Supplementary Table S3 – List of the genes found to be up-regulated by CgHaa1 in response to acetic acid (30 mM, at pH 4.0). The dataset of genes regulated by CgHaa1 under acetic acid stress was selected to include: i) genes that were up-regulated (by more than 2-fold) in response to acetic acid in the KUE100 strain, but not in the ΔCgHaa1 mutant; ii) genes whose acid-induced transcriptional activation in the DCgHaa1 background was at least two-fold lower than the one registered in cells of the parental strain. The biological function indicated was based on the information available at Candida Genome Database. Information on involvement in tolerance to acetic acid of corresponding S. cerevisiae orthologues and their eventual inclusion in the ScHaa1-dependent transcriptional regulatory network is also shown, based on the information available on the YEASTRACT database (Teixeira et al., 2014).

## Genes whose acetic acid-induced transcriptional activation was fully dependent of CgHaa1

ORF	C. glabrata Gene	logFC (wt AC/ wt CTRL)	logFC (∆Cghaa1AC/ ∆Cghaa1 CTRL)	Function	S. cerevisiae orthologue	S. cerevisiae orthologue regulated by ScHaa1?	S. cerevisiae homologue confers resistance to acetic acid?	C. glabrata promoter harbors an HRE motif
CAGL0C04323g	-	5,33	-	Ortholog(s) have alpha,alpha-trehalase activity, role in trehalose catabolic process and cytoplasm localization	NTH1	Not described	No	No
CAGL0I07249g	-	4,71	-	Putative GTPase-activating protein involved in cell wall and cytoskeleton homeostasis; gene is upregulated in azole-resistant strain	BAG7	Not described	No	Yes
CAGL0K07337g	-	4,37	-	Has domain(s) with predicted ion channel activity, role in ion transport and membrane localization	HSP30	Yes	No	Yes
CAGL0H02585g	-	4,19	-	Ortholog(s) have glutamate decarboxylase activity, role in cellular response to oxidative stress, glutamate catabolic process and cytoplasm localization	GAD1	Yes	No	Yes
CAGL0H10076g	-	4,12	-	Has domain(s) with predicted ion channel activity, role in ion transport and membrane localization	YRO2	Yes	Yes	Yes
CAGL0G06182g	-	3,72	-	No Description Available	YHR131C	Not described	No	No
CAGL0A01804g	CgHXT1	3,65	-	Ortholog(s) have fructose transmembrane transporter activity, pentose transmembrane transporter activity, role in glucose transport, mannose transport and plasma membrane localization	HXT1	Not described	No	No
CAGL0K03421g	-	3,39	-	Ortholog(s) have cytosol, nucleus localization	PGM2	Yes	No	Yes
CAGL0L08008g	-	3,39	-	No Description Available	PMP2	Not described	Yes	No
CAGL0G05269g	-	3,27	-	Putative mitochondrial protein; gene is downregulated in azole- resistant strain	FMP16	Not described	No	No
CAGL0I09702g	-	3,24	-	Ortholog(s) have riboflavin transporter activity, role in riboflavin transport and plasma membrane localization	MCH5	Yes	Yes	No
CAGL0E05148g	CgDLD1	3,23	-	Ortholog(s) have alpha-mannosidase activity, role in oligosaccharide catabolic process and cytosol, fungal-type vacuole membrane localization	AMS1	Not described	No	No
CAGL0G02057g	-	3,19	-	Ortholog(s) have cytoplasm, nucleus localization	YKR075C	Yes	No	Yes
CAGL0H04851g	-	3,18	-	Ortholog(s) have 4-nitrophenylphosphatase activity, protein serine/threonine phosphatase activity and role in cellular protein localization, cellular sodium ion homeostasis, protein dephosphorylation	PPZ1	Not described	No	No
CAGL0A02002g	-	3,16	-	No Description Available	YOL024W	Not described	No	No
CAGL0K07590g	CgMYO3	3,11	-	Putative myosin	MYO3	Not described	No	No
CAGL0I05148g	CgDLD1	3,07	-	D-lactate ferricytochrome C oxidoreductase	DLD1	Not described	No	No
CAGL0G02563g	-	3,06	-	Has domain(s) with predicted ubiquitin thiolesterase activity and role in ubiquitin-dependent protein catabolic process	-	-	-	No
CAGL0G03179g	-	3,06	-	Has domain(s) with predicted phospholipid binding activity	*ASK10	Not described	Not tested	Yes
CAGL0A00495g	CgPMA1	2,98	-	Putative plasma membrane proton pump with a predicted role in pH homeostasis	*PMA1	Not described	Not tested	Yes
CAGL0A01870g	-	2,97	-	Has domain(s) with predicted integral to membrane localization	-	-	-	No
CAGL0I06644g	-	2,94	-	Putative GPI-linked cell wall protein	SPI1	Not described	No	No
CAGL0M06897g	-	2,91	-	Ortholog(s) have cytoplasm localization	YNL024C	Yes	No	Yes
CAGL0H07469g	-	2,90	-	Putative adhesin-like protein	ICS2	Not described	No	No
CAGL0G05698g	CgGDH2	2,89	-	Ortholog(s) have glutamate dehydrogenase (NAD+) activity, role in nitrogen compound metabolic process and cytosol, mitochondrion localization	GDH2	Not described	No	Yes
CAGL0A01716g	-	2,87	-	Ortholog(s) have nicotinamidase activity, role in chromatin silencing at rDNA, chromatin silencing at telomere, replicative cell aging and cytosol, nucleus, peroxisome localization	PNCI	Not described	No	No
CAGL0E03630g	-	2,84	-	Ortholog(s) have RNA binding activity and role in negative regulation of conjugation with cellular fusion, premeiotic DNA replication, reciprocal meiotic recombination, sporulation resulting in formation of a cellular spore	RIM4	Not described	No	No
CAGL0J11462g	-	2,84	-	Predicted GPI-linked cell wall protein	YNL190W	Not described	No	Yes
CAGL0G03267g	-	2,80	-	Ortholog(s) have role in protein targeting to membrane and cytoplasm localization	AST2	Not described	No	No
CAGL0A01650g	_	2,80	I -	Putative protein; gene is upregulated in azole-resistant strain	ECL1	Yes	No	Yes

CAGL0E01749g	CgYPS4	2,78	-	Putative aspartic protease; member of a YPS gene cluster that is required for virulence in mice; induced in response to low pH and high temperature	YPS1	Not described	No	No
CAGL0K02145g	-	2,71	-	Has domain(s) with predicted nucleic acid binding activity	YER130C	Not described	No	Yes
CAGL0L05786g	-	2,71	-	Ortholog(s) have sequence-specific DNA binding activity	YPR013C	Not described	No	No
CAGL0F03707g	-	2,71	-	Ortholog(s) have protein kinase activity, role in cellular ion homeostasis, protein phosphorylation and cytoplasm localization	HRK1	Yes	Yes	Yes
CAGL0D03322g	-	2,70	_	Ortholog(s) have role in cellular zinc ion homeostasis and endoplasmic reticulum localization	IZH3	Yes	No	Yes
CAGL0G09603g	-	2,69	-	Putative protein; gene is upregulated in azole-resistant strain	YOR186W	-	No	Yes
CAGL0G01474g		2,66		Ortholog(s) have role in cellular response to methylmercury and	BOP3	Not described	No	Yes
CAGL0J03080g				cytoplasm, nucleus localization  No Description Available	RGII		No	
CAGLUJU3U8Ug		2,65	-	Ortholog(s) have asparagine-tRNA ligase activity, role in	KGII	Yes	INO	Yes
CAGL0L08030g	-	2,64	-	mitochondrial asparaginyl-tRNA aminoacylation and mitochondrion localization	SLM5	Not described	No	No
CAGL0F07117g	-	2,63	-	Putative subunit of the heterotrimeric G protein; gene is upregulated in azole-resistant strain	GPG1	Yes	No	Yes
CAGL0L03696g	-	2,62	-	Has domain(s) with predicted role in transmembrane transport and integral to membrane localization	ECM3	Not described	No	Yes
CAGL0G04081g	-	2,60	_	Ortholog(s) have Golgi apparatus, cell division site, cell tip,	TH173	Not described	No	Yes
CAGL0C03740g		2,59		endoplasmic reticulum localization  Ortholog(s) have sequence-specific DNA binding, sequence-specific	MIT1	Not described	Yes	V
Ü			-	DNA binding transcription factor activity				Yes
CAGL0J04026g	-	2,56	-	No Description Available  Putative transcription factor involved in sterol uptake; gene is	HER1	Not described	No	No
CAGL0I04246g	-	2,56	-	upregulated in azole-resistant strain	SUT2	Not described	No	No
CAGL0H08778g	-	2,55	-	Ortholog(s) have mRNA binding activity, role in nuclear-transcribed mRNA catabolic process, deadenylation-dependent decay and cytoplasm localization	PUF2	Not described	No	Yes
CAGL0K09372g	-	2,47	-	Ortholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding, more	MIG2	Not described	No	Yes
CAGL0J00715g	-	2,46	-	Has domain(s) with predicted GTP binding, GTPase activity, role in GTP catabolic process, protein transport, signal transduction, small GTPase mediated signal transduction and intracellular, membrane localization	YHR022C	Not described	No	Yes
CAGL0I05060g	-	2,43	-	Has domain(s) with predicted DNA binding, chromatin binding activity	DOT6	Not described	No	No
CAGL0D05566g	-	2,42	-	Ortholog(s) have sterol esterase activity, role in cell wall mannoprotein biosynthetic process, sterol metabolic process and integral to membrane, plasma membrane localization	YEH2	Not described	Yes	Yes
CAGL0K06853g	-	2,38	-	Ortholog(s) have mRNA binding activity, role in cellular response to cadmium ion, detoxification of cadmium ion and cytosol, peroxisomal matrix, peroxisomal membrane localization	PCS60	Not described	No	No
CAGL0H02519g	-	2,37	-	Ortholog(s) have cytoplasm localization	YMR253C	Not described	No	Yes
CAGL0M00748g	CgECM7	2,36	_	Putative integral membrane protein required for high-affinity Ca2+ influx	ECM7	Not described	No	Yes
CAGL0B01875g	-	2,33	_	Ortholog(s) have mitochondrial inner membrane localization	COX26	Not described	No	Yes
CAGL0F08217g	-	2,30	-	Ortholog(s) have cytoplasmic stress granule localization	YGR250C	Yes	No	No
CAGL0J06028g	CgMEP2	2,27	-	Ortholog(s) have high affinity secondary active ammonium transmembrane transporter activity, methylammonium transmembrane transporter activity	MEP2	Not described	No	Yes
CAGL0D04026g	-	2,27	-	Ortholog(s) have 4-aminobutyrate transaminase activity, pyridoxal phosphate binding activity, role in gamma-aminobutyric acid catabolic process, glutamate metabolic process and cytosol localization	UGA1	Not described	No	No
CAGL0K07458g	-	2,20	-	Has domain(s) with predicted ATP binding, protein kinase activity, protein serine/threonine kinase activity, protein tyrosine kinase activity, transferase activity, transferring phosphorus-containing groups activity	YPK1	Not described	No	Yes
CAGL0K02651g	-	2,19	-	Ortholog(s) have role in chloride transport and fungal-type vacuole localization	YHL008C	Not described	No	Yes
CAGL0H08888g	-	2,18	-	Ortholog(s) have FAD transmembrane transporter activity, role in FAD transport, fungal-type cell wall biogenesis, protein folding and cellular bud neck, endoplasmic reticulum, fungal-type vacuole localization	FLC3	Not described		Yes
CAGL0F03641g	-	2,18		Has domain(s) with predicted membrane localization	NA	-	-	Yes
CAGL0I09108g	-	2,18	-	Has domain(s) with predicted role in transmembrane transport and integral to membrane localization	NA	-	-	Yes
CAGL0C05071g	-	2,15	-	Ortholog(s) have hydroxymethylpyrimidine kinase activity, phosphomethylpyrimidine kinase activity, thiaminase activity, role in thiamine biosynthetic process, thiamine catabolic process and cytosol localization	THI20	Yes	No	No

C 4 CL 01/12144	G FFG1	2.12	1	Putative Hsp70p nucleotide exchange factor; protein abundance	EEGI	N ( 1 7 1	N	v
CAGL0K12144g	CgFES1	2,13	-	decreased in ace2 mutant cells	FES1	Not described	No	Yes
CAGL0H00110g	-	2,13	-	Adhesin-like protein with internal repeats; predicted GPI-anchor; likely a C-terminal fragment of a single ORF with CAGL0H00132g	-	-	-	Yes
CAGL0M03179g	-	2,13	-	Ortholog(s) have cytosol, nucleus localization	YKR018C	Not described	No	Yes
CAGL0G07183g	-	2,13	-	Ortholog(s) have cytoplasm localization	NA	-	-	Yes
CAGL0B00902g	CgHIS4	2,13	-	Phosphoribosyl-AMP cyclohydrolase; phosphoribosyl-ATP pyrophosphatase; histidinol dehydrogenase	HIS4	Not described	No	Yes
CAGL0K12100g	-	2,12	-	Putative coproporphyrinogen III oxidase; protein differentially expressed in azole resistant strain	*HEM13	Not described	No	Yes
CAGL0D04422g	-	2,11	-	Ortholog(s) have endoplasmic reticulum localization	YPL279C	Not described	No	Yes
CAGL0I09086g	-	2,11	-	Ortholog(s) have endoplasmic reticulum, mitochondrion localization	ESBP6	Not described	No	Yes
CAGL0E06292g	-	2,10	-	Has domain(s) with predicted GTP binding, GTPase activity, role in GTP catabolic process, protein transport, signal transduction, small GTPase mediated signal transduction and intracellular, membrane localization	YHR022C	Not described	No	No
CAGL0L05236g	CgMDH1	2,08	-	Malate dehydrogenase	MDH1	Not described	No	Yes
CAGL0H08261g	-	2,05	-	No Description Available	YOR019W	Not described	No	Yes
CAGL0K10428g	-	2,05	-	No Description Available	IGD1	Yes	No	No
CAGL0L12012g	-	2,04	-	Ortholog(s) have trans-aconitate 3-methyltransferase activity and cytosol localization	TMT1	Not described	No	No
CAGL0L10758g	CgPFK2	2,03	-	Putative 6-phosphofructokinase, beta subunit; protein abundance increased in ace2 mutant cells	PFK2	Not described	Yes	Yes
CAGL0K07546g	CgPMU2	2,03	-	Putative phosphate starvation inducible acid phosphatase; contains a phosphomutase-like domain; functionally complements a S. cerevisiae pho5 mutant; transcript abundance during phosphate starvation regulated by Pho4p	-	-	-	No
CAGL0E06072g	-	2,02	-	Ortholog(s) have cytoplasm localization	YMR181C	-	No	Yes
CAGL0J05060g	-	1,98	-	Ortholog(s) have RNA polymerase II regulatory region sequence- specific DNA binding, sequence-specific DNA binding RNA polymerase II transcription factor activity, zinc ion binding activity	ZAP1	Not described	No	Yes
CAGL0E05588g	-	1,97	-	Ortholog(s) have DNA-directed DNA polymerase activity, deoxycytidyl transferase activity and role in error-free translesion synthesis, error-prone translesion synthesis	REVI	Not described	No	Yes
CAGL0K01155g	-	1,97	-	No Description Available	YGR079W	Not described	No	Yes
CAGL0M06347g	-	1,97	-	Ortholog(s) have dihydroceramidase activity, role in ceramide biosynthetic process, ceramide catabolic process and endoplasmic reticulum, fungal-type vacuole membrane localization	YPC1	Yes	No	Yes
CAGL0J09262g	=	1,95	-	Ortholog(s) have role in negative regulation of ATPase activity and mitochondrion localization	STF1	Not described	No	No
CAGL0F02167g	-	1,94	-	Ortholog(s) have DNA binding activity, role in reciprocal meiotic recombination and nuclear chromosome localization	MSH4	Not described	No	No
CAGL0I01276g	-	1,93	-	Ortholog(s) have cytoplasm, nucleus localization	YHR112C	Not described	No	No
CAGL0I07843g	CgADH1	1,93	-	Putative alcohol dehydrogenase isoenzyme III; increased protein abundance in azole resistant strain	ADHI	Not described	No	Yes
CAGL0B02475g	CgPHO84	1,93	-	Ortholog(s) have inorganic phosphate transmembrane transporter activity, manganese ion transmembrane transporter activity and role in manganese ion transport, phosphate ion transport, polyphosphate metabolic process	PHO84	Not described	No	Yes
CAGL0K07183g	-	1,92	-	Unknown	1	-	•	No
CAGL0H08305g	-	1,91	-	No Description Available	DETI	Not described	No	No
CAGL0I00550g	-	1,91	-	Ortholog(s) have fungal-type vacuole membrane, nucleus localization	YLR297W	Yes	No	Yes
CAGL0F03399g	CgSCS7	1,88	-	Ortholog(s) have fatty acid alpha-hydroxylase activity, role in cellular response to cadmium ion, detoxification of cadmium ion, mannosyl-inositol phosphorylceramide metabolic process and endoplasmic reticulum, membrane localization	SCS7	Not described	Yes	Yes
CAGL0H08195g	-	1,88	-	Ortholog(s) have ATPase inhibitor activity, Hsp70 protein binding, Hsp90 protein binding, mRNA binding activity, role in protein folding and cytosol, nucleus localization	STII	Not described	No	Yes
CAGL0M03135g	-	1,87	-	Ortholog(s) have cell division site, cell tip, cytosol localization	ALY2	Not described	No	No
CAGL0L03267g	CgGAP1	1,87	-	Ortholog(s) have L-proline transmembrane transporter activity, polyamine transmembrane transporter activity and role in amino acid transport, polyamine transport, regulation of nitrogen utilization	GAP1	Not described	No	Yes
CAGL0C00319g	-	1,85	-	Ortholog(s) have carboxypeptidase activity, role in nitrogen compound metabolic process, proteolysis involved in cellular protein catabolic process and fungal-type vacuole lumen localization	CPS1	Not described	No	No
CAGL0L10582g	-	1,85	-	Ortholog(s) have cytoplasm localization	YMR196W	Not described	No	Yes
CAGL0F00605g	CgGLK1	1,85	-	Aldohexose specific glucokinase	EMI2	Not described	No	Yes

CAGL0K07678g	- 1	1,84	-	Unknown	-	-	_	Yes
		,-		Ortholog(s) have glutamate-ammonia ligase activity, role in cellular				
CAGL0K05357g	CgGLN1	1,84	-	response to nitrogen starvation, glutamine biosynthetic process, nitrogen utilization and cytosol, nucleus localization	*GLN1	Yes	No	Yes
CAGL0E06116g	-	1,84	-	Has domain(s) with predicted nucleic acid binding activity	RGM1	-	No	Yes
CAGL0H04037g	-	1,84	-	Ortholog(s) have heat shock protein binding activity, role in glycogen metabolic process, meiosis, mitotic spindle assembly checkpoint, response to heat and protein phosphatase type 1 complex localization	GAC1	Not described	No	No
CAGL0B04675g	-	1,83	-	No Description Available	YCL001W-B	Not described	No	Yes
CAGL0F09207g	CgBAT1	1,82	ī	Has domain(s) with predicted branched-chain-amino-acid transaminase activity, catalytic activity and role in branched-chain amino acid metabolic process, metabolic process	BAT1	Not described	No	No
CAGL0A01782g	CgHXT4	1,80	-	Ortholog(s) have glucose transmembrane transporter activity, pentose transmembrane transporter activity and plasma membrane localization	HXT4	Not described	No	Yes
CAGL0K07205g	-	1,79	-	No Description Available	YGL117W	Not described	No	Yes
CAGL0H02387g	-	1,78	-	Putative trehalose-6-phosphate synthase/phosphatase subunit; gene is upregulated in azole-resistant strain	TPS3	Not described	No	Yes
CAGL0G02101g	CgECM4	1,77	-	Putative omega class glutathione transferase; gene is downregulated in azole-resistant strain	ECM4	Not described	No	Yes
CAGL0K02101g	-	1,76	ī	Ortholog(s) have role in TOR signaling cascade, cellular response to chemical stimulus, cellular response to heat, cellular response to pH and chlamydospore formation, more	PMD1	-	No	No
CAGL0B00264g	CgMTLalpha2	1,75	1	Homeobox-domain protein alpha2	HMLalpha2	Not described	No	No
CAGL0F09273g	-	1,75	-	Putative adhesin-like protein	-	-		No
CAGL0K01683g	CgGPD1	1,74	-	Putative cytoplasmic glycerol-3-phosphate dehydrogenase (NAD+); protein abundance increased in ace2 mutant cells	GPD1	Not described	No	No
CAGL0B03817g	-	1,74	-	Ortholog(s) have cytosol, nucleus localization  Has domain(s) with predicted catalytic activity, pyridoxal phosphate	MHO1	Not described	No	No
CAGL0K05665g CAGL0M03245g	-	1,73	-	binding activity  Ortholog(s) have cytosol localization	YEL020C	Not described  Not described	- No	Yes
,				Component of the chromatin remodelling Swi/Snf complex;				
CAGL0M04807g	CgSNF2	1,73	-	involved in regulation of biofilm formation  Ortholog(s) have role in maintenance of rDNA, meiotic	SNF2	Not described	No	No
CAGL0G08888g	-	1,73	-	chromosome segregation, recombinational repair and Shu complex, cytoplasm, nucleus localization	CSM2	Not described	No	No
CAGL0M06765g	-	1,73	-	Ortholog(s) have role in actin filament organization, endocytosis, response to stress and cytosol, nucleus localization	SIW14	Not described	Yes	Yes
CAGL0E05610g	-	1,72	-	Ortholog(s) have role in cellular response to nitrogen starvation, negative regulation of G0 to G1 transition and cytosol localization	PYK2	-	No	Yes
CAGL0J08074g	-	1,72	-	Ortholog(s) have phosphatidylinositol transporter activity	PDR17	Yes	No	No
CAGL0J07502g	-	1,71	-	Putative protein similar to globins with a heme-binding domain; gene is upregulated in azole-resistant strain	YNL234W	Not described	No	No
CAGL0C01551g	-	1,70	-	Has domain(s) with predicted DNA binding, sequence-specific DNA binding, sequence-specific DNA binding transcription factor activity and role in regulation of transcription, DNA-dependent	CUP9	Not described	No	Yes
CAGL0H10164g	-	1,69	-	Ortholog(s) have role in premeiotic DNA replication and cytoplasm localization	MUM2	Not described	No	No
CAGL0M02915g	-	1,69	-	Ortholog(s) have role in peroxisome degradation and peroxisome localization	ATG36	Not described	No	Yes
CAGL0H05379g	-	1,69	-	Ortholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding, more	*GCR1	Yes	No	No
CAGL0L05016g	-	1,68	-	Ortholog(s) have Sin3-type complex localization	STB2	Not described	No	No
CAGL0B01265g	CgMATalpha2	1,68	-	Mating-type regulatory protein alpha2; expressed in all MTLalpha strains and not in MTLa strains	MATalpha2	Not described	No	No
CAGL0H10626g	AWP13	1,67	-	Predicted cell wall adhesin with a predicted role in adhesion; predicted GPI anchor; contains tandem repeats	-	-	-	Yes
CAGL0L06006g	-	1,67	-	Ortholog(s) have protein serine/threonine kinase activity	*ATG1	Not described	No	No
CAGL0E04548g  CAGL0M01716g	-	1,67	-	Ortholog(s) have mitochondrion localization  Transcription factor targeting filamentation genes and Tyl expression; Ste12p activation of most filamentation gene promoters depends on Tec1p and Tec1p transcriptional activity is dependent on its association with Ste12p; binds to TCS elements upstream of filamentation genes, which are regulated by Tec1p/Ste12p/Dig1p complex; competes with Dig2p for binding to Ste12p/Dig1p; positive regulator of chronological	YOR020W-A TEC1	Not described  Not described	No No	No Yes
CAGL0C02365g	-	1,64	-	life span: TEA/ATTS DNA-binding domain family member Unknown	-	_	-	Yes
		,		- *******				

CAGLOROSONS   1,54			1		Outhological bound of the outhors and the outhors are DNA binding			1	
CAGIOLI1999    C.   1,64   C.   C.   C.   C.   C.   C.   C.   C	CAGL0I05698g	-	1,64	-	activity, role in glycolysis, proton transport and 6-	PFK2	Not described	Yes	Yes
CAGLB1990g   .	CAGL0F02101g	-	1,64	-		BLM10	Not described	No	No
CAGLOM10139g     1.62	CAGL0L11990g	-	1,63	-	cytoskeleton organization, cellular iron ion homeostasis, cellular	GRX4	Not described	No	Yes
CAGLID10157g   -   1,61   -	CAGL0F03003g	-	1,62	-	Ortholog(s) have osmosensor activity and role in (1->3)-beta-D- glucan biosynthetic process, cellular bud site selection, fungal-type cell wall organization, hyperosmotic response, osmosensory	*HKR1	Not described	No	Yes
CAGLOHO1378	CAGL0M10439g	-	1,61	-		NTH1	Not described	No	No
CAGLOHI0100g   -   1.59	CAGL0L02453g	-	1,61	-	No Description Available		Not described	Yes	No
CAGIO.03157g	CAGL0E03025g	-	1,60	-		ECL1	Not described	No	Yes
Evolutionarily conserved kinetochore protein factor activity   DALO	CAGL0H10120g	-	1,59	-		YBR056W	Not described	No	Yes
CAGLOM01364g   CgCBF3D   1,58   multiple protein complexes, including the SCF ubiquith ligas complex that things centromeric DNA, and the RAVE complex that things centrol the RAVE complex that the RAVE complex that things centrol the RAVE complex that the RAVE complex that things centrol the RAVE complex that things centrol the RAVE complex that things centrol the RAVE complex that the	CAGL0L03157g	-	1,58	-		DAL80	Not described	No	Yes
CAGLO101018/g   -   1.57   -	CAGL0M01364g	CgCBF3D	1,58		multiple protein complexes, including the SCF ubiquitin ligase complex, the CBF3 complex that binds centromeric DNA, and	SKP1	Not described	No	Yes
CAGLOE01529g   -     1.56	CAGL0F00187g	-	1,57	-		FET4	Not described	No	Yes
CAGL0E09808g   -   1.55   -   Ortholog(s) have institution-phosphates activity, role in histiding biosynthesis, earlier as nonhocamer   HIS2   Not described   No   No   No	CAGL0C05027g	-	1,57	-	groups activity	YATI	Not described	No	Yes
CAGL0E05808g	CAGL0E01529g	-	1,56	-		PFK27	Yes	No	Yes
CAGL0E05808g   Cg7HI6	CAGL0I09009g	-	1,55	-	biosynthetic process and cytosol, nucleus localization	HIS2	Not described	No	No
CAGL0H0747g	CAGL0E05808g	CgTHI6	1,54	-	phosphate pyrophosphorylase and 4-methyl-5-beta-	THI6	Not described	No	Yes
CAGI.018074g   -   1,53	CAGL0I10747g	-	1,54	-	role in ammonium transport, nitrogen utilization and plasma	MEP3	Not described	No	Yes
CAGLOL10912g - 1,51 - Ortholog(s) have spermidine transmembrane transporter activity, spermine transmembrane transporter activity, spermine transmembrane transporter activity, spermine transport, spermine transporter activity, spermine transport and fungal-type vacuole membrane, plasma membrane localization  CAGLOL03916g - 1,51 - No Description Available	CAGL0H02541g	-	1,53	-	Ortholog(s) have mitochondrion localization	YMR252C	-	No	No
CAGL0E03740g - 1,51 - Spermine transport and tingal-type vacuole membrane, plasma membrane transport and fingal-type vacuole membrane, plasma membrane localization  CAGL0E03740g - 1,51 - No Pescription Available	CAGL0L08074g	-	1,53	-	No Description Available	SYP1	Not described	No	No
CAGLOB01595g - 1,49 - Unknown - Not described No No No No CAGLOB01595g - 1,49 - Unknown - Not described No Yes  CAGLOM10153g - 1,49 - Ortholog(s) have MAP kinase kinase kinase kinase kinase kinase activity, histone serine kinase activity  CAGLOB01595g - 1,48 - Ortholog(s) have MAP kinase	CAGL0L10912g	-	1,51	-	spermine transmembrane transporter activity, role in spermidine transport, spermine transport and fungal-type vacuole membrane,	TPO4	Not described	No	Yes
CAGLOB01595g - 1,49 - Unknown - Not described No Yes  CAGLOM10153g - 1,49 - Ortholog(s) have MAP kinase kinase activity, histone serine kinase activity, histone serine kinase activity, histone serine kinase activity, rate ion binding RNA polymerase II transcription factor activity, zine ion binding activity and the inregulation of transcription, DNA- dependent, transcription, DNA-dependent  CAGLOB04895g - 1,48 - Ortholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding activity  CAGLOK12078g - 1,48 - Has domain(s) with predicted nucleic acid binding activity  CAGLOLO9273g - 1,48 - Has domain(s) with predicted nucleic acid binding activity  CAGLOLO9273g - 1,48 - Has domain(s) with predicted nucleic acid binding activity  CAGLOLO9273g - 1,48 - Catabolic process, 2-methylisocitrate lyase activity, role in propionate catabolic process, 2-methylisocitrate lyase activity, role in propionate catabolic process, 2-methylicitrate cycle and mitochondrial matrix localization  Ortholog(s) have actin filament bundle assembly, endocytosis and actin cortical patch localization  CAGLOC04213g - 1,47 - Ortholog(s) have role in vesicle-mediated transport and fungal-type vacuole, vesicle localization  CAGLOK10824g - 1,47 - No Description Available  CAGLOH07977g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Krebp.  Val206C Not described No No described No No No  No described No No No No  No Mot described No N	CAGL0E03740g	-	1,51	-	No Description Available	YHL026C	Not described	No	Yes
CAGLOM10153g - 1,49 - Ortholog(s) have MAP kinase kinase kinase activity, histone serie kinase activity, histone serie kinase activity, and the seribed should be in regulation of transcription, DNA-dependent transcription, DNA-		-		-	Has domain(s) with predicted nucleic acid binding activity	AZF1	Not described		No
CAGLOF102519g - 1,48 - 1,48 - Has domain(s) with predicted DNA binding, sequence-specific DNA binding RNA polymerase II core promoter proximal region sequence-specific DNA binding activity and role in regulation of transcription, DNA-dependent or proximal region sequence-specific DNA binding activity and role in regulation of transcription, DNA-dependent or proximal region sequence-specific DNA binding activity and role in regulation of transcription, DNA-dependent or proximal region sequence-specific DNA binding activity or proxima	CAGL0B01595g	-	1,49	-		-	Not described	No	Yes
CAGL0F02519g - 1,48 - binding RNA polymerase II transcription factor activity, zine ion binding activity and role in regulation of transcription, DNA-dependent  CAGL0B04895g - 1,48 - Oftholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding activity  CAGL0K12078g - 1,48 - Has domain(s) with predicted nucleic acid binding activity  CAGL0L09273g - 1,48 - Has domain(s) with predicted nucleic acid binding activity  CAGL0L09273g - 1,48 - Has domain(s) with predicted nucleic acid binding activity, role in propionate catabolic process, 2-methylcitrate cycle and mitochondrial matrix  CAGL0L09273g - 1,47 - Oftholog(s) have actin filament binding activity, role in actin cortical patch localization  CAGL0C04213g - 1,47 - Oftholog(s) have role in vesicle-mediated transport and fungal-type vacuole, vesicle localization  CAGL0K10824g - 1,47 - No Description Available  CAGL0H07977g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to KrPp,	CAGL0M10153g	-	1,49	-	serine kinase activity	STE20	Not described	No	No
CAGLON 12078g - 1,48 - Has domain(s) with predicted nucleic acid binding activity NRG1 Yes Yes No  CAGLON 12078g - 1,48 - Has domain(s) with predicted nucleic acid binding activity NRG1 Yes Yes No  CAGLOL 09273g - 1,48 - Ortholog(s) have methylisocitrate lyase activity, role in propionate catabolic process, 2-methylcitrate cycle and mitochondrial matrix ICL2 Not described No No  CAGLOA02145g - 1,47 - Ortholog(s) have actin filament binding activity, role in actin cortical patch localization  CAGLOC04213g - 1,47 - Ortholog(s) have role in vesicle-mediated transport and fungal-type vacuole, vesicle localization  CAGLOK10824g - 1,47 - Not described No No No  CAGLOK10824g - 1,47 - Not described No No Yes  CAGLOHO7997g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to KrPp,	CAGL0F02519g	-	1,48	-	binding RNA polymerase II transcription factor activity, zinc ion binding activity and role in regulation of transcription, DNA-	YJL206C	Not described	No	No
CAGL0K12078g - 1,48 - Has domain(s) with predicted nucleic acid binding activity NRG1 Yes Yes No Ortholog(s) have methylisocitrate lyase activity, role in propionate catabolic process, 2-methylicitrate cycle and mitochondrial matrix ICL2 Not described No No CAGL0A02145g - 1,47 - Ortholog(s) have actin binding activity, role in actin cortical patch localization  CAGL0C04213g - 1,47 - Ortholog(s) have actin binding activity, role in actin cortical patch localization  CAGL0C04213g - 1,47 - Ortholog(s) have role in vesicle-mediated transport and fungal-type vacuole, vesicle localization  CAGL0K10824g - 1,47 - No Description Available YLR149C Not described No Yes  CAGL0H07997g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Krebp.  Krebp. Krebp. Krebp. Krebp. No Mrg. No Has cribed No No No	CAGL0B04895g	-	1,48	-	Ortholog(s) have RNA polymerase II core promoter proximal region	RFX1	Not described	No	No
CAGL0A02145g - 1,47 - Ortholog(s) have actin filament bundle assembly, endocytosis and actin cortical patch localization  CAGL0C04213g - 1,47 - Ortholog(s) have actin filament bundle assembly, endocytosis and actin cortical patch localization  CAGL0K10824g - 1,47 - Ortholog(s) have real to reside-mediated transport and fungal-type vacuole, vesicle localization  CAGL0H07997g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Krefp.  Krefp. Krefp. Krefp. Not described No	CAGL0K12078g	-	1,48	-	Has domain(s) with predicted nucleic acid binding activity	NRG1	Yes	Yes	No
CAGLOA02145g - 1,47 - Ortholog(s) have actin filament binding activity, role in actin cortical patch localization, actin filament bundle assembly, endocytosis and actin cortical patch localization actin cortica	CAGL0L09273g	-	1,48	-	catabolic process, 2-methylcitrate cycle and mitochondrial matrix	ICL2	Not described	No	No
CAGLOC04213g - 1,47 - Ortholog(s) have role in vesicle-mediated transport and fungal-type RCRI Not described No No Scalable - 1,47 - No Description Available YLR149C Not described No Yes CAGLOH07997g CgKNHI 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Kre9p, No Modescribed No	CAGL0A02145g	-	1,47	-	Ortholog(s) have actin filament binding activity, role in actin cortical patch localization, actin filament bundle assembly, endocytosis and	YSC84	Not described	No	No
CAGLOK10824g - 1,47 - No Description Available YLR149C Not described No Yes  CAGLOH07997g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Kre9p, Not described No No No	CAGL0C04213g	-	1,47	-	Ortholog(s) have role in vesicle-mediated transport and fungal-type	RCR1	Not described	No	No
CAGL0H07997g CgKNH1 1,46 - Protein involved in cell wall beta 1,6-glucan synthesis, similar to Kre9p, No No	CAGL0K10824g	-	1,47	-		YLR149C	Not described	No	Yes
CAGL0H09966g - 1,46 - Ortholog(s) have mitochondrion localization FMP23 Not described No No		CgKNH1	1,46	-		KNH1	Not described	No	No
	CAGL0H09966g	-	1,46	-		FMP23	Not described	No	No

CAGL0I04180g	CgAMT1	1,46	-	Metal-activated transcription factor; binds promoters of metallothionein genes; autoregulates its own expression; gene is	*CUP2	Not described	No	Yes
CAGL0E04004g		1,46		downregulated in azole-resistant strain  Ortholog(s) have L-methionine transmembrane transporter activity	MUP3	Not described	No	Yes
CAGL0E04004g	-	1,40	-	and role in amino acid transport  Ortholog(s) have role in autophagy, cellular response to starvation,	MOF3	Not described	NO	ies
CAGL0M03157g	-	1,46	-	chromatin silencing at rDNA, fungal-type cell wall organization, inositol lipid-mediated signaling and mitochondrion, pre- autophagosomal structure localization	IRS4	Not described	No	No
CAGL0D02948g	CgKAR2	1,46	_	Protein with a predicted role in nuclear fusion	*KAR2	Not described	No	Yes
CAGL0H10054g	СдКЛК2	1,46		No Description Available	YBR053C	Not described	No	Yes
CAGL0E00319g	-	1,46	-	Unknown	- TBK033C	Not described	-	No
CAGLUE00319g		1,40		Ortholog(s) have NADH dehydrogenase (ubiquinone) activity and	-	Not described	-	NO
CAGL0B02431g	-	1,45	-	role in NADH oxidation, chronological cell aging, mitochondrial electron transport, NADH to ubiquinone, positive regulation of apoptotic process	NDII	Not described	No	Yes
CAGL0K08624g	-	1,45	-	Ortholog(s) have RNA polymerase II activating transcription factor binding, more	HAP4	Not described	No	Yes
CAGL0M09449g	-	1,44	-	No Description Available	ECM21	Not described	No	No
CAGL0I05522g	-	1,43	-	Has domain(s) with predicted ubiquitin thiolesterase activity and role in ubiquitin-dependent protein catabolic process	UBP9	Not described	No	Yes
CAGL0G09295g	-	1,43	-	Ortholog(s) have cytoplasm localization	FYV8	Not described	No	No
CAGL0I02530g	-	1,43	-	Ortholog(s) have N,N-dimethylaniline monooxygenase activity, role in protein folding and endoplasmic reticulum membrane, mitochondrion localization	FMO1	Not described	No	No
CAGL0G09515g	-	1,42	-	Ortholog(s) have glucan exo-1,3-beta-glucosidase activity, role in ascospore formation and ascospore wall localization	SPR1	Not described	No	No
CAGL0C03267g	CgFPS1	1,42	-	Glycerol transporter; 1 of 2 Fps1 orthologs in C. glabrata; double fps1/fps2 mutant accumulates glycerol, has constitutive cell wall stress, is hypersensitive to caspofungin in vitro and in vivo	FPS1	Not described	Yes	Yes
CAGL0A03872g	-	1,42	-	Ortholog(s) have phosphatidylinositol-4,5-bisphosphate binding activity, role in actin cortical patch assembly, actin filament organization, endocytosis and actin cortical patch, mating projection tip localization	ENT2	Not described	No	No
CAGL0M07612g	-	1,41	-	Ortholog(s) have polyamine oxidase activity, role in pantothenate biosynthetic process, polyamine catabolic process and cytoplasm localization	FMS1	Not described	No	Yes
CAGL0L03135g	-	1,41	-	Putative phospholipase D; gene is upregulated in azole-resistant strain	SPO14	Not described	No	Yes
CAGL0M06963g	-	1,41	-	Ortholog(s) have role in tRNA export from nucleus and cytoplasm, nucleus localization	SOL1	Not described	No	Yes
CAGL0H04213g	-	1,41	-	Ortholog(s) have sequence-specific DNA binding activity and nucleus localization	TDA9	Not described	No	No
CAGL0F01793g	CgERG3	1,41	-	Delta 5,6 sterol desaturase; C-5 sterol desaturase; predicted transmembrane domain and endolasmic reticulum (ER) binding motif; gene used for molecular typing of C. glabrata strain isolates	ERG3	Not described	Yes	No
CAGL0L00583g	-	1,40	-	Ortholog(s) have sequence-specific DNA binding, sequence-specific DNA binding transcription factor activity	USVI	Not described	No	Yes
CAGL0K01705g	-	1,39	-	Ortholog(s) have cytoplasm localization	GPM2	Not described	No	No
CAGL0F04829g	-	1,39	-	Ortholog(s) have role in negative regulation of Arp2/3 complex- mediated actin nucleation and actin cortical patch, nucleus localization	PIN3	Not described	No	Yes
CAGL0H02893g	-	1,39	-	Ortholog(s) have mitochondrion localization	YJL070C	Not described	No	No
CAGL0G05357g	-	1,39	-	Ortholog(s) have NADHX epimerase activity, role in nicotinamide nucleotide metabolic process and cytosol, mitochondrion, nucleus localization	YNL200C	Yes	Yes	No
CAGL0D04510g	-	1,39	-	No Description Available	YPR117W	Not described	No	Yes
CAGL0I07227g	-	1,38	-	Putative isocitrate dehydrogenase	IDH2	Not described	No	Yes
CAGL0G06798g	-	1,38	-	No Description Available	YJR005C-A	Not described	No	Yes
CAGL0M04763g	-	1,37	-	Ortholog(s) have role in cellular response to drug and cytosol, nucleus localization	YOR289W	Yes	No	Yes
CAGL0M10571g	-	1,37	-	Ortholog(s) have ergosterol O-acyltransferase activity, role in ergosterol metabolic process and endoplasmic reticulum localization	ARE2	Not described	No	Yes
CAGL0D01980g	-	1,37	-	Ortholog(s) have sterol esterase activity, role in cellular lipid metabolic process, sterol metabolic process and integral to membrane, lipid particle localization	TGL1	Not described	No	No
CAGL0G05962g	_	1,37	_	Ortholog(s) have endoplasmic reticulum localization	YHR140W	Not described	No	Yes
CAGL0B03421g	-	1,37	-	Has domain(s) with predicted DNA binding, sequence-specific DNA binding RNA polymerase II transcription factor activity, zinc ion binding activity and role in regulation of transcription, DNA-dependent transcription, DNA-dependent	HAP1	Not described	No	Yes

CAGL0C03872g	CgTIR3	1,36	-	Putative GPI-linked cell wall protein involved in sterol uptake	TIR3	Not described	No	Yes
CAGL0C03289g	CgYBT1	1,35	-	Putative ABC transporter involved in bile acid transport; gene is	YBT1	Not described	No	Yes
CAGL0E02651g	-	1,35	-	upregulated in azole-resistant strain  Has domain(s) with predicted identical protein binding, serine-type endopeptidase activity and role in negative regulation of catalytic activity, proteolysis	YSP3	Not described	No	No
CAGL0C01595g	-	1,35	-	Ortholog(s) have imidazoleglycerol-phosphate synthase activity, role in histidine biosynthetic process and cytosol, nucleus localization	HIS7	Not described	No	No
CAGL0F04785g		1,35		Cytoplasmic protein of unknown function; identified as a high- copy suppressor of the synthetic lethality of a sis2 sit4 double mutant, suggesting a role in G1/S phase progression; similar to Mlf3p	VHS2	Not described	No	Yes
CAGL0J07876g	-	1,34	-	Ortholog(s) have cytoplasm, nucleus localization	RTC4	Yes	No	No
CAGL0M12947g	CgPUP1	1,34	-	Mitochondria-localized protein; gene is upregulated in azole- resistant strain	-	-	-	No
CAGL0G06050g	-	1,34	-	Unknown	-	-	-	Yes
CAGL0L04598g	-	1,33	-	Ortholog(s) have RNA 7-methylguanosine cap binding, m7G(5')pppN diphosphatase activity, role in deadenylation- dependent decapping of nuclear-transcribed mRNA and cytoplasmic mRNA processing body, cytosol, nucleus localization	DCS2	Not described	No	Yes
CAGL0J02948g	CgFCY2	1,33	-	Purine-cytosine transporter	FCY22	Not described	No	Yes
CAGL0G00858g	-	1,33	-	No Description Available	MID2	Not described	No	Yes
CAGL0L12892g	-	1,33	-	Ortholog(s) have role in actin cytoskeleton organization, inositol lipid-mediated signaling, vacuole organization and plasma membrane localization	SFK1	Not described	No	No
CAGL0L09251g	-	1,32	-	Ortholog(s) have role in positive regulation of transcription from RNA polymerase II promoter, response to salt stress and cytoplasm localization	HAL1	Not described	No	Yes
CAGL0K11297g	-	1,31	-	Ortholog(s) have gluconokinase activity, role in D-gluconate metabolic process and cytosol, nucleus localization	YDR248C	Not described	No	Yes
CAGL0L07744g	-	1,31	-	Ortholog(s) have endoplasmic reticulum localization	ADP1	Not described	No	Yes
CAGL0I05676g		1,30		RNA-dependent ATPase in the DEAH-box family, required for activation of the spliceosome before the first transesterification step in RNA splicing; orthologous to human protein DHX16	PRP2	Yes	No	Yes
CAGL0J08613g	-	1,29	-	Ortholog(s) have calcium activated cation channel activity, calcium channel activity, potassium channel activity, sodium channel activity, voltage-gated ion channel activity and role in cellular cation homeostasis	YVC1	Not described	No	Yes
CAGL0L01287g	CgUTR4	1,29	-	Haloacid dehalogenase-like hydrolase	UTR4	Not described	No	No
CAGL0L10043g	-	1,29	-	Ortholog(s) have protein kinase activator activity	STD1	Yes	No	Yes
CAGL0H09944g	-	1,29	-	Ortholog(s) have 2-alkenal reductase [NAD(P)] activity, AU-rich element binding, NADPH:quinone reductase activity, role in cellular response to oxidative stress and cytosol, nucleus localization	ZTAI	Not described	No	No
CAGL0G01100g	-	1,29	-	Ortholog(s) have cytosol localization	YLR345W	Not described	No	Yes
CAGL0C01771g	-	1,29	-	Ortholog(s) have role in protein targeting to vacuole and mitochondrion localization	YBR241C	Not described	Yes	No
CAGL0H03135g	MFalpha	1,29		Mating pheromone alpha-factor, made by alpha cells; interacts with mating type a cells to induce cell cycle arrest and other responses leading to mating; also encoded by MF(ALPHA)1, which is more highly expressed than MF(ALPHA)2	MF(ALPHA)2	Not described	No	No
CAGL0J11308g	-	1,28	-	Has domain(s) with predicted ATP binding, protein kinase activity, protein tyrosine kinase activity, transferase activity, transferring phosphorus-containing groups activity and role in protein phosphorylation	NPR1	Not described	No	Yes
CAGL0I10648g	CgASN2	1,28	-	Putative asparagine synthetase; protein abundance increased in ace2 mutant cells	ASN2	Not described	No	No
CAGL0J01699g	-	1,28	-	No Description Available	YPR010C-A	Not described	No	Yes
CAGL0A01045g		1,28		Fumarase, converts fumaric acid to L-malic acid in the TCA cycle; cytosolic and mitochondrial distribution determined by the N-terminal targeting sequence, protein conformation, and status of glyoxylate shunt; phosphorylated in mitochondria	FUMI	Not described	Yes	Yes
CAGL0K00803g	CgTRX2	1,28		Cytoplasmic thioredoxin isoenzyme of the thioredoxin system which protects cells against oxidative and reductive stress, forms LMA1 complex with Pbi2p, acts as a cofactor for Tsa1p, required for ER-Golgi transport and vacuole inheritance	TRXI	Yes	No	Yes

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CAGL0F04609g	-	1,27	-	Ortholog(s) have ubiquitin binding activity, role in endocytosis, endoplasmic reticulum unfolded protein response and actin cortical patch, cellular bud neck, cellular bud tip, mating projection tip localization	EDE1	Not described	No	No
CAGL0L05654g	-	1,27	-	Ortholog(s) have chloride transmembrane transporter activity, potassium ion transmembrane transporter activity	TRK2	Not described	No	Yes
CAGL0C05533g	-	1,27	-	Has domain(s) with predicted phosphoric diester hydrolase activity and role in lipid metabolic process	AIM6	Not described	No	Yes
CAGL0M07293g	-	1,27	-	Putative ABC transporter of weak organic acids; gene is downregulated in azole-resistant strain	PDR12	Yes	No	No
CAGL0M11726g		1,27		Putative GPI-linked cell wall adhesin-like protein;	CCW12	Yes	No	Yes
CAGL0E02321g	-	1,26	-	Putative phospholipase B; predicted GPI-anchor	PLB3	Yes	No	No
CAGL0F05687g	-	1,26	-	Ortholog(s) have cytoplasm, ribosome localization	YDR186C	Yes	No	No
CAGL0I05082g	-	1,26	-	Ortholog(s) have role in DNA damage checkpoint, G2/M transition of mitotic cell cycle, cellular response to biotic stimulus and cellular response to starvation, more	PIN4	Yes	No	No
CAGL0C04191g		1,25		Succinate semialdehyde dehydrogenase involved in the utilization of gamma-aminobutyrate (GABA) as a nitrogen source; part of the 4-aminobutyrate and glutamate degradation pathways; localized to the cytoplasm	UGA2	Not described	No	Yes
CAGL0I11011g		1,25		Putative adhesin	-	Not described	-	No
CAGL0C01397g	-	1,24	=	Has domain(s) with predicted 6-phosphofructo-2-kinase activity, ATP binding, catalytic activity and role in fructose 2,6-bisphosphate metabolic process, fructose metabolic process	PFK26	Not described	No	Yes
CAGL0J00803g	-	1,24	-	Ortholog(s) have structural constituent of cytoskeleton activity	MHP1	Not described	No	Yes
CAGL0L06864g	-	1,24	-	Putative protein related to ECM3; gene is downregulated in azole- resistant strain	SIP5	Yes	No	No
CAGL0I03872g	-	1,24	-	Has domain(s) with predicted substrate-specific transmembrane transporter activity, transmembrane transporter activity, role in transmembrane transport and integral to membrane, membrane localization	RGT2	Not described	No	No
CAGL0L06248g	-	1,24	_	Ortholog(s) have cytoplasm, nucleus localization	YBR085C-A	Not described	No	Yes
CAGL0J03256g	-	1,24	-	Ortholog(s) have protein tyrosine phosphatase activity	PTP3	Not described	No	Yes
CAGL0K10604g		1,24		Calmodulin-dependent protein kinase; may play a role in stress response, many Ca++/calmodulin dependent phosphorylation substrates demonstrated in vitro, amino acid sequence similar to Cmk2n and mammalian Cam Kinase II	CMK1	Not described	No	Yes
CAGL0K01133g	-	1,23	-	Ortholog(s) have actin monomer binding activity, role in sequestering of actin monomers and cell division site, cell tip, mating projection tip localization	TWF1	Not described	No	Yes
CAGL0K04257g	-	1,23	-	Ortholog(s) have ATPase activity, coupled to transmembrane movement of ions, RNA polymerase II core promoter proximal region sequence-specific DNA binding, sequence-specific DNA binding RNA polymerase II transcription factor activity	RME1	Not described	No	Yes
CAGL0D00990g		1,23		Putative protein of unknown function; YDL057W is not an essential gene	YDL057W	Not described	No	Yes
CAGL0H09614g		1,23		Cell wall mannoprotein of the Srp1p/Tip1p family of serine- alanine-rich proteins; expression is downregulated at acidic pH and induced by cold shock and anaerobiosis; abundance is	TIRI	Not described	No	No
CAGL0L09108g	-	1,22	-	increased in cells cultured without shaking Ortholog(s) have role in propionate metabolic process and mitochondrial outer membrane localization	PDH1	Yes	No	No
CAGL0E06666g	CgEPA2	1,22	-	Epithelial adhesion protein; predicted GPI-anchor; adhesin-like protein	FLO1	Yes	-	Yes
CAGL0H02695g	-	1,21	-	Ortholog(s) have glycogenin glucosyltransferase activity and role in glycogen biosynthetic process	GLG1	Not described	No	Yes
CAGL0D01100g	-	1,21	-	Ortholog(s) have 6-phosphofructo-2-kinase activity and role in fructose 2,6-bisphosphate metabolic process	PFK26	Not described	No	No
CAGL0H09592g	-	1,21	-	Putative GPI-linked cell wall protein	-	-	-	Yes
CAGL0F01947g	CgIRC15	1,21	-	Ortholog(s) have microtubule binding activity	IRC15	Not described	No	No
CAGL0I03476g		1,21		Cytoplasmic DExD/H-box helicase, stimulates mRNA decapping; coordinates distinct steps in mRNA function and decay, interacts with both the decapping and deadenylase complexes, may have a role in mRNA export and translation; C-terminus of Dhl1p interacts with Ngr1p and promotes POR1, but not EDC1 mRNA decay	DHH1	Not described	No	Yes
CAGL0I08943g		1,21		Poly(A) binding protein, suppressor of DNA polymerase epsilon mutation, similar to Mip6p	PES4	Not described	No	Yes

				Has domain(s) with predicted RNA binding, nucleic acid binding,				
CAGL0M09108g	-	1,20	-	nucleotide binding activity	PUF2	Not described	No	Yes
CAGL0I01980g	-	1,20	-	Putative activator of transcription; gene is upregulated in azole- resistant strain	YSP1	Not described	Yes	Yes
CAGL0K12716g	-	1,20	-	Has domain(s) with predicted substrate-specific transmembrane transporter activity, transmembrane transporter activity, role in transmembrane transport and integral to membrane, membrane localization	YFL040W	Not described	No	No
CAGL0H01177g	-	1,20	-	Ortholog(s) have diacylglycerol diphosphate phosphatase activity, phosphatidate phosphatase activity and role in farnesol biosynthetic process, phospholipid metabolic process	DPP1	Not described	No	Yes
CAGL0L06358g		1,20		Vacuolar membrane protein of unknown function that is conserved in mammals; predicted to contain eleven transmembrane helices; interacts with Pdr5p, a protein involved in multidrug resistance	TMSI	Not described	No	No
CAGL0M05401g		1,20		Putative protein of unknown function	YBR201C-A	Not described	No	Yes
CAGL0E01859g	CgYPS10	1,19	-	Putative aspartic protease; predicted GPI-anchor; member of a YPS gene cluster that is required for virulence in mice; induced in response to low pH and high temperature	-	-	-	Yes
CAGL0L12056g	CgBMH1(A)	1,19	-	No Description Available	BMH1	Not described	No	Yes
CAGL0K04675g		1,19	-	Unknown	-	-	-	No
CAGL0L10142g	CgRSB1	1,18	-	Putative sphingolipid flippase; gene is upregulated in azole-resistant strain	RSB1	Not described	No	Yes
CAGL0H01287g	-	1,18	-	Ortholog(s) have mRNA 5'-UTR binding, translation repressor activity, nucleic acid binding activity	*SSD1	Not described	No	Yes
CAGL0E01419g	CgYPS2	1,18	-	Putative aspartic protease; predicted GPI-anchor; member of a YPS gene cluster that is required for virulence in mice; induced in response to low pH and high temperature	MCK7	-	-	Yes
CAGL0J01892g	CgPANI	1,17	-	Ortholog(s) have protein binding, bridging activity and role in actin cortical patch assembly, axial cellular bud site selection, bipolar cellular bud site selection, endocytosis, unidimensional cell growth	*PANI	Not described	No	Yes
CAGL0L09691g	-	1,17	-	Ortholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding, more	PUT3	Not described	No	Yes
CAGL0M08800g	CgYAP6	1,17	-	bZIP domain-containing protein	CIN5	Not described	No	No
CAGL0L06094g	CgSTR3	1,17		Peroxisomal cystathionine beta-lyase, converts cystathionine into homocysteine; may be redox regulated by Gto1p	STR3	Not described	No	Yes
CAGL0M06457g		1,17		Putative protein of unknown function; expression is reduced in a gcr1 null mutant; GFP-fusion protein localizes to the vacuole; expression pattern and physical interactions suggest a possible role in ribosome biogenesis	GDT1	Not described	Yes	Yes
CAGL0E06380g	-	1,16	-	Ortholog(s) have ATP-dependent NAD(P)H-hydrate dehydratase activity, role in nicotinamide nucleotide metabolic process and cytosol localization	YKL151C	Yes	No	Yes
CAGL0K12760g	-	1,16	-	Ortholog(s) have cytoplasm localization	YFL042C	Not described	No	Yes
CAGL0C03850g		1,16		Nuclear thiol peroxidase which functions as an alkyl- hydroperoxide reductase during post-diauxic growth	DOT5	Not described	Yes	No
CAGL0E02255g		1,16		Peripheral membrane protein of the plasma membrane that interacts with Mid2p; regulates the cell integrity pathway mediated by Pkc1p and Slt2p; the authentic protein is detected in a phosphorylated state in highly purified mitochondria	ZEOI	Not described	No	No
CAGL0G05093g	-	1,15	-	Ortholog(s) have mitochondrion localization	YDR061W	Not described	No	No
CAGL0C05137g	CgGPD2	1,15		NAD-dependent glycerol 3-phosphate dehydrogenase, homolog of Gpd1p, expression is controlled by an oxygen- independent signaling pathway required to regulate metabolism under anoxic conditions; located in cytosol and mitochondria	GPD2	Not described	No	Yes
CAGL0H02497g		1,15		Coiled-coiled protein of unknown function, identified as a high- copy suppressor of a dbp5 mutation	GFD1	Not described	No	Yes
CAGL0L08140g		1,15		PProtein homologous to human Chediak-Higashi syndrome and murine Beige proteins, which are implicated in disease syndromes due to defective lysosomal trafficking; mutant phenotype and genetic interactions suggest a role in protein sorting	ВРН1	Not described	Yes	Yes
CAGL0I03168g	-	1,14	-	No Description Available	YEL023C	Not described	No	No
			1	Ortholog(s) have role in actin cortical patch assembly and actin	AIM3	Not described	No	No

CAGL0A00539g		1,13		Ortholog(s) have role in CVT pathway, intra-Golgi vesicle-mediated	COG7	Not described	No	No
CAGL0A00339g		1,13	-	transport and Golgi transport complex, mitochondrion localization  Ortholog(s) have protein binding, bridging activity and role in CVT	0007	Not described	NO	NO
CAGL0I07887g	-	1,13	-	Ortholog(s) nave protein binding, origing activity and role in CV1 pathway, ER-associated protein catabolic process, protein complex localization, protein processing, vesicle organization Histidinol-phosphate aminotransferase, catalyzes the seventh	ATG19	Not described	No	No
CAGL0C01243g		1,13		step in histidine biosynthesis; responsive to general control of amino acid biosynthesis; mutations cause histidine auxotrophy and sensitivity to Cu, Co, and Ni salts	HIS5	Not described	No	Yes
CAGL0C01243g		1,13		Histidinol-phosphate aminotransferase, catalyzes the seventh step in histidine biosynthesis; responsive to general control of amino acid biosynthesis; mutations cause histidine auxotrophy and sensitivity to Cu, Co, and Ni salts	HIS5	Not described	No	Yes
CAGL0D00286g	CgBMT1	1,12	-	Beta mannosyltransferase	-	-	-	No
CAGL0C04939g		1,12		Putative protein of unknown function; has sequence or structural similarity to lipases	YJR107W	Not described	No	No
CAGL0I02046g		1,12		Unknown	-	Not described	-	No
CAGL0L00957g	-	1,11	-	No Description Available	CAJI	Not described	No	Yes
CAGL0H09218g	CgSDT1	1,11		Pyrimidine nucleotidase; overexpression suppresses the 6-AU sensitivity of transcription elongation factor S-II, as well as resistance to other pyrimidine derivatives	SDT1	Not described	No	Yes
CAGL0M02629g		1,11		Conserved protein of the mitochondrial matrix, performs a scaffolding function during assembly of iron-sulfur clusters, interacts physically and functionally with yeast frataxin (Yfh1p); isu1 isu2 double mutant is inviable	ISUI	Not described	No	Yes
CAGL0M00550g	-	1,10	-	Ortholog(s) have cytosol, nucleus localization	STR2	Not described	No	No
CAGL0C02519g	-	1,10	-	Has domain(s) with predicted nucleic acid binding activity	MIG3	Not described	No	Yes
CAGL0L07810g	-	1,10	-	Ortholog(s) have protein kinase activity	SAT4	Not described	No	No
CAGL0H03311g		1,10		Putative protein of unknown function; non-essential gene; interacts genetically with CHS5, a gene involved in chitin biosynthesis	YGL081W	Not described	No	Yes
CAGL0J03916g		1,10		Protein implicated in the regulation of ergosterol biosynthesis; one of a seven member gene family with a common essential function and non-essential unique functions; similar to human oxysterol binding protein (OSBP)	HES1	Not described	No	Yes
CAGL0K10736g	CgCYB2	1,10		Cytochrome b2 (L-lactate cytochrome-c oxidoreductase), component of the mitochondrial intermembrane space, required for lactate utilization; expression is repressed by glucose and anaerobic conditions	CYB2	Not described	No	No
CAGL0G02893g	-	1,09	-	Ortholog(s) have NADH kinase activity, role in NADP biosynthetic process, cellular response to oxidative stress and mitochondrial matrix localization	POS5	Not described	Yes	No
CAGL0E02035g	-	1,09	-	Ortholog(s) have fungal-type vacuole membrane localization	MCH4	Yes	No	Yes
CAGL0L11440g	-	1,09	-	Ortholog(s) have lipid binding activity and role in endoplasmic reticulum membrane organization, regulation of phosphatidylinositol dephosphorylation	TCB3	Not described	No	No
CAGL0I01496g		1,09		Hsp70 family ATPase, constituent of the import motor component of the Translocase of the Inner Mitochondrial membrane (TIM23 complex); involved in protein translocation and folding; subunit of Seel endonuclease	SSCI	Not described	No	Yes
CAGL0K09790g		1,09		CAP (cyclase-associated protein) subunit of adenylyl cyclase complex; N-terminus binds adenylyl cyclase and facilitates activation by RAS; C-terminus binds ADP-actin monomers, facilitating regulation of actin dynamics and cell morphogenesis	SRV2	Not described	No	Yes
CAGL0L02607g		1,09		Putative protein of unknown function; green fluorescent protein (GFP)-fusion protein localizes to the vacuole, while HA-tagged protein is found in the soluble fraction, suggesting cytoplasmic localization	YHR202W	Not described	No	No
CAGL0M08552g	-	1,08	-	Ortholog(s) have role in cation transport, regulation of membrane potential and plasma membrane localization	PMP3	Yes	No	Yes
CAGL0G01738g	-	1,08	-	Ortholog(s) have lipid binding activity and role in eisosome assembly, endocytosis, negative regulation of protein kinase activity, protein localization, response to heat	PILI	Not described	No	Yes

				Vacuolar Ca2+ ATPase involved in depleting cytosol of Ca2+				
CAGL0A00517g	-	1,08	-	ions; prevents growth inhibition by activation of calcineurin in the presence of elevated concentrations of calcium; similar to	PMC1	Not described	No	Yes
CAGL0G08646g		1,08		mammalian PMCA1a  Nuclear chromatin-associated protein of unknown function; overexpression promotes recovery from pheromone induced arrest and suppresses the stress sensitivity caused by a mutation in the E3 ubiquitin ligase Rsp5p; binds upstream of BAR1 and cell cycle-related genes; potential Cdc28p substrate; SBF regulated	POGI	Not described	No	No
CAGL0K05687g		1,08		SBF regulated	-	Not described	-	Yes
CAGL0M13783g		1,08		Ubiquitin-specific protease involved in protein deubiquitination; catalytic activity regulated by an N-terminal TRAF-like domain and and C-terminal sequences; physically interacts with anaphase-promoting complex/cyclosome (APC/C) activator, Cdh1p	UBP15	Not described	Yes	No
CAGL0I10626g	-	1,07	-	Ortholog(s) have Golgi apparatus, endoplasmic reticulum, fungal- type vacuole membrane localization Plasma membrane sterol transporter of the ATP-binding	YGR125W	Not described	No	No
CAGL0F01419g	CgAUS1	1,07		Plasma membrane sterol transporter of the ATP-binding cassette family; required, along with Pdr I1p, for uptake of exogenous sterols and their incorporation into the plasma membrane; activity is stimulated by phosphatidylserine; sterol uptake is required for anaerobic growth because sterol biosynthesis requires oxygen	AUSI	Not described	No	Yes
CAGL0J09416g		1,07		Protein of unknown function, localized to the vacuolar outer membrane; predicted to be palmitoylated	SNA4	Not described	No	Yes
CAGL0M08602g		1,07		Cu(+2)-transporting P-type ATPase, required for export of copper from the cytosol into an extracytosolic compartment; has similarity to human proteins involved in Menkes and Wilsons diseases	CCC2	Not described	No	No
CAGL0M07568g	-	1,06	-	Ortholog(s) have ubiquitin-protein ligase activity	UBC7	Not described	No	No
CAGL0K04367g	-	1,06	-	Has domain(s) with predicted amino acid transmembrane transporter activity, role in amino acid transmembrane transport and membrane localization	MUPI	Not described	No	Yes
CAGL0C03509g		1,06		Ser/Thr protein kinase that regulates the putative phospholipid translocases Lem3p-Dnf1p/Dnf2p; phosphorylates and inhibits upstream inhibitory kinase, Ypk1p; localizes to the cytoplasm, early endosome/TGN compartments, and plasma membrane	FPK1	Not described	Yes	Yes
CAGL0I02552g		1,06		Transcription factor, involved in regulating multidrug resistance and oxidative stress response; forms a heterodimer with Pdr1p; contains a Zn(II)2Cys6 zinc finger domain that interacts with a pleiotropic drug resistance element in vitro	STB5	Not described	Yes	Yes
CAGL0L08712g	-	1,05	-	Ortholog(s) have cytoplasm, nucleus localization	YPL014W	Yes	No	Yes
CAGL0F06831g		1,05		ER membrane protein involved in regulation of OLE1 transcription, acts with homolog Spt23p; inactive ER form dimerizes and one subunit is then activated by ubiquitin/proteasome-dependent processing followed by nuclear targeting	MGA2	Not described	No	No
CAGL0M10549g		1,05		Cytochrome c oxidase subunit; has a role in assembly of respiratory supercomplexes; similar to Rcf1p, and either Rcf1p or Rcf2p is required for late-stage assembly of the Cox12p and Cox13p subunits and for cytochrome c oxidase activity; associates with the cytochrome c oxidase - cytochrome bc1 supercomplex; null mutant accumulates reactive oxygen species; member of the conserved hypoxia induced gene family; C. elegans homolog is functional in yeast	RCF2	Not described	No	Yes
CAGL0M13365g		1,05		Protein involved in the control of meiotic nuclear division and coordination of meiosis with spore formation; transcription is induced midway through meiosis	SSP1	Not described	No	No
CAGL0A02024g		1,04		Protein that negatively regulates the SCF E3-ubiquitin ligase by interacting with and preventing neddyation of the cullin subunit, Cdc53p; longevity determinant that is preferentially expressed in young cells; similar to mammalian Cand1	LAG2	Yes	No	No

CAGL0B00242g		1,04	Silenced copy of ALPHA1 at HML, encoding a transcriptions coactivator involved in the regulation of mating-type alpha-	HMLALPHA1	Not described	No	Yes
CAGL0B00242g		1,04	specific gene expression		Not described	NO	ies
CAGL0F02387g	CgPHO87	1,04	Low-affinity phosphate transporter; deletion of pho84, pho87 pho89, pho90, and pho91 causes synthetic lethality; transcription independent of Pi and Pho4p activity;	, PHO90	Not described	No	Yes
			overexpression results in vigorous growth Cytoplasmic aldehyde dehydrogenase, involved in beta-alanir	e			
CAGL0F07777g		1,04	synthesis; uses NAD+ as the preferred coenzyme; very similar		Not described	No	No
			to Ald2p; expression is induced by stress and repressed by glucose				
CAGL0K12694g		1,04	Actin, structural protein involved in cell polarization, endocytosis, and other cytoskeletal functions	ACTI	Not described	No	No
			Acetyl-coA synthetase isoform which, along with Acs2p, is the	<b>I</b>			
CAGL0L00649g		1,04	nuclear source of acetyl-coA for histone acetylation; expresse during growth on nonfermentable carbon sources and under aerobic conditions	ACSI	Not described	No	Yes
			Putative protein of unknown function; has similarity to Mgr3 <sub>1</sub> but unlike MGR3, is not required for growth of cells lacking				
CAGL0D02134g		1,03	the mitochondrial genome (null mutation does not confer a petite-negative phenotype)	YKL133C	Not described	No	Yes
			Ribosomal RNA processing element (RRPE)-binding protein				
CAGL0E00891g		1,03	involved in the glucose-induced transition from quiescence to growth; restricted to nucleus in quiescent cells, released into		Not described	No	No
			cytoplasm after glucose repletion; binds Sin3p				
CACL 0102000-	CARALL	1.02	Subunit A of the eight-subunit V1 peripheral membrane domain of the vacuolar H+-ATPase; protein precursor	171441	N. 1 7 1	N	v
CAGL0I03960g	CgVMA1	1,03	undergoes self-catalyzed splicing to yield the extein Tfp1p an the intein Vde (PI-SceI), which is a site-specific endonucleas		Not described	No	Yes
			C-4 methyl sterol oxidase, catalyzes the first of three steps required to remove two C-4 methyl groups from an				
CAGL0K04477g		1,03	intermediate in ergosterol biosynthesis; mutants accumulate	ERG25	Not described	No	No
			the sterol intermediate 4,4-dimethylzymosterol  Pentafunctional arom protein, catalyzes steps 2 through 6 in				
CAGL0M11484g		1,03	the biosynthesis of chorismate, which is a precursor to aromatic amino acids	AROI	Not described	Yes	Yes
			Ortholog(s) have role in histone deacetylation, negative regulation				
CAGL0J01529g	-	1,02	of antisense RNA transcription, regulation of DNA-dependent DN replication initiation, transcription elongation from RNA polymera:		Not described	No	No
			Il promoter Putative integral membrane E3 ubiquitin ligase; acts with				
CAGL0A03344g		1,02	Asi1p and Asi2p to ensure the fidelity of SPS-sensor signallin by maintaining the dormant repressed state of gene expressio		Not described	No	Yes
			in the absence of inducing signals	•			
CAGL0I10054g		1,02	Protein involved in sphingolipid biosynthesis; type II membrane protein with similarity to Kre6p	SKN1	Not described	No	Yes
			Minor isoform of tropomyosin, binds to and stabilizes actin cables and filaments, which direct polarized cell growth and				
CAGL0L08338g		1,02	the distribution of several organelles; appears to have distinc	1 IPM2	Not described	No	Yes
			and also overlapping functions with Tpm1p Part of the evolutionarily-conserved CCR4-NOT				
CAGL0J08349g		1,01	transcriptional regulatory complex involved in controlling mRNA initiation, elongation, and degradation	CAF120	Not described	No	No
			Malate synthase, enzyme of the glyoxylate cycle, involved in	1			
CAGL0L03982g		1,01	utilization of non-fermentable carbon sources; expression is subject to carbon catabolite repression; localizes in	MLS1	Not described	No	Yes
CAGL0D06512g		1,00	peroxisomes during growth in oleic acid medium	SDC25	Not described	No	Yes
CAGL0F01287g	CgGAS5	1,00	1,3-beta-glucanosyltransferase, has similarity to Gas1p;	GAS5	Not described	No	Yes
	*		localizes to the cell wall Putative protein of unknown function; green fluorescent				
CAGL0K04873g		1,00	protein (GFP)-fusion protein localizes to the cytoplasm and nucleus; YDL233W is not an essential gene	YDL233W	Not described	No	Yes

## Genes whose acetic acid-induced transcriptional activation was partly dependent of CgHaa1

_	ORF	C. glabrata gene			Function	S. cerevisiae orthologue	S. cerevisiae orthologue regulated by ScHaa1?	S. cerevisiae homologue confers resistance to acetic acid?	C. glabrata promoter harbors an HRE motif
	CAGL0I06182g	CgPIR2	7,65	3,10	O-mannosylated heat shock protein that is secreted and covalently attached to the cell wall via beta-1,3-glucan and disulfide bridges; required for cell wall stability; induced by heat shock, oxidative stress, and nitrogen limitation	HSP150	Not described	No	Yes
[	CAGL0G05632g	-	6,95	1,41	Ortholog(s) have cytoplasm localization	YDL218W	Not described	No	No
	CAGL0I10010g	-	6,82	3,66	v-SNARE binding protein that facilitates specific protein retrieval from a late endosome to the Golgi; modulates arginine uptake, possible role in mediating pH homeostasis between the vacuole and plasma membrane H(+)-ATP	BTN2	Not described	No	Yes
-	CAGL0M01166g	-	6,44	4,20	Ortholog(s) have ferrous iron binding activity, role in mitochondrial genome maintenance, thiamine biosynthetic process, thiazole biosynthetic process and cytosol, nucleus localization	THI4	Not described	No	No
	CAGL0F08261g	-	6,11	2,55	Ortholog(s) have phosphopyruvate hydratase activity, role in glycolysis, regulation of vacuole fusion, non-autophagic and fungal-type vacuole, internal side of plasma membrane, mitochondrion, phosphopyruvate hydratase complex localization	ENO1	Not described		No
	CAGL0G03883g	-	6,10	4,05	Disaggregase; Heat shock protein that cooperates with Ydj1p (Hsp40) and Ssa1p (Hsp70) to refold and reactivate previously dratured, aggregated proteins; responsive to stresses including: heat, ethanol, and sodium arsenite; involved in [PSI+] propagation	HSP104	Yes		No
Ī	CAGL0G03289g	CgSSA3	6,10	2,09	Heat shock protein of the HSP70 family	SSA4	Yes	Yes	No
	CAGL0J00451g	-	5,66	4,38	Putative glyceraldehyde-3-phosphate dehydrogenase; protein differentially expressed in azole resistant strain; expression downregulated in biofilm vs planktonic cell culture	TDH3	Not described	No	No
	CAGL0M08822g	CgHSP78	5,06	3,34	Ortholog(s) have ATPase activity, misfolded protein binding activity	HSP78	Not described	No	Yes
36	CAGL0E00803g	-	4,82	2,88	Putative small cytosolic stress-induced chaperone; gene is upregulated in azole-resistant strain	HSP42	Yes	No	Yes
	CAGL0H03707g	-	4,64	2,57	Ortholog(s) have role in protein folding, translational initiation and cytosolic small ribosomal subunit, nucleus localization	*SIS1	Not described	No	Yes
	CAGL0G08866g	-	4,38	1,96	Ortholog(s) have RNA polymerase II transcription factor binding, RNA polymerase II transcription factor binding transcription factor activity, sequence-specific DNA binding activity	FKH2	Yes	No	Yes
	CAGL0C02321g	СдРНМ8	4,25	2,36	Ortholog(s) have nucleotidase activity and role in pyrimidine nucleobase metabolic process	SDT1	Not described	No	Yes
L	CAGL0K10164g	-	4,08	2,54	Predicted GPI-linked protein; putative adhesin-like protein	SP11	Yes	No	Yes
	CAGL0I09724g	-	4,07	2,05	Unknown	-	-	No	Yes
	CAGL0F04631g	-	4,03	1,84	No Description Available	MOH1	Not described	No	Yes
	CAGL0F04631g		4,03	1,84	Protein of unknown function, has homology to kinase Snf7p; not required for growth on nonfermentable carbon sources; essential for survival in stationary phase	МОН1	Not described	No	Yes
	CAGL0I10384g	CgTPO3	3,98	1,49	Predicted polyamine transporter of the major facilitator superfamily; required for azole resistance	TPO3	Yes	Yes	No
	CAGL0J06050g	-	3,97	1,41	Has domain(s) with predicted role in cellular amino acid metabolic process	YGP1	Yes	No	Yes
-	CAGL0H00704g	-	3,95	2,86	Protein of unknown function; mobilized into polysomes upon a shift from a fermentable to nonfermentable carbon source; potential Cdc28p substrate	ICY2	Not described	Yes	Yes
	CAGL0G08624g	CgQDR2	3,92	2,69	Drug:H+ antiporter of the Major Facilitator Superfamily, confers imidazole drug resistance, involved in quinidine/multidrug efflux; gene is activated by Pdrlp; upregulated in azole-resistant strain	QDR1	Not described	No	Yes
	CAGL0F04521g	-	3,84	1,19	No Description Available	ECM13	Yes	No	Yes
	CAGL0L07722g	CgPGK1	3,69	2,34	Putative 3-phosphoglycerate kinase; protein differentially expressed in azole resistant strain; protein abundance increased in ace2 mutant cells	*PGK1	Not described	No	Yes
	CAGL0H04279g	CgMT-IIB	3,65	2,73	Copper-binding metallothionein, involved in sequestration of metal ions; inducible by copper and silver; present in multiple (3-9) tandemly arranged copies in various strains	-	-	-	Yes
	CAGL0F04895g		3,61	1,45	Ortholog(s) have glycogen phosphorylase activity, role in glycogen catabolic process and cell surface, cytoplasm, hyphal cell wall localization	GPH1	Not described	No	Yes
	CAGL0K12254g		3,60	2,71	Peripheral membrane protein located at Vid (vacuole import and degradation) vesicles; regulates fructose-1,6-bisphosphatase (FBPase) targeting to the vacuole; promotes proteasome-dependent catabolite degradation of FBPase	VID24	Not described	No	No
	CAGL0K04301g	- 1	3,47	1,45	Putative mitochondrial Ser/Thr protein kinase; gene is upregulated in azole-resistant strain	FMP48	Yes	Yes	No

CAGL0E06358g	CgGPM1	3,46	2,58	Tetrameric phosphoglycerate mutase, mediates the conversion of 3- phosphoglycerate to 2-phosphoglycerate during glycolysis and the reverse reaction during gluconeogenesis	GPM1	Not described	No	No
CAGL0H02101g	-	3,31	1,95	Ortholog(s) have role in RNA metabolic process and cytoplasm, nucleus localization	RTC3	Yes	No	Yes
CAGL0J10296g	-	3,30	1,40	Ortholog(s) have ATPase activator activity, unfolded protein binding activity, role in protein sumoylation and mitochondrion, nucleus localization	APJ1	Not described	No	Yes
CAGL0F08745g	-	3,22	1,70	Protein involved in resistance to dessication stress; Stf2p exhibits antioxidant properties, and its overexpression prevents ROS accumulation and apoptosis; binds to the F0 sector of mitochondrial F1F0 ATPase in vitro and is proposed to modulate the inhibitory action of Inh1p and Stf1p	STF2	Yes	No	Yes
CAGL0M02167g	-	3,22	1,83	Pheromone-regulated protein proposed to be involved in mating; predicted to have 1 transmembrane segment; transcriptionally regulated by Ste12p during mating and by Cat8p during the diauxic shift	PRM4	Not described	No	Yes
CAGL0A03102g	CgARO10	3,17	1,66	Phenylpyruvate decarboxylase, catalyzes decarboxylation of phenylpyruvate to phenylacetaldehyde, which is the first specific step in the Ehrlich pathway	ARO10	Not described	No	Yes
CAGL0H00418g		3,16	1,26	Unknown	-	-	-	Yes
CAGL0K04719g	-	3,15	1,09	Ortholog(s) have mitochondrion, ribosome localization Ortholog(s) have electron carrier activity, stearoyl-CoA 9-desaturase	YNL208W	Not described	No	No
CAGL0I00418g	-	3,15	2,00	activity	*OLE1	Not described	No	No
CAGL0G03795g	CgSSA1	3,13	1,84	Heat shock protein of the HSP70 family	SSA2	Not described	No	Yes
CAGL0I05934g	-	3,12	1,95	Ortholog(s) have role in cellular response to water deprivation and cytoplasm localization	YJL144W	Not described	No	Yes
CAGL0E05566g	÷	3,11	1,41	Serine-rich protein that contains a basic-helix-loop-helix (bHLH) DNA binding motif; binds E-boxes of glycolytic genes and contributes to their activation; may function as a transcriptional activator in Ty1-mediated gene expression	TYE7	Yes	No	No
CAGL0F01111g	-	3,09	1,88	Protein with a possible role in phospholipid biosynthesis, based on inositol-excreting phenotype of the null mutant and its suppression by exogenous choline	OPI10	Not described	No	Yes
CAGL0I02486g		3,06	2,14	Enolase II, a phosphopyruvate hydratase that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate during glycolysis and the reverse reaction during gluconeogenesis; expression is induced in response to glucose	ENO2	Not described	No	Yes
CAGL0M13651g	-	3,04	1,62	Ortholog(s) have serine-type carboxypeptidase activity, role in phytochelatin biosynthetic process and endoplasmic reticulum, fungal-type vacuole localization	PRCI	Not described	No	No
CAGL0J04466g		3,04	1,68	Plasma membrane protein with a role in cell wall integrity; co- localizes with Sur7p in punctate membrane patches; null mutant displays decreased thermotolerance; transcription induced upon cell wall damage and metal ion stress	PUNI	Not described	No	No
CAGL0C00275g		3,04	1,01	Putative cysteine protease	-	-	-	No
CAGL0C02893g	-	3,01	1,22	Ortholog(s) have protein serine/threonine kinase activity	HRK1	Yes	Yes	Yes
CAGL0H03971g	-	2,98	1,82	Ortholog(s) have membrane raft, mitochondrion, plasma membrane localization	YCP4	Not described	No	No
CAGL0M08492g	CgPIR3	2,88	1,66	Pir protein family member, predicted GPI-anchor	PIR1	Not described	No	Yes
CAGL0L02497g	CgFBA1	2,84	1,59	Fructose-bisphosphate aldolase; expression downregulated in biofilm vs planktonic cell culture; protein abundance increased in ace2 mutant cells	*FBA1	Not described	No	Yes
CAGL0L06424g		2,77	1,42	77 1 1 (2) 21	YDR134C	Yes		Yes
CAGL0H08393g	-	2,75	1,55	Has domain(s) with predicted amino acid transmembrane transporter activity, role in amino acid transmembrane transport, amino acid transport, transmembrane transport and integral to membrane, membrane localization	BAP3	Not described	No	Yes
CAGL0M12034g	CgPYK1	2,72	1,75	Pyruvate kinase, functions as a homotetramer in glycolysis to convert phosphoenolpyruvate to pyruvate, the input for aerobic (TCA cycle) or anaerobic (glucose fermentation) respiration	CDC19	Not described	No	No
CAGL0K07634g	CgGAT1	2,65	1,07	Ortholog(s) have RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription, more	GATI	Not described	No	No
CAGL0I01342g	-	2,63	1,00	Ortholog(s) have L-allo-threonine aldolase activity, role in carnitine biosynthetic process, glycine biosynthetic process, threonine catabolic process and cytosol, nucleus localization	GLYI	Not described	Yes	Yes
CAGL0E04774g	-	2,55	1,05	Ortholog(s) have cytoplasm localization	YDR222W	Not described	No	Yes
CAGL0M11000g		2,50	1,10	Putative protein of unknown function; expression is regulated by  Msn2p/Msn4p	YNR034W-A	Yes	No	Yes
CAGL0G03531g	-	2,49	1,10	No Description Available	SPR6	Not described	No	No
CAGL0H01375g	CgSUR2	2,44	1,34	Predicted sphinganine hydroxylase with role in sphingolipid biosynthesis; mutants show reduced sensitivity to caspofungin and increased sensitivity to micafungin	SUR2	Yes	Yes	Yes

CAGL0F08041g	CgPFK1	2,43	1,23	Putative phosphofructokinase, alpha subunit; increased protein abundance in azole resistant strain	PFK1	Not described	Yes	No
CAGL0G08844g		2,35	1,16	Zinc cluster protein proposed to function as a transcriptional regulator involved in the stress response; null mutants have a respiratory deficiency, calcofluor white sensitivity and slightly increased cycloheximide resistance	ASG1	Yes	Yes	Yes
CAGL0F04917g	-	2,17	1,15	Putative targeting subunit for the type-1 protein phosphatase Glc7p that tethers it to the Gsy2p glycogen synthase	PIG1	Not described	No	Yes
CAGL0L11154g	-	2,14	1,13	Ortholog(s) have carboxylesterase activity, lysophospholipase activity, role in phosphatidylcholine catabolic process, regulation of phospholipid biosynthetic process and endoplasmic reticulum localization	NTE1	Not described	No	Yes
CAGL0G10219g	AWP12	2,11	1,02	Adhesin-like protein with 5 tandem repeats	-	-	-	Yes
CAGL0G02849g		2,08	1,15	Protein that interacts with Ulp1p, a Ubl (ubiquitin-like protein)- specific protease for Smt3p protein conjugates; detected in a phosphorylated state in the mitochondrial outer membrane; also detected in ER and nuclear envelope	UIP4	Not described	No	Yes