	0.338531	0.26485	0.446161	2.63477	2.19347
YPL281C	0.585543	0.357541	0.461932	1.96796	2.69752
YPR015C	4.00272	6.7352	7.41415	9.90971	11.4583
YPR061C	8.89411	10.2381	11.5206	17.8288	20.7578
YPR151C	2.71037	4.0494	4.19363	6.86095	6.56916
SRG1	175.278	146.472	149.068	100.407	85.2592
YBL002W	2768.61	2839.12	2942.47	1224.34	1108.86
YBL003C	1997.51	2193.77	2134.34	1055.68	890.568
YDR222W	29.052	47.751	57.8716	16.5634	18.0501
YDR384C	261.391	238.238	236.761	124.758	165.052
YDR414C	63.0187	58.096	57.9452	34.4446	35.5048
YDR538W	65.4854	63.1761	57.5127	34.3013	33.0862
YGL143C	29.9477	32.6421	34.6653	16.8067	16.0581
YGR018C	390.285	384.992	366.965	221.389	210.549
YHR119W	24.3045	24.1867	24.4623	0.0328135	0.0323625
YHR124W	13.4263	12.3256	12.0473	7.0374	8.17492
YHR128W	349.515	325.462	338.052	201.711	179.068
YIL121W	83.0233	87.3054	89.2951	45.8328	34.9588
YJL144W	36.7865	98.9025	118.753	17.2363	17.7915
YKL109W	47.4642	89.8738	107.698	27.3481	27.4932
YKL170W	23.3276	19.7253	13.7364	12.5748	12.7442
YKR061W	35.4889	32.2326	31.6529	18.868	22.2248
YLR040C	45.0325	42.1747	41.9775	21.1968	20.0808
YLR041W	47.6982	54.1411	60.587	22.3679	30.2297
YLR064W	144.167	149.896	150.028	70.7358	78.7081
YLR327C	139.669	201.96	217.803	68.4559	80.3015
YLR446W	25.5962	20.715	21.8314	10.105	10.0738
YMR011W	877.068	887.16	717.971	440.332	561.9
YMR173W-A	124.904	134.839	141.406	71.6704	63.4418
YNL040W	37.6617	35.6749	35.6112	18.8131	18.2432
YNL281W	498.567	522.837	518.913	278.659	259.093
YOL104C	28.3572	30.5068	28.814	15.7735	17.4744

YOR153W	230.734	288.569	279.115	125.236	128.066
YOR248W	1292.3	1322.85	1366.68	746.163	770.531
YOR381W	18.8344	21.7099	21.803	9.97505	15.9689
YOR383C	1169.16	1410.98	1561.05	504.563	1619.64

Supplementary Table 6.

RNA-Seq data. List of significantly differentially expressed genes in *set5Δ set1Δ*

mutant. FPKM values calculated with FDR-adjusted p-value < 0.05 and fold-change

relative to WT > 1.7 (see Materials and Methods for details) are indicated for each gene.

ORF	WT	*set5Δ*	*SET5$_{Y402A}$*	*set1Δ*	*set5Δset1Δ*
YAL018C	0.0989603	0.24413	0.21155	4.36186	3.66659
YAL040C	32.5494	40.7001	47.5245	63.5912	80.0391
YAL067C	1.62132	0.708136	1.71988	4.77548	5.1927
YAR073W	0.932061	1.0282	1.66838	1.74108	3.46939
YAR075W	2.47062	2.86134	2.96299	2.63653	7.33677
YBL043W	7.23649	10.6077	8.38588	16.4046	15.4732
YBL084C	18.4722	22.0156	22.9866	31.6428	32.1236
YBL109W	0	2.41754	2.06022	1.85586	5.65573
YBL111C	4.62518	4.59929	5.41894	5.61825	8.74382
YBL113C	20.8208	25.5395	28.7412	27.9208	37.1344
YBR006W	19.1881	21.8041	24.0752	33.1638	33.8709
YBR018C	2.34296	2.38716	2.80194	4.62154	5.31438
YBR040W	1.6225	1.48259	1.46872	5.18527	5.31411
YBR045C	2.99914	2.71003	3.12905	6.7683	7.13104
YBR047W	21.3166	26.2106	25.4722	48.9828	47.8333
YBR054W	44.3476	78.1997	119.384	137.334	111.942
YBR085C-A	249.554	443.763	465.572	447.6	482.96
YBR105C	49.3838	64.174	57.2734	84.7269	114.254
YBR200W-A	0	0	5.20344	94.902	98.6069
YBR285W	5.24807	5.28344	7.13844	11.9559	13.2688
YBR296C	10.9046	11.897	11.3972	24.5847	27.9867
YCL007C	8.77824	17.3507	17.9056	19.9453	22.1662
YCL048W	0.947571	0.480868	0.538413	2.11534	2.64763
YCL073C	0.0732457	0.203942	0.279345	0.329608	3.20059
YCL074W	0	0	0	0.108657	2.80729
YCL075W	0	0	0	0.331635	1.61445
YDL199C	4.16978	4.98112	6.22796	8.16005	7.99161
YDL209C	19.2606	20.225	17.964	35.0865	35.4292
YDL211C	10.6814	11.1927	12.8084	20.328	21.7369
YDL244W	1.78802	1.92674	2.13026	3.9146	4.72105
YDL245C	4.75461	4.58043	4.50911	9.23865	9.08407
YDR018C	3.10313	4.03393	3.67111	6.34389	7.07058
YDR034C-A	1226.15	1297.14	1347.88	1817.64	2113.44
YDR059C	54.135	60.8859	56.0056	81.0914	95.1514
YDR191W	9.42849	7.99911	8.87936	18.375	18.7481
YDR218C	0.856855	1.01749	0.714749	3.25919	4.06426
YDR230W	14.0763	18.1851	22.2932	30.2931	32.685
YDR231C	37.7273	46.7323	42.4358	67.7876	65.5079

YDR402C	2.27634	2.53012	2.29242	4.93776	4.90666
YDR403W	2.88797	2.86585	3.56296	8.76687	10.0129
YDR446W	0.517483	0.61351	0.268193	1.49318	2.3629
YDR491C	33.5056	34.1142	28.905	65.5225	62.4213
YDR523C	2.50579	2.07459	2.01369	5.20145	5.31918
YDR528W	21.7206	18.1265	19.1207	46.0636	44.4086
YDR534C	13.4155	19.4268	19.1279	22.6977	58.0149
YEL039C	8.51484	5.60808	9.74282	19.704	19.3413
YEL059C-A	65.2756	76.5132	87.9942	209.971	190.279
YEL065W	182.666	171.987	178.539	222.281	315.459
YEL070W	1.14924	1.85512	1.29543	4.89042	5.35383
YER084W	2.51291	1.74259	3.61692	11.5775	11.1411
YER095W	72.0812	71.7094	75.9737	96.357	125.03
YER096W	3.08994	2.71897	3.23377	8.03561	9.05107
YER106W	1.20497	0.645073	1.19335	3.8146	3.92461
YER188W	9.24782	13.0046	14.9892	11.3208	17.2167
YFL011W	0.754899	0.578687	0.749684	3.13547	3.29548
YFL012W	2.58046	1.75166	2.19035	10.1311	9.9746
YFL014W	46.9638	70.6051	73.0639	91.8058	127.369
YFL020C	6.35546	10.2559	8.84675	12.9034	18.1965
YFL058W	0.703261	0.679616	0.66298	2.48214	3.74747
YFL067W	19.5435	24.0224	18.8999	32.3933	41.104
YFR023W	0.371344	0.339371	0.33009	4.1315	3.53309
YFR032C	1.90807	1.28785	2.05305	3.82883	4.11159
YFR057W	0	0	0	0.986025	6.56954
YGL121C	17.4201	17.8263	22.1511	31.8153	31.1316
YGL156W	7.14296	7.35574	8.76017	12.0707	13.1193
YGL158W	1.81103	1.35374	1.43246	4.04129	3.86509
YGL175C	5.44795	7.26731	8.06786	10.6928	11.9245
YGL184C	1.98302	2.03814	1.78824	4.99338	5.411
YGL204C	80.4343	73.1816	73.889	129.712	142.476
YGL209W	58.3768	62.6767	53.3504	152.203	179.189
YGL259W	1.86515	2.02329	4.88985	5.36478	8.03206
YGL262W	0.302209	0.832665	0.203099	3.6659	5.48642
YGL263W	1.85623	7.06358	2.49492	7.52776	24.708
YGR023W	6.61009	10.4791	13.2167	14.5101	15.4255
YGR032W	19.0455	21.1635	22.0555	25.5515	39.3248
YGR035C	117.11	79.5549	67.7712	227.298	240.171
YGR043C	5.30165	5.7293	6.38184	10.0744	11.0587
YGR052W	3.17189	6.58117	10.4271	8.54093	7.99948
YGR059W	0.981812	0.881018	0.655095	3.01131	3.20868
YGR079W	64.0307	40.2903	35.4731	145.313	173.453
YGR087C	1.03812	0.973788	0.787617	5.08569	5.8263
YGR131W	9.80283	11.7554	10.2393	16.1672	18.8524
YGR144W	5.40007	5.63136	6.31839	12.8073	12.4957
YGR146C	87.5289	106.812	106.174	158.699	210.835
YGR225W	0.737461	0.682236	0.845069	2.17371	2.16725

YGR260W	213.697	214.148	218.115	391.387	468.021
YHL029C	32.0009	33.896	36.1076	56.8251	59.4804
YHL036W	2.00986	3.82624	6.71758	13.314	15.3618
YHL044W	13.2287	16.3786	16.0588	24.2689	23.2462
YHR015W	2.67077	2.4201	2.81366	6.9597	6.06345
YHR054C	23.4016	21.0784	25.1729	44.9702	43.8387
YHR061C	20.7853	23.0727	23.9186	33.8782	36.2449
YHR126C	0	0.273576	0.577326	4.46947	4.38922
YHR151C	19.9228	19.8546	18.3766	39.1053	40.5671
YHR171W	8.17131	7.90125	9.14438	14.791	15.9591
YHR185C	0.226901	0.292613	0.311996	1.99634	2.37593
YHR218W	4.93113	4.98225	5.90342	5.96023	9.4257
YIL006W	5.61207	9.12768	10.2958	18.3376	19.6992
YIL011W	37.3382	37.9168	38.3751	72.1217	79.7029
YIL042C	12.1848	16.966	18.3448	27.0388	32.2771
YIL066C	3.90209	4.13731	4.4431	7.98639	9.30262
YIL099W	2.41591	2.45145	2.24507	5.77471	9.38728
YIL113W	6.14059	8.30624	11.8188	11.0259	12.1177
YIR013C	2.49116	1.48274	0.855434	5.00201	9.91977
YIR014W	7.05463	9.11004	9.2156	14.5654	15.6917
YIR017W-A	3.33234	4.08716	4.05675	9.78813	9.79062
YIR019C	3.1765	4.09158	4.32076	6.09407	7.09832
YIR027C	2.83553	2.0774	3.34633	7.26534	7.88925
YIR039C	3.51415	3.70734	6.27387	9.44376	11.2988
YIR042C	7.02464	11.1111	16.4351	13.6302	15.4937
YIR043C	1.77471	2.8512	5.15311	4.14019	8.94425
YJL037W	1.60259	1.64912	1.845	7.26388	8.56514
YJL038C	9.05712	7.7669	8.87208	27.6379	29.0873
YJL045W	2.1692	2.17328	2.02678	5.46944	5.75208
YJL088W	5.98601	5.08754	3.8434	12.0564	12.9291
YJL116C	21.2222	25.9489	25.2233	32.7554	46.5445
YJL163C	7.43297	8.29816	9.23969	14.588	15.0631
YJL194W	9.65256	8.61752	8.55512	26.4025	27.6353
YJL219W	2.55743	3.10063	2.38238	5.4313	6.24199
YJL221C	2.35312	2.6833	2.85373	5.25766	5.00277
YJR078W	3.05035	2.44567	2.37824	14.7145	14.9836
YJR097W	48.7728	39.5712	30.858	79.7792	84.7264
YJR158W	3.16883	2.81635	3.26367	5.81926	6.12788
YKL162C	6.41942	6.53954	6.95494	12.5248	12.0283
YKL163W	7.24612	9.06656	8.49235	11.7494	14.0965
YKR011C	50.3446	59.0258	62.0473	85.4662	86.7515
YKR034W	0.349479	0.690523	0.58562	3.41094	3.22852
YKR039W	11.9769	11.8627	12.9452	26.8859	23.3448
YKR102W	4.02058	4.24601	4.82362	7.70354	8.83959
YKR106W	2.54591	4.32289	5.23347	4.84096	5.57472
YLL025W	9.59296	14.1634	11.6401	15.2637	19.8668
YLL046C	0.733465	0.684601	1.29863	3.04922	3.07317

YLL052C	31.7695	33.5847	32.1547	48.5226	61.007
YLL053C	37.1049	41.8159	43.3658	60.1258	78.6949
YLR013W	0	0.166102	0	1.45465	2.06326
YLR094C	25.5032	25.9817	26.6232	43.8107	47.9846
YLR107W	36.4677	37.1665	38.4847	61.5702	69.7643
YLR108C	21.5127	20.4678	19.9764	45.5951	50.6643
YLR142W	4.82861	5.78515	6.67346	8.26826	9.4791
YLR149C	4.15427	4.73267	5.14628	7.18943	7.77618
YLR205C	17.2288	15.9411	16.0059	26.3485	43.409
YLR307C-A	0	1.22156	2.07527	16.5622	21.9909
YLR307W	1.29255	1.09213	1.13144	13.7947	13.8625
YLR312C	1.76155	1.26337	1.65167	4.52624	3.93251
YLR346C	25.6379	34.4823	39.9503	49.3604	47.8132
YLR356W	42.8543	45.8643	43.5308	73.7038	81.9767
YML027W	37.4517	30.1713	29.7402	60.9226	65.3345
YML043C	31.4433	25.6724	22.3086	60.2597	63.8319
YML058W-A	250.104	279.032	375.287	1573.39	2554.22
YML116W	29.4452	28.6529	28.753	50.6432	61.4929
YMR034C	7.87566	9.58207	11.8907	17.0057	17.9055
YMR085W	2.97704	3.09258	3.69159	5.95951	5.84854
YMR101C	1.20988	1.24935	1.26306	4.50825	4.36997
YMR120C	54.0657	43.806	37.0736	101.127	93.8788
YMR122C	11.5226	11.7056	13.8128	22.4698	25.8851
YMR136W	12.8566	15.613	18.3811	21.5356	23.4101
YMR141C	31.0584	26.998	38.2627	48.0965	54.8989
YMR206W	2.37289	4.03749	3.23532	4.60834	5.17874
YMR244W	1.87204	1.07161	1.44537	7.98412	7.96361
YMR323W	0.189814	0.150608	0.0779624	1.1745	2.83346
YNL018C	1.97809	1.35914	1.30145	5.07357	5.32193
YNL034W	1.42603	0.90957	1.11467	2.85578	3.81353
YNL065W	77.2841	76.5062	66.7039	158.028	204.728
YNL202W	13.0762	12.5795	11.506	21.1643	23.4912
YNL311C	13.0459	11.4545	12.3924	21.6	23.1595
YNL332W	1.65134	1.84542	1.33056	4.26839	5.3193
YNR064C	11.0307	11.5816	9.66717	27.5251	36.0053
YNR071C	3.91144	3.85212	3.18879	7.43017	7.93845
YNR073C	3.01979	3.60464	3.71286	6.71154	7.33169
YOL024W	1.78201	1.85895	1.58312	6.81176	5.91012
YOL047C	3.06813	3.87115	4.09888	7.70734	8.96954
YOL058W	36.9678	35.2219	32.1246	61.4781	68.8
YOL083W	8.63942	9.00653	11.2051	15.2011	16.5622
YOL084W	0.933572	1.01906	1.36993	2.42404	2.52648
YOL118C	20.2298	22.0746	14.961	35.5229	38.1591
YOL126C	78.0088	98.4738	95.7408	179.332	202.711
YOL132W	2.41606	2.396	2.54071	6.259	6.93241
YOL162W	2.52149	3.0534	2.9892	6.76708	7.2288
YOL163W	6.24245	5.25221	7.26896	10.097	13.1081

YOR020W-A	169.728	199.437	219.786	308.044	291.881
YOR062C	8.53486	14.2408	16.2923	16.1286	18.1808
YOR066W	20.612	24.6317	25.829	33.8919	35.9245
YOR208W	12.7318	11.8909	14.8179	20.4469	23.182
YOR237W	3.90874	3.29102	3.72043	6.46062	8.09683
YOR242C	2.64268	3.44803	3.52802	4.65876	5.52541
YOR338W	13.9784	16.4486	14.7744	37.0195	56.2758
YOR388C	2.45225	2.32298	2.31352	5.54017	5.886
YOR391C	0.444721	0.263393	0.432521	2.97084	2.96174
YOR393W	0.585543	0.357541	0.461932	1.96796	2.69752
YPL026C	28.6271	28.5434	29.0604	44.986	49.4226
YPL033C	0.588773	0.544182	0.259665	2.05171	2.68917
YPL171C	3.54777	4.05858	4.10919	8.46389	9.60676
YPL187W	1.18503	2.86225	2.21805	6.70915	8.83258
YPL229W	35.8524	33.6616	38.0247	58.0968	68.7159
YPL250C	39.7813	54.6646	52.168	66.0791	70.6897
YPL275W	3.9344	3.09794	3.79308	7.33218	7.58688
YPL281C	0.585543	0.357541	0.461932	1.96796	2.69752
YPR015C	4.00272	6.7352	7.41415	9.90971	11.4583
YPR061C	8.89411	10.2381	11.5206	17.8288	20.7578
YPR078C	3.00428	2.2895	2.58557	5.55329	7.10555
YPR151C	2.71037	4.0494	4.19363	6.86095	6.56916
RUF20	12.7314	9.75402	8.78011	8.47721	6.06904
SRG1	175.278	146.472	149.068	100.407	85.2592
YBL002W	2768.61	2839.12	2942.47	1224.34	1108.86
YBL003C	1997.51	2193.77	2134.34	1055.68	890.568
YBR009C	3920.62	4574.91	4690.17	2576.87	2189.69
YDL041W	69.4875	34.3356	51.197	43.9135	23.4687
YDL043C	48.9573	36.0846	45.2967	33.3765	22.0962
YDR174W	415.184	325.575	365.861	310.312	224.443
YDR342C	79.5435	80.5689	79.4411	50.5972	39.9787
YDR343C	65.9717	68.0299	67.2987	44.2814	35.2372
YDR414C	63.0187	58.096	57.9452	34.4446	35.5048
YDR538W	65.4854	63.1761	57.5127	34.3013	33.0862
YDR539W	57.7393	56.5933	59.4737	34.3752	32.9411
YFL034C-A	763.361	642.976	683.569	511.383	433.79
YGL143C	29.9477	32.6421	34.6653	16.8067	16.0581
YGR017W	134.582	137.215	132.299	83.0637	73.657
YGR018C	390.285	384.992	366.965	221.389	210.549
YHR057C	145.278	150.986	149.074	91.4859	81.5692
YHR119W	24.3045	24.1867	24.4623	0.0328135	0.0323625
YHR128W	349.515	325.462	338.052	201.711	179.068
YHR207C	34.5605	0.0544822	42.426	37.8453	0.0167172
YIL121W	83.0233	87.3054	89.2951	45.8328	34.9588
YIL132C	21.2558	15.293	17.6227	15.1495	10.891
YJL144W	36.7865	98.9025	118.753	17.2363	17.7915
YJR069C	203.606	192.86	185.308	127.409	119.115

YKL096W-A	17221.8	16299.4	16252.1	12038.8	9351.04
YKL109W	47.4642	89.8738	107.698	27.3481	27.4932
YKL120W	232.776	221.286	205.754	145.334	128.709
YKL138C-A	467.75	484.89	410.154	288.436	260.668
YLR031W	18.4678	15.3603	18.8714	12.6967	10.3379
YLR040C	45.0325	42.1747	41.9775	21.1968	20.0808
YLR064W	144.167	149.896	150.028	70.7358	78.7081
YLR327C	139.669	201.96	217.803	68.4559	80.3015
YLR446W	25.5962	20.715	21.8314	10.105	10.0738
YMR158W	125.597	108.457	113.178	85.1582	71.7534
YMR173W	233.695	271.381	284.08	151.156	127.732
YMR173W-A	124.904	134.839	141.406	71.6704	63.4418
YNL030W	3759.5	4651.15	4787.32	2306.16	2029.77
YNL031C	3324.07	3704.04	3926.49	2129.99	1943.41
YNL040W	37.6617	35.6749	35.6112	18.8131	18.2432
YNL281W	498.567	522.837	518.913	278.659	259.093
YOL014W	79.9811	252.229	303.09	47.1364	39.7611
YOR111W	35.2239	34.1529	36.2452	22.5699	19.7839
YOR153W	230.734	288.569	279.115	125.236	128.066
YOR289W	13.7972	19.1997	18.3002	8.03415	6.36568
YOR298C-A	1209.45	1541.29	1562.46	784.086	704.137
YOR315W	219.385	194.083	178.522	156.78	123.996
YPL197C	459.625	380.914	389.219	334.073	247.169
snR49	1025.5	781.549	747.486	672.293	595.139

Supplementary References

1. Carr M, Bensasson D, Bergman CM. Evolutionary genomics of transposable elements in Saccharomyces cerevisiae. PLoS One 2012, 7:e50978.

2. Kim JM, Vanguri S, Boeke JD, Gabriel A, Voytas DF. Transposable elements and genome organization: a comprehensive survey of retrotransposons revealed by the complete Saccharomyces cerevisiae genome sequence. Genome Res 1998, 8:464-78.

3. Collins SR, Schuldiner M, Krogan NJ, Weissman JS. A strategy for extracting and analyzing large-scale quantitative epistatic interaction data. Genome Biol 2006, 7:R63.

4. Schuldiner M, Collins SR, Weissman JS, Krogan NJ. Quantitative genetic analysis in Saccharomyces cerevisiae using epistatic miniarray profiles (E-MAPs) and its application to chromatin functions. Methods 2006, 40:344-52.

5. Collins SR, Miller KM, Maas NL, Roguev A, Fillingham J, Chu CS, Schuldiner M, Gebbia M, Recht J, Shales M, et al. Functional dissection of protein complexes involved in yeast chromosome biology using a genetic interaction map. Nature 2007, 446:806-10.

Table S7. List of transposable elements validated by RT-PCR in Figure 3E

Primer set	MIPS annotation*	Ty element	ORF(s) targeted	UPL Probe	Forward primer	Reverse primer
A	TY2B_DR1	YDRCTy2–1	YDR034C-D	25	TGCAGATTCC CTTTTATGGA TT	AGGCGCTACC ATGAAGATTG
B	TY1B_ER1 TY1B_JR1	YERCTy1–1 YJRWTy1–1	YER138C YJR027W	72	GAACAATAAG CACGACCTTC ACT	TCAGAATGAT TAGTGTGATT TACCG
C	TY1B_LR1 TY1B_H TY1B_ER2	YLRCdelta2 YLRCdelta3 YHRCTy1–1 YERCTy1–2	YLR035C-A YHR214C-B YER160C	6	TCACTACACC ACGTCGTTCC	GGAGTGGAAG ATCAGCGATA A
D	TY1B_PR3 TY1A_PR3	YPRCTy1–4	YPR158C-D YPR158C-C	77	CATTTACTGA TTCATCCTCA GCA	CCCAATTTGG AAAGTCATTA GG
E	TY1B_PR3 TY1B_PL TY1B_OL TY1B_ML1 TY1B_LR3 TY1B_LR2 TY1B_GR1 TY1B_DR6	YPRCTy1–4 YPLWTy1–1 YOLWTy1–1 YMLWTy1–2 YLRWTy1–2 YLRCTy1–1 YGRWTy1–1 YDRWTy1–5	YPR158C-D YPL257W-B YOL103W-B YML039W YLR227W-B YLR157C-B YGR027W-B YDR365W-B	72	ACAATAAGCA CGACCTTCAC C	TCAGAATGAT TAGTGTGATT TACCG

Due to sequence homology, each primer set (labeled **A–E**) amplifies the indicated ORFs. Ty elements are named according to MIPS annotation (*Munich Information Center for Protein Sequences [http://mips.gsf.de/genre/proj/yeast/]).

Table S8. Telomere proximal genes tested by qRT-PCR in **Figure 2C and D; Figure S3**

Telomere	Systematic name	ORF	UPL Probe	Forward primer	Reverse primer
TEL07L	YGL263W	COS12	48	CATTACAAAT ACTCCGGGTA TAGACA	GCAGCTGGAA CCATCAAAA
TEL07L	YGL262W	YGL262W	56	GAGAATTACT CTGACATTGG AGATGA	TTGTCATTAC AGAAGCCATC AAC
TEL07L	YGL258W	VEL1	9	GCCGACGTCT TGACTGAAAG	TGTTTCCTGG CCCAAATATC
TEL07L	YGL257C	MNT2	66	CAAAGTAGCA GCAGTGGCAA T	ACCCAGGCGT AAGACCTTC
TEL07L	YGL256W	ADH4	78	TGGCTATCAT TGACAACAAC G	CCAAACATGG TAGATGGATC G
TEL07L	YGL255W	ZRT1	9	GATCGGTCTA AACCTGGGAA G	CACTAAGACAGGGTATAGGGAGGA
TEL02L	YBL113C	YBL113C	29	CTTGGATTTC GGTCTGACG	CACAGAGCCC GAACATCTTT
TEL02L	YBL109W	YBL109W	42	TCCCTACGGC CTTGTCTAAC	GACAGGTTGG AAGGGTTGAA
TEL02L	YBL107C	MIC23	34	CGAACTGGCA AATACGGAAT	TGATCGGTCT CGTTCTTCAT C
TEL02L	YBL104C	SEA4	16	GCGTATAAGG ATCTGCCAGG TA	CGGAGGACAT TTTTCTGCAT
TEL02L	YBL101C	ECM21	2	CATGAGCTCA CATCAACTGA AAA	TTGGATACTC TGCGAAAATG TC
Control	YBR123C	TFC1	62	GCTGGCACTC ATATCTTATC GTTTCACAAT GG	GAACCTGCTG TCAATACCGC CTGGAG

Table S9. List of ORFs and Ty elements validated by qRT-PCR in **Figure 3A and B; Figure S5**

ORF	Systematic name	UPL Probe	Forward primer	Reverse primer
KCS1	YDR017C	35	GATAAAGAAG GCGAGCAAGC	GGATATTCCC TATGTTCATT ATCACC
LYS14	YDR034C	78	GTCCCCACCG GGTAGTTATC	TTTGTGAACG ATGAACCACT G
YDRCTy2–1 (Primer set A)	YDR034C-D	25	TGCAGATTCC CTTTTATGGA TT	AGGCGCTACC ATGAAGATTG
ARO3	YDR035W	53	TGAAGGTAGA CAAGATATTC CCAAA	AGCATCCGTA ACAGAACAAC C
EHD3	YDR036C	2	ACTCACAAAT GGCCCTGTAT CT	AAGCGTCTGC TCCTGTGACT
BAP3	YDR046C	8	GCGACCCTGG TTCATTTG	TATAACATAT CCCTTTGAAA CGAGTG
ASN1	YPR145W	2	TCTAAGGAAG GCATTCGACA C	TCTTCTGGTA AATATGGCTT AGCA
CUR1	YPR158W	15	ACAATCAGAT AGAAGAATTG AATGACA	CTTCCTTTTT GATGATACTT TCTTGA
YPRCTy1–4 (Primer set D)	YPR158C-D YPR158C-C	77	CATTTACTGA TTCATCCTCA GCA	CCCAATTTGG AAAGTCATTA GG
KRE6	YPR159W	50	TCATCCGAAT CAAGGTGTTG	AGTTTCACCT TCCAAAACAT CAA
SGV1	YPR161C	42	CATTCACCGG ATATTACAAA TGC	CGGCAGGATC ATGTAGAATG
MET16	YPR167C	16	TAAGCCGGAT GGATGTGAA	TCCCATAAGA AATCCCCGTA

The Ty elements YDRCTy2–1 and YPRCTy1–4 correspond to primer sets **A** and **D**, respectively, in **Figure 3E.**