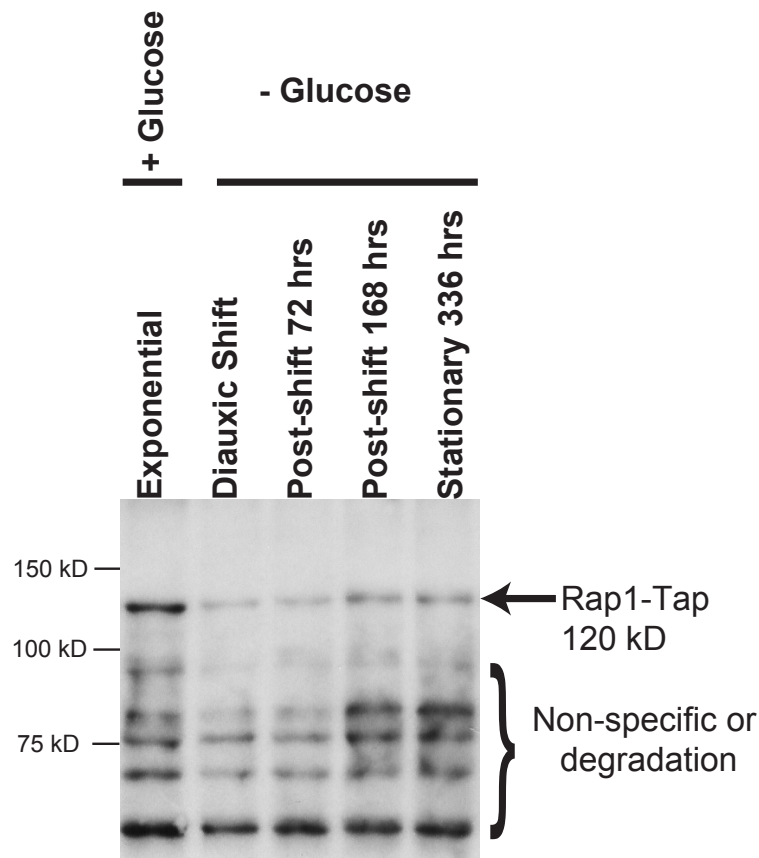
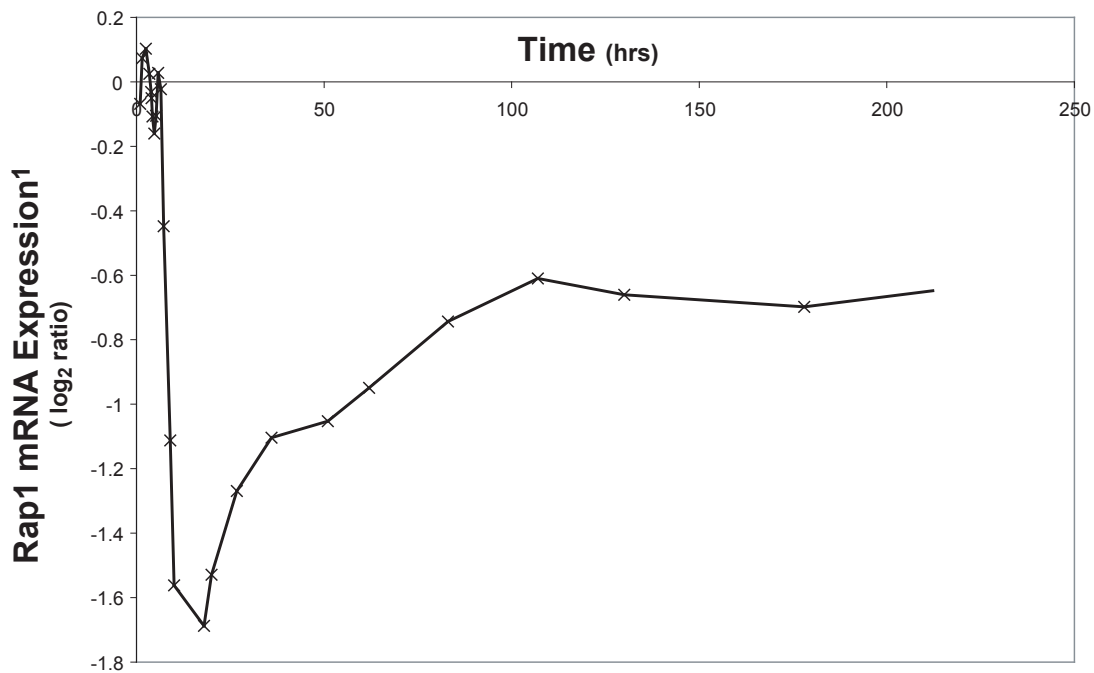


# A

## Rap1 protein levels decrease upon glucose depletion



# B

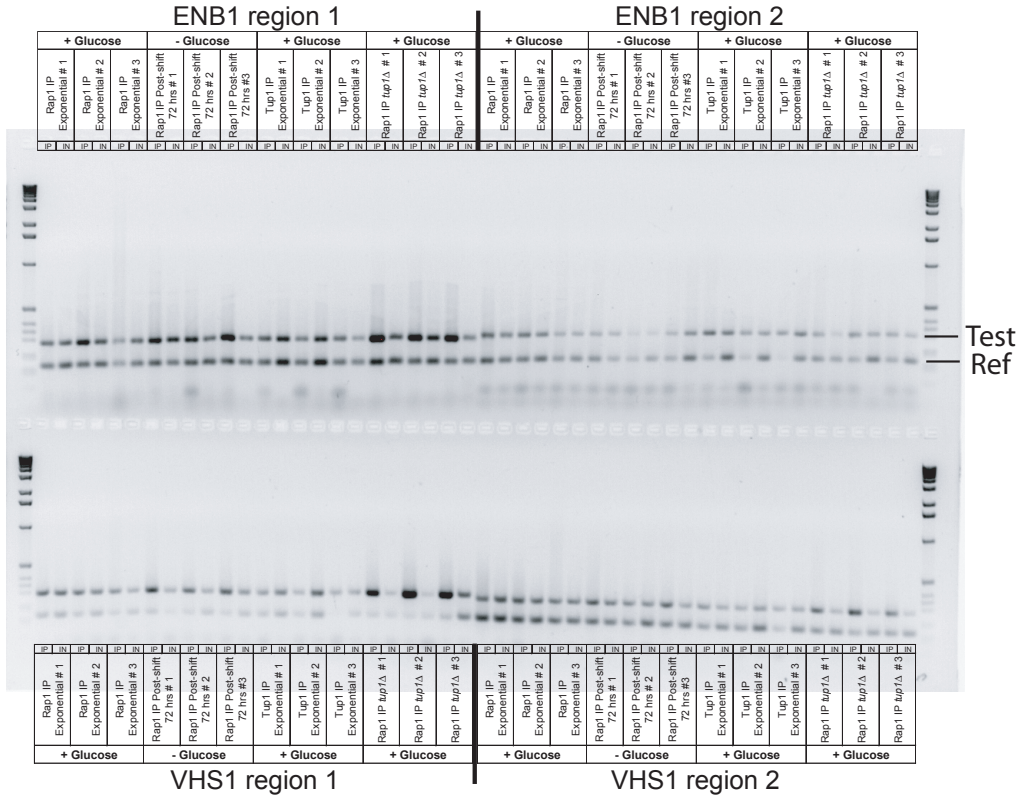


**Supplementary Figure 1. Rap1 protein and mRNA levels decrease as glucose is depleted.**

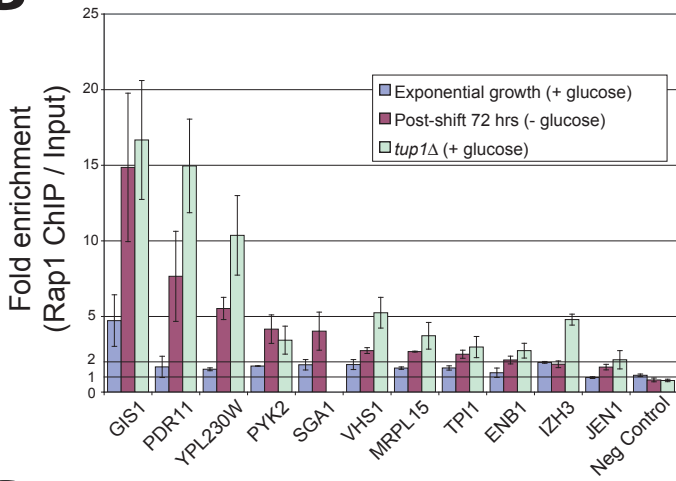
**A)** 20  $\mu$ g of whole-cell extract was separated by a 12% SDS-PAGE gel and probed with anti-Rap1 antibody. **B)** mRNA levels for Rap1, as measured by microarray<sup>1</sup>, decrease upon diauxic shift.

<sup>1</sup>Radonjic, M. et al. Genome-wide analyses reveal RNA polymerase II located upstream of genes poised for rapid response upon *S. cerevisiae* stationary phase exit. *Mol Cell* 18, 171-83 (2005).

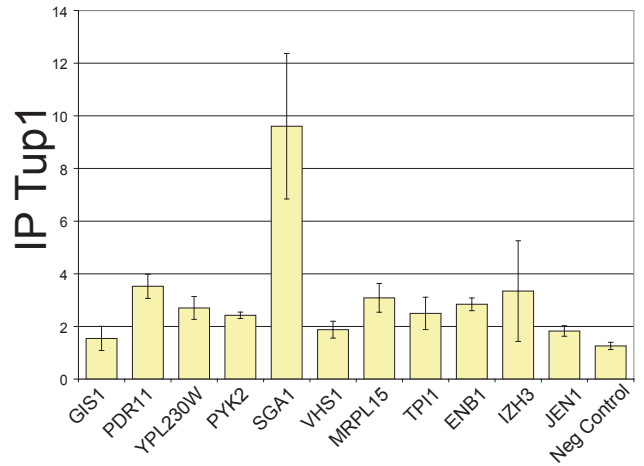
**A**



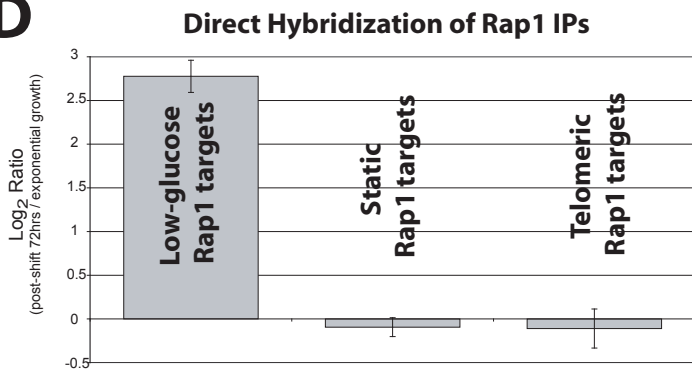
**B**



**C**

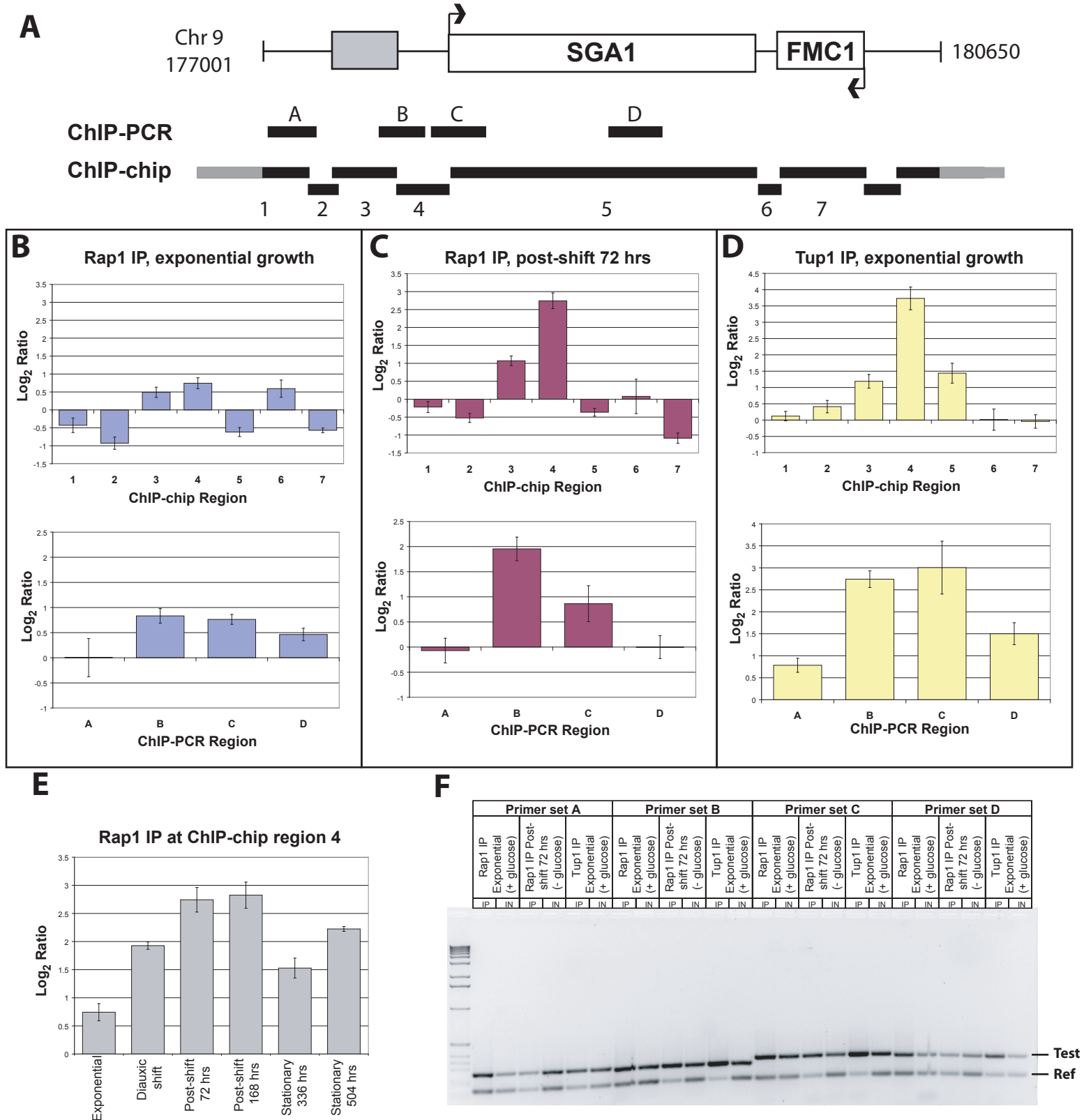


**D**



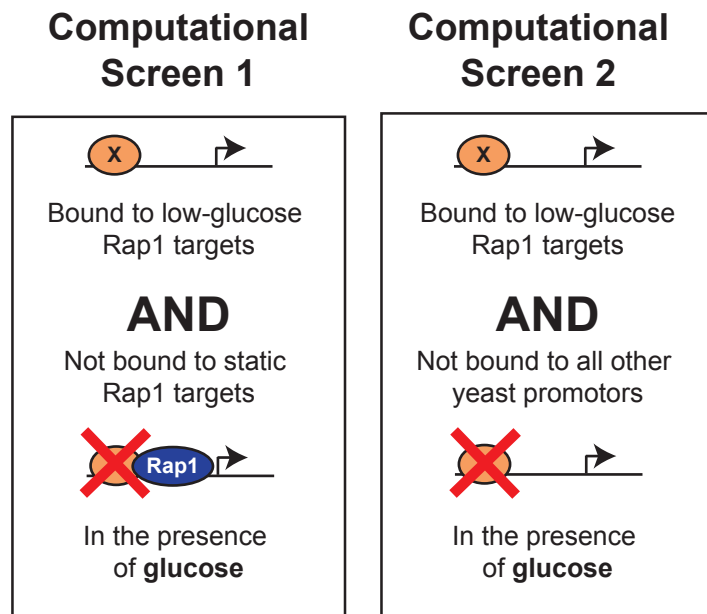
**Supplementary Figure 2. Confirmation of ChIP-chip results.** **A)** Representative agarose gel image of ChIP-PCR results, showing results from two genomic regions upstream of ENB1 and VHS1. ChIP (IP) samples are loaded next to their corresponding input (IN). The top band in every lane is the test fragment, and the bottom band is specific to a control (YHR131C). **B)** The average ratio (IP/Input) for Rap1 IPs, during exponential growth, after depletion of glucose (72 hrs), and in a *tup1*Δ background, is plotted with their standard error at 11 loci. The ratio for any site is determined by the (intensity of the test fragment in IP / intensity of the control fragment in IP) / (intensity of the test fragment in input / intensity of the control fragment in input). **C)** The average ratio (IP/Input) for Tup1 IPs is plotted with their standard error at 11 loci. **D)** Two biological replicates of Rap1 ChIPs after glucose depletion (72 hrs) were hybridized directly on the same microarray with Rap1 ChIPs from cells grown in high glucose. The average ratios reported from probes representing the 52 low-glucose Rap1 targets, 262 static Rap1 targets, and telomeric targets is plotted, along with their standard errors.

Supplementary Figure 3. Buck and Lieb



**Supplementary Figure 3. Confirmation of ChIP-chip results at the SGA1 locus.**

**A)** The open reading frames for SGA1 and FMC1 are shown. An upstream dubious open reading frame is shaded grey. Arrows indicate direction of transcription. The regions tested by ChIP-PCR (A-D) and the elements on the microarray (1-7) are shown below. **B)** Rap1 IPs during exponential growth (+ glucose) as measured by the microarray (top; 8 replicates) and PCR (bottom; 4 replicates). **C)** Rap1 IPs in low glucose (72 hrs) as measured by the microarray (top; 7 replicates) and PCR (bottom; 4 replicates). **D)** Tup1 IPs during exponential growth (+ glucose) as measured by microarray (top; 8 replicate) and PCR (bottom; 3 replicates). **E)** The enrichment at microarray element 4 is shown for the entire timecourse. **F)** A representative gel image for one replicate at each PCR region. IP (IP) samples are loaded next to their corresponding input (IN). The top band in every lane is the test fragment, which is compared to the bottom control band (YHR131C).

**A****B**

**Computational Screen 1**

	Description	r
<b>Mig1</b>	<b>Tup1 associated factor</b> Glucose metabolism	0.25 **
<b>Sut1</b>	<b>Tup1 associated factor</b> Sterol transport	0.23 **
<b>Gat1</b>	Regulation of nitrogen utilization	0.23 **
<b>Nrg1</b>	<b>Tup1 associated factor</b> Glucose metabolism	0.23 **
<b>Dot6</b>	Chromatin silencing at telomere	0.22 **

**Computational Screen 2**

	Description	r
<b>Sut1</b>	<b>Tup1 associated factor</b> Sterol transport	0.14 **
<b>Swi4</b>	G1/S transition of mitotic cell cycle	0.09 **
<b>Nrg1</b>	<b>Tup1 associated factor</b> Glucose metabolism	0.09 **
<b>Phd1</b>	Pseudohyphal growth	0.09 **
<b>Sko1</b>	<b>Tup1 associated factor</b> Negative regulation of transcription	0.07 *

\*\* p &lt; 0.00001; \* p &lt; 0.0001

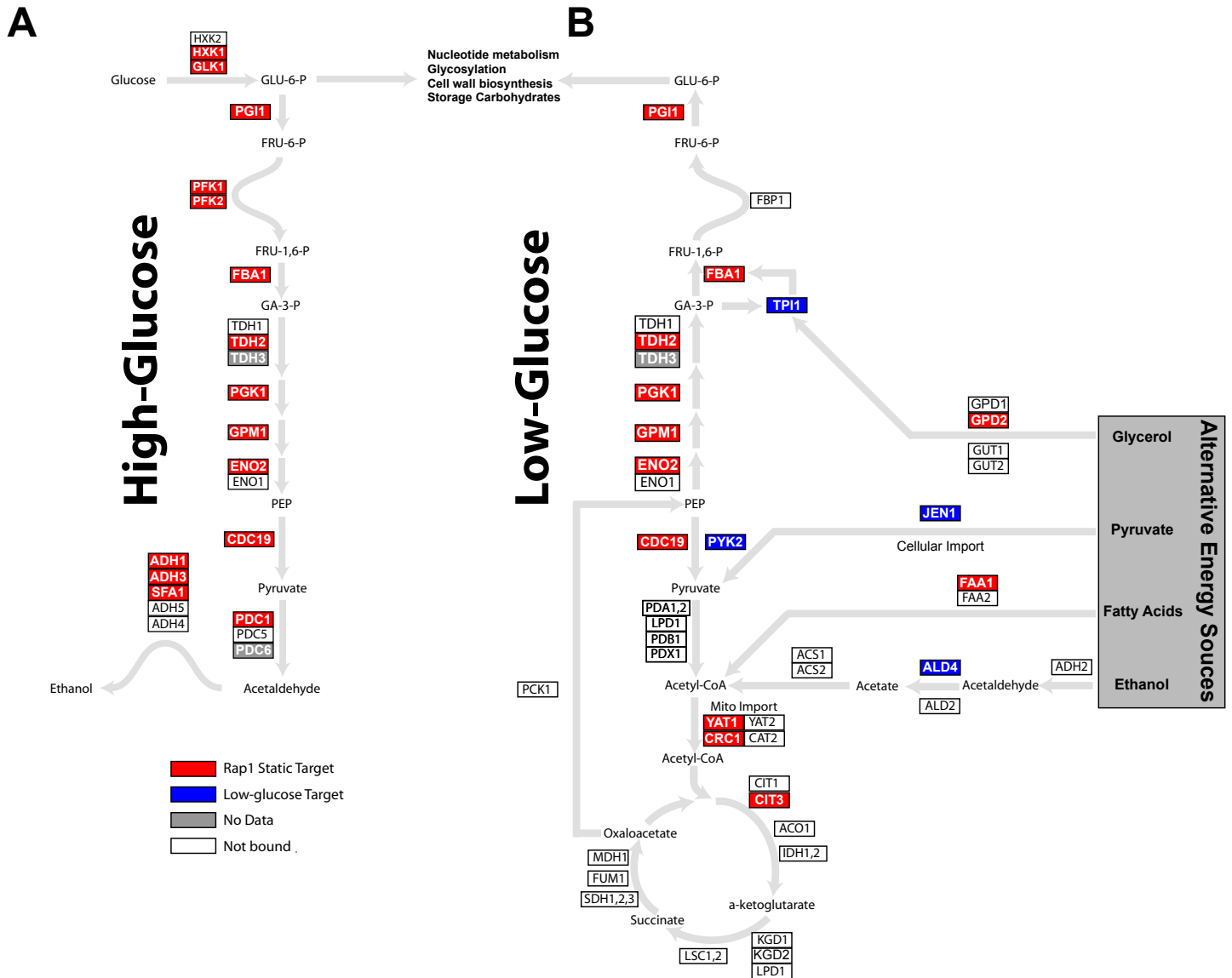
**Supplementary Figure 4. Computational screens predict the involvement of Tup1-Ssn6 proteins in blocking Rap1 binding.** **A)** Schematic representation of two computational screens for effectors of Rap1 conditional binding. Screen 1 compares low-glucose targets versus static targets and screen 2 compares low-glucose targets versus all yeast intergenic regions. Individual variables best separating the two groups were identified using discriminant analysis with stepwise variable selection. The genomic dataset analyzed contained published ChIP-chip data for 205 transcription factors<sup>1</sup>, protein-binding microarray data<sup>2</sup>, nucleosome occupancy<sup>3</sup>, histone methylation<sup>4</sup>, and GC content. **B)** Results for the two computational screens listed by Pearson correlation (r) to the classifier variable. The p-value was estimated by 10,000 permutations. The GO biological process is listed for each protein (lower row). The variables selected were from ChIP-chip experiments<sup>1</sup> except for Mig1 which was from protein-binding microarray data<sup>2</sup>.

<sup>1</sup> Harbison, C.T. et al. Transcriptional regulatory code of a eukaryotic genome. Nature 431, 99-104 (2004).

<sup>2</sup> Mukherjee, S. et al. Rapid analysis of the DNA-binding specificities of transcription factors with DNA microarrays. Nat Genet 36, 1331-9 (2004).

<sup>3</sup> Rao, B., Shibata, Y., Strahl, B.D. & Lieb, J.D. Dimethylation of histone H3 at lysine 36 demarcates regulatory and nonregulatory chromatin genome-wide. Mol Cell Biol 25, 9447-59 (2005).

<sup>4</sup> Lee, C.K., Shibata, Y., Rao, B., Strahl, B.D. & Lieb, J.D. Evidence for nucleosome depletion at active regulatory regions genome-wide. Nat Genet 36, 900-5 (2004).



**Supplementary Figure 5. Rap1 binding and glycolysis**

**A)** Rap1 binds upstream of at least one enzyme involved in each of the eleven steps required to metabolize glucose into ethanol. Static Rap1 targets are shown in red and low-glucose targets are in blue. Arrows indicate the flow of substrate. **B)** During growth in low-glucose, Rap1 binds upstream of genes involved in alternative carbon-source utilization.

**Supplemental Table 1. Summary of all ChIP-chip experiments performed.**

Experiment Number	Array Name	Growth Condition	Protein of interest	Strain	IP Tech
1	PM028I	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
2	PM029I	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
3	BR046C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
4	BR083C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
5	BR111C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
6	BR136C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
7	BR047C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
8	BR095C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
9	BR107C	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
10	BR104C	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
11	PM032I	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
12	PM118I	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
13	PM119I	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
14	BR251C	YPD 24hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
15	BR089C	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
16	PM121I	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
17	BR088C	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
18	BR206C	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
19	PM023I	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
20	PM025I	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
21	BR145C	YPD 72 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
22	BR103C	YPD 168 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
23	PM031I	YPD 168 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
24	PM120I	YPD 168 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
25	BR244C	YPD 168 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
26	BR250C	YPD 168 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
27	BR102C	YPD 336 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
28	PM030I	YPD 336 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
29	BR144C	YPD 336 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
30	PM073I	YPD 336 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
31	PM074I	YPD 504 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
32	BR142C	YPD 504 hrs	Rap1	BY4741 Rap1-TAP <sup>1</sup>	TAP-Tag
33	BR108C	YPD Exponential Growth (OD 0.6-1.0)	Mock	BY4741	TAP-Tag
34	BR246C	YPD Exponential Growth (OD 0.6-1.0)	Mock	BY4741	TAP-Tag
35	BR153C	YPD 24hrs	Mock	BY4741	TAP-Tag
36	PM099I	YPD 24hrs	Mock	BY4741	TAP-Tag
37	BR053C	YPD 72 hrs	Mock	BY4741	TAP-Tag
38	PM097I	YPD 72 hrs	Mock	BY4741	TAP-Tag
39	BR151C	YPD 168 hrs	Mock	BY4741	TAP-Tag
40	PM096I	YPD 168 hrs	Mock	BY4741	TAP-Tag
41	GSM050	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
42	PM093I	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
43	PM122I	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
44	PM110C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sut 1</i> Δ	AB Y-300
45	PM109C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sut 1</i> Δ	AB Y-300
46	GSM047	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sut 1</i> Δ	AB Y-300
47	PM111I	YPD 24hrs	Rap1	BY4741 <i>sut 1</i> Δ	AB Y-300
48	PM112I	YPD 24hrs	Rap1	BY4741 <i>sut 1</i> Δ	AB Y-300

49	PM1131	YPD 72 hrs	Rap1	BY4741 <i>sut1</i> Δ	AB Y-300
50	PM1141	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>mig1</i> Δ	AB Y-300
51	PM1151	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>mig1</i> Δ	AB Y-300
52	PM1161	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>mig1</i> Δ	AB Y-300
53	BR190C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>nrg1</i> Δ	AB Y-300
54	GSM254	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>nrg1</i> Δ	AB Y-300
55	GSM049	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>nrg1</i> Δ	AB Y-300
56	GSM216	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sko1</i> Δ	AB Y-300
57	GSM217	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sko1</i> Δ	AB Y-300
58	GSM226	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>sko1</i> Δ	AB Y-300
59	GSM099	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>dot6</i> Δ	AB Y-300
60	BR061C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>dot6</i> Δ	AB Y-300
61	GSM101	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>dot6</i> Δ	AB Y-300
62	GSM195	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>dot6</i> Δ	AB Y-300
63	GSM230	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>gat1</i> Δ	AB Y-300
64	GSM098	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>gat1</i> Δ	AB Y-300
65	GSM048	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>gat1</i> Δ	AB Y-300
66	BR101C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>tup1</i> Δ	AB Y-300
67	BR198C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>tup1</i> Δ	AB Y-300
68	GSM196	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>tup1</i> Δ	AB Y-300
69	GSM201	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>tup1</i> Δ	AB Y-300
70	BR195C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>tup1</i> Δ	AB Y-300
71	GSM148	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>isw2</i> Δ	AB Y-300
72	GSM149	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>isw2</i> Δ	AB Y-300
73	GSM100	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>isw2</i> Δ	AB Y-300
74	GSM151	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>hda1</i> Δ	AB Y-300
75	GSM198	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>hda1</i> Δ	AB Y-300
76	BR062C	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>hda1</i> Δ	AB Y-300
77	GSM102	YPD Exponential Growth (OD 0.6-1.0)	Rap1	BY4741 <i>hda1</i> Δ	AB Y-300
78	GSM152	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
79	GSM154	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
80	BR063C	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
81	GSM155	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
82	YOI-N-174	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
83	YOI-N-185	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
84	YOI-N-183	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
85	YOI-N-191	YPD Exponential Growth (OD 0.6-1.0)	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
86	BR060C	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
87	GSM104	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
88	YOI-N-173	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
89	GSM146	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
90	YOI-N-219	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
91	YOI-N-220	YPD 72 hrs	Tup1	BY4741 Tup1-TAP <sup>1</sup>	TAP-Tag
92	YOI-N-192	YPD Exponential Growth (OD 0.6-1.0)	Histone H3	BY4741	AB H3
93	YOI-N-134	YPD Exponential Growth (OD 0.6-1.0)	Histone H3	BY4741	AB H3
94	YOI-N-202	YPD Exponential Growth (OD 0.6-1.0)	Histone H3	BY4741	AB H3
95	YOI-N-193	YPD 72 hrs	Histone H3	BY4741	AB H3
96	YOI-N-138	YPD 72 hrs	Histone H3	BY4741	AB H3
97	YOI-N-201	YPD 72 hrs	Histone H3	BY4741	AB H3
98	YOI-N-136	YP EtOH Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
99	YOI-N-117	YP EtOH Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
100	YOI-N-141	YP EtOH Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300
101	YOI-N-119	YP EtOH Exponential Growth (OD 0.6-1.0)	Rap1	BY4741	AB Y-300

102	BR059C	YPD Exponential Growth (OD 0.6-1.0)	Sut1	BY4741 Sut1-TAP <sup>1</sup>	TAP-Tag
103	YOI-N-089	YPD Exponential Growth (OD 0.6-1.0)	Sut1	BY4741 Sut1-TAP <sup>1</sup>	TAP-Tag
104	YOI-N-075	YPD Exponential Growth (OD 0.6-1.0)	Sut1	BY4741 Sut1-TAP <sup>1</sup>	TAP-Tag
105	YOI-N-200	YPD Exponential Growth (OD 0.6-1.0)	Sut1	BY4741 Sut1-TAP <sup>1</sup>	TAP-Tag
106	BR100C	YPD 72 hrs	Sut1	BY4741 Sut1-TAP <sup>1</sup>	TAP-Tag
107	JDL_g_024_	YPD Exponential Growth (OD 0.6-1.0)	Rap1	S288C	AB
108	JDL_g_109_	YPD Exponential Growth (OD 0.6-1.0)	Rap1	S288C	AB
109	JDL_g_124_	YPD Exponential Growth (OD 0.6-1.0)	Rap1	S288C	AB
110	JDL_g_128_	YPD Exponential Growth (OD 0.6-1.0)	Rap1	S288C	AB
111	JDL_g_132_	YPD Exponential Growth (OD 0.6-1.0)	Rap1	S288C	AB
112	JDL_g_084_	YPD 24hrs	Rap1	S288C	AB
113	JDL_g_095_	YPD 24hrs	Rap1	S288C	AB
114	JDL_g_093_	YPD 72 hrs	Rap1	S288C	AB
115	JDL_g_096_	YPD 72 hrs	Rap1	S288C	AB
116	JDL_g_125_	YPD 336 hrs	Rap1	S288C	AB
117	JDL_g_126_	YPD 336 hrs	Rap1	S288C	AB

<sup>1</sup>Ghaemmaghami, S. et al. Global analysis of protein expression in yeast. Nature 425, 737-41 (2003).



Rap1 Target Type	Center of Binding	Downstream ORF 1	Gene Name 1	Downstream ORF 2	Gene Name 2	Notes
Low-Glucose	iYAL003W	YAL002W	VPS8			
Low-Glucose	iYBL050W	YBL049W		YBL048W		
Low-Glucose	iYBR090C	YBR090C		YBR089C-A		
Low-Glucose	iYBR105C	YBR106W	PHO88	YBR105C	VID24	
Low-Glucose	iYBR202W	YBR203W				
Low-Glucose	YCL018W	YCL018W	LEU2			2
Low-Glucose	iYCR006C	YCR006C		YCR005C	CIT2	
Low-Glucose	iYDR050C	YDR050C	TPI1			
Low-Glucose	iYDR061W	YDR062W	LCB2			
Low-Glucose	YDR094W	YDR096W	GIS1			1
Low-Glucose	iYDR246W	YDR247W				
Low-Glucose	iYDR258C	YDR258C	HSP78			
Low-Glucose	iYDR387C	YDR388W	RVS167	YDR387C		
Low-Glucose	iYDR487C	YDR487C	RIB3	YDR486C	VPS60	
Low-Glucose	iYEL028W	tM(CAU)E				
Low-Glucose	YER092W	YER091C	MET6			1
Low-Glucose	iYER145C	YER145C	FTR1	YER146W	LSM5	
Low-Glucose	YFLWTAU1					
Low-Glucose	iYFR017C	YFR017C				
Low-Glucose	iYFR033C	YFR033C	QCR6			
Low-Glucose	iYGL121C	YGL121C		YGL122C	NAB2	
Low-Glucose	iYGL097W-0	YGL096W	TOS8			
Low-Glucose	iYGR091W	YGR092W	DBF2			
Low-Glucose	iYGRCDelta25	YGR144W	THI4			
Low-Glucose	iYGR233C-0	YGR233C	PHO81	YGR234W	YHB1	
Low-Glucose	iYiL119C-1	YiL118W	RHO3	YiL119C	RPI1	
Low-Glucose	iYiL100W	YiL099W	SGA1	YiL101C	XBP1	
Low-Glucose	iYiL013C	YiL013C	PDR11	YiL012W		
Low-Glucose	iYiL009C-A	YiL009C-A	EST3			
Low-Glucose	YJL084C	YJL083W		YJL084C		1, 2
Low-Glucose	iYJL079C	YJL079C	PRY1			
Low-Glucose	iYKL218C-2	YKL217W	JEN1			
Low-Glucose	iYLR023C	YLR023C				
Low-Glucose	YLR141W	YLR142w	PUT1	YLR139c	SLS1	1
Low-Glucose	YLR173W	YLR172C	DPH5	YLR174W	IDP2	1
Low-Glucose	iYLR312C	YLR312W-A	MRPL15	YLR312C		
Low-Glucose	YML122C	YML123C	PHO84	YML121W	GTR1	1
Low-Glucose	iYMR016C-1	YMR017W	SPO20	YMR016C	SOK2	
Low-Glucose	YMR069W	YMR070W	MOT3			1
Low-Glucose	iYMR086C-A	YMR086C-A		YMR087W		
Low-Glucose	iYMRWDelta15	YMR107W				
Low-Glucose	YNL028W	YNL029C	KTR5	YNL027W	CRZ1	1
Low-Glucose	iYOL158C	YOL158C	ENB1			
Low-Glucose	iYOR178C-0	YOR178C	GAC1			
Low-Glucose	iYOR268C	YOR268C		YOR269W	PAC1	
Low-Glucose	YOR318C	YOR319W	HSH49			1
Low-Glucose	YOR348C	YOR347C	PYK2	YOR348C	PUT4	1, 2
Low-Glucose	iYPL231W	YPL230W	USV1			
Low-Glucose	YPL056C	YPL057C	SUR1			1

Low-Glucose	iYPL055C	YPL054W	LEE1	YPL055C		
Low-Glucose	YPL025C	YPL026C	SHA3	YPL024W	NCE4	1
Low-Glucose	iYPR191W	YPR192W	AQY1			
Static	YLR400W	YLR399C	BDF1	YLR400W		1, 2
Static	iYLR390W	YLR390W-A		YLR389C	STE23	
Static	iYJL028W	YJL026W	RNR2	YJL027C		
Static	iYGL116W	YGL115W	SNF4			
Static	YOR343C	YOR342C				
Static	YCR025C	YCR025C		YCR024C-A	PMP1	1, 2
Static	iYMR013C-0	YMR013C	SEC59			
Static	iYAL034C					
Static	iYPL162C	YPL162C				
Static	iYiL019W	YiL018W	RPL2B			
Static	YLR402W	YLR401C		YLR403W	SFP1	1
Static	YEL008W	YEL009C	GCN4	YEL007W	TOS9	1
Static	iYGL075C	YGL075C	MPS2	YGL073W	HSF1	3
Static	iYDL192W	YDL191W	RPL35A			
Static	iYBR047W	YBR048W	RPS11B			
Static	YOR235w	snR17a		YOR234C	RPL33B	1
Static	iYDR186C	YDR186C		YDR188W	CCT6	
Static	iYJR139C	YJR139C	HOM6			
Static	iYPR079W	YPR080W	TEF1			
Static	YEL035C	YEL036C	ANP1	YEL034W	HYP2	1
Static	iYNL329C	YNL329C	PEX6			
Static	iYBL022C	YBL022C	PIM1			
Static	iYJL192C	YJL191W	RPS14B	YJL192C		
Static	iYDR276C	YDR276C	PMP3			
Static	iYiL052C	YiL052C	RPL34B			
Static	iLSR1					
Static	iYDR416W	YDR418W	RPL12B			
Static	iYDL130W-A	YDL130W	RPP1B			
Static	iYOR292C	YOR293W	RPS10A	YOR292C		
Static	iYPL145C	YPL144W		YPL145C	KES1	
Static	iYPR102C	YPR103W	PRE2	YPR102C	RPL11A	
Static	iYER031C	YER031C	YPT31	YER032W	FIR1	
Static	iYDL137W	YDL136W	RPL35B			
Static	iYLR044C	YLR044C	PDC1			
Static	iYOL110W	YOL109W	ZEO1			
Static	iYiL055C	YiL055C		YiL054W	FYV2	
Static	iYLR286C	YLR286C	CTS1			
Static	iYDR063W	YDR064W	RPS13			
Static	YPL080C	YPL079W	RPL21B			1
Static	iYEL054C	YEL054C	RPL12A			
Static	iYCL037C	YCL037C	SRO9	YCL036W		
Static	iYJR058C	YJR059W	PTK2	YJR058C	APS2	
Static	iYML064C	YML063W	RPS1B	YML064C	TEM1	
Static	iYBL087C	YBL087C	RPL23A			
Static	iYDR392W	YDR393W	SHE9			
Static	iYNL302C	YNL302C	RPS19B			
Static	iYDL188C	YDL188C	PPH22	YDL186W		
Static	iYOL121C	YOL121C	RPS19A			
Static	iYEL073C-4					

Static	iYOL083W-1	YOL082W	CVT19				
Static	iYLR437C	YLR437C		YLR438W	CAR2		
Static	iYiR015W	YiR016W					
Static	iYPL221W	YPL220W	RPL1A	YPL219W	PCL8		
Static	iYPL017C	YPL017C		YPL016W	SWI1		
Static	iTA(AGC)D	YDL022W	GPD1	YDL024C	DIA3		
Static	iYLR441C	YLR441C	RPS1A				
Static	iYLL066C-1	YLL065W	GIN11	YLL066C			
Static	iYGR085C	YGR085C	RPL11B				
Static	iYDR036C	YDR036C		YDR037W	KRS1		
Static	iYMR193W	YMR194W	RPL36A				
Static	iYDL083C	YDL082W	RPL13A	YDL083C	RPS16B		
Static	iYOR161C	YOR161C					
Static	iYNL289W-1	YNL288W	CAF40				
Static	iYJL136C	YJL136C	RPS21B	YJL135W			
Static	iYOL060C	YOL059W	GPD2	YOL060C	AMI3		
Static	iYJR122W	YJR123W	RPS5				
Static	YOR183W	YOR182c	RPS30B	YOR184W	SER1	1	
Static	iYHR009C	YHR010W	RPL27A	YHR009C			
Static	iYFR031C-A	YFR031C-A	RPL2A				
Static	iYML025C	YML025C		YML024W	RPS17A		
Static	iYDR449C	YDR450W	RPS18A	YDR449C			
Static	iYBR084C-A	YBR084C-A	RPL19A	YBR085W	AAC3		
Static	YLR003C	YLR003C				2	
Static	iYHR203C	YHR203C	RPS4B	YHR204W	HTM1		
Static	iYDR300C	YDR301W	CFT1	YDR300C	PRO1		
Static	iYGL136C	YGL136C		YGL135W	RPL1B		
Static	iYER073W	YER074W	RPS24A				
Static	iYPR161C	YPR161C	SGV1				
Static	iYiL133C	YiL133C	RPL16A				
Static	iYMR142C	YMR143W	RPS16A	YMR142C	RPL13B		
Static	iYLR047C	YLR048W	RPS0B	YLR047C			
Static	iYLR452C	YLR452C	SST2				
Static	iYBR189W	YBR191W	RPL21A	YBR190W			
Static	iYER116C	YER117W	RPL23B	YER116C	SLX8		
Static	iYNL154C	YNL154C	YCK2	YNL152W			
Static	iYPL249C-A						
Static	iYJL190C	YJL190C	RPS22A	YJL189W	RPL39		
Static	iYDL184C	YDL184C	RPL41A				
Static	iYGL104C	YGL103W	RPL28	YGL104C			
Static	iYPL090C	YPL090C	RPS6A				
Static	iYPR131C	YPR131C	NAT3	YPR132W	RPS23B		
Static	iYPL082C	YPL081W	RPS9A	YPL082C	MOT1		
Static	iTR(CCG)L	YLR344W	RPL26A				
Static	iYCL067C	YCL066W		YCL067C			
Static	YLR112W	YLR110C	CCW12	YLR113W	HOG1	1, 3	
Static	iYBL093C	YBL092W	RPL32	YBL093C	ROX3		
Static	YGL007W	YGL008C	PMA1			1	
Static	iYDR500C	YDR501W	PLM2	YDR500C	RPL37B		
Static	iYOL040C	YOL040C	RPS15	YOL039W	RPP2A		
Static	iYKL176C	YKL175W	ZRT3	YKL176C	LST4		
Static	iYMR229C	YMR230W	RPS10B	YMR229C	RRP5		

Static	iYMR230W	YMR231W	PEP5			
Static	iYGL124C	YGL124C	MON1	YGL123W	RPS2	
Static	iYOL136C	YOL136C	PFK27	YOL133W	HRT1	
Static	iYDR470C	YDR470C	UGO1	YDR471W	RPL27B	
Static	iYNL069C	YNL069C	RPL16B			
Static	iYHL002W	YHL001W	RPL14B			
Static	iYNL011C	YNL010W		YNL011C		
Static	iYOR387C-0	YOR387C				
Static	iYMR015C	YMR015C	ERG5			
Static	YKL097C	YKL096W-A				1
Static	iYCR039C	YCR040W	ALPHA1	YCR039C	ALPHA2	
Static	iYOR100C	YOR101W	RAS1	YOR100C	CRC1	
Static	iYJL090C	YJL089W	SIP4	YJL090C	DPB11	
Static	iYDL055C-0	YDL055C	PSA1			
Static	iYMR143W	YMR144W				
Static	iYOR340C	YOR341W	RPA190	YOR340C	RPA43	
Static	iYBR188C	YBR189W	RPS9B	YBR188C	NTC20	
Static	iYDL169C	YDL169C	UGX2	YDL168W	SFA1	
Static	iYEL023C	YEL022W	GEA2	YEL023C		
Static	iYLR406C	YLR406C	RPL31B	YLR407W		
Static	iYHR032W	YHR033W				
Static	iYLR287C-A	YLR287C-A	RPS30A			
Static	YNL102W	YNL102W	POL1			2
Static	iYLR264W					
Static	iYGR033C	YGR033C		YGR034W	RPL26B	
Static	iYGR027C	YGR027C	RPS25A			
Static	iYGR180C	YGR180C	RNR4	YGR181W	TIM13	
Static	iYNL096C	YNL096C	RPS7B			
Static	YEL045C	YEL046C	GLY1	YEL044W		1
Static	iYJR145C	YJR145C	RPS4A	YJR146W		
Static	iYBL028C	YBL028C		YBL027W	RPL19B	
Static	YJL096W	YJL096W	MRPL49	YJL095W	BCK1	1, 2
Static	iYHL038C	YHL038C	CBP2	YHL036W	MUP3	
Static	iYKR092C-0	YKR092C	SRP40	YKR093W	PTR2	
Static	YLR184W	YLR185W	RPL37A	YLR183C	TOS4	1
Static	iYNL254C	YNL254C		YNL253W		
Static	iYER056C-A	YER056C-A	RPL34A			
Static	iYOL128C	YOL127W	RPL25	YOL128C		
Static	iYKL006C-A	YKL006C-A		YKL006W	RPL14A	
Static	YDR024W	YDR024W	FYV1	YDR025W	RPS11A	1
Static	YER168C	YER169W	RPH1	YER168C	CCA1	
Static	iYLR333C	YLR333C	RPS25B	YLR335W	NUP2	
Static	iYDL076C	YDL076C		YDL075W	RPL31A	
Static	iYMR242C	YMR242C	RPL20A			
Static	iYKL181W	YKL180W	RPL17A			
Static	iYPL132W	YPL131W	RPL5			
Static	iYOR366W	YOR365C		YOR367W	SCP1	
Static	iYLL039C	YLL039C	UBI4	YLL037W		
Static	iYLR447C	YLR447C	VMA6	YLR448W	RPL6B	
Static	iYPR105C	YPR105C		YPR106W	ISR1	
Static	iYFL051C-1					
Static	YBR196C	YBR196C	PGI1			

Static	YLR255C	YLR256W	HAP1	YLR254c		1
Static	YKL031W	YKL031W		YKL032C	IXR1	1, 2
Static	iYOL086C	YOL086C	ADH1	YOL084W	PHM7	
Static	iYLR325C	YLR325C	RPL38	YLR326W		
Static	iYOR344C-0	YOR344C	TYE7			
Static	iYGL147C	YGL147C	RPL9A			
Static	iYDL034W	YDL035C	GPR1			
Static	iYOR301W	YOR302W		YOR303W	CPA1	
Static	iYNL144C-0	YNL144C				
Static	iYER033C	YER034W		YER033C	ZRG8	
Static	iYNL191W	YNL190W				
Static	iYPL199C	YPL198W	RPL7B	YPL199C		
Static	iYOR124C	YOR124C	UBP2			
Static	iYAL053W	YAL051W	OAF1			
Static	iYKL183W	YKL182W	FAS1			
Static	iYFL022C	YFL021W	GAT1	YFL022C	FRS2	
Static	iYOR354C-0	YOR354C	MSC6	YOR355W	GDS1	
Static	iYOR358W	YOR359W				
Static	iYFL034C-A	YFL034W		YFL034C-B		
Static	iYLL002W	YLL001W	DNM1			
Static	iYBL072C	YBL072C	RPS8A	YBL069W	AST1	
Static	iYOL053C-A	YOL052C-A				
Static	iYBL061C	YBL061C	SKT5	YBL060W		
Static	iYMR265C	YMR265C		YMR266W	RSN1	
Static	SNR189	YCR031C	RPS14A	YCR032W	BPH1	1
Static	iYPR110C	YPR111W	DBF20	YPR110C	RPC40	
Static	iYAL040C	YAL040C	CLN3			
Static	iYBR181C	YBR181C	RPS6B			
Static	iYiL069C	YiL069C	RPS24B			
Static	iYNL311C	YNL311C		YNL309W	STB1	
Static	iYLR060W	YLR061W	RPL22A			
Static	iYDR259C	YDR259C	YAP6			
Static	iYER158C	YER158C				
Static	iYKL063C-1	YKL062W	MSN4	YKL063C		
Static	iYMR224C	YMR224C	MRE11			
Static	iYJL178C	YJL177W	RPL17B	YJL178C		
Static	YGR203W	YGR204W	ADE3	YGR202C	PCT1	1
Static	iYML089C	YML088W	UFO1	YML089C		
Static	iYHL033C	YHL033C	RPL8A			
Static	iYKL157W	YKL156W	RPS27A			
Static	iYLR387C	YLR388W	RPS29A	YLR387C		
Static	YGR117C	YGR118W	RPS23A			1
Static	iYPR029C	YPR030W	CSR2	YPR029C	APL4	
Static	iYDR324C	YDR324C		YDR325W	YCG1	
Static	iYOR312C	YOR312C	RPL20B			
Static	iYPR042C	YPR043W	RPL43A	YPR042C	PUF2	
Static	YMR082C	YMR082C		YMR081C	ISF1	1, 2
Static	iYMR250W	YMR251W		YMR250W	GAD1	
Static	iYEL057C	YEL057C		YEL056W	HAT2	
Static	iYKR094C	YKR095W	MLP1	YKR094C	RPL40B	
Static	iYML073C	YML073C	RPL6A			
Static	iYHL016C	YHL016C	DUR3	YHL015W	RPS20	

Static	iYLR074C	YLR074C	BUD20	YLR075W	RPL10	
Static	iYGR283C	YGR283C				
Static	iYAL039C-1	YAL038W	CDC19			
Static	iYiL122W	YiL121W				
Static	iYMR127C	YMR128W	ECM16	YMR127C	SAS2	
Static	iYDL061C	YDL061C	RPS29B	YDL060W	TSR1	
Static	iYDR099W	YDR100W				
Static	iYGR050C	YGR050C		YGR052W		
Static	iTM(CAU)O2					
Static	iYOR179C-1	YOR179C				
Static	iYBL030C-1	YBL029W				
Static	iYOR316C-1	YOR317W	FAA1	YOR316C	COT1	
Static	iYKL200C	YKL201C	MNN4			
Static	iYKR056W	YKR057W	RPS21A			
Static	iYLR412W-1	YLR413W				
Static	iSNR66	YNL025C	SSN8			
Static	iYOR056C	YOR056C		YOR057W	SGT1	
Static	iYDR076W	YDR077W	SED1			
Static	iYNL179C-1	YNL178W	RPS3	YNL179C		
Static	iYARWDELTA7	YAR035W	YAT1			
Static	iYiL057C	YiL057C				
Static	iYLR103C	YLR103C	CDC45	YLR104W		
Static	iYCL025C	YCL025C	AGP1	YCL024W	KCC4	
Static	iYNR069C-0	YNR069C				
Static	iYGR258C-0	YGR258C	RAD2	YGR260W	TNA1	
Static	iYAL054C	YAL054C	ACS1	YAL053W		
Static	iYiL149C	YiL149C	MLP2	YiL148W	RPL40A	
Static	iYMR092C	YMR093W		YMR092C	AIP1	
Static	iYJL207C	YJL207C				
Static	iSNR190	YJL148W	RPA34			
Static	iYBR179C	YBR180W	DTR1	YBR179C	FZO1	
Static	iYLR338W	YLR340W	RPP0			
Static	iYLL044w	YLL045C	RPL8B			
Static	YDR193W	YDR192C	NUP42			1
Static	iYNL163C	YNL163C	RIA1	YNL162W	RPL42A	
Static	iYPL076W-0	YPL075W	GCR1			
Static	iYEL022W	YEL021W	URA3			
Static	iYPL227C	YPL226W	NEW1	YPL227C	ALG5	
Static	iYCRCDELTA6-A	TP(AGG)C				
Static	iYBR060C-0	YBR060C	ORC2			
Static	iYLR327C	YLR327C		TS(GCU)L		
Static	YHR021W-A	YHR021C	RPS27B			1
Static	iYOR337W	YOR338W				
Static	iYER130C	YER130C		YER131W	RPS26B	
Static	YGRWDELTA19					
Static	iYMR116C	YMR116C	ASC1			
Static	iYER101C	YER101C	AST2	YER102W	RPS8B	
Static	iYLR029C	YLR029C	RPL15A	YLR030W		
Static	iYLR303W					
Static	iYBR296C-0	YBR296C	PHO89	YBR297W	MAL33	
Static	YPL111W	YPL111W	CAR1			2
Static	iYGR035C					

Static	iSNR62	YOR043W	WHI2				
Static	iYKL040C						
Static	iYPR008W	YPR009W					
Static	YLR101C	YLR099C	ICT1	YLR100W	ERG27	1	
Static	RDN25-1C	RDN25-1B		RDN25-1C			
Telomeric	iYDR543C	YDR543C					
Telomeric	YHR217C						
Telomeric	iYFL064C	YFL064C		YFL063W			
Telomeric	iYLR460C-1	YLR461W	PAU4			3	
Telomeric	iYML133C-0	YML133C					
Telomeric	YEL074W	YEL075C				1	
Telomeric	YAR073W	YAR075W				1	
Telomeric	iYLL067C-1	YLL067C					
Telomeric	iYERWOMEGA2-0						
Telomeric	TEL9L						
Telomeric	YJR162C	YJR161C	COS5				
Telomeric	TEL15R-1						
Telomeric	YMR326C						
Telomeric	iYJL225C-0	YJL225C					
Telomeric	YKL225W						
Telomeric	YNR076W						
Telomeric	iYGR295C-1	YGR296W	YRF1-3				
Telomeric	TEL6R						
Telomeric	YHR219W						
Telomeric	iYiL177C-0	YiL177C					
Telomeric	iYGL259W-1	YGL258W					
Telomeric	iYLR466W	YLR465C		YLR463C			
Telomeric	TEL15R-6						
Telomeric	iYPR201W-1	YPR202W		YPR203W			
Telomeric	YBL113C						
Telomeric	YCLWOMEGA1	YCL076W		YCLWTY5-1A			
Telomeric	YAL067C						
Telomeric	iYDR541C-0	YDR541C					
Telomeric	iYAL068C-0	YAL068C					
Telomeric	YiR040C	YiR041W				1	
Telomeric	YiL175W	YiL175W		YiL176c		1, 2	
Telomeric	iYGL261C	YGL260W		YGL261C			
Telomeric	YKL223W	YKL224C				1	
Other	iYNL217W	YNL216W	RAP1			4	
Other	YGR031W	YGR030C	POP6	YGR032W	GSC2	1, 4	
Other	iYLL051C	YLL051C	FRE6	YLL049W		4	
Other	YCL042W	YCL040W	GLK1	YCL041C		1, 4	
Other	iYGL084C	YGL084C	GUP1	YGL083W	SCY1	4	
Other	iYER045C-0	YER045C	ACA1	YER046W	SPO73	4	
Other	YNL150W	YNL151C	RPC31			1, 4	
Other	YDL230W	YDL229W	SSB1	YDL231C	BRE4	1, 4	
Other	iSNR47	YDR042C				4	
Other	iYPL095C	YPL095C				4	
Other	iYPL001W	YPR001W	CIT3			4	
Other	iYDR343C	YDR343C	HXT6			4	
Other	iYKL152C	YKL152C	GPM1			4	
Other	iYJR009C-0	YJR009C	TDH2	YJR010W	MET3	4	

Other	iYOR112W	YOR113W	AZF1			4
Other	iYJL078C	YJL078C	PRY3	YJL076W	NET1	4
Other	iTW(CCA)J					4
Other	iYOR369C	YOR369C	RPS12			4
Other	iYNR017W	YNR018W				4
Other	iYCL030C	YCL030C	HIS4			4
Other	YDR451C	YDR452W	PHM5	YDR451C	YHP1	1, 2, 4
Other	iYKL016C	YKL015W	PUT3	YKL016C	ATP7	4
Other	YHR178W	YHR179W	OYE2			1, 4
Other	iYDR311W	YDR312W	SSF2			4
Other	YCR068W	YCR069W		YCR067C	SED4	1, 4
Other	iYKL060C	YKL060C	FBA1			4
Other	iYDR408C	YDR409W		YDR408C	ADE8	4
Other	YDR319C	YDR319C				2, 4
Other	iYMR295C	YMR295C				4
Other	TS(UGA)P	YPR072W	NOT5			1, 4
Other	iYDR135C	YDR135C	YCF1	YDR137W	RGP1	4
Other	iYOR032C	YOR032C	HMS1			4
Other	iYPR054W	YPR055W	SEC8			4
Other	iYJR131W	YJR132W	NMD5			4
Other	YGR210C	YGR209C	TRX2	YGR211W	ZPR1	1, 4
Other	YDR197W	YDR196C		YDR197W	CBS2	1, 2, 4

**Notes** - All peaks of binding were confirmed manually. The downstream targets for any peak centered on a ORF were assigned to (1) the nearest downstream ORFs, and/or (2) to itself. (3) A doublet peak was observed. (4) "Other" targets are not represented on Figure 1, and consist of targets that are strongly bound at at least two time points but fail to meet the criteria for the other three categories.