# **Supplementary Tables**

## **Supplementary Table 1**

All Y2H activators described in this study. The original Y2H study from which they were extracted (Uetz = [24] or Ito = [23]) and the measured activation strengths are given. LTH is the minimal concentration of 3-AT (in mM) that is required to suppress activator activity and thus a direct measure of activation strength. bGAL is the beta-Galactosidase activity measured as described in Materials and Methods, including the Standard Error Mean (SEM) resulting from 3 measurements. Proteins annotated to have the F-GO term "transcriptional activator activity" in the YPD database (Biobase) are indicated (YPD).

ORF	name	source	LTH (3-AT)	bGAL (+/- SEM)	YPD
YAL014C	YAL014C	Ito	>200	0.8685+/-0.0990	
YAL040C	CLN3	Ito	50	-0.029+/-0.0399	
YAR003W	YAR003W	Ito	100	0.1138+/-0.1060	
YAR014C	YAR014C	Ito & Uetz	50	NA	
YAR042W	SWH1	Ito	25	-0.073+/-0.0191	
YAR062W	YAR062W	Ito	50	0.2152+/-0.0601	
YAR074C		Ito	NA	NA	
YBL005W-A	Ą	Ito	NA	NA	
YBL007C	SLA1	Ito	>200	0.8809+/-0.0605	
YBL010C	YBL010C	Ito	100	NA	
YBL025W	RRN10	Ito	NA	NA	
YBL032W		Uetz	NA	NA	
YBL046W	YBL046W	Ito	10	NA	
YBL049W	YBL049W	Ito	NA	NA	
YBL051C	YBL051C	Ito	100	0.4275+/-0.1067	
YBL056W	PTC3	Ito	3	NA	
YBL074C	AAR2	Ito	NA	NA	
YBL079W	NUP170	Ito	100	0.2055+/-0.0769	
YBL081W	YBL081W	Ito	>200	0.8972+/-0.0431	
YBL093C	ROX3	Ito	>200	0.5879+/-0.0490	y
YBL097W	BRN1	Ito	10	NA	
YBR012C	YBR012C	Ito	NA	NA	
YBR028C		Uetz	10	NA	
YBR030W	YBR030W	Ito	100	0.5805+/-0.1252	
YBR045C	GIP1	Ito	NA	NA	
YBR050C	REG2	Ito & Uetz	NA	NA	
YBR057C	MUM2	Ito	NA	NA	
YBR058C	UBP14	Ito	50	0.6862+/-0.0742	
YBR061C	YBR061C	Ito	200	NA	
YBR062C	YBR062C	Ito	NA	NA	
YBR072W	HSP26	Ito	50	0.6162+/-0.1196	

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YBR098W	YBR098W		100	0.0312+/-0.0478	y
YBR105C	VID24	Ito	NA	NA	
YBR125C		Uetz	3	NA	
YBR138C	YBR138C	Ito	100	0.5158+/-0.0970	
YBR156C		Uetz	NA	NA	
YBR193C	MED8	Ito	>200	0.8372+/-0.1316	y
YBR211C	WEDO	Uetz	NA	NA	y
	NCD1				
YBR212W	NGR1	Ito	100	NA	
YBR239C		Uetz	3	NA	
YBR240C	THI2	Ito	50	NA	
YBR250W		Uetz	3	NA	
YBR271W	YBR271W	Ito	200	0.7195+/-0.1125	
YBR284W	YBR284W	Ito	50	-0.000+/-0.0249	
YBR289W	SNF5	Ito	100	NA	y
YCL012W		Ito	NA	NA	J
YCL017C	NFS1	Ito	50	-0.137+/-0.0089	
	INI O I				
YCL032W		Uetz	3	NA	
YCL043C		Uetz	NA	NA	
YCR065W	HCM1	Ito	100	0.1958+/-0.0279	y
YCR077C	PAT1	Ito	>200	0.5859+/-0.0760	
YCR082W	YCR082W	Ito	200	0.5496+/-0.0552	
YDL005C	MED2	Ito	NA	NA	
YDL017W	CDC7	Ito	100	0.2612+/-0.0748	
YDL020C	RPN4	Ito	25	NA	y
YDL028C		Uetz	3	NA	J
YDL037C	YDL037c	Ito	NA	NA	
YDL065C	PEX19	Ito	200	0.1532+/-0.0317	
YDL081C	RPP1A	Ito	200	0.1932+/-0.0225	
YDL088C	ASM4	Ito	>200	0.0355+/-0.0473	
YDL106C	GRF10	Ito	NA	NA	
YDL115C	YDL115c	Ito	NA	NA	
YDL125C		Uetz	NA	NA	
YDL130W	RPP1B	Ito	100	0.1822+/-0.0318	
YDL134C	PPH21	Ito & Uetz	100	0.1252+/-0.0366	
YDL154W	MSH5	Ito	100	-0.080+/-0.0233	
YDL161W	YDL161w	Ito	>200	0.7565+/-0.1249	
YDL165W	CDC36	Ito	50	0.3929+/-0.1141	y
YDL188C	PPH22	Ito	25	-0.003+/-0.0198	J
YDL215C	GDH2	Ito	3	NA	
YDL223C	ODITZ	Uetz	3	NA	
	VDD040-				
YDR016C	YDR016c	Ito	100	NA	
YDR022C	CIS1	Ito	100	0.0735+/-0.0341	
YDR031W	YDR031w	Ito	200	0.4646+/-0.0889	
YDR045C	YDR045C	Ito	10	0.0372+/-0.0526	
YDR073W	SNF11	Ito	100	0.3912+/-0.0466	y
YDR075W	YDR075W	Ito & Uetz	NA	NA	
YDR081C	PDC2	Ito	>200	0.0566+/-0.0424	
YDR082W	STN1	Ito	50	0.3036+/-0.0682	
		-	-		

YDR098C	YDR098C	Ito	3	0.0172+/-0.0266	
YDR103W	STE5	Ito	200	NA	
YDR111C	0.20	Uetz	3	NA	
YDR118W	APC4	Ito	>200	0.2609+/-0.0465	
YDR123C	YDR123C		NA	NA	у
YDR124W	YDR124W		NA	NA	J
YDR132C		Uetz	10	NA	
YDR145W	YDR145W	Ito	NA	NA	y
YDR146C	SWI5	Ito	>200	0.5196+/-0.1306	y
YDR151C	YDR151C		NA	NA	J
YDR162C	YDR162C		NA	NA	
YDR164C		Uetz	NA	NA	
YDR165W		Uetz	3	NA	
YDR167W	YDR167W	Ito	NA	NA	y
YDR183W	YDR183W	Ito	NA	NA	J
YDR184C	ATC1	Ito	>200	0.5882+/-0.0313	
YDR189W		Uetz	3	NA	
YDR210W	YDR210W	Ito	100	NA	
YDR213W	YDR213W	Ito	>200	0.5049+/-0.1203	y
YDR216W	ADR1	Ito	>200	0.4752+/-0.2174	y
YDR221W	YDR221W	Ito	3	NA	-
YDR223W	YDR223W	Ito	>200	0.5482+/-0.0435	
YDR253C	MET32	Ito	50	0.3632+/-0.0988	
YDR260C	YDR260C	Ito	200	-0.010+/-0.0371	
YDR273W	YDR273W	Ito	100	0.5725+/-0.0730	
YDR277C	MTH1	Ito	NA	NA	
YDR291W	YDR291W	Ito	>200	0.0675+/-0.0683	
YDR299W	BFR2	Ito	>200	0.5766+/-0.0529	
YDR308C	SRB7	Ito	25	0.0699+/-0.0375	
YDR318W	YDR318W	Ito	NA	NA	
YDR320C	YDR320C	Ito	>200	0.8629+/-0.0902	
YDR328C	SKP1	Ito	3	0.0399+/-0.0280	
YDR330W	YDR330W	Ito	200	0.2609+/-0.0773	
YDR373W		Uetz	3	NA	
YDR392W	SPT3	Ito	50	0.2372+/-0.1230	y
YDR423C	CAD1	Ito	100	0.0096+/-0.0185	y
YDR443C	SSN2	Ito	>200	0.7916+/-0.0357	
YDR448W	ADA2	Ito	NA	NA	y
YDR464W	SPP41	Ito	3	0.1369+/-0.0537	
YDR484W		Uetz	NA	NA	
YDR489W	YDR489W	Ito	>200	NA	
YDR518W		Uetz	NA	NA	
YDR520C	YDR520C	Ito	>200	0.8299+/-0.0179	
YDR527W	YDR527W	Ito	NA	NA	
YDR532C	YDR532C	Ito	100	0.2726+/-0.0802	
YEL053C	MAK10	Ito	3	NA	
YER008C	SEC3	Ito	50	0.0352+/-0.0300	
YER021W	RPN3	Ito	50	0.3698+/-0.2191	

YER040W GLN3 Ito >200 NA YER045C YER045C Ito >200 0.9192+/-0.0479 yER051W Uetz 200 NA YER059W YER089C Uetz 3 NA YER096W YER096W Ito 100 0.4195+/-0.0440 YER110C SWI4 Ito 100 0.2982+/-0.1524 yER118C YER118C YER118C Ito 100 0.7692+/-0.0578 YER122C Uetz 3 NA YER118C YER130C Ito 100 0.9515+/-0.0602 YER130C YER130C Ito 10 NA YER149C YER130C Ito 10 NA YER149C YER130C Ito 10 NA YER161C UBP3 Ito >200 0.9515+/-0.0602 YER130C CAK1 Ito 200 0.5335+/-0.0385 YFL029C CAK1 Ito 200 0.5335+/-0.0385 YFL029C CAK1 Ito 200 0.5335+/-0.0385 YFL033C RIM15 Ito >200 0.4306+/-0.0764 YFR043C YER049W Ito 100 0.6852+/-0.1114 YFR033C QCR6 Ito 25 0.0139+/-0.0445 YFR034C PHO4 Ito 200 0.5952+/-0.0681 y YFR043C YFR043C Ito 100 0.6852+/-0.1114 YFR033C CDH1 Ito 100 NA YGL026 YGL036W YGL036W Ito 100 0.0675+/-0.0458 YGL036W YGL036W Ito 100 0.2105+/-0.1388 YGL036W YGL036W Ito 200 0.5912+/-0.1001 YGL043W DST1 Ito 100 0.785+/-0.0458 YGL036W YGL036W Ito 200 0.2105+/-0.0150 YGL073W HSF1 Ito >200 0.2105+/-0.0150 YGL073W HSF1 Ito >200 0.2105+/-0.0160 YGL073W HSF1 Ito >200 0.2105+/-0.0100 YGL043W DST1 Ito 100 0.1785+/-0.1442 YGL066W YGL036W Ito 200 0.5912+/-0.1001 YGL043W DST1 Ito 100 0.0675+/-0.0458 YGL079W Ito 200 0.2138+/-0.0565 YGL073W HSF1 Ito >200 0.2138+/-0.0565 YGL073W HSF1 Ito >200 0.2138+/-0.0565 YGL170C YGL070C YBB9 Ito 100 0.0272+/-0.0506 YGL073W HSF1 Ito >200 0.2138+/-0.0565 YGL170C YGL070C YGL070C Ito 100 0.2252+/-0.1001 YGL151W YGL151W Ito NA NA YGL156W YGL036W Ito >200 0.2138+/-0.0565 YGL170C YGL170C Ito 100 0.2252+/-0.1502 YGL170C YGL170C Ito 100 0.5799+/-0.0877 YGL175C YGL227W YGL227C Ito NA NA NA YGL223C YGL223C Ito NA NA NA YGL223C YGL223C Ito NA NA NA YGL223C YGL223C Ito NA NA NA YGL223C YGL227W Ito NA NA NA YGL223C YGL22	YER027C YER033C	GAL83 YER033c	Ito Ito	100 100	0.0962+/-0.0576 NA	
YER045C YER051W YER059W YER059W YER059W YER089C YER089C Uetz 3 NA     Uetz 200 NA     NA     YER059W YER096W Ito 200 0.0992+/-0.1759     YER051W YER096W YER096W Ito 100 0.4195+/-0.0440     YER096W YER096W Ito 100 0.4195+/-0.0440     YER096W YER096W Ito 100 0.4195+/-0.0440     YER108C YER118C Ito 100 0.2982+/-0.1524     YER111C YER118C Ito 100 0.7692+/-0.0578     YER111C YER118C Ito 100 0.7692+/-0.0578     YER122C YER13C Ito 10 NA     YER122C YER13C Ito 10 NA     YER13C YER13C Ito 10 NA     YER149C YER13C Ito 25 NA     YER151C UBP3 Ito 200 0.8425+/-0.0947     YER151C UBP3 Ito 200 0.6002+/-0.2382     YER167W YER167W BCK2 Ito 200 0.6002+/-0.0385     YER167W YER049W Ito 200 0.6335+/-0.0385     YER049W YER049W Ito 100 0.6852+/-0.1114     YER033C QCR6 Ito 25 0.0139+/-0.0445     YER049W YER049W Ito 100 0.6852+/-0.1114     YER043C YER046C Ito NA						
YER051W YER059W PCL6     Uetz Uetz 3     NA       YER089C YER096W YER096W Ito 100 0.4195+/-0.0440     100 0.4195+/-0.0440       YER108C YER096W Ito 100 0.2982+/-0.1524     YER096W YER096W Ito 100 0.2982+/-0.1524     YER118C YER1118C Ito 100 0.7692+/-0.0578       YER118C YER118C VER118C Ito 100 0.7692+/-0.0578     YER122C Uetz 3 NA     NA       YER125W RSP5 Ito >200 0.9515+/-0.0602     YER130C YER130C Ito 10 NA     YER130C YER130C Ito 10 NA       YER130C YER130 Ito 25 NA     YER167W BCK2 Ito >200 0.6002+/-0.2382     YER167W YER167W Ito 200 0.5335+/-0.0385       YFL032C CAK1 Ito 200 0.4306+/-0.0764     YFL049W Ito 100 0.6852+/-0.1114     YFR033C QCR6 Ito 25 0.0139+/-0.0445       YFR033C QCR6 Ito 25 0.0139+/-0.0661     YFR046C Ito NA						V
YER059W YER088C     PCL6     Ito     200     0.0992+/-0.1759       YER088C     Uetz     3     NA       YER096W     YER096W     Ito     100     0.4195+/-0.0440       YER108C     Ito     NA     NA       YER111C     SWI4     Ito     100     0.2982+/-0.1524     y       YER11BC     YER118c     Ito     100     0.7692+/-0.0578     y       YER12CV     Uetz     3     NA     Y       YER12SW     RSP5     Ito     >200     0.9515+/-0.0602     YER130C     Ito     10     NA       YER13DC     YER130c     Ito     10     NA     YER150     YER1670     YER167W     BCK2     Ito     250     NA     YER167W     BCK2     Ito     >200     0.6002+/-0.0947     YER161C     YER167W     BCK2     Ito     >200     0.6802+/-0.0947     YER167W     YER167W     BCK2     Ito     >200     0.5335+/-0.0385     YFL039W     Ito     >200     0.5335+/-0.0385     YFL039W     Ito     >200						J
YER089C     Uetz     3     NA       YER096W     YER096w     Ito     100     0.4195+/-0.0440       YER108C     Ito     NA     NA       YER111C     SWI4     Ito     100     0.2982+/-0.1524     y       YER118C     YER118c     Ito     100     0.7692+/-0.0578     y       YER12C     Uetz     3     NA     y       YER130C     Ito     10     NA     y       YER130C     YER130c     Ito     10     NA       YER130C     YER130c     Ito     10     NA       YER149C     PEA2     Ito     25     NA       YER149C     PEA2     Ito     200     0.8425+/-0.0947       YER149C     PEA2     Ito     200     0.5935+/-0.0947       YER167W     BCK2     Ito     200     0.5935+/-0.0947       YEL049W     YFL049W     Ito     200     0.5935+/-0.0385     YFL049W       YFR043C     PHO4     Ito     200     0.5952+/-0.1114 <t< td=""><td></td><td>PCL6</td><td></td><td></td><td></td><td></td></t<>		PCL6				
YER096W     YER096w     Ito     NA     NA       YER108C     Ito     NA     NA       YER111C     SWI4     Ito     100     0.2982+/-0.1524     y       YER118C     YER118c     Ito     100     0.7692+/-0.0578     y       YER12C     Uetz     3     NA     y       YER12SW     RSP5     Ito     >200     0.9515+/-0.0602     y       YER13OC     YER130c     Ito     10     NA     y       YER149C     PEA2     Ito     25     NA     y       YER149C     PEA2     Ito     25     NA     y       YER167W     BCK2     Ito     >200     0.6002+/-0.2382     y       YFL029C     CAK1     Ito     200     0.5335+/-0.0385     y     YFL049W     YFL049W     Ito     100     0.6852+/-0.0385     y     YFL049W     Ito     100     0.6852+/-0.0184     y     YFR033C     YFR043C     Ito     100     0.5952+/-0.0681     y     YFR033C     YFR046						
YER108C     Ito     NA     NA       YER111C     SWI4     Ito     100     0.2982+/-0.1524     y       YER118C     YER118C     Ito     100     0.7692+/-0.0578     y       YER122C     Uetz     3     NA     Y       YER122C     Uetz     3     NA     Y       YER130C     Ito     10     NA     YER130C     YER130C     Ito     10     NA       YER130C     YER130C     Ito     25     NA     YER167C     YER167C     PEA2     Ito     25     NA     YER167C     YER049C     PEA2     Ito     200     0.8425+/-0.0947     YER049C     YER048C     Ito     200     0.6002+/-0.2382     YFL039C     CAK1     Ito     200     0.5335+/-0.0385     YFL039C     YFL049W     YFL049W     Ito     100     0.6852+/-0.0764     YFL049W     YFL049W     Ito     100     0.6852+/-0.0764     YFR046C     YFR043C     Ito     100     0.5952+/-0.0681     y     YFR046C     YFR046C     Ito     NA<		YER096w				
YER111C     SWI4     Ito     100     0.2982+/-0.1524     y       YER118C     YER118c     Ito     100     0.7692+/-0.0578     Y       YER12CC     Uetz     3     NA     YER125W     RSP5     Ito     >200     0.9515+/-0.0602     YER130C     YER130C     Ito     10     NA     YER149C     YER130C     YER03C     YER03C     YER03C     YER04C     YER04C     YER04C     YER04C     YER04C     YER04C     YER04C     YER04SC						
YER118C     YER118c     Ito     100     0.7692+/-0.0578       YER12CV     Uetz     3     NA       YER12SW     RSP5     Ito     >200     0.9515+/-0.0602       YER130C     YER130c     Ito     10     NA       YER149C     PEA2     Ito     25     NA       YER151C     UBP3     Ito     >200     0.8425+/-0.0947       YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR043C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR046C     YFR046C     Ito     NA     NA       YGL030C     CDH1     Ito     100     N.0675+/-0.0458       YGL03W     YGL036W     Ito     50     0.		SWI4				V
YER122C     Uetz     3     NA       YER125W     RSP5     Ito     >200     0.9515+/-0.0602       YER130C     YER130C     Ito     10     NA       YER149C     PEA2     Ito     25     NA       YER151C     UBP3     Ito     >200     0.8425+/-0.0947       YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR043C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C     YFR046C     Ito     NA     NA       YGL030W     CDH1     Ito     100     0.0675+/-0.0445     YGL015C     YGL015C     Ito     100     0.2105+/-0.1388     YGL02		YER118c				J
YER125W     RSP5     Ito     >200     0.9515+/-0.0602       YER130C     YER130c     Ito     10     NA       YER149C     PEA2     Ito     25     NA       YER151C     UBP3     Ito     >200     0.8425+/-0.0947       YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C     YFR046C     Ito     NA     NA       YGL030C     CDH1     Ito     100     NA     NA     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL						
YER130C     YER130c     Ito     10     NA       YER149C     PEA2     Ito     25     NA       YER151C     UBP3     Ito     >200     0.8425+/-0.0947       YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL033C     RIM15     Ito     >200     0.5335+/-0.0385       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR046C     Ito     100     -0.101+/-0.0157     YFR046C     Ito     NA     NA       YGL03C     CDH1     Ito     100     NA     NA     YGL03C     YGL015C     Ito     100     NA     NA     YGL03GW     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL066W     YGL066W     YGL066W     YGL076W     YGL076W     YGL076W     YGL076W     YGL076W     YGL076	YER125W	RSP5			0.9515+/-0.0602	
YER151C     UBP3     Ito     >200     0.8425+/-0.0947       YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     VFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C     YFR046C     Ito     NA     NA       YGL030C     CDH1     Ito     100     NA     NA     YGL015C     Ito     100     NA     NA     YGL015C     Ito     100     0.0675+/-0.0458     YGL016W     YGL036W     YGL036W     YGL036W     Ito     200     0.5912+/-0.0458     YGL045W     YGL045W     YGL045W     YGL066W <td>YER130C</td> <td>YER130c</td> <td></td> <td>10</td> <td>NA</td> <td></td>	YER130C	YER130c		10	NA	
YER167W     BCK2     Ito     >200     0.6002+/-0.2382       YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR044C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C     YFR046C Ito     NA     NA       YGL033C     CDH1     Ito     100     NA     NA     YGL0303C     CDH1     Ito     100     NA     NA     YGL036W     YGL036W     Ito     100     0.0675+/-0.0458     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL066W     YGL066W     YGL066W     YGL066W     YGL066W     YGL066W     YGL066W     YGL066W     YGL076W     YGL076W     YGL076W     YGL076W     YGL077	YER149C	PEA2	Ito	25	NA	
YFL029C     CAK1     Ito     200     0.5335+/-0.0385       YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C     YFR046C     Ito     NA     NA     YGL003C     CDH1     Ito     100     NA     NA     YGL003C     CDH1     Ito     100     NA     NA     YGL015C     YGL015C     Ito     100     0.0675+/-0.0458     YGL019W     YGL015C     Ito     100     0.0675+/-0.0458     YGL019W     YGL036W     Ito     >200     0.5912+/-0.0458     YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001     YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001     YGL036W     YGL036W     YGL044C     YGL04     YGL04C     YGL04C     YGL04C     YGL	YER151C	UBP3	Ito	>200	0.8425+/-0.0947	
YFL033C     RIM15     Ito     >200     0.4306+/-0.0764       YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     y       YFR046C     YFR046C     Ito     NA     NA     NA     YGL003C     CDH1     Ito     100     NA     NA     YGL015C     Ito     100     0.0675+/-0.0458     YGL015C     YGL015C     Ito     100     0.0675+/-0.0458     YGL019W     YGL015C     Ito     100     0.0675+/-0.0458     YGL019W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL036W     YGL066W     YGL079W     YGL079W     YGL079W     YGL079W     YGL079W     YGL079W     YGL079W     YGL079W	YER167W	BCK2	Ito	>200	0.6002+/-0.2382	
YFL049W     YFL049W     Ito     100     0.6852+/-0.1114       YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     y       YFR046C     YFR046C     Ito     NA     NA     NA       YGL03C     CDH1     Ito     100     NA     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458     NA       YGL019W     CKB1     Ito     50     0.2105+/-0.1388     NA       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001     NA       YGL038W     YGL066W     Ito     50     (3 Uetz)     0.7785+/-0.1001     NA       YGL066W     YGL066W     Ito     100     0.0272+/-0.0506     NA       YGL079W     Ito     200     NA     NA       YGL079W     Ito     200     0.2138+/-0.0565     NA       YGL127C	YFL029C	CAK1	Ito	200	0.5335+/-0.0385	
YFR033C     QCR6     Ito     25     0.0139+/-0.0445       YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     y       YFR046C     YFR046C     Ito     NA     NA     NA       YGL03C     CDH1     Ito     100     NA     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458     NA       YGL019W     CKB1     Ito     50     0.2105+/-0.1388     NA       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001     NA       YGL038W     YGL036W     Ito     >200     0.5912+/-0.1001     NA       YGL036W     YGL036W     Ito     100     0.1785+/-0.1001     NA       YGL043W     DST1     Ito     100     0.0272+/-0.0506     NA       YGL079W     Ito     200     NA     NA     YGL079W     NA     NA     NA     NA     YGL127C     NA     NA     NA	YFL033C	RIM15	Ito	>200	0.4306+/-0.0764	
YFR034C     PHO4     Ito     200     0.5952+/-0.0681     y       YFR043C     YFR043C     Ito     100     -0.101+/-0.0157     YFR046C       YFR046C     YFR046C     Ito     NA     NA       YGL003C     CDH1     Ito     100     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458       YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL036W     YGL036W     Ito     100     0.1785+/-0.1001       YGL036W     YGL036W     Ito     100     0.1785+/-0.1001       YGL043W     DST1     Ito     100     0.0272+/-0.01001       YGL066W     YGL066W     Ito     200     NA       YGL070C     RPB9     Ito     100     0.2138+/-0.0565       YGL127C     SOH1     Ito     20     0.2138+/-0.0288       YGL134W     YGL151W     Ito     NA     NA       YGL151W     YGL	YFL049W	YFL049W	Ito	100	0.6852+/-0.1114	
YFR043C     YFR046C     Ito     100     -0.101+/-0.0157       YFR046C     YFR046C     Ito     NA     NA       YGL003C     CDH1     Ito     100     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458       YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito     100     0.0272+/-0.001       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406 <td>YFR033C</td> <td>QCR6</td> <td>Ito</td> <td>25</td> <td>0.0139+/-0.0445</td> <td></td>	YFR033C	QCR6	Ito	25	0.0139+/-0.0445	
YFR046C     YFR046C     Ito     NA     NA       YGL003C     CDH1     Ito     100     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458       YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito <td>YFR034C</td> <td>PHO4</td> <td>Ito</td> <td>200</td> <td>0.5952+/-0.0681</td> <td>y</td>	YFR034C	PHO4	Ito	200	0.5952+/-0.0681	y
YGL003C     CDH1     Ito     100     NA       YGL015C     YGL015C     Ito     100     0.0675+/-0.0458       YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL079W     YGL079W     Ito     200     0.0412+/-0.0288       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito <td>YFR043C</td> <td>YFR043C</td> <td>Ito</td> <td>100</td> <td>-0.101+/-0.0157</td> <td>-</td>	YFR043C	YFR043C	Ito	100	-0.101+/-0.0157	-
YGL015C     YGL015C     Ito     100     0.0675+/-0.0458       YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     Ito     100     0.5799+/-0.0877     Y       YGL172W     NUP49     Ito <td>YFR046C</td> <td>YFR046C</td> <td>Ito</td> <td>NA</td> <td>NA</td> <td></td>	YFR046C	YFR046C	Ito	NA	NA	
YGL019W     CKB1     Ito     50     0.2105+/-0.1388       YGL036W     YGL036W     Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     YGL175C       YGL175C     SAE2     Ito     NA     NA       YGL223C	YGL003C	CDH1	Ito	100	NA	
YGL036W     YGL036W Ito     >200     0.5912+/-0.1001       YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C Ito     100     0.5799+/-0.0877     YGL175C     SAE2     Ito     NA     NA       YGL223C     YGL223C Ito     200     NA     NA     YGL227W Ito     NA     NA <td>YGL015C</td> <td>YGL015C</td> <td>Ito</td> <td>100</td> <td>0.0675+/-0.0458</td> <td></td>	YGL015C	YGL015C	Ito	100	0.0675+/-0.0458	
YGL043W     DST1     Ito     100     0.1785+/-0.1442       YGL066W     YGL066W     Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.5799+/-0.0877     YGL175C     SAE2     Ito     NA     NA       YGL181W     Uetz     3     NA     y       YGL223C     YGL223C     Ito     NA     NA <t< td=""><td>YGL019W</td><td>CKB1</td><td>Ito</td><td>50</td><td>0.2105+/-0.1388</td><td></td></t<>	YGL019W	CKB1	Ito	50	0.2105+/-0.1388	
YGL066W     YGL066W     Ito & Uetz     50 (3 Uetz)     0.7785+/-0.1077       YGL070C     RPB9     Ito     100     0.0272+/-0.0506       YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL166C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.5799+/-0.0877     YGL175C     SAE2     Ito     NA     NA       YGL175C     SAE2     Ito     NA     NA     YGL223C     YGL223C     NA     YGL223C     NA     NA       YGL227W     YGL227W     Ito     NA     NA     NA	YGL036W	YGL036W	Ito	>200	0.5912+/-0.1001	
YGL070C   RPB9   Ito   100   0.0272+/-0.0506     YGL073W   HSF1   Ito   >200   NA     YGL079W   YGL079W   Ito   200   0.2138+/-0.0565     YGL127C   SOH1   Ito   50   0.0412+/-0.0288     YGL134W   PCL10   Ito   25   -0.054+/-0.0140     YGL151W   YGL151W   Ito   NA   NA     YGL154C   LYS5   Ito   10   0.3445+/-0.1086     YGL166C   Uetz   NA   NA     YGL166W   CUP2   Ito   >200   0.8069+/-0.1406   y     YGL170C   YGL170C   Ito   100   0.5799+/-0.1502   y     YGL172W   NUP49   Ito   100   0.5799+/-0.0877   y     YGL175C   SAE2   Ito   NA   NA     YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA	YGL043W	DST1	Ito	100	0.1785+/-0.1442	
YGL073W     HSF1     Ito     >200     NA       YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     y       YGL172W     NUP49     Ito     100     0.5799+/-0.0877     Y       YGL175C     SAE2     Ito     NA     NA     Y       YGL223C     YGL223C     Ito     200     NA       YGL227W     YGL227W     Ito     NA     NA       YGL229C     SAP4     Ito     100     NA       YGR052W     Uetz     3     NA	YGL066W	YGL066W	Ito & Uetz	50 (3 Uetz)	0.7785+/-0.1077	
YGL079W     YGL079W     Ito     200     0.2138+/-0.0565       YGL127C     SOH1     Ito     50     0.0412+/-0.0288       YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     Y       YGL172W     NUP49     Ito     100     0.5799+/-0.0877     Y       YGL175C     SAE2     Ito     NA     NA     Y       YGL181W     Uetz     3     NA     y       YGL223C     YGL223C     Ito     NA     NA       YGL227W     YGL227W     Ito     NA     NA       YGL229C     SAP4     Ito     100     NA       YGR052W     Uetz     3     NA <	YGL070C	RPB9	Ito	100	0.0272+/-0.0506	
YGL127C   SOH1   Ito   50   0.0412+/-0.0288     YGL134W   PCL10   Ito   25   -0.054+/-0.0140     YGL151W   YGL151W   Ito   NA   NA     YGL154C   LYS5   Ito   10   0.3445+/-0.1086     YGL161C   Uetz   NA   NA     YGL166W   CUP2   Ito   >200   0.8069+/-0.1406   y     YGL170C   YGL170C   Ito   100   0.2252+/-0.1502   y     YGL172W   NUP49   Ito   100   0.5799+/-0.0877   Y     YGL175C   SAE2   Ito   NA   NA   NA     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   NA   NA     YGL227W   YGL227W   Ito   NA   NA     YGR052W   Uetz   3   NA	YGL073W	HSF1	Ito	>200	NA	
YGL134W     PCL10     Ito     25     -0.054+/-0.0140       YGL151W     YGL151W     Ito     NA     NA       YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     Y       YGL172W     NUP49     Ito     100     0.5799+/-0.0877     Y       YGL175C     SAE2     Ito     NA     NA     Y       YGL223C     YGL223C     Ito     NA     NA     Y       YGL227W     YGL227W     Ito     NA     NA     NA       YGR052W     Uetz     3     NA     NA	YGL079W	YGL079W	Ito	200	0.2138+/-0.0565	
YGL151W   YGL151W   Ito   NA   NA     YGL154C   LYS5   Ito   10   0.3445+/-0.1086     YGL161C   Uetz   NA   NA     YGL166W   CUP2   Ito   >200   0.8069+/-0.1406   y     YGL170C   YGL170C   Ito   100   0.2252+/-0.1502   Y     YGL172W   NUP49   Ito   100   0.5799+/-0.0877   Y     YGL175C   SAE2   Ito   NA   NA   Y     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   NA   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA	YGL127C	SOH1	Ito	50	0.0412+/-0.0288	
YGL154C     LYS5     Ito     10     0.3445+/-0.1086       YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     Y       YGL172W     NUP49     Ito     100     0.5799+/-0.0877     Y       YGL175C     SAE2     Ito     NA     NA     Y       YGL181W     Uetz     3     NA     y       YGL223C     YGL223C     Ito     200     NA       YGL227W     YGL227W     Ito     NA     NA       YGL229C     SAP4     Ito     100     NA       YGR052W     Uetz     3     NA	YGL134W	PCL10	Ito	25	-0.054+/-0.0140	
YGL161C     Uetz     NA     NA       YGL166W     CUP2     Ito     >200     0.8069+/-0.1406     y       YGL170C     YGL170C     Ito     100     0.2252+/-0.1502     YGL172W     NUP49     Ito     100     0.5799+/-0.0877     YGL175C     SAE2     Ito     NA     NA     NA     YGL181W     Uetz     3     NA     y     YGL223C     Ito     200     NA     YGL227W     YGL227W     Ito     NA     NA     YGL229C     SAP4     Ito     100     NA     NA     YGR052W     Uetz     3     NA     NA     NA     NA     NA     YGR052W     NA     NA     NA     NA     NA     YGR052W     Uetz     3     NA     NA     NA     NA     YGR052W     Uetz     3     NA     NA     NA     NA     YGR052W     Uetz     3     NA     NA     NA     NA     YGR052W     VGR052W     VGR052W     VGR052W     VGR052W     VGR052W     VGR052W     VGR052W     VGR052W	YGL151W	YGL151W	Ito	NA	NA	
YGL166W   CUP2   Ito   >200   0.8069+/-0.1406   y     YGL170C   YGL170C   Ito   100   0.2252+/-0.1502   Y     YGL172W   NUP49   Ito   100   0.5799+/-0.0877   Y     YGL175C   SAE2   Ito   NA   NA   Y     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGR052W   Uetz   3   NA	YGL154C	LYS5	Ito	10	0.3445+/-0.1086	
YGL170C   YGL170C   Ito   100   0.2252+/-0.1502     YGL172W   NUP49   Ito   100   0.5799+/-0.0877     YGL175C   SAE2   Ito   NA   NA     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA	YGL161C		Uetz	NA	NA	
YGL172W   NUP49   Ito   100   0.5799+/-0.0877     YGL175C   SAE2   Ito   NA   NA     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA			Ito	>200	0.8069+/-0.1406	y
YGL175C   SAE2   Ito   NA   NA     YGL181W   Uetz   3   NA   y     YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA	YGL170C		Ito	100	0.2252+/-0.1502	
YGL181W   Uetz   3   NA   y     YGL223C   YGL223C Ito   200   NA     YGL227W   YGL227W Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA			Ito		0.5799+/-0.0877	
YGL223C   YGL223C   Ito   200   NA     YGL227W   YGL227W   Ito   NA   NA     YGL229C   SAP4   Ito   100   NA     YGR052W   Uetz   3   NA		SAE2	Ito			
YGL227W YGL227W Ito NA NA YGL229C SAP4 Ito 100 NA YGR052W Uetz 3 NA						y
YGL229C SAP4 Ito 100 NA YGR052W Uetz 3 NA						
YGR052W Uetz 3 NA						
		SAP4				
YGR070W Uetz NA NA						
	YGR070W		Uetz	NA	NA	

YGR077C	PEX8	Ito	25	0.0188+/-0.0190	
YGR120C	YGR120C	Ito	>200	NA	
YGR130C	YGR130C	Ito	>200	0.4559+/-0.0909	
YGR160W		Uetz	25	NA	
YGR163W	YGR163W	/ Ito	NA	NA	
YGR188C		Uetz	3	NA	
YGR241C	YAP1802	Ito	>200	0.2015+/-0.0863	
YGR251W	YGR251W	/ Ito	50	NA	
YGR253C	PUP2	Ito	200	0.1598+/-0.0615	
YGR256W		Uetz	3	NA	
YGR269W	YGR269W	/ Ito	25	NA	
YGR274C	YGR274C	Ito	NA	NA	y
YGR288W	YGR288W	/ Ito	25	NA	y
YHL009C	YAP3	Ito	NA	NA	J
YHL012W	YHL012W		200	NA	
YHL018W	YHL018W		3	NA	
	SLT2	Ito	100	0.5042+/-0.0686	
YHR056C	YHR056C		25	NA	
YHR086W	NAM8	Ito	3	NA	
YHR124W	NDT80	Ito	3	0.0272+/-0.0281	
YHR135C	112100	Uetz	3	NA	
YHR149C	YHR149C		10	NA	
YHR160C	YHR160C		>200	1.0002+/-0.0941	
YHR167W	1111(1000	Uetz	3	NA	
YHR170W	NMD3	Ito	3	NA	
YHR183W	TAINIDO	Uetz	10	NA	
YHR184W	SSP1	Ito	25	NA	
YHR185C	YHR185C		25	NA	
YHR187W	IKI1	Ito	200	0.8495+/-0.0858	
YHR205W	SCH9	Ito	200	0.1552+/-0.0475	
YIL007C	30119	Uetz	50	NA	
YIL019W	YIL019W	Ito	200	0.2692+/-0.0706	
YIL021W	RPB3	Ito	>200	0.6482+/-0.0357	
YIL021VV	CAP2	Ito	100	0.2682+/-0.0399	
YIL034C	YIL036W			0.2162+/-0.0399	• •
YIL036W YIL046W	TILUSOVV	Ito	100		У
YIL046VV YIL062C	ADC15	Uetz	NA 100	NA 0.0471/0.0183	
	ARC15	Ito	100	-0.047+/-0.0183	
YIL071W	VII 0700	Ito	NA NA	NA 0.0002+/-0.0007	
YIL079C	YIL079C	Ito	>200	0.9892+/-0.0207	
YIL093C	YIL093C	Ito	3	-0.042+/-0.0378	
YIL119C	RPI1	Ito	>200	0.9349+/-0.0426	У
YIL123W	SIM1	Ito	3	NA	
YIL135C	YIL135C	Ito	3	NA	
YIL151C	YIL151C	Ito	NA	NA 0.0400+/.0.0000	
YIR010W	YIR010W	Ito	100	0.0122+/-0.0233	
YIR025W	YIR025W	Ito	3	-0.092+/-0.0238	
YJL029C	YJL029C	Ito	>200	NA	
YJL058C	YJL058C	Ito	50	0.0046+/-0.0229	

YJL069C	YJL069C	Ito	100	-0.019+/-0.0421	
YJL070C	YJL070C	Ito	NA	NA	
YJL084C	YJL084C	Ito	50	NA	
YJL098W	YJL098W	Ito	10	NA	
YJL100W		Uetz	100	NA	
YJL103C	YJL103C	Ito	50	-0.056+/-0.0198	
YJL106W	IME2	Ito	10	NA	
YJL116C	NCA3	Ito	200	0.6629+/-0.1065	
YJL126W		Uetz	3	NA	
YJL127C	SPT10	Ito	25	-0.076+/-0.0166	y
YJL146W	IDS2	Ito	>200	0.2022+/-0.1395	J
YJL147C	YJL147C	Ito	3	NA	
YJL159W	HSP150	Ito	NA	NA	
YJL176C	SWI3	Ito	200	0.0189+/-0.0175	
YJL181W	YJL181W	Ito	>200	0.1689+/-0.0668	
YJL185C	YJL185C	Ito	50	0.0228+/-0.0163	
YJL187C	SWE1	Ito	25	0.0969+/-0.0519	
YJL204C	OVVLI	Uetz	3	NA	
YJL218W	YJL218W	Ito	100	NA	
YJR002W	MPP10	Ito	25	-0.006+/-0.0353	
YJR042W	YJR042W		NA	NA	
YJR056C	101104211	Uetz	3	NA	
YJR063W	RPA12	Ito	200	-0.011+/-0.0032	
YJR067C	YAE1	Ito	3	NA	
YJR070C	YJR070C	Ito & Uetz	200 (3 Uetz)	NA	
YJR082C	YJR082C	Ito & Oetz	3	0.0038+/-0.0197	
YJR093C	FIP1	Ito	100	-0.134+/-0.0214	
YJR094C	IME1	Ito	200	NA	
YJR112W	NNF1	Ito	10	NA	
	YJR119C		200	0.2019+/-0.1009	
YJR119C YJR125C		Ito			
YJR125C YJR141W	YJR125C	Ito	3	NA	
-	VIZI 000\A/	Uetz	10	NA	
YKL002W	YKL002W		100	NA 0.2072+/ 0.0046	
YKL015W	PUT3	Ito	200	0.3072+/-0.0846	У
YKL025C	PAN3	Ito	100	0.2319+/-0.0485	
YKL028W	TFA1	Ito	100	0.3572+/-0.1658	
YKL038W	YKL038W		NA	NA	У
YKL048C		Uetz	10	NA	
YKL059C	YKL059C	Ito	200	0.1292+/-0.0985	
YKL061W	YKL061W	Ito	100	0.3545+/-0.1920	
YKL062W	MSN4	Ito	100	0.7522+/-0.0354	y
YKL068W	NUP100	Ito	200	0.3679+/-0.0517	
YKL093W	MBR1	Ito	200	-0.132+/-0.0142	
YKL109W	HAP4	Ito	200	0.6056+/-0.0597	y
YKL135C	APL2	Ito	>200	0.1112+/-0.0662	
YKL143W	LTV1	Ito	200	0.5272+/-0.0376	
YKL161C	YKL161C	Ito	3	0.0465+/-0.0765	
YKL165C	MCD4	Ito	>200	0.3156+/-0.0892	

YKL171W	YKL171W	Ito	200	NA	
YKL173W	SNU114	Ito	100	0.1232+/-0.0124	
YKL190W		Uetz	25	NA	
YKR017C	YKR017C		50	0.0619+/-0.0165	
YKR021W	YKR021W		50	0.3116+/-0.0905	
YKR022C		Uetz	100	NA	
YKR027W	YKR027W		50	0.2616+/-0.0432	
YKR048C	NAP1	Ito	200	0.6022+/-0.0544	
YKR060W	YKR060W		>200	NA	
YKR064W	YKR064W		200	-0.024+/-0.0423	
YKR077W	YKR077W		>200	0.9899+/-0.0390	
YLL013C	YLL013C	Ito	>200	0.7076+/-0.0934	
YLR016C		Uetz	50	NA	
	YLR019W		100	NA	
YLR024C	YLR024C	Ito	100	0.1615+/-0.0752	
YLR038C	COX12	Ito	3	NA	
YLR053C	YLR053C	Ito	3	NA	
YLR071C	RGR1	Ito	50	NA	y
YLR085C	ARP6	Ito	25	NA	
YLR095C	YLR095C	Ito	100	0.2445+/-0.0776	
YLR098C	CHA4	Ito	200	0.6499+/-0.0856	y
YLR102C	APC9	Ito	100	NA	
YLR113W	HOG1	Ito	100	0.1389+/-0.0362	
YLR119W	SRN2	Ito	3	NA	
YLR131C	ACE2	Ito	>200	NA	y
YLR135W	YLR135W	Ito	>200	0.7172+/-0.1206	
YLR144C	ACF2	Ito	>200	NA	
YLR154C	YLR154C	Ito	3	-0.099+/-0.0144	
YLR182W	SWI6	Ito	100	NA	y
YLR192C	YLR192C	Ito	>200	0.8849+/-0.0641	
YLR212C	TUB4	Ito	100	0.2939+/-0.0491	
YLR215C		Uetz	100	NA	
YLR226W	_	Uetz	NA	NA	
YLR228C	ECM22	Ito	>200	0.7762+/-0.1344	y
YLR273C	PIG1	Ito	100	NA	
YLR285W	YLR285W	Ito	>200	0.9469+/-0.0781	
YLR288C	MEC3	Ito	25	NA	
YLR300W	EXG1	Ito	25	NA	
YLR321C	SFH1	Ito	100	0.2722+/-0.0064	
YLR331C	YLR331C	Ito	100	1.0302+/-0.0364	
YLR371W		Uetz	3	NA	
YLR403W	SFP1	Ito	3	0.0022+/-0.0089	
YLR417W	VPS36	Ito	25	0.0082+/-0.0187	
YLR424W	YLR424W		100	-0.011+/-0.0300	
YLR435W	YLR435W		10	-0.028+/-0.0141	
YLR445W	YLR445W	Ito	200	0.1456+/-0.0112	
YLR451W	LEU3	Ito	100	0.3956+/-0.1238	y
YML037C	YML037C	Ito	200	0.0382+/-0.0207	

YML058W	SML1	Ito	3	NA	
YML068W	YML068W	Ito	3	-0.098+/-0.0059	
YML081W	YML081W	Ito	3	-0.061+/-0.0332	
YML091C	YML091C	Ito	NA	NA	
YML099C	ARG81	Ito	100	NA	y
YML128C	YML128C	Ito	100	0.3646+/-0.0531	J
YMR004W	MVP1	Ito	>200	0.3639+/-0.0600	
YMR022W	10101	Uetz	3	NA	
YMR030W	YMR030W		>200	0.0425+/-0.0698	17
YMR037C	MSN2	Ito	>200	1.1689+/-0.1381	y
YMR048W	YMR048W		>200	0.1739+/-0.0609	y
YMR080C	NAM7	Ito	200	0.0282+/-0.0298	
YMR081C	ISF1	Ito	200	0.2389+/-0.0471	
YMR091C	NPL6	Ito	25	NA	
YMR112C		Ito	100	0.2012+/-0.0585	
YMR133W	REC114	Ito	200	-0.035+/-0.0319	
YMR179W	SPT21	Ito	>200	-0.009+/-0.0390	
YMR181C	YMR181C	Ito	>200	0.8592+/-0.0775	
YMR195W	YMR195W	Ito	>200	0.3746+/-0.0845	
YMR223W	UBP8	Ito	50	0.6462+/-0.1722	
YMR227C	YMR227C	Ito	NA	NA	
YMR236W	YMR236W	Ito	NA	NA	y
YMR270C	RRN9	Ito	100	NA	•
YMR277W	FCP1	Ito	200	0.1342+/-0.0405	
YMR295C		Ito	>200	NA	
YMR297W	PRC1	Ito	25	NA	
YMR299C	YMR299C		200	0.0979+/-0.0148	
YMR323W	YMR323W		3	-0.014+/-0.0122	
YNL004W	HRB1	Ito	3	-0.062+/-0.0235	
YNL025C	SSN8	Ito	100	0.2122+/-0.0517	
YNL023C	CRZ1	Ito	>200	0.8595+/-0.0728	
	SIW14				
YNL032W		Ito	200	0.7252+/-0.1191	
YNL074C	YNL074C	Ito	NA	NA	
YNL075W	\/\!\ 004\\/	Uetz	25	NA 0.014 × / 0.014 0	
YNL091W	YNL091W		50	-0.014+/-0.0416	
YNL092W	YNL092W		3	-0.045+/-0.0169	
YNL103W	MET4	Ito	>200	0.7636+/-0.0770	y
YNL127W		Ito	3	0.0485+/-0.0240	
YNL151C	RPC31	Ito	50	-0.026+/-0.0369	
YNL161W	CBK1	Ito	100	0.3809+/-0.1267	
YNL164C	YNL164C	Ito	3	0.0162+/-0.0497	
YNL192W	YNL192W	Ito	NA	NA	
YNL199C	GCR2	Ito	100	0.5216+/-0.0662	y
YNL204C	SPS18	Ito	100	0.0242+/-0.0378	,
YNL223W		Ito	NA	NA	
YNL225C	CNM67	Ito	100	0.1709+/-0.0875	
YNL236W	SIN4	Ito	>200	0.1229+/-0.0694	
YNL245C		Uetz	NA	NA	
INLZAJU		UCIZ	11/7	11/7	

VNII 2000		l lot-	3	NIA	
YNL308C	CTD4	Uetz		NA	
YNL309W	STB1	Ito	100	NA	У
YNL314W	DAL82	Ito	100	-0.047+/-0.0655	У
YNL330C	RPD3	Ito	10	NA	
YNR003C	RPC34	Ito	3	NA	
YNR004W	YNR004W		10	0.0165+/-0.0629	
YNR010W	CSE2	Ito	200	0.3445+/-0.0819	
YNR017W	MAS6	Ito	200	0.5209+/-0.1233	
YNR023W	SNF12	Ito	NA	NA	
YNR032W	PPG1	Ito	200	NA	
YNR063W	YNR063W		100	0.0312+/-0.0368	
YNR069C	YNR069C		>200	0.9416+/-0.3435	
YOL044W		Uetz	3	NA	
YOL051W	GAL11	Ito	200	0.9772+/-0.0244	y
YOL067C	RTG1	Ito	>200	0.5925+/-0.0651	y
YOL082W	YOL082W	Ito	NA	NA	
YOL083W	YOL083W	Ito	NA	NA	
YOL108C	INO4	Ito	100	NA	y
YOL112W	MSB4	Ito	200	0.4759+/-0.1309	
YOL135C	MED7	Ito	50	0.0815+/-0.0151	
YOL136C	PFK27	Ito	200	0.3526+/-0.0579	
YOL148C	SPT20	Ito	100	0.4402+/-0.1069	y
YOR032C	HMS1	Ito	NA	NA	
YOR066W	YOR066W	Ito	>200	0.5309+/-0.1226	
YOR069W		Uetz	NA	NA	
YOR070C	GYP1	Ito	>200	-0.070+/-0.0176	
YOR113W		Uetz	NA	NA	y
YOR128C	ADE2	Ito	NA	NA	•
YOR151C	YOR151C	Ito & Uetz	NA	NA	
YOR162C	YRR1	Ito	100	0.0812+/-0.0411	y
YOR166C	YOR166C	Ito	200	0.0519+/-0.0395	2
YOR174W	MED4	Ito	>200	0.1035+/-0.0747	
YOR177C		Uetz	3	NA	
YOR178C	GAC1	Ito	>200	0.5292+/-0.0982	
YOR194C	TOA1	Ito	>200	NA	
YOR197W	YOR197W	Ito	100	0.1565+/-0.0919	
YOR212W	STE4	Ito	NA	NA	
YOR262W	YOR262W		200	0.5596+/-0.0335	
YOR281C	YOR281C		100	NA	
YOR290C	SNF2	Ito	200	0.7139+/-0.1587	
YOR299W	BUD7	Ito	50	0.1079+/-0.0420	
YOR329C	SCD5	Ito	>200	0.2706+/-0.0516	
YOR339C	- <del>- •</del>	Uetz	NA	NA	
YOR344C	TYE7	Ito	100	0.3559+/-0.1249	y
YOR352W	YOR352W		100	0.2375+/-0.0558	J
YOR355W	GDS1	Ito	100	0.2076+/-0.0304	
YOR370C	MRS6	Ito	>200	0.5295+/-0.1343	
YOR382W	YOR382W		3	-0.023+/-0.0297	
1 01100211	1 01100211	1.0	•	0.0201	

YPL011C	YPL011C	Ito	NA	NA	
YPL014W	YPL014W	Ito	3	0.0819+/-0.0381	
YPL026C	SKS1	Ito	50	-0.025+/-0.0102	
YPL038W	MET31	Ito	50	0.0242+/-0.0316	
YPL042C	SSN3	Ito	NA	NA	
YPL054W	LEE1	Ito	50	-0.041+/-0.0251	
YPL055C	YPL055C	Ito	3	-0.047+/-0.0301	
YPL075W	GCR1	Ito	50	0.0769+/-0.0356	y
YPL089C	RLM1	Ito	200	NA	
YPL105C	YPL105C	Ito	200	0.0619+/-0.0482	
YPL124W	YPL124W	Ito	NA	NA	
YPL174C	NIP100	Ito	100	-0.056+/-0.0151	
YPL184C	YPL184C	Ito	100	0.5069+/-0.1525	
YPL202C	YPL202C	Ito	NA	NA	y
YPL229W	YPL229W	Ito & Uetz	200	0.0929+/-0.0316	
YPL233W	YPL233W	Ito	200	NA	
YPL250C	YPL250C	Ito	>200	0.5319+/-0.1199	
YPL254W	HFI1	Ito	100	0.2372+/-0.1030	y
YPL256C	CLN2	Ito	NA	NA	
YPL278C	YPL278C	Ito	100	0.3419+/-0.0477	
YPR007C	YPR007C	Ito	3	-0.013+/-0.0290	
YPR008W	YPR008W	Ito	>200	0.8622+/-0.1090	
YPR040W		Uetz	3	NA	
YPR046W	MCM16	Ito	50	0.0815+/-0.0187	
YPR066W	YPR066W	Ito	NA	NA	
YPR070W	YPR070W	Ito	NA	NA	
YPR076W	YPR076W	Ito	100	0.4306+/-0.0696	
YPR103W	PRE2	Ito	100	0.0619+/-0.0151	
YPR105C		Uetz	3	NA	
YPR119W		Uetz	3	NA	
YPR144C	YPR144C	Ito & Uetz	50	NA	
YPR168W	NUT2	Ito	100	0.0442+/-0.0305	
YPR179C	YPR179C	Ito	>200	0.8885+/-0.0251	
YPR180W	AOS1	Ito	>200	-0.048+/-0.1139	
YPR187W	RPO26	Ito	100	0.0695+/-0.0532	
YPR192W	YPR192W	Ito	NA	NA	

# **Supplementary Table 2**

**Influence of "specific" physicochemical properties onto activation properties.** The mean difference of several "specific" physicochemical properties in the nuclear sets of activators and non-activators evaluated. The table shows the analyzed properties, together with their raw p-value of a Student's t-test and the p-values after correction for multiple testing (Bonferroni correction and Holm's correction). Significance after Holm's correction at a level of p<0.05 is indicated. Significant groups are labelled yellow.

			Bonferroni	Holm's
		raw p-value	correction	correction
	KR	6.98E-04	3.28E-02	2.65E-02
	Ο	6.09E-01	1.00E+00	1.00E+00
	KR_ED	1.12E-05	5.27E-04	4.71E-04
Over-/underrepresentation of	LVIFM	1.37E-01	1.00E+00	1.00E+00
amino-acid groups indicated by one letter code (calculated	ST	8.32E-02	1.00E+00	1.00E+00
using SAPS programm)	AGP	5.70E-01	1.00E+00	1.00E+00
using OAI S programm)	FIKMNY	5.14E-01	1.00E+00	1.00E+00
	ED	9.17E-02	1.00E+00	1.00E+00
	KRED	6.09E-01	1.00E+00	1.00E+00
segments or clusters of	positive cluster	8.18E-02	1.00E+00	1.00E+00
physicochemical properties	negative cluster	1.64E-02	7.73E-01	5.26E-01
(charge, hydrophobicity)	hydrophobic segment	2.63E-01	1.00E+00	1.00E+00
(calculated with SAPS program)	transmembrane segment	6.40E-01	1.00E+00	1.00E+00
	AAClusterQ	2.03E-03	9.56E-02	7.52E-02
	AAClusterN	3.37E-01	1.00E+00	1.00E+00
	AAClusterH	6.06E-05	2.85E-03	2.36E-03
clusters of amino-acids	AAClusterY	8.94E-01	1.00E+00	1.00E+00
indicated by one letter code	AAClusterP	2.36E-01	1.00E+00	1.00E+00
(calculated with SAPS program)	AAClusterW	4.61E-01	1.00E+00	1.00E+00
	AAClusterF	3.19E-01	1.00E+00	1.00E+00
	AAClusterS	4.64E-03	2.18E-01	1.62E-01
	AAClusterT	8.33E-02	1.00E+00	1.00E+00
	L	7.77E-01	1.00E+00	1.00E+00
	Α	3.02E-05	1.42E-03	1.21E-03
	G	4.60E-06	2.16E-04	2.02E-04
	S	5.74E-06	2.70E-04	2.47E-04
	V	5.06E-13	2.38E-11	2.38E-11
	K	9.55E-12	4.49E-10	4.39E-10
	E	2.95E-01	1.00E+00	1.00E+00
	T	6.45E-01	1.00E+00	1.00E+00
Over-/underrepresentation of	D	4.43E-03	2.08E-01	1.59E-01
specific amino-acids indicated	l D	1.31E-01	1.00E+00	1.00E+00
by one letter code	R P	7.70E-02	1.00E+00	1.00E+00
	N N	7.51E-03 2.46E-10	3.53E-01 1.16E-08	2.48E-01 1.11E-08
	R	4.46E-01	1.10E-00 1.00E+00	1.00E+00
	Q	1.55E-05	7.29E-04	6.36E-04
	Y	3.28E-01	1.00E+00	1.00E+00
	H	9.15E-02	1.00E+00	1.00E+00
	M	6.56E-02	1.00E+00	1.00E+00
	C	6.55E-01	1.00E+00	1.00E+00
	W	7.06E-03	3.32E-01	2.40E-01
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#### **Supplementary Table 3**

**Functional groups among Y2H activators.** GO terms in the set of Y2H activators were compared to the whole yeast genome using the program FuncAssociate [32]. GO terms are ranked according to the significance of their overrepresentation in this dataset.

See http://llama.med.harvard.edu/cgi/func/funcassociate for technical details.

Rank position in the attribute list ranked by significance of association

N number of genes in your query with this attribute;

X number of genes overall with this attribute;

LOD the natural log of the odds ratio; positive and negative values indicate over- and

underrepresentation, respectively;

P single hypothesis one-sided P-value of the association between attribute and

query (based on Fisher's Exact Test);

P-adj adjusted P-value: fraction (as a %) of 1000 null-hypothesis simulations having

attributes with this single-hypothesis P value or smaller

Rank	N	X	LOD	P	P-adj	GO Attribute	
1	92	319	0.816	5.7e-35	< 0.001	<u>0030528</u> : transcription regulator	
						activity	
2	105	461	0.684	3.4e-30	< 0.001	<u>0006350</u> : transcription	
3	95	429	0.657	3.5e-26	< 0.001	<u>0006351</u> : transcription, DNA-	
						dependent	
4	72	265	0.759	1.9e-25	< 0.001	<u>0006366</u> : transcription from Pol II	
						promoter	
5	47	123	0.959	8.9e-24	< 0.001	0003702: RNA polymerase II	
						transcription factor activity	
6	233	1940	0.430	1.9e-23	< 0.001	<u>0005634</u> : nucleus	
7	83	426	0.573	5.4e-19	< 0.001	<u>0050789</u> : regulation of biological	
						process/regulation	
8	29	62	1.095	6e-18	< 0.001	<u>0016251</u> : general RNA polymerase II	
						transcription factor activity	
9	87	516	0.494	9.3e-16	< 0.001	<u>0007049</u> : cell cycle/cell-division cycle	
10	60	283	0.602	1.4e-15	< 0.001	<u>0005654</u> : nucleoplasm	
11	70	376	0.536	5.8e-15	< 0.001	<u>0050791</u> : regulation of physiological	
						process	
12	70	376	0.536	5.8e-15	< 0.001	<u>0019222</u> : regulation of metabolism	
13	91	588	0.449	4.2e-14	< 0.001	<u>0008283</u> : cell proliferation	
14	27	74	0.910	1.6e-13	< 0.001	0016591: DNA-directed RNA	
						polymerase II, holoenzyme	
15	45	206	0.608	2.2e-12	< 0.001	<u>0000278</u> : mitotic cell cycle	
16	166	1492	0.314	6.6e-12	< 0.001	<u>0006139</u> : nucleobase, nucleoside,	
						nucleotide and nucleic acid	

						metabolism
17	55	297	0.522	8.3e-12	<0.001	0006355: regulation of transcription,
1 /		271	0.322	0.50-12	\0.001	DNA-dependent
18	56	306	0.516	8.6e-12	<0.001	0045449: regulation of transcription
19	57	315	0.510	8.9e-12	<0.001	
19	37	313	0.311	8.96-12	<0.001	0019219: regulation of nucleobase,
						nucleoside, nucleotide and nucleic
20	1.2	20	1.202	20 11	0.001	acid metabolism
20	13	20	1.392	3.9e-11	< 0.001	0016455: RNA polymerase II
2.1	20	1=0	0.600	0.0.11	0.004	transcription mediator activity
21	38	172	0.609	8.8e-11	< 0.001	0006357: regulation of transcription
			0.5.5		2 2 2 2	from Pol II promoter
22	228	2378	0.263	4.7e-10	< 0.001	<u>0009987</u> : cellular process
23	18	47	0.937	7.7e-10	< 0.001	<u>0000082</u> : G1/S transition of mitotic
						cell cycle
24	222	2312	0.259	9.4e-10	< 0.001	<u>0050875</u> : cellular physiological
						process
25	13	24	1.206	9.7e-10	< 0.001	<u>0000119</u> : mediator complex/TRAP
						complex
26	15	36	0.995	5.2e-09	< 0.001	<u>0016563</u> : transcriptional activator
						activity/transcription activating factor
27	209	2201	0.241	1.6e-08	< 0.001	0008151: cell growth and/or
						maintenance/cell physiology
28	16	44	0.900	1.7e-08	< 0.001	0006367: transcription initiation from
						Pol II promoter
29	44	258	0.470	1.7e-08	< 0.001	0000279: M phase/M-phase
30	27	124	0.594	7.1e-08	<0.001	0000074: regulation of cell cycle/cell
50	2,	12.	0.571	7.10 00	10.001	cycle control
31	17	55	0.796	9.5e-08	<0.001	0003700: transcription factor activity
32	40	239	0.457	1.3e-07	<0.001	0000280: nuclear division
33	15	45	0.437	1.8e-07	<0.001	0045944: positive regulation of
33	13	43	0.043	1.80-07	<0.001	transcription from Pol II promoter
2.4	17	50	0.752	20.07	<0.001	
34	17	59	0.752	3e-07	< 0.001	0009893: positive regulation of
25	12	20	0.064	2.22.07	<0.001	metabolism
35	12	30	0.964	3.2e-07	< 0.001	0004722: protein serine/threonine
26	1.6	52	0.701	2.2.07	-0.001	phosphatase activity
36	16	53	0.781	3.3e-07	< 0.001	0045893: positive regulation of
27	1.5	40	0.000	4.6.07	0.001	transcription, DNA-dependent
37	15	48	0.802	4.6e-07	< 0.001	<u>0004721</u> : phosphoprotein phosphatase
						activity/protein phosphatase activity
38	9	17	1.181	5.4e-07	< 0.001	0000124: SAGA complex/Spt-Ada-
						Gcn5-acetyltransferase complex
39	16	55	0.758	5.7e-07	< 0.001	<u>0006352</u> : transcription initiation
40	24	114	0.574	7.4e-07	< 0.001	<u>0005667</u> : transcription factor complex
41	14	44	0.813	8.8e-07	< 0.001	<u>0003704</u> : specific RNA polymerase II
						transcription factor activity
42	16	57	0.736	9.8e-07	< 0.001	<u>0045935</u> : positive regulation of
						nucleobase, nucleoside, nucleotide
	<u> </u>	<u> </u>				and nucleic acid metabolism
43	16	57	0.736	9.8e-07	< 0.001	<u>0045941</u> : positive regulation of
		1				transcription

44	23	108	0.580	1e-06	< 0.001	0006468: protein amino acid	
						phosphorylation	
45	8	14	1.248	1.1e-06	< 0.001	<u>0000114</u> : G1-specific transcription in	
						mitotic cell cycle	
46	54	398	0.353	1.1e-06	< 0.001	<u>0006464</u> : protein modification	
47	31	181	0.465	2.2e-06	0.001	<u>0006793</u> : phosphorus metabolism	
48	31	181	0.465	2.2e-06	0.001	0006796: phosphate metabolism	
49	24	128	0.510	6.4e-06	0.007	0007126: meiosis	
50	11	33	0.842	8.1e-06	0.007	0000086: G2/M transition of mitotic	
						cell cycle	
51	12	42	0.746	1.9e-05	0.011	0000075: cell cycle checkpoint	
52	7	15	1.076	3e-05	0.023	<u>0000079</u> : regulation of cyclin	
						dependent protein kinase	
						activity/regulation of CDK activity	
53	8	21	0.930	4.8e-05	0.031	0000080: G1 phase of mitotic cell	
						cycle	
54	25	153	0.437	4.9e-05	0.031	0030234: enzyme regulator	
						activity/enzyme modulator	
55	15	68	0.597	5.1e-05	0.032	0007059: chromosome segregation	
56	24	145	0.444	5.6e-05	0.034	0016310: phosphorylation	
57	30	202	0.389	5.7e-05	0.035	<u>0003677</u> : DNA binding	
58	12	47	0.680	6.4e-05	0.037	0000123: histone acetyltransferase	
						complex	

## Supplementary Table 4A

#### Proteins co-occurring in protein complexes with nuclear activators

Proteins significantly overrepresented in protein complexes with nuclear Y2H activators (N=181) are shown. The list is sorted by the percentage [%] of nuclear Y2H activators found to be in at least one protein complex with the respective ORF. For example, the large subunit of RNA polymerase II, YDL140C, was found in a complex with 17.7% of all nuclear Y2H activators. The percent [%] ratio is the previous percentage devided by the percentage of nuclear non-activators (in other words: the [%] ratio is the enrichment compared to nuclear non-activators). A significant co-occurrence was assessed using Fisher's exact test comparing the set of nuclear Y2H activators with nuclear non-activators (P). The P value was adjusted ( $P_{adj}$ ) for multiple testing using Holm's procedure [37]. Only the top 20 significance list ranked by percentage is shown.

ORF	%	% ratio	Definition	Description	Р	$P_{adj}$
YDL140C	17,7	3,8	RNA polymerase II core subunit	RNA polymerase II large subunit	4,95E-09	1,02E-05
YOL086C	17,7	2,9	alcohol dehydrogenase	Adh protein catalyzes activities for the production of certain carboxylate esters.	1,29E-06	2,63E-03
YGL112C	16,0	4,5	TATA-binding protein- associated-factor	Subunit (60 kDa) of TFIID and SAGA complexes, involved in transcription initiation of RNA polymerase II and in chromatin modification, similar to histone H4	1,53E-09	3,17E-06
YBR081C	15,5	4,7	histone acetyltransferase SAGA complex member transcription factor	Subunit of the SAGA transcriptional regulatory complex, involved in proper assembly of the complex; also present as a C-terminally truncated form in the SLIK/SALSA transcriptional regulatory complex	1,75E-09	3,61E-06
YML007W	14,4	8,0	jun-like transcription factor	bZip transcription factor required for oxidative stress tolerance and localized to the nucleus in response to the presence of oxidants.	2,52E-12	5,22E-09
YGR252W	14,4	6,5	histone acetyltransferase	functions in the Ada and SAGA (Spt/Ada) complexes to acetylate nucleosomal histones	4,63E-11	9,60E-08
YDR448W	13,8	6,1	transcription factor	transcription factor, member of ADA and SAGA, two transcriptional adaptor/HAT (histone acetyltransferase)complexes	3,36E-10	6,95E-07
YNL236W	13,8	5,7	RNA polymerase II holoenzyme/mediator subunit	involved in positive and negative regulation of transcription, possibly via changes in chromatin structure; regulation of YGP1 expression	8,88E-10	1,84E-06
YOR174W	13,8	3,4	RNA polymerase II holoenzyme/mediator subunit	Member of RNA Polymerase II transcriptional regulation mediator	1,72E-06	3,51E-03
YHR174W	10,5	3,9	enolase	Enolase II, catalyzes the first common step of glycolysis and gluconeogenesis; expression is induced in response to glucose	6,61E-06	1,35E-02
YHR147C	9,4	8,0		Mitochondrial ribosomal protein of the large subunit	2,11E-08	4,36E-05
YNL025C	9,4	4,0	C-type cyclin associates with the Ssn3p cyclin- dependent kinase	Component of RNA polymerase II holoenzyme, involved in RNA pol II carboxy-terminal domain phosphorylation. Activity of the kinase (SSN3)/cyclin (SSN8) pair required, along with SSN6 & TUP1, for transcriptional repression of a-specific genes	1,84E-05	3,73E-02
YBR198C	8,8	4,3		Subunit (90 kDa) of TFIID and SAGA complexes, involved in RNA polymerase II transcription initiation and in chromatin modification	1,53E-05	3,12E-02
YKL060C	8,8	4,3	aldolase	Fructose 1,6-bisphosphate adolase, required for glycolysis and gluconeogenesis	1,53E-05	3,12E-02

YGL025C	8,3	9,6		Probable transcription factor, polyglutamine domain protein	3,43E-08	7,09E-05
YBR253W	8,3	9,6	part of Srb/Mediator complex transcription factor	involved in transcription as part of Srb/Mediator complex	3,43E-08	7,09E-05
YHR058C	8,3	9,6		RNA polymerase II transcriptional regulation mediator	3,43E-08	7,09E-05
YER022W	8,3	9,6	RNA polymerase II holoenzyme/mediator subunit	subunit of RNA polymerase II holoenzyme/mediator complex	3,43E-08	7,09E-05
YPL042C	8,3	8,8	cyclin (SSN8)- dependent serine/threonine protein kinase	Component of RNA polymerase II holoenzyme, involved in RNA pol II carboxy-terminal domain phosphorylation. Activity of the kinase (SSN3)/cyclin (SSN8) pair required, along with SSN6 & TUP1, for transcriptional repression of a-specific genes	6,89E-08	1,42E-04
YCR081W	8,3	8,8		activation mediator subcomplex of RNA polymerase I holoenzyme	6,89E-08	1,42E-04

## Supplementary Table 4B

# Binary interactions of Y2H activators

Proteins interacting with nuclear Y2H activators (N=181). Only the twenty highest significant proteins are shown. The list is sorted by the percentage [%] of nuclear Y2H activators found to interact with the respective ORF. For example, 5.5% of all nuclear Y2H activators interact with YDR167W, a subunit of TFIID and SAGA. The percent [%] ratio compares this percentage with the percentage for nuclear non activators (NA – the % ratio could not be calculated because no interaction with non activator set was found). A significant interaction was assessed using Fisher's exact test comparing the set of nuclear Y2H activators with nuclear non activators (P). When the P value was adjusted ( $P_{adj}$ ) for multiple testing using Holm's procedure [37], none of these interaction were significant, most likely due to a limited interaction data set.

ORF	%	% ratio	Definition	Description	р
YDR167W	5,5	4,7	TFIID subunit	Subunit (145 kDa) of TFIID and SAGA complexes, involved in RNA polymerase II transcription initiation and in chromatin modification	4,24E- 04
YLR055C	3,9	9,9	probable member of histone acetyltransferase SAGA complex transcription factor	Subunit of the SAGA transcriptional regulatory complex but not present in SAGA-like complex SLIK/SALSA, required for SAGA-mediated inhibition at some promoters	1,89E- 04
YBR081C	3,9	9,9	histone acetyltransferase SAGA complex member transcription factor	Subunit of the SAGA transcriptional regulatory complex, involved in proper assembly of the complex; also present as a C-terminally truncated form in the SLIK/SALSA transcriptional regulatory complex	1,89E- 04
YGR252W	3,9	9,9	histone acetyltransferase	functions in the Ada and SAGA (Spt/Ada) complexes to acetylate nucleosomal histones	1,89E- 04
YGL112C	3,9	8,2	TATA-binding protein-associated- factor	Subunit (60 kDa) of TFIID and SAGA complexes, involved in transcription initiation of RNA polymerase II and in chromatin modification, similar to histone H4	3,67E- 04
YBR198C	3,9	8,2		Subunit (90 kDa) of TFIID and SAGA complexes, involved in RNA polymerase II transcription initiation and in chromatin modification	3,67E- 04
YHR099W	3,9	6,2	ATM/Mec1/TOR1/TOR2-related NuA4 complex component	TRA1 is the homolog of the human protein TRRAP which we have isolated as an essential cofactor of c-Myc.	1,11E- 03
YDR176W	3,9	5,5		Involved in glucose repression of GAL4p- regulated transcription	1,76E- 03
YOR174W	3,3	14,1	RNA polymerase II holoenzyme/mediator subunit	Member of RNA Polymerase II transcriptional regulation mediator	2,09E- 04
YDR145W	3,3	7,0	TFIID subunit	Subunit (61/68 kDa) of TFIID and SAGA complexes, involved in RNA polymerase II transcription initiation and in chromatin modification, similar to histone H2A	1,66E- 03
YPL254W	3,3	7,0	Ada/Gcn5 protein complex member transcription factor	Adaptor protein required for structural integrity of the SAGA complex, a histone acetyltransferase-coactivator complex that is involved in global regulation of gene expression through acetylation and transcription functions	1,66E- 03
YMR236W	3,3	7,0	TFIID subunit	Subunit (17 kDa) of TFIID and SAGA complexes, involved in RNA polymerase II transcription initiation and in chromatin modification, similar to histone H3	1,66E- 03
YDR392W	3,3	6,0	histone acetyltransferase SAGA complex member transcription factor	Subunit of the SAGA and SAGA-like transcriptional regulatory complexes,	2,76E- 03

				interacts with Spt15p to activate transcription of some RNA polymerase Ildependent genes, also functions to inhibit trancription at some promoters	
YOL135C	2,8	17,6	RNA polymerase II holoenzyme/mediator subunit	Member of RNA Polymerase II transcriptional regulation mediator	4,81E- 04
YPR040W	2,2	NA		SDF1 the first obserwed null phenotype was Sporulation DeFiciency	2,33E- 04
YGL025C	2,2	28,2		Probable transcription factor, polyglutamine domain protein	1,05E- 03
YBR270C	2,2	28,2			1,05E- 03
YDL132W	2,2	14,1		Cullin, structural protein of SCF complexes (which also contain Skp1p, Cdc34p, and an F-box protein) involved in ubiquitination; SCF promotes the G1-S transition by targeting G1 cyclins and the Cln-CDK inhibitor Sic1p for degradation	2,84E- 03
YIL021W	2,2	14,1	RNA polymerase II 45 kDa subunit	RNA polymerase II core subunit	2,84E- 03
YDR054C	2,2	14,1	ubiquitin-conjugating enzyme	Ubiquitin-conjugating enzyme or E2; together with Skp1p, Rbx1p, Cdc53p, and an F-box protein, forms a ubiquitin-protein ligase called the SCF complex which regulates cell cycle progression by targeting key substrates for degradation	2,84E- 03
YDR308C	1,7	NA	RNA polymerase II holoenzyme/mediator subunit	Suppressor of RNA polymerase II, possible component of the holoenzyme	1,90E- 03

# **Supplementary Table 5**

**Domains of Y2H activators.** Domains over-represented in the Y2H activator set ranked by their significance are shown. The number of Y2H activators containing the domain (#) and enrichment of this domain in the set of Y2H activators compared to the whole genome are shown. The significance level indicates significant over-representation using Fisher's exact test only (P<0.05, \*) or also after correction for multiple testing using Holm's procedure (P<0.05, \*).

Domain	Description	#	enrich-	significance
	•		ment	level
HLH	helix loop helix domain	6	6,64	**
ZnF_C2C2	C2C2 Zinc finger	4	8,85	**
	GAL4-like Zn(II)2Cys6 (or C6 zinc) binuclear cluster			*
GAL4	DNA-binding domain	16	2,53	
RPOL9	RNA polymerase subunit 9	3	8,85	*
ZnF_C2H2	zinc finger	13	2,30	*
ZnF_C2HC	zinc finger	5	4,02	*
IBR	In Between Ring fingers	2	8,85	*
BRLZ	basic region leucin zipper	5	2,95	*
	Putative GTP-ase activating proteins for the small			*
ArfGap	GTPase, ARF	3	4,43	
PP2C_SIG	Sigma factor PP2C-like phosphatases	3	4,43	*
STYKc	Protein kinase; unclassified specificity.	10	2,06	*
	Domain found in NIK1-like kinases, mouse citron and			*
CNH	yeast ROM1, ROM2	2	5,90	
Cu_FIST	Copper-Fist	2	5,90	*
S_TK_X	Extension to Ser/Thr-type protein kinases	4	2,95	*
	Protein phosphatase 2A homologues, catalytic	•		*
PP2Ac	domain.	4	2,95	