

### GO terms enriched and transcriptional regulations of the top 16 CCC-Biclusters

<i>ID</i>	<i>#Genes</i>	<i>TFs</i> ( <i>Top 10</i> )	<i>%</i>	<i>GO Terms Enriched</i> ( <i>Top 10</i> )	<i>DF</i>	<i>p-value (level)</i>
124	904	Yap1p Sfp1p Met4p Rap1p Rpn4p Arr1p Sok2p Ihf1p Fhl1p Ino4p	32.1 29.6 24.5 18.7 16.9 14.5 11.7 11.6 11.6 9.7	ribonucleoprotein complex biogenesis and assembly ribosome biogenesis and assembly organelle organization and biogenesis RNA processing rRNA metabolic process RNA metabolic process rRNA processing nucleobase, nucleoside, nucleotide and nucleic acid metabolic process cellular component organization and biogenesis ribosomal large subunit biogenesis and assembly	31.10 27.91 43.06 22.65 15.47 34.93 14.83 44.34 56.78 6.54	5.62E-81(4) 1.76E-76(5) 3.08E-38(4) 3.75E-37(6) 9.12E-36(6) 1.02E-33(5) 1.10E-33(6,7) 1.12E-33(4) 3.69E-32(3) 1.29E-26(6,5)
14	1091	Yap1p Met4p Sok2p Aft1p Hsf1p Msn2p Rpn4p Msn4p Arr1p Ino4p	28.8 24.4 19.5 18.5 17.1 16.7 15.8 14.5 11.9 10.6	carbohydrate metabolic process catabolic process cellular catabolic process generation of precursor metabolites and energy cellular carbohydrate metabolic process response to stress energy derivation by oxidation of organic compounds macromolecule catabolic process cellular macromolecule catabolic process energy reserve metabolic process	10.87 15.55 15.04 8.85 9.48 16.06 6.95 11.88 10.49 2.91	2.77E-23(4) 6.27E-21(3) 3.83E-20(4) 4.15E-20(3) 5.08E-19(5) 1.53E-18(3) 7.57E-16(4) 3.33E-15(4) 9.17E-13(5) 3.71E-12(5)
27	290	Met4p Yap1p Sok2p Aft1p Hsf1p Msn2p Rpn4p Msn4p Arr1p Ino4p	27.7 27.0 26.0 24.9 22.1 19.4 17.3 16.6 15.2 13.1	carbohydrate metabolic process response to stress regulation of carbohydrate metabolic process energy reserve metabolic process regulation of metabolic process cellular carbohydrate metabolic process regulation of biosynthetic process regulation of biological process cell communication carbohydrate biosynthetic process	13.64 19.32 4.55 4.55 18.18 1023 5.68 22.73 10.80 5.68	1.04E-08(4) 1.53E-07(3) 6.28E-07(5,4) 6.91E-06(5) 1.01E-05(4,3) 1.23E-05(5) 1.24E-05(5,4) 1.34E-05(3) 1.74E-05(3)* 3.25E-05(5)*
39	258	Sok2p Yap1p Met4p Arr1p Hsf1p Aft1p Rpn4p Msn2p Nrg1p Ino4p	27.3 21.9 19.5 14.5 14.1 14.1 12.5 12.5 11.7 11.7			
151	232	Yap1p Swi4p Met4p Mbp1p Sok2p Arr1p Ste12p Rpn4p Aft1p Ino4p	18.1 13.8 10.8 10.3 10.3 9.5 9.1 8.2 7.8 7.3	cellular component organization and biogenesis cell cycle cell cycle process nucleobase, nucleoside, nucleotide and nucleic acid metabolic process cell cycle phase mitotic cell cycle organelle organization and biogenesis biopolymer metabolic process primary metabolic process cellular metabolic process	57.89 20.53 20.00 43.16 16.84 13.68 37.89 52.63 66.84 68.95	3.14E-11(3) 5.39E-10(3) 5.85E-10(4,3) 8.64E-10(4) 5.22E-09(5,4) 3.58E-08(4) 6.50E-08(4) 7.40E-08(4) 9.08E-07(3) 1.20E-06(3)
48	182	Sok2p Yap1p Arr1p	15.0 15.0 12.2			

		Met4p	11.7			
		Ste12p	11.1			
		Aft1p	10.0			
		Rpn4p	8.9			
		Nrg1p	8.9			
		Hap4p	8.9			
		Mga1p	7.8			
142	248	Yap1p	23.8	cellular component organization and biogenesis	57.89	3.14E-11(3)
		Met4p	13.3	transcription, DNA-dependent	18.95	5.58E-07(7,6)
		Sok2p	12.9	RNA biosynthetic process	18.95	6.11E-07(7,6)
		Ste12p	12.1	microtubule-based process	7.37	9.93E-07(6)
		Abf1p	10.1	transcription	19.47	1.42E-06(5)
		Arr1p	10.1	chromosome organization and biogenesis (sensu Eukaryota)	19.47	1.42E-06(6)
		Mbp1p	8.9	chromosome organization and biogenesis	19.47	1.75E-06(5)
		Yox1p	8.5	microtubule cytoskeleton organization and biogenesis	6.32	2.93E-06(7)
		Rpn4p	8.1	regulation of transcription, DNA-dependent	14.21	3.36E-06(8,7)
		Rap1p	7.7	regulation of transcription	14.74	4.35E-06(7,6)
		Cbf1p	7.7			
43	109	Sok2p	19.4	response to chemical stimulus	20.31	5.58E-05(3)*
		Yap1p	18.5			
		Yox1p	13.9			
		Ste12p	13.9			
		Met4p	13.0			
		Aft1p	13.0			
		Skn7p	12.0			
		Swi4p	12.0			
		Rpn4p	12.0			
		Arr1p	11.1			
		Rap1p	11.1			
		Tec1p	11.1			
147	144	Ste12p	16.0			
		Yap1p	16.0			
		Rap1p	13.2			
		Sok2p	12.5			
		Met4p	12.5			
		Swi4p	12.5			
		Leu3p	11.8			
		Rpn4p	11.1			
		Phd1p	10.4			
		Ino4p	9.7			
		Tec1p	9.7			
83	224	Yap1p	29.0	response to stress	16.56	6.23E-05(3)*
		Met4p	22.8			
		Sok2p	17.9			
		Hsf1p	17.0			
		Rpn4p	16.1			
		Aft1p	16.1			
		Arr1p	15.2			
		Ste12p	12.1			
		Msn2p	10.7			
		Rap1p	10.3			
42	131	Yap1p	22.1	cellular component organization and biogenesis	54.95	3.95E-05(3)*
		Aft1p	20.6			
		Sok2p	19.1			
		Hsf1p	18.3			
		Met4p	18.3			
		Ste12p	13.7			
		Msn2p	13.0			
		Phd1p	13.0			

		Arr1p	13.0			
		Msn4p	11.5			
148	192	Met4p	21.9	lipid metabolic process	11.49	2.41E-05(4)*
		Yap1p	20.8	cellular lipid metabolic process	10.81	4.45E-05(4,5)*
		Sok2p	15.6	protein modification process	17.57	6.48E-05(6)*
		Ste12p	13.0	ER to Golgi vesicle-mediated transport	6.08	7.22E-05(5-8)*
		Swi4p	11.5			
		Rap1p	11.5			
		Phd1p	9.9			
		Gcn4p	9.4			
		Rpn4p	9.4			
		Abf1p	9.4			
		Mbp1p	9.4			
159	56	Yap1p	33.9	cellular biosynthetic process	0.2500	1.93E-05(4)
		Met4p	17.9	regulation of translational initiation	6.82	3.36E-05(6-8)*
		Sfp1p	17.9			
		Cbf1p	14.3			
		Gcn4p	12.5			
		Yox1p	12.5			
		Pho4p	12.5			
		Leu3p	10.7			
		Rpn4p	10.7			
		Rap1p	10.7			
79	97	Yap1p	33.0	carboxylic acid metabolic process	19.72	4.75E-06(5)
		Met4p	22.7	organic acid metabolic process	19.72	4.75E-06(4)
		Sok2p	19.6	phosphatidylcholine biosynthetic process	4.23	4.24E-05(8-10)*
		Rpn4p	18.6	phosphatidylcholine metabolic process	4.23	9.96E-05(8,9)*
		Arr1p	17.5			
		Gcn4p	16.5			
		Hsf1p	13.4			
		Leu3p	11.3			
		Crz1p	11.3			
		Ste12p	11.3			
		Aft1p	11.3			
92	52	Yap1p	32.7	nitrogen compound metabolic process	28.57	4.55E-07(3)
		Sok2p	23.1	amine metabolic process	22.86	1.93E-05(4)
		Leu3p	19.2			
		Met4p	19.2			
		Rpn4p	15.4			
		Ino4p	15.4			
		Ste12p	15.4			
		Tec1p	13.5			
		Hap4p	13.5			
		Gcn4p	13.5			
99	39	Yap1p	28.2	organelle inheritance	13.79	2.58E-05(5)
		Ste12p	20.5			
		Sok2p	20.5			
		Met4p	17.9			
		Rap1p	15.4			
		Sfp1p	15.4			
		Rpn4p	12.8			
		Leu3p	12.8			
		Yox1p	12.8			
		Cin5p	12.8			
		Hsf1p	12.8			
		Ifh1p	12.8			