Table S3. Components of the Binding shortest-path longevity network. The Binding shortest-path longevity network (SPLN) contains 171 genes/proteins. The Binding SPLN contains 33 of the genes/proteins previously reported to increase replicative life span that were used to build the Binding SPLN (Input), 45 genes that are required for vegetative growth in yeast (Essential), 5 non-essential genes that are not present in the $MAT\alpha$ haploid deletion collection or for which no viable cells were obtained (No Grow/No Deletion), and 88 genes for which replicative life span was assayed (RLS Determined). Seven of the genes/proteins previously reported to increase replicative life span are present in the Composite SPLN (**Figure S1**), but are not contained in the Binding SPLN: Gpr1, Hxk2, Rpd3, Rpl31a, Sch9, Uth1, and Ybr266c.

ORF	Gene	Status
YCR088W	ABP1	RLS Determined
YFL039C	ACT1	Essential
YDR448W	ADA2	RLS Determined
YDR216W	ADR1	RLS Determined
YCL025C	AGP1	RLS Determined
YKL135C	APL2	RLS Determined
YDL029W	ARP2	Essential
YJR065C	ARP3	Essential
YPR034W	ARP7	Essential
YDR101C	ARX1	RLS Determined
YNL101W	AVT4	RLS Determined
YER177W	BMH1	RLS Determined
YDR099W	BMH2	RLS Determined
YIL159W	BNR1	RLS Determined
YBL085W	BOI1	RLS Determined
YER114C	BOI2	RLS Determined
YNR051C	BRE5	Input
YLR310C	CDC25	Input
YBR160W	CDC28	Essential
YJL194W	CDC6	Input
YDR301W	CFT1	Essential
YHR142W	CHS7	RLS Determined
YHR052W	CIC1	Essential
YNL298W	CLA4	RLS Determined
YPR119W	CLB2	RLS Determined
YBR036C	CSG2	RLS Determined
YJR048W	CYC1	RLS Determined
YJL005W	CYR1	Input
YGR155W	CYS4	RLS Determined
YKL087C	CYT2	RLS Determined
YHR169W	DBP8	Essential

YDR385W EFT2 YOR144C ELG1 YPL101W ELP4 YKL182W FAS1 YPR104C FHL1 YLR342W FKS1 YDR110W FOB1 YER027C GAL83 YDR307W GAS1 YDR283C GCN2 YEL009C GCN4 YKL184C GFA1 YKL184C GFA1 YKL194W GIM5 YKL194W GIM5 YKL194W GIM5 YKL194W GIM5 YKL104C GFA1 YKL105C GFA1 YKL105C GFA1 YKL104C GFA1 YKL105C GFA1 YKL104C GFA1 YKL105C GFA1 YKL104C GFA1 YKL104C GFA1 YKL104C GFA1 YKL104C GFA1 YKL105C GFA1 YKL104C GKA YKL104C GKA YKL104			
YPL101W ELP4 YKL182W FAS1 YR104C FHL1 YLR342W FKS1 YDR110W FOB1 YER027C GAL83 YMR307W GAS1 YDR283C GCN2 YEL009C GCN4 YKL104C GFA1 YKL104C GKA		EFT2	
YKL182W FAS1 Essential YPR104C FHL1 Essential YLR342W FKS1 RLS Determined YDR110W FOB1 Input YER027C GAL83 RLS Determined YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YHR095C LAG1 Input YRL003C LAG2 Input YFR001W LOC1 RLS Determined YHR006W MAK21 Essential YHR06C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YOR144C	ELG1	RLS Determined
YPR104C FHL1 Essential YLR342W FKS1 RLS Determined YDR110W FOB1 Input YER027C GAL83 RLS Determined YMR307W GAS1 RLS Determined YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YHL003C LAG1 Input YHL003C LAG1 Input YHL003C LAG1 Input YFR001W LOC1 RLS Determined YPR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YPL101W	ELP4	RLS Determined
YLR342W FKS1 RLS Determined YDR110W FOB1 Input YER027C GAL83 RLS Determined YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YCL040W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YHL003C LAG1 Input YNL003C LAG1 Input YNL003C LAG1 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YLR05C MAS1 Essential YBR084W MIS1 RLS Determined YLS Determined YLR05C MOS1 Essential YGL178W MPT5 Input	YKL182W	FAS1	Essential
YDR110W FOB1 Input YER027C GAL83 RLS Determined YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YCL040W GLK1 RLS Determined YCL040W GLK1 RLS Determined YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YHL003C LAG1 Input YHO03C LAG1 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YLS Determined YLS Determined YLS Determined YLR05C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YPR104C	FHL1	Essential
YER027C GAL83 RLS Determined YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YOL012C HTZ1 RLS Determined YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YER095C IOC2 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YNL005C IOC1 RLS Determined YHL003C LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YLR342W	FKS1	RLS Determined
YMR307W GAS1 RLS Determined YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YNL009W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YNL005C IOC1 RLS Determined YHL003C LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR110W	FOB1	Input
YDR283C GCN2 RLS Determined YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YHC005W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YER027C	GAL83	RLS Determined
YEL009C GCN4 RLS Determined YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YMR307W	GAS1	RLS Determined
YKL104C GFA1 Essential YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YHR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR283C	GCN2	RLS Determined
YML094W GIM5 RLS Determined YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GP18 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YNL005W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YEL009C	GCN4	RLS Determined
YDR507C GIN4 RLS Determined YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YKL104C	GFA1	Essential
YCL040W GLK1 RLS Determined YER020W GPA2 Input YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YLR095C IOC2 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YML094W	GIM5	RLS Determined
YER020W GPA2 Input YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR507C	GIN4	RLS Determined
YDR331W GPI8 Essential YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YCL040W	GLK1	RLS Determined
YKL109W HAP4 Input YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YER020W	GPA2	Input
YJL033W HCA4 Essential YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR331W	GPI8	Essential
YGL194C HOS2 RLS Determined YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YKL109W	HAP4	Input
YPL240C HSP82 RLS Determined YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YJL033W	HCA4	Essential
YOL012C HTZ1 RLS Determined YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YGL194C	HOS2	RLS Determined
YDR342C HXT7 No Deletion/No Grow YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YPL240C	HSP82	RLS Determined
YEL034W HYP2 Essential YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YOL012C	HTZ1	RLS Determined
YOR136W IDH2 Input YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR342C	HXT7	No Deletion/No Grow
YNL009W IDP3 RLS Determined YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YEL034W	HYP2	Essential
YLR095C IOC2 RLS Determined YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YOR136W	IDH2	Input
YJR091C JSN1 RLS Determined YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YNL009W	IDP3	RLS Determined
YER110C KAP123 RLS Determined YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YLR095C	IOC2	RLS Determined
YHL003C LAG1 Input YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YJR091C	JSN1	RLS Determined
YOL025W LAG2 Input YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YER110C	KAP123	RLS Determined
YFR001W LOC1 RLS Determined YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YHL003C	LAG1	Input
YDR060W MAK21 Essential YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YOL025W	LAG2	Input
YLR163C MAS1 Essential YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YFR001W	LOC1	RLS Determined
YBR084W MIS1 RLS Determined YIL106W MOB1 Essential YGL178W MPT5 Input	YDR060W	MAK21	Essential
YIL106W MOB1 Essential YGL178W MPT5 Input	YLR163C	MAS1	Essential
YGL178W MPT5 Input	YBR084W	MIS1	RLS Determined
1	YIL106W	MOB1	Essential
YPR030W MRG19 Input	YGL178W	MPT5	Input
TI TOSO VI TITICOS	YPR030W	MRG19	Input
YNL124W NAF1 Essential	YNL124W	NAF1	Essential
YKR048C NAP1 RLS Determined	YKR048C	NAP1	RLS Determined
YMR309C NIP1 Essential	YMR309C	NIP1	Essential
YHR170W NMD3 Essential	YHR170W	NMD3	Essential
YLR285W NNT1 Input	YLR285W	NNT1	Input
YNR053C NOG2 Essential		NOG2	Essential
YNL110C NOP15 Essential	YNL110C	NOP15	Essential
YNL061W NOP2 Essential	YNL061W	NOP2	Essential

YPL043W	NOP4	Essential
YOR209C	NPT1	Input
YDR288W	NSE3	Essential
YDR001C	NTH1	RLS Determined
YMR047C	NUP116	Essential
YBR060C	ORC2	Essential
YLR350W	ORM2	RLS Determined
YGR087C	PDC6	RLS Determined
YKL043W	PHD1	RLS Determined
YGL008C	PMA1	Essential
YGL037C	PNC1	Input
YDR473C	PRP3	Essential
YER095W	RAD51	RLS Determined
YPL153C	RAD53	Essential
YNL216W	RAP1	Essential
YOR101W	RAS1	Input
YNL0986	RAS2	Input
YDR195W	REF2	RLS Determined
YDR028C	REG1	RLS Determined
YBR267W	REI1	Input
YFR051C	RET2	Essential
YCR028CA	RIM1	RLS Determined
YMR061W	RNA14	Essential
YLR371W	ROM2	Input
YPR190C	RPC82	Essential
YMR242C	RPL20A	RLS Determined
YOR312C	RPL20B	RLS Determined
YLR406C	RPL31B	RLS Determined
YLR448W	RPL6B	Input
YHR200W	RPN10	RLS Determined
YBL103C	RTG3	Input
YDR233C	RTN1	RLS Determined
YCR009C	RVS161	RLS Determined
YDR388W	RVS167	No Deletion/No Grow
YDR129C	SAC6	RLS Determined
YOR367W	SCP1	Input
YER120W	SCS2	RLS Determined
YGR245C	SDA1	Essential
YGL137W	SEC27	Essential
YIL076W	SEC28	RLS Determined
YDL195W	SEC31	Essential
YHR098C	SFB3	No Deletion/No Grow
YPR161C	SGV1	Essential
YGL208W	SIP2	RLS Determined
YJL089W	SIP4	RLS Determined
YDL042C	SIR2	Input
I DE072C	51112	mput

YDR227W	SIR4	Input
YHR149C	SKG6	No Deletion/No Grow
YBL007C	SLA1	RLS Determined
YGR229C	SMI1	RLS Determined
YDR510W	SMT3	Essential
YDR477W	SNF1	RLS Determined
YOR290C	SNF2	RLS Determined
YGL115W	SNF4	Input
YBR289W	SNF5	RLS Determined
YDR006C	SOK1	RLS Determined
YJR010CA	SPC1	RLS Determined
YDR523C	SPS1	RLS Determined
YML010W	SPT5	Essential
YDR293C	SSD1	Input
YPL042C	SSN3	RLS Determined
YPR163C	STM1	RLS Determined
YBR231C	SWC5	RLS Determined
YJL187C	SWE1	RLS Determined
YPL016W	SWI1	Essential
YDR146C	SWI5	RLS Determined
YMR149W	SWP1	Essential
YDR334W	SWR1	RLS Determined
YPL129W	TAF14	RLS Determined
YGR162W	TIF4631	RLS Determined
YPR016C	TIF6	Essential
YKL056C	TMA19	RLS Determined
YDR457W	TOM1	RLS Determined
YOL006C	TOP1	RLS Determined
YJR066W	TOR1	Input
YPL203W	TPK2	Input
YHR099W	TRA1	Essential
YCR084C	TUP1	RLS Determined
YER151C	UBP3	RLS Determined
YDR207C	UME6	RLS Determined
YNL229C	URE2	Input
YML041C	VPS71	RLS Determined
YOR043W	WHI2	RLS Determined
YNL107W	YAF9	RLS Determined
YAR010C	YAR010C	No Deletion/No Grow
YBR238C	YBR238C	Input
YBR255W	YBR255W	Input
YGR234W	YHB1	RLS Determined
YLR200W	YKE2	RLS Determined
YOR135C	YOR135C	Input
YBR183W	YPC1	RLS Determined
		Essential

YHR016C	YSC84	RLS Determined
YMR273C	ZDS1	Input