

**Supplemental Table 1.** Yeast gene deletion mutants with increased sensitivity to low zinc.

ORF	Gene	5 generations	15 generations
<i>YOR216C</i>	<i>RUD3</i>	-1.2	-5.3
<i>YNR051C</i>	<i>BRE5</i>		-5.1
<i>YDR149C</i>		-0.9	-4.6
<i>YHR030C</i>	<i>SLT2</i>		-4.6
<i>YCR068W</i>	<i>ATG15</i>	-1.2	-4.45
<i>YPL195W</i>	<i>APL5</i>		-3.95
<i>YDR225W</i>	<i>HTA1</i>	-2.1	-3.9
<i>YDR455C</i>		-0.7	-3.9
<i>YKL048C</i>	<i>ELM1</i>	-0.7	-3.9
<i>YNL329C</i>	<i>PEX6</i>		-3.9
<i>YMR073C</i>	<i>IRC21</i>		-3.9
<i>YHR129C</i>	<i>ARP1</i>	-1.3	-3.85
<i>YDR265W</i>	<i>PEX10</i>		-3.8
<i>YOL012C</i>	<i>HTZ1</i>		-3.75
<i>YOR360C</i>	<i>PDE2</i>	-1.2	-3.75
<i>YGR184C</i>	<i>UBR1</i>	-1.75	-3.7
<i>YLR425W</i>	<i>TUS1</i>		-3.7
<i>YMR294W</i>	<i>JNM1</i>	-1	-3.65
<i>YGL153W</i>	<i>PEX14</i>		-3.6
<i>YKR035W-A</i>	<i>DID2</i>		-3.6
<i>YBR288C</i>	<i>APM3</i>		-3.55
<i>YFL032W</i>		-1.15	-3.5
<i>YBR131W</i>	<i>CCZ1</i>		-3.5
<i>YGR077C</i>	<i>PEX8</i>		-3.5
<i>YJL024C</i>	<i>APS3</i>		-3.5
<i>YJL211C</i>			-3.5
<i>YER167W</i>	<i>BCK2</i>	-1.1	-3.45
<i>YFR040W</i>	<i>SAP155</i>	-1.7	-3.45
<i>YHR079C</i>	<i>IRE1</i>	-1.45	-3.4
<i>YJL080C</i>	<i>SCP160</i>	-1.7	-3.3
<i>YBR227C</i>	<i>MCX1</i>		-3.3
<i>YDL203C</i>	<i>ACK1</i>		-3.3
<i>YMR284W</i>	<i>YKU70</i>		-3.3
<i>YMR275C</i>	<i>BUL1</i>		-3.3
<i>YPL120W</i>	<i>VPS30</i>		-3.25
<i>YDR414C</i>	<i>ERD1</i>		-3.25
<i>YOL044W</i>	<i>PEX15</i>		-3.2

YKL197C	PEX1		-3.15
YJR117W	STE24		-3.1
YIL090W	ICE2	-1.1	-3.1
YMR263W	SAP30	-0.7	-3.1
YDR456W	NHX1		-3.1
YGR133W	PEX4		-3
YDL118W		-1.2	-3
YNL324W			-3
YML055W	SPC2	-1.5	-2.9
YCR036W	RBK1	-0.95	-2.9
YAL055W	PEX22		-2.9
YDL065C	PEX19		-2.9
YNL067W	RPL9B		-2.9
YDR329C	PEX3		-2.85
YGL256W	ADH4		-2.85
YMR304W	UBP15	-1.45	-2.8
YNL325C	FIG4	-0.7	-2.8
YBL083C			-2.8
YLR055C	SPT8	-1.1	-2.75
YIL148W	RPL40A	-0.8	-2.75
YAL040C	CLN3	-1.4	-2.7
YBR103W	SIF2	-1.55	-2.7
YLR191W	PEX13		-2.7
YPR201W	ARR3		-2.7
YKL037W			-2.7
YDR443C	SSN2		-2.7
YGR261C	APL6		-2.7
YKL190W	CNB1		-2.7
YNL025C	SSN8		-2.7
YMR106C	YKU80		-2.65
YNR029C			-2.6
YBR291C	CTP1		-2.6
YGL152C			-2.6
YER059W	PCL6	-0.85	-2.55
YKL114C	APN1	-1.45	-2.5
YBR298C	MAL31	-0.8	-2.5
YLR360W	VPS38		-2.5
YMR299C	DYN3		-2.5
YLR373C	VID22	-1	-2.45
YPL152W	RRD2	-0.95	-2.45
YPL174C	NIP100	-0.8	-2.45
YCR081W	SRB8		-2.45
YDR335W	MSN5		-2.45
YCR033W	SNT1	-0.85	-2.4
YDR150W	NUM1	-0.7	-2.4
YNL264C	PDR17		-2.4

YCR026C	NPP1	-0.7	-2.4
YEL031W	SPF1	-1.25	-2.35
YBR249C	ARO4		-2.35
YCL005W	LDB16		-2.3
YGL124C	MON1		-2.3
YKL032C	IXR1		-2.3
YGR284C	ERV29		-2.3
YOL115W	PAP2		-2.3
YML115C	VAN1		-2.25
YNL016W	PUB1		-2.2
YDR486C	VPS60		-2.2
YCR009C	RVS161		-2.15
YEL029C	BUD16		-2.15
YLL049W	LDB18		-2.1
YFL031W	HAC1		-2.1
YBL039C	URA7		-2.05
YJR044C	VPS55		-2.05
YER161C	SPT2		-2.05
YDL226C	GCS1		-2.05
YOR322C	LDB19		-2.05
YMR016C	SOK2		-2
YOR124C	UBP2		-2
YLL038C	ENT4	-0.8	-2
YDL074C	BRE1		-2
YIL036W	CST6		-2
YJL127C	SPT10	-0.7	-1.9
YBL031W	SHE1		-1.9
YDR043C	NRG1		-1.9
YBR023C	CHS3		-1.9
YJL036W	SNX4		-1.85
YLR436C	ECM30	-0.8	-1.8
YJL154C	VPS35		-1.8
YOL129W	VPS68		-1.8
YML071C	COG8		-1.8
YJR054W			-1.8
YCL029C	BIK1		-1.8
YNR007C	ATG3		-1.8
YGL160W			-1.8
YPL042C	SSN3		-1.8
YGL194C	HOS2	-0.9	-1.75
YCL001W-A		-0.8	-1.75
YDR005C	MAF1		-1.75
YDL066W	IDP1		-1.75
YNL291C	MID1		-1.75
YJL053W	PEP8		-1.75
YOL004W	SIN3	-1	-1.7

YKR029C	SET3	-1	-1.7
YML117W	NAB6	-0.7	-1.7
YOR085W	OST3	-0.75	-1.7
YBL078C	ATG8		-1.7
YIL135C	VHS2		-1.7
YDR388W	RVS167		-1.7
YCR034W	FEN1		-1.65
YKR042W	UTH1		-1.65
YOR067C	ALG8		-1.65
YBR015C	MNN2		-1.65
YLR418C	CDC73	-0.95	-1.6
YCR045C		-0.8	-1.6
YIL044C	AGE2		-1.6
YOL116W	MSN1		-1.6
YPR065W	ROX1		-1.6
YOR002W	ALG6		-1.6
YKL077W			-1.6
YCR087W		-1.1	-1.6
YHL009C	YAP3		-1.6
YNL323W	LEM3		-1.6
YDR488C	PAC11		-1.6
YHR012W	VPS29		-1.6
YNL097C	PHO23	-0.8	-1.55
YGR276C	RNH70	-0.5	-1.55
YLR434C			-1.55
YKR052C	MRS4		-1.55
YHR206W	SKN7	-0.6	-1.55
YCR050C		-0.9	-1.5
YLR335W	NUP2		-1.5
YDR363W	ESC2		-1.5
YJR033C	RAV1		-1.5
YOL064C	MET22		-1.5
YJL115W	ASF1		-1.5
YEL007W			-1.5
YKL041W	VPS24		-1.5
YOL018C	TLG2		-1.5
YDR425W	SNX41		-1.5
YDR276C	PMP3		-1.45
YJL192C	SOP4		-1.45
YBR229C	ROT2		-1.45
YNR039C	ZRG17		-1.45
YBL082C	ALG3		-1.45
YGR289C	MAL11		-1.45
YGR170W	PSD2		-1.45
YCR044C	PER1	-0.85	-1.4
YOR269W	PAC1		-1.4

YCR011C	ADP1		-1.4
YDR426C			-1.4
YML017W	PSP2		-1.4
YNL074C	MLF3		-1.4
YOR304C-A			-1.4
YMR010W			-1.4
YBL091C	MAP2		-1.4
YCR087C-A	LUG1		-1.4
YPL227C	ALG5		-1.4
YGR064W			-1.4
YLR058C	SHM2		-1.35
YOR068C	VAM10		-1.35
YHR204W	MNL1		-1.35
YBL046W	PSY4		-1.35
YBL061C	SKT5		-1.35
YLR079W	SIC1	-0.85	-1.3
YML007W	YAP1		-1.3
YML103C	NUP188		-1.3
YDR496C	PUF6		-1.3
YGR270W	YTA7		-1.3
YJL123C			-1.3
YDL125C	HNT1		-1.3
YDR505C	PSP1		-1.3
YNL027W	CRZ1		-1.3
YDL173W		-1.15	-1.25
YPR064W			-1.25
YGL228W	SHE10		-1.25
YNL219C	ALG9		-1.25
YJR075W	HOC1		-1.25
YGL027C	CWH41		-1.25
YGR063C	SPT4		-1.25
YNL170W		-1.9	-1.2
YJL152W		-0.6	-1.2
YDR169C	STB3		-1.2
YBL062W			-1.2
YDR108W	GSG1		-1.2
YKR041W			-1.2
YOR298C-A	MBF1		-1.2
YDR253C	MET32		-1.2
YIL112W	HOS4		-1.2
YDR451C	YHP1		-1.2
YDR424C	DYN2		-1.2
YPL138C	SPP1		-1.2
YNR030W	ALG12		-1.2
YDR289C	RTT103		-1.2
YDL162C			-1.2
YNR040W			-1.15
YER020W	GPA2		-1.15

YLR404W			-1.15
YDR395W	SXM1		-1.15
YGR004W	PEX31		-1.15
YHL023C	RMD11		-1.15
YOR123C	LEO1	-1.15	-1.1
YDR290W		-0.9	-1.1
YDL172C		-0.8	-1.1
YLL013C	PUF3		-1.1
YGR106C			-1.1
YMR214W	SCJ1		-1.1
YDR466W	PKH3		-1.1
YDR294C	DPL1		-1.1
YML035C-A			-1.1
YOR008C-A			-1.1
YPL066W			-1.1
YGR217W	CCH1		-1.1
YOR069W	VPS5		-1.1
YJL051W	IRC8		-1.1
YPL253C	VIK1		-1.1
YIL162W	SUC2		-1.1
YMR276W	DSK2		-1.1
YGL226C-A	OST5		-1.1
YBR260C	RGD1		-1.1
YML010W-A			-1.1
YNL283C	WSC2		-1.1
YGL003C	CDH1		-1.1
YDR112W	IRC2		-1.1
YKR051W			-1.1
YNL183C	NPR1		-1.1
YDR348C			-1.1
YBR041W	FAT1		-1.05
YBR231C	SWC5		-1.05
YEL062W	NPR2		-1.05
YBR009C	HHF1		-1.05
YDR295C	HDA2		-1.05
YDR071C	PAA1		-1.05
YBR171W	SEC66	-1.2	-1
YJL128C	PBS2		-1
YBR036C	CSG2		-1
YPR179C	HDA3		-1
YOR364W			-1
YHR142W	CHS7		-1
YHR181W	SVP26		-1
YNL041C	COG6		-1
YMR152W	YIM1		-1
YDL133W			-1

YLR131C	ACE2		-1
YGR227W	DIE2		-1
YOR344C	TYE7		-1
YBR216C	YBP1		-1
YIR037W	HYR1		-0.95
YHR078W			-0.95
YEL061C	CIN8		-0.95
YMR190C	SGS1		-0.95
YBR027C			-0.95
YML006C	GIS4	-0.8	-0.9
YNL314W	DAL82		-0.9
YNL322C	KRE1		-0.9
YBR263W	SHM1		-0.9
YFL044C	OTU1		-0.9
YKL149C	DBR1		-0.9
YML010C-B			-0.9
YOR371C	GPB1		-0.9
YDR525W	API2		-0.9
YIL038C	NOT3		-0.9
YML032C	RAD52		-0.9
YML008C	ERG6		-0.9
YGR007W	MUQ1		-0.9
YNL224C	SQS1		-0.9
YGR197C	SNG1		-0.9
YKR040C			-0.9
YPR087W	VPS69		-0.9
YGL060W	YBP2		-0.9
YLR412W			-0.9
YOR132W	VPS17		-0.9
YLR269C			-0.9
YOR112W	CEX1		-0.9
YGR250C			-0.9
YHL002W	HSE1		-0.9
YCL038C	ATG22		-0.9
YJL178C	ATG27		-0.85
YCR076C			-0.85
YJR142W			-0.85
YNL201C	PSY2		-0.85
YER072W	VTC1		-0.85
YHR004C	NEM1		-0.8
YAL009W	SPO7		-0.8
YOR352W			-0.8
YHR031C	RRM3		-0.8
YDR254W	CHL4		-0.8
YPL245W			-0.8
YFL043C			-0.8

YMR167W	MLH1		-0.8
YJR083C	ACF4		-0.8
YOL110W	SHR5		-0.8
YJL193W			-0.8
YLL007C			-0.8
YIL137C	TMA108		-0.8
YDR006C	SOK1		-0.8
YBR277C			-0.8
YER143W	DDI1		-0.8
YIL027C	KRE27		-0.8
YOL035C			-0.8
YMR199W	CLN1		-0.8
YML012W	ERV25		-0.8
YOR140W	SFL1		-0.8
YJL146W	IDS2		-0.8
YHR195W	NVJ1		-0.8
YBR255W			-0.8
YMR070W	MOT3		-0.8
YHR135C	YCK1		-0.8
YNR006W	VPS27		-0.8
YMR179W	SPT21		-0.8
YLL024C	SSA2		-0.8
YKL160W	ELF1		-0.8
YGL049C	TIF4632		-0.8
YCR032W	BPH1		-0.8
YOL128C	YGK3		-0.8
YPL269W	KAR9		-0.8
YDR205W	MSC2		-0.8
YDL180W			-0.8
YKL063C			-0.8
YNL076W	MKS1		-0.8
YOL124C	TRM11		-0.8
YER005W	YND1		-0.8
YCR008W	SAT4	-0.8	-0.75
YBR278W	DPB3		-0.75
YOL036W			-0.75
YOL087C		-0.8	-0.7
YOR351C	MEK1		-0.7
YLR433C	CNA1		-0.7
YBL067C	UBP13	-0.7	-0.7
YOR223W			-0.7
YKR032W			-0.7
YLR176C	RFX1		-0.7
YOR016C	ERP4		-0.7
YOR276W	CAF20		-0.7
YIL125W	KGD1		-0.7



YDR334W	SWR1		-0.7
YFL025C	BST1		-0.7
YCR086W	CSM1		-0.7
YMR159C	ATG16		-0.7
YML095C	RAD10		-0.7
YIL119C	RPI1		-0.7
YKL047W			-0.7
YBR217W	ATG12		-0.7
YLR225C			-0.7
YOR233W	KIN4		-0.7
YMR238W	DFG5		-0.7
YPL022W	RAD1		-0.7
YPL150W			-0.7
YNR021W			-0.7
YHL029C	OCA5		-0.7
YPL261C			-0.7
YHR045W			-0.7
YKL034W	TUL1		-0.7
YEL042W	GDA1		-0.7
YNR067C	DSE4		-0.6
YHL040C	ARN1		-0.6
YJL073W	JEM1		-0.6
YIL160C	POT1		-0.6
YOR017W	PET127		-0.6
YFL021W	GAT1		-0.6
YBL056W	PTC3		-0.6
YCR060W	TAH1		-0.5
YDR392W	SPT3	-2.7	
YLL039C	UBI4	-2.6	
YIL083C		-2.3	
YOL081W	IRA2	-2.1	
YJL175W		-2	
YLR315W	NKP2	-1.9	
YHL025W	SNF6	-1.9	
YGL168W	HUR1	-1.9	
YDR028C	REG1	-1.85	
YPL250C	ICY2	-1.8	
YAL013W	DEP1	-1.6	
YML028W	TSA1	-1.6	
YHR013C	ARD1	-1.4	
YGL212W	VAM7	-1.3	
YJR073C	OPI3	-1.3	
YDL040C	NAT1	-1.25	
YGR056W	RSC1	-1.2	
YJL184W	GON7	-1.2	
YDR484W	VPS52	-1.2	

YOR106W	VAM3	-1.2	
YHR018C	ARG4	-1.2	
YJL029C	VPS53	-1.2	
YHL020C	OPI1	-1.15	
YLR322W	VPS65	-1.15	
YBR156C	SLI15	-1.1	
YLR226W	BUR2	-1.1	
YMR054W	STV1	-1.05	
YDR207C	UME6	-1.05	
YOR198C	BFR1	-1	
YLR386W	VAC14	-1	
YLR148W	PEP3	-1	
YGL054C	ERV14	-0.95	
YDR080W	VPS41	-0.9	
YMR062C	ECM40	-0.9	
YDR372C	VPS74	-0.85	
YIL052C	RPL34B	-0.8	
YGL244W	RTF1	-0.8	
YPL254W	HFI1	-0.8	
YDR173C	ARG82	-0.8	
YER111C	SWI4	-0.8	
YKL054C	DEF1	-0.8	
YCR084C	TUP1	-0.7	
YNL236W	SIN4	-0.7	
YGR057C	LST7	-0.7	
YNL206C	RTT106	-0.6	