

gene	ORF	protein	YPM	references
AAD3	YCR107W	probable aryl-alcohol reductase	●	[11][17]
AAH1	YNL141W	adenine deaminase		[24]
AAT2	YLR027C	aspartate aminotransferase		[15][19]
ABC1	YGL119W	assembly protein (Ubiquinol-cytochrome-c reductase complex)		[23]
ABF2	YMR072W	ARS-binding factor		[23]
ABP1	YCR088W	actin binding protein		[24]
ACH1	YBL015W	acetyl-CoA hydrolase	●	[15][17][21][22][23]
ACO1	YLR304C	aconitase	●	[17][19][20][21][23]
ACO2	YJL200C	aconitase	●	[17][19][21][23][24]
ACS1	YAL054C	acetyl-CoA synthetase	●	[18]
ACS2	YLR153C	acetyl-CoA synthetase	●	[17][19][22]
ACT1	YFL039C	actin	●	[10][11][17][22][23][24]
ADE1	YAR015W	SAICAR synthetase	●	[11][15][17][24]
ADE12	YNL220W	adenylosuccinate synthetase		[19]
ADE13	YLR359W	adenylosuccinate lyase	●	[14][15][17][24]
ADE16	YLR028C	AlCAR transformylase/IMP synthetase	●	[17][22]
ADE17	YMR120C	AlCAR transformylase/IMP cyclohydrolase	●	[11][17][22][24][25]
ADE2	YOR128C	phosphoribosylaminoimidazole carboxylase	●	[17]
ADE3	YGR204W	C1-tetrahydrofolate synthetase	●	[11][15][17][24]
ADE4	YMR300C	amidophosphoribosyltransferase	●	[17][24]
ADE5,7	YGL234W	GARSase + AIRSase	●	[11][17][22][24]
ADE6	YGR061C	5'-phosphoribosylformyl glycinamide synthetase	●	[17][24]
ADH1	YOL086C	alcohol dehydrogenase I	●	[1][9][10][11][15][17][19][20][22][23][24]
ADH2	YMR303C	alcohol dehydrogenase II	●	[11][15][17][20][23]
ADH3	YMR083W	mitochondrial alcohol dehydrogenase III		[21][23]
ADH4	YGL256W	alcohol dehydrogenase IV	●	[17]
ADH5	YBR145W	alcohol dehydrogenase		[24]
ADK1	YDR226W	adenylate kinase	●	[11][15][17][20][23][24]
ADO1	YJR105W	adenosine kinase	●	[11][15][17][20][22][24][25]
AFG2	YLR397C	essential protein with an ATPase activity		[24]
AHP1	YLR109W	alkyl hydroperoxide reductase	●	[11][15][17][23][24][25]
ALA1	YOR335C	alanyl-tRNA synthetase	●	[17][22][23][24]
ALD2	YMR170C	aldehyde dehydrogenase		[11]
ALD3	YMR169C	aldehyde dehydrogenase	●	[17]
ALD4	YOR374W	mitochondrial aldehyde dehydrogenase	●	[14][17][20][21][22][23][24]
ALD5	YER073W	mitochondrial aldehyde dehydrogenase		[21][23]
ALD6	YPL061W	aldehyde dehydrogenase	●	[10][11][15][17][20][22][23][24][25]
ALO1	YML086C	D-arabinino-1,4-lactone oxidase		[23]
ALT1	YLR089C	putative alanine transaminase		[21][23]
APA1	YCL050C	ATP adenylyltransferase 1	●	[15][17][24]
APE2	YKL157W	aminopeptidase II		[23]
APT1	YML022W	adenine phosphoribosyltransferase	●	[17]
ARA1	YBR149W	D-arabinose dehydrogenase	●	[17][20][22]
ARC1	YGL105W	cofactor for methionyl- and glutamyl-tRNA synthetases		[19]
ARG1	YOL058W	argininosuccinate synthetase	●	[17][22][24][25]
ARG3	YJL088W	ornithine carbamoyltransferase	●	[17]
ARG4	YHR018C	argininosuccinate lyase	●	[11][17]
ARG5	YER069W	acetylglutamate kinase		[23][24]
ARG6	YER069W	acetylglutamyl-phosphate reductase		[23][24]
ARG7	YMR062C	ornithine acetyltransferase		[23]
ARG8	YOL140W	acetylornithine aminotransferase	●	[17][21][23]
ARH1	YDR376W	adrenodoxin oxidoreductase homolog		[23]
ARO1	YDR127W	arom pentafunctional enzyme	●	[17][24]
ARO10	YDR380W	putative indole-3-pyruvate decarboxylase	●	[17]
ARO3	YDR035W	2-dehydro-3-deoxyphosphoheptonate aldolase		[25]
ARO4	YBR249C	2-dehydro-3-deoxyphosphoheptonate aldolase	●	[17][24]
ARO8	YGL202W	aromatic amino acid aminotransferase I	●	[11][15][17][22][24][25]
ARO9	YHR137W	aromatic amino acid aminotransferase II	●	[17]
ARP2	YDL029W	actin-related protein	●	[17][24]
ASC1	YMR116C	40S subunit ribosomal protein	●	[10][11][15][17][20][22][23][24]
ASN1	YPR145W	asparagine synthetase 1	●	[17][22][24]
ASN2	YGR124W	asparagine synthetase 2	●	[17]
ATP1	YBL099W	F1-ATP synthase beta-subunit		[14][15][21][23]
ATP11	YNL315C	F1-ATP synthase assembly protein		[23]
ATP14	YLR295C	F0-ATP synthase subunit h		[8][11]
ATP16	YDL004W	F1-ATP synthase delta-subunit		[23]
ATP18	YML081C-A	F0-ATP synthase subunit i/j		[23]
ATP2	YJR121W	F1-ATP synthase beta-subunit	●	[10][11][17][21][22][23][24]
ATP3	YBR039W	F1-ATP synthase gamma-subunit		[19][23]

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ATP4	YPL078C	F0-ATP synthase subunit b		[21][23]
ATP5	YDR298C	F0-ATP synthase subunit 5		[21][23]
ATP7	YKL016C	F0-ATP synthase subunit d		[15][19][20][21][23]
AYR1	YIL124W	1-acyldihydroxyacetone-phosphate reductase		[23]
BAT1	YHR208W	mitochondrial branched-chain amino acid transaminase		[15][20][21][23]
BAT2	YJR148W	cytosolic branched-chain amino acid transaminase		[15]
BFR1	YOR198C	protein involved in secretion		[19]
BGL2	YGR282C	endo-beta-1,3-glucanase of the cell wall		[10][11][13][24]
BMH1	YER177W	signal transduction during pseudohyphal growth	●	[11][15][17][22][23][24]
BMH2	YDR099W	signal transduction during pseudohyphal growth	●	[11][17][22][23][24]
BNA1	YJR025C	3-hydroxyanthranilate 3,4-dioxygenase	●	[17][24]
CAR1	YPL111W	arginase	●	[15][17][24]
CAR2	YLR438W	ornithine aminotransferase		[15][22]
CAT2	YML042W	carnitine O-acetyl-transferase		[23]
CAT5	YOR125C	ubiquinone biosynthesis protein		[23]
CBP4	YGR174C	assembly protein (Ubiquinol-cytochrome-c reductase complex)		[23]
CCP1	YKR066C	cytochrome-c peroxydase	●	[17][23][24]
CCS1	YMR038C	copper chaperone for Sod1p	●	[17]
CCT1	YDR212W	component of chaperonin-containing T-complex	●	[10][17]
CCT2	YIL142W	component of chaperonin-containing T-complex	●	[17]
CCT3	YJL014W	component of chaperonin-containing T-complex		[24]
CCT5	YJR064W	component of chaperonin-containing T-complex	●	[17][24]
CCT6	YDR188W	component of chaperonin-containing T-complex	●	[11][17][24]
CCT7	YJL111W	component of chaperonin-containing T-complex	●	[17]
CCT8	YJL008C	component of chaperonin-containing T-complex	●	[15][17][24]
CDC37	YDR168W	Hsp90 co-chaperone	●	[17]
CDC48	YDL126C	ATPase of the AAA family	●	[11][17][22][23][24][25]
CDC60	YPL160W	leucyl-tRNA synthetase	●	[11][17]
CHA1	YCL064C	L-serine/ L-threonine deaminase		[23]
CIT1	YNR001C	mitochondrial citrate synthase		[21][23]
CIT2	YCR005C	peroxisomal citrate synthase	●	[11][17][22]
CLC1	YGR167W	clathrin light chain		[8][24]
COF1	YLL050C	cofilin		[8]
COQ5	YML110C	ubiquinone biosynthesis methyltransferase		[23][24]
COQ6	YGR255C	ubiquinone biosynthesis monooxygenase		[23]
COR1	YBL045C	ubiquinol cytochrome-c reductase core protein 1	●	[15][17][21][22][23]
COX12	YLR038C	cytochrome-c oxidase subunit VIb		[23]
COX13	YGL191W	cytochrome-c oxidase subunit VIa		[21][23]
COX14	YML129C	assembly protein (Cytochrome C oxidase)		[23]
COX4	YGL187C	cytochrome-c oxidase subunit IV		[21][23]
COX5A	YNL052W	cytochrome-c oxidase subunit Va		[23]
COX5B	YIL111W	cytochrome-c oxidase subunit Vb		[21]
COX6	YHR051W	cytochrome-c oxidase subunit VI		[23]
CPA2	YJR109C	carbamoylphosphate synthase, large chain	●	[17][23][24]
CPR1	YDR155C	peptidyl-prolyl cis-trans isomerase		[8][15][19][20][24]
CPR3	YML078W	peptidyl-prolyl cis-trans isomerase		[13][19][21][23]
CPR5	YDR304C	peptidyl-prolyl cis-trans isomerase		[11][23][24]
CRN1	YLR429W	coronin, actin-binding protein		[24]
CTA1	YDR256C	catalase A		[14]
CTT1	YGR088W	catalase T	●	[17]
CWH41	YGL027C	glucosidase I		[23]
CYB2	YML054C	L-lactate dehydrogenase		[15][20][21][23]
CYC1	YJR048W	Cytochrome-c isoform 1		[21]
CYM1	YDR430C	putative zinc metalloprotease		[23]
CYS3	YAL012W	cystathionine gamma-lyase	●	[11][15][17][22][23][24]
CYS4	YGR155W	cystathionine beta-synthase	●	[15][17][19][21][22][24]
DAK1	YML070W	dihydroxyacetone kinase	●	[10][17][24]
DAL7	YIR031C	malate synthase 2	●	[17]
DCP1	YOL149W	mRNA decapping enzyme		[25]
DDR48	YMR173W	stress protein		[8]
DLD1	YDL174C	D-lactate dehydrogenase	●	[17][21][22][23]
DLD2	YDL178W	mitochondrial D-Lactate dehydrogenase		[21][23]
DLD3	YEL071W	D-lactate dehydrogenase	●	[11][15][17][19][22]
DNM1	YLL001W	dynamin related protein		[13]
DPB4	YDR121W	DNA Polymerase II subunit		[24]
DPM1	YPR183W	dolichol-phosphate mannosyltransferase		[15]
DPS1	YLL018C	aspartyl-tRNA synthetase	●	[11][17][24]
DSK2	YMR276W	involved in ubiquitin-dependent proteolysis	●	[17][24]
DYS1	YHR068W	deoxyhypusine synthase	●	[15][17][24]

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ECM17	YJR137C	sulfite reductase	●	[17]
EFB1	YAL003W	translation elongation factor EF-1beta		[8][9][10][11][15][20][22][24]
EFT1/EFT2	YOR133W/YDR385W	translation elongation factor EF-2	●	[11][15][17][22][23][24]
EGD1	YPL037C	beta subunit of the NAC complex	●	[17][24]
EGD2	YHR193C	alpha subunit of the NAC complex	●	[11][15][17][24]
EMI5	YOL071W	unknown function		[21]
EMP24	YGL200C	endosomal membrane protein		[23]
ENO1	YGR254W	enolase 1	●	[9][10][11][12][15][17][19][22][23][24][25]
ENO2	YHR174W	enolase 2	●	[9][10][11][15][17][20][22][23][24][25]
ERG1	YGR175C	squalene monooxygenase		[11]
ERG10	YPL028W	acetyl-CoA acetyltransferase		[15]
ERG13	YML126C	3-Hydroxy-3-methylglutaryl coenzyme A synthase		[24]
ERG19	YNR043W	mevalonate diphosphate decarboxylase	●	[17]
ERG20	YJL167W	farnesyl pyrophosphate synthetase		[11]
ERG26	YGL001C	3-beta-hydroxysteroid dehydrogenase		[23]
ERG6	YML008C	S-adenosyl-methionine delta-24-sterol-C-methyltransferase	●	[11][15][17][21][22][23][24]
ERG8	YMR220W	phosphomevalonate kinase		[24]
ETR1	YBR026C	2-enoyl thioester reductase		[23]
EUG1	YDR518W	protein disulfide isomerase		[23]
FAA1	YOR317W	long-chain-fatty-acid-CoA ligase		[23]
FBA1	YKL060C	fructose-biphosphate aldolase	●	[9][10][11][15][17][19][20][22][23][24]
FBP1	YLR377C	fructose-1,6-bisphosphatase	●	[18]
FCY1	YPR062W	cytosine deaminase		[24]
FIS1	YIL065C	protein involved in mitochondrial division		[23]
FOX2	YKR009C	multifunctional enzyme (fatty acid beta-oxidation)		[23]
FPR1	YNL135C	FK506-binding protein		[24]
FPR2	YDR519W	FK506-binding protein		[23]
FRS1	YLR060W	phenylalanyl-tRNA synthetase, alpha-subunit	●	[17][22]
FRS2	YFL022C	phenylalanyl-tRNA synthetase, beta-subunit	●	[11][15][17][22][24]
FSH1	YHR049W	unknown function		[15][22][24]
FUM1	YPL262W	fumarate hydratase		[20][21][22]
FUR1	YHR128W	uracil phosphoribosyltransferase		[24]
GAL7	YBR018C	UDP-glucose-hexose-1-phosphate uridyltransferase		[7]
GCN20	YFR009W	required for activation of Gcn2 protein kinase	●	[17][24]
GCS1	YDL226C	GTPase-activating protein		[24]
GCV1	YDR019C	glycine decarboxylase, subunit T		[20]
GCV2	YMR189W	glycine decarboxylase, subunit P		[23]
GCV3	YAL044C	glycine decarboxylase, subunit H		[21][23]
GDH1	YOR375C	NADP-glutamate dehydrogenase 1	●	[10][11][17][22][24][25]
GDH3	YAL062W	NADP-glutamate dehydrogenase 2	●	[17]
GGC1	YDL198C	GDP/GTP Carrier		[23]
GLK1	YCL040W	glucokinase	●	[14][15][17][22][24][25]
GLN1	YPR035W	glutamine synthetase	●	[3][11][17][22][24]
GLR1	YPL091W	glutathione reductase		[13]
GLY1	YEL046C	threonine aldolase	●	[17][24]
GND1	YHR183W	6-phosphogluconate dehydrogenase	●	[11][17][22]
GPD1	YDL022W	glycerol-3-phosphate dehydrogenase	●	[10][17][20][22][24]
GPM1	YKL152C	phosphoglycerate mutase		[4][9][10][15][19][20][23]
GRE2	YOL151W	alpha-acetoxy ketone reductase		[13][22][24]
GRS1	YBR121C	glycyl-tRNA synthetase	●	[11][15][17][22][23][24]
GRX1	YCL035C	glutaredoxin		[13]
GRX5	YPL059W	glutaredoxin		[23]
GSP1	YLR293C	GTP-binding protein of the ras superfamily	●	[11][15][17][22][24]
GSY1	YFR015C	glycogen synthase		[11]
GTT1	YIR038C	glutathione transferase		[23]
GUA1	YMR217W	GMP synthase	●	[14][17][22][24]
GUK1	YDR454C	guanylate kinase		[15][24]
GUT2	YIL155C	mitochondrial glycerol-3-phosphate dehydrogenase		[20][21][23]
GVP36	YIL041W	unknown function	●	[11][17][20][22][23][24]
GYP6	YJL044C	GTPase activating protein		[11][15]
HAM1	YJR069C	protein controlling 6-N-hydroxylaminopurine sensitivity		[24]
HCH1	YNL281W	chaperone activator		[24]
HCR1	YLR192C	putative component of translation initiation factor eIF3	●	[17][24]
HEM13	YDR044W	coproporphyrinogen III oxidase		[19][22]
HEM14	YER014W	protoporphyrinogen oxidase		[23]
HIS1	YER055C	ATP phosphoribosyltransferase	●	[11][15][17]
HIS3	YOR202W	imidazoleglycerol-phosphate dehydratase	●	[11][17]
HIS4	YCL030C	trifunctional enzyme of histidine biosynthesis	●	[11][17][20][24][25]
HIS7	YBR248C	glutamine amidotransferase		[24]

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HMF1	YER057C	growth inhibitor		[24]
HNT1	YDL125C	adenosine monophosphoramidase		[19]
HOM2	YDR158W	aspartate-semialdehyde dehydrogenase	●	[11][15][17][24]
HOM6	YJR139C	homoserine dehydrogenase	●	[17][23][24]
HOR2	YER062C	DL-glycerol phosphate phosphatase	●	[10][15][17][20][22]
HPT1	YDR399W	hypoxanthine-guanine phosphoribosyl transferase		[24]
HSC82	YMR186W	chaperonin	●	[5][11][15][17][22][23]
HSP10	YOR020C	mitochondrial chaperonin		[19][21][23]
HSP104	YLL026W	heat shock protein	●	[6][11][17][22]
HSP12	YFL014W	heat shock protein		[13][25]
HSP26	YBR072W	heat shock protein	●	[10][14][15][17][20][22][24]
HSP31	YDR533C	heat shock protein		[22]
HSP42	YDR171W	heat shock protein		[13]
HSP60	YLR259C	mitochondrial chaperonin	●	[9][11][17][21][22][23][24]
HSP78	YDR258C	mitochondrial protease	●	[17][20][21][23][24]
HSP82	YPL240C	heat-inducible chaperonin	●	[5][11][13][17][22][23]
HTA2	YBL003C	histone H2A2		[19]
HTB2	YBL002W	histone H2B		[19]
HTS1	YPR033C	histidinyl-tRNA synthetase	●	[17][23]
HXK1	YFR053C	hexokinase PI	●	[11][17][22][24]
HXK2	YGL253W	hexokinase PII	●	[1][10][11][15][17][22][23][24]
HYR1	YIR037W	glutathione peroxidase		[19]
ICL1	YER065C	isocitrate lyase	●	[14][15][17]
ICL2	YPR006C	2-methylisocitrate lyase		[21][23]
IDH1	YNL037C	isocitrate dehydrogenase, subunit 1		[4][19][20][21][23]
IDH2	YOR136W	isocitrate dehydrogenase, subunit 2		[15][20][21][23]
ID1	YPL117C	isopentenyl-diphosphate isomerase	●	[17]
IDP1	YDL066W	isocitrate dehydrogenase		[15][23]
IDP2	YLR174W	isocitrate dehydrogenase	●	[15][17]
ILV1	YER086W	threonine deaminase		[23]
ILV2	YMR108W	acetolactate synthase	●	[11][17][21][22][23]
ILV3	YJR016C	dihydroxyacid dehydratase		[13][15][19][23][25]
ILV5	YLR255C	acetohydroxyacid reductoisomerase	●	[10][11][15][17][19][21][22][23][24]
ILV6	YCL009C	acetolactate synthase regulatory subunit	●	[15][17][21][23][24]
INH1	YDL181W	inhibitory subunit of mitochondrial ATP synthase		[21]
INO1	YJL153C	myo-inositol-1-phosphate synthase	●	[17]
IPI3	YNL182C	involved in rRNA processing		[24]
IPP1	YBR011C	inorganic pyrophosphatase	●	[9][10][11][15][17][20][22][23][24]
KAR2	YJL034W	heat shock protein	●	[11][17][22][23]
KES1	YPL145C	protein implicated in ergosterol biosynthesis	●	[14][17]
KGD1	YIL125W	2-Oxoglutarate dehydrogenase complex protein	●	[17][19][21][22][23]
KGD2	YDR148C	dihydrolipoamide succinyltransferase	●	[17][21][22][23]
KRS1	YDR037W	cytoplasmic lysyl-tRNA synthetase	●	[11][17][22]
LAP4	YKL103C	vacuolar aminopeptidase I		[8]
LAT1	YNL071W	dihydrolipoamide acetyltransferase	●	[17][21][22][23][24]
LCB1	YMR296C	serine C-palmitoyltransferase		[11]
LEU1	YGL009C	3-Isopropylmalate dehydratase	●	[11][17][24]
LEU2	YCL018W	3-Isopropylmalate dehydrogenase	●	[11][17][20][22][23]
LEU3	YLR451W	transcription factor of branched chain amino acid biosynthesis		[19]
LEU4	YNL104C	2-Isopropylmalate synthase	●	[15][17][21][23]
LEU9	YOR108W	alpha-isopropylmalate synthase II		[23]
LPD1	YFL018C	dihydrolipoamide dehydrogenase	●	[15][17][19][21][23]
LSC1	YOR142W	succinate-CoA ligase, alpha subunit		[21][23]
LSC2	YGR244C	succinate-CoA ligase, beta subunit		[21][23]
LSP1	YPL004C	regulator of Pkh1p activity	●	[14][17][21][23]
LYS1	YIR034C	saccharopine dehydrogenase		[23]
LYS12	YIL094C	homoisocitrate dehydrogenase	●	[17][19][20][21][23]
LYS2	YBR115C	alpha-aminoadipate reductase	●	[17]
LYS20	YDL182W	homocitrate synthase	●	[17][19][22][24]
LYS21	YDL131W	homocitrate synthase		[11][19][24]
LYS4	YDR234W	homoaconitase	●	[17][19][20][21][22][23]
LYS9	YNR050C	saccharopine dehydrogenase	●	[10][11][15][17][22][24]
MAE1	YKL029C	mitochondrial malate dehydrogenase		[15][22][23][24]
MAL32	YBR299W	maltase		[22]
MAM33	YIL070C	mitochondrial acidic matrix protein		[23]
MAS1	YLR163C	mitochondrial processing peptidase beta subunit		[21][23]
MAS2	YHR024C	mitochondrial processing peptidase alpha subunit		[21][23][24]
MBA1	YBR185C	respiratory chain assembly protein		[23]
MCM3	YEL032W	component of the pre-replication complex		[15]

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MCR1	YKL150W	cytochrome-b5 reductase		[21][23]
MDH1	YKL085W	mitochondrial malate dehydrogenase	●	[17][19][20][21][23]
MDJ1	YFL016C	mitochondrial chaperonin		[23]
MEF1	YLR069C	mitochondrial elongation factor G	●	[17][21][23]
MES1	YGR264C	methionyl-tRNA synthetase	●	[17]
MET13	YGL125W	methylenetetrahydrofolate reductase	●	[17]
MET14	YKL001C	adenylylsulfate kinase		[19]
MET16	YPR167C	3'-phosphoadenylylsulfate reductase	●	[17]
MET17	YLR303W	O-acetylhomoserine sulfhydrylase	●	[10][15][17][22][24]
MET22	YOL064C	bisphosphate-3'-nucleotidase		[24]
MET3	YJR010W	sulfate adenylyltransferase	●	[17][22]
MET6	YER091C	homocysteine methyltransferase	●	[10][11][15][17][22][24][25]
MGE1	YOR232W	folding of mitochondrial proteins	●	[17][21][23][24]
MIA40	YKL195W	mitochondrial protein required for import and assembly		[23]
MIR1	YJR077C	mitochondrial phosphate transport protein		[23]
MIS1	YBR084W	C1-tetrahydrofolate synthase		[23]
MLS1	YNL117W	malate synthase	●	[14][18]
MMF1	YIL051C	protein important for maintenance of mitochondrial DNA		[9][19][21][23]
MNP1	YGL068W	putative mitochondrial ribosomal protein		[23]
MPM1	YJL066C	unknown function		[21][23][24]
MRP1	YDR347W	mitochondrial 40s ribosomal protein		[23]
MRP4	YHL004W	mitochondrial 40s ribosomal protein		[21][23]
MRP49	YKL167C	mitochondrial 60s ribosomal protein		[23]
MRP8	YKL142W	mitochondrial 40s ribosomal protein		[8][14][15]
MRPL13	YKR006C	mitochondrial 60s ribosomal protein		[21][23]
MRPL17	YNL252C	mitochondrial 60s ribosomal protein		[23]
MRPL35	YDR322W	mitochondrial 60s ribosomal protein		[23]
MRPL40	YPL173W	mitochondrial 60s ribosomal protein		[23]
MRS1	YIR021W	mitochondrial RNA splicing protein		[23]
MSD1	YPL104W	mitochondrial aspartyl-tRNA synthetase		[23]
MSK1	YNL073W	mitochondrial lysyl-tRNA synthetase		[23]
MSS116	YDR194C	mitochondrial RNA helicase of the DEAD box family		[23]
MSS51	YLR203C	mitochondrial protein required for translation of COX1 mRNA		[21][23]
MSW1	YDR268W	mitochondrial tryptophanyl-tRNA synthetase		[23]
MTF2	YDL044C	mitochondrial mRNA splicing	●	[17]
MXR1	YER042W	peptide methionine sulfoxide reductase		[19]
NCP1	YHR042W	NADP-cytochrome P450 reductase		[11]
NDE1	YMR145C	mitochondrial NADH dehydrogenase		[23]
NFS1	YCL017C	cysteine desulfurase		[23]
NFU1	YKL040C	involved in maturation of mitochondrial iron-sulfur proteins		[21][23]
NPL3	YDR432W	protein involved in pre-rRNA processing	●	[17]
NTF2	YER009W	nuclear transport factor		[8][24]
NUC1	YJL208C	mitochondrial nuclease		[23]
OAC1	YKL120W	mitochondrial oxaloacetate carrier		[23]
OM45	YIL136W	protein of the outer mitochondrial membrane		[21][23]
OYE2	YHR179W	NADPH dehydrogenase	●	[11][17][24]
OYE3	YPL171C	NADPH dehydrogenase		[13][22]
PAA1	YDR071C	polyamine acetyl-transferase		[23][24]
PAB1	YER165W	poly(A)-binding protein	●	0.25[11][15][17][22][24]
PAD1	YDR538W	phenylacrylic acid decarboxylase		[23]
PAM16	YJL104W	component of the TIM23 translocase		[23]
PCK1	YKR097W	phosphoenolpyruvate carboxykinase	●	[17]
PCS60	YBR222C	peroxisomal AMP-binding protein		[23]
PDA1	YER178W	pyruvate dehydrogenase complex E1-alpha subunit	●	[14][17][21][23][24]
PDB1	YBR221C	pyruvate dehydrogenase complex E1-beta subunit	●	[11][17][21][22][23][24]
PDC1	YLR044C	pyruvate decarboxylase 1	●	[10][11][15][17][20][22][23][24]
PDC5	YLR134W	pyruvate decarboxylase 2	●	[15][16][17]
PDH1	YPR002W	unknown function		[22][23]
PDI1	YCL043C	protein disulfide isomerase		[8][11][15][23][24]
PDR13	YHR064C	Hsp70 protein	●	[11][17][24]
PDX1	YGR193C	pyruvate dehydrogenase complex protein X		[23]
PDX3	YBR035C	pyridoxine (pyridoxamine) phosphate oxidase		[19]
PEP4	YPL154C	protease A		[8][20]
PET9	YBL030C	ADP, ATP carrier protein		[23]
PFK1	YGR240C	phosphofructokinase alpha subunit	●	[11][17][24]
PFK2	YMR205C	phosphofructokinase beta subunit	●	[11][17][24]
PFS2	YNL317W	polyadenylation factor I subunit		[19]
PFY1	YOR122C	profilin		[24]
PGI1	YBR196C	glucose-6-phosphate isomerase	●	[11][17][23][24]

gene	ORF	protein	YPM	references
PGK1	YCR012W	phosphoglycerate kinase		[4][10][14][15][19][20][22][23]
PGM2	YMR105C	phosphoglucomutase	●	[15][17]
PHB1	YGR132C	prohibitin		[21][23]
PHB2	YGR231C	prohibitin		[23]
PIL1	YGR086C	regulator of Pkh1p activity	●	[11][17][21][23]
PIM1	YBL022C	ATP-dependent protease		[23]
PMI40	YER003C	mannose-6-phosphate isomerase	●	[17][24]
PNC1	YGL037C	pyrazinamidase and nicotinamidase	●	[17][22]
POR1	YNL055C	mitochondrial porin		[15][19][20][21][23]
POR2	YIL114C	mitochondrial porin		[23]
POX1	YGL205W	acyl-CoA oxidase		[23]
PPA1	YHR026W	vacuolar ATPase subunit		[10]
PPS1	YBR276C	protein phosphatase		[11]
PRB1	YEL060C	protease B	●	[14][15][17][22]
PRE1	YER012W	proteasome subunit		[13]
PRE3	YJL001W	proteasome subunit		[13][20][24]
PRE4	YFR050C	proteasome subunit		[15]
PRE5	YMR314W	proteasome subunit		[13]
PRE8	YML092C	proteasome subunit	●	[15][17]
PRE9	YGR135W	proteasome subunit	●	[17]
PRO2	YOR323C	phosphoglutamate dehydrogenase	●	[11][15][17][24]
PRO3	YER023W	pyrroline-5-carboxylate reductase	●	[17][24]
PRP43	YGL120C	pre-mRNA splicing factor		[11]
PRT1	YOR361C	translation initiation factor eIF3 subunit	●	[11][17]
PRX1	YBL064C	mitochondrial thiol peroxidase		[20][21][23]
PSA1	YDL055C	mannose-1-phosphate guanylttransferase	●	[11][15][17][22][24]
PSK2	YOL045W	serine/threonine protein kinase of unknown function		[21]
PST2	YDR032C	similarity to S. pombe brefeldin resistance protein	●	[11][13][17][23][24]
PTC7	YHR076W	phosphatase type 2C		[23]
PUB1	YNL016W	polyadenylated RNA-binding protein	●	[11][17][24]
PUP2	YGR253C	proteasome subunit	●	[13][15][17]
PUR5	YHR216W	inosine-5'-monophosphate dehydrogenase	●	[17]
PUT2	YHR037W	delta1-pyrroline-5-carboxylate dehydrogenase		[21][23]
PYC1	YGL062W	pyruvate carboxylase 1	●	[11][17]
PYC2	YBR218C	pyruvate carboxylase 2	●	[11][17]
PYK1	YAL038W	pyruvate kinase		[4][15][24]
QCR10	YHR001W-A	ubiquinol cytochrome c reductase subunit		[21][23]
QCR2	YPR191W	ubiquinol cytochrome c reductase core protein 2		[14][15][21][23][24]
QCR7	YDR529C	ubiquinol cytochrome c reductase subunit		[21][23]
RAM2	YKL019W	protein farnesyltransferase, alpha subunit		[24]
RBK1	YCR036W	ribokinase	●	[17]
RHR2	YIL053W	DL-glycerol-3-phosphatase	●	[10][11][15][17][20][75][23][24]
RIB3	YDR487C	3,4-dihydroxy-2-butanone 4-phosphate synthase		[24]
RIB4	YOL143C	6,7-dimethyl-8-ribityllumazine synthase		[24]
RIB5	YBR256C	riboflavin synthase		[24]
RIM1	YCR028C-A	mitochondrial ssDNA-binding protein		[21][23][24]
RIP1	YEL024W	ubiquinol cytochrome c reductase iron-sulfur protein		[21][22][23]
RNQ1	YCL028W	may be required for resistance to certain drugs	●	[17]
RNR4	YGR180C	ribonucleotide reductase, small subunit	●	[11][17][22]
ROT2	YBR229C	glucosidase II alpha subunit		[23]
RPB3	YIL021W	RNA polymerase II subunit		[24]
RPC37	YKR025W	RNA polymerase III subunit		[24]
RPC40	YPR110C	RNA polymerases I and III subunit		[24]
RPE1	YJL121C	ribulose-5-phosphate 3-epimerase		[15][24]
RPL1	YPL131W	ribosomal protein	●	[17][22]
RPL10	YLR075W	ribosomal protein		[19]
RPL11A/B	YPR102C/YGR085C	ribosomal protein		[19]
RPL12A/B	YEL054C/YDR418W	ribosomal protein		[19]
RPL13B	YMR142C	ribosomal protein		[19]
RPL17A	YKL180W	ribosomal protein		[19]
RPL20A/B	YMR242C/YOR312C	ribosomal protein		[19]
RPL21A	YBR191W	ribosomal protein		[19]
RPL22A	YLR061W	ribosomal protein		[24]
RPL26A	YLR344W	ribosomal protein		[19]
RPL27A/B	YHR010W/YDR471W	ribosomal protein		[19]
RPL2A/B	YFR031C-A/YIL018W	ribosomal protein		[19]
RPL31A/B	YDL075W/YLR406C	ribosomal protein		[19]
RPL35A/B	YDL191W/YDL136W	ribosomal protein		[19]
RPL4A/B	YBR031W/YDR012W	ribosomal protein		[19]

gene	ORF	protein	YPM	references
RPL5	YPL131W	ribosomal protein		[19]
RPL6B	YLR448W	ribosomal protein		[19]
RPL7B	YPL198W	ribosomal protein		[19]
RPL8A/B	YHL033C/YLL045C	ribosomal protein		[19]
RPN10	YHR200W	proteasome subunit	●	[17][24]
RPN11	YFR004W	proteasome subunit		[13]
RPN12	YFR052W	proteasome subunit	●	[17][24]
RPN8	YOR261C	proteasome subunit		[24]
RPP0	YLR340W	ribosomal protein	●	[11][17][23]
RPP2A	YOL039W	ribosomal protein		[8]
RPP2B	YDR382W	ribosomal protein		[8]
RPS0A	YGR214W	ribosomal protein	●	[10][11][15][17][24]
RPS0B	YLR048W	ribosomal protein	●	[10][11][17][22][24]
RPS10A/B	YOR293W/YMR230W	ribosomal protein		[19]
RPS14B	YJL191W	ribosomal protein		[19]
RPS15	YOL040C	ribosomal protein		[19]
RPS17A/B	YML024W/YDR447C	ribosomal protein		[19]
RPS19A/B	YOL121C/YNL302C	ribosomal protein		[19]
RPS22A/B	YJL190C/YLR367W	ribosomal protein		[19]
RPS24A/B	YER074W/YIL069C	ribosomal protein		[19][21]
RPS27A/B	YKL156W/YHR021C	ribosomal protein		[19]
RPS28A/B	YGR118W/YPR132W	ribosomal protein		[19]
RPS3	YNL178W	ribosomal protein		[15][19]
RPS4A/B	YJR145C/YHR203C	ribosomal protein		[19]
RPS5	YJR123W	ribosomal protein	●	[11][15][17][19][22]
RPS6A	YPL090C	ribosomal protein		[19]
RPS7A	YOR096W	ribosomal protein		[19]
RPS9A/B	YPL081W/YBR189W	ribosomal protein		[19]
RPT1	YKL145W	proteasome subunit	●	[11][17]
RPT3	YDR394W	proteasome subunit	●	[17]
RPT4	YOR259C	proteasome subunit	●	[17]
RPT5	YOR117W	proteasome subunit		[24]
RSM24	YDR175C	mitochondrial ribosome small subunit		[23]
RSM25	YIL093C	mitochondrial ribosome small subunit		[23]
RSM26	YJR101W	mitochondrial ribosome small subunit		[21][23]
RVB1	YDR190C	DNA helicase	●	[14][15][17][23]
RVB2	YPL235W	DNA helicase	●	[17]
RVS167	YDR388W	protein involved in actin distribution	●	[17]
SAH1	YER043C	adenosylhomocysteinase	●	[15][17][22]
SAM1	YLR180W	S-adenosylmethionine synthetase 1	●	[10][15][17][22][24]
SAM2	YDR502C	S-adenosylmethionine synthetase 2	●	[10][15][17][20][22][23][24]
SAM4	YPL273W	S-adenosylmethionine homocysteine methyltransferase		[24]
SAM50	YNL026W	essential component SAM complex		[23]
SAR1	YPL218W	GTP-binding protein of the ras superfamily	●	[11][15][17]
SBA1	YKL117W	Ste5p-associated protein		[8][11][15][24]
SBP1	YHL034C	single-stranded nucleic acid-binding protein	●	[17][22]
SCL1	YGL011C	proteasome subunit	●	[13][17][22][24]
SCO1	YBR037C	inner mitochondrial membrane protein		[23]
SCP160	YJL080C	control of mitotic chromosomal transmission	●	[17]
SDH1	YKL148C	succinate dehydrogenase subunit	●	[17][21][23]
SDH2	YLL041C	succinate dehydrogenase subunit		[23]
SDH4	YDR178W	succinate dehydrogenase subunit		[23]
SDS22	YKL193C	protein phosphatase PP1 regulatory subunit		[24]
SEC14	YMR079W	phosphatidylinositol/phosphatidylcholine transfer protein	●	[11][15][17][24]
SEC17	YBL050W	vesicular-fusion protein	●	[17][24]
SEC53	YFL045C	phosphomannomutase	●	[11][17][22][23][24]
SER1	YOR184W	phosphoserine phosphatase	●	[11][15][17][22][24]
SES1	YDR023W	seryl-tRNA synthetase	●	[14][17][22][24]
SFA1	YDL168W	glutathione-dependent formaldehyde dehydrogenase	●	[17]
SGT2	YOR007C	may be involved in protein folding	●	[11][17][20][24]
SHM2	YLR058C	serine hydroxymethyl transferase		[8][10][14][15][19][20][23]
SHP1	YBL058W	potential regulatory subunit for Glc7p	●	[17]
SIS1	YNL007C	protein chaperone		[19]
SMI1	YGR229C	involved in beta-1,3-glucan synthesis		[24]
SNZ1	YMR096W	putative pyridoxine (vitamin B6) biosynthetic enzyme	●	[17][24]
SOD1	YJR104C	copper-zinc superoxide dismutase	●	[9][11][17][22][23][24]
SOD2	YHR008C	manganese superoxide dismutase	●	[1][15][17][20][21][22][23]
SOL3	YHR163W	possible 6-phosphogluconolactonase		[24]
SPE2b	YOL052C	S-adenosylmethionine decarboxylase beta chain		[13]

gene	ORF	protein	YPM	references
SPE3	YPR069C	spermidine synthase	●	[11][15][17][22][24]
SRP1	YNL189W	karyopherin-alpha subunit	●	[11][17]
SRV2	YNL138W	adenylate cyclase-associated protein		[15]
SSA1	YAL005C	cytoplasmic chaperone	●	[5][10][11][17][20][22][23][24]
SSA2	YLL024C	cytoplasmic chaperone	●	[5][10][11][15][17][22][24]
SSA3	YBL075C	cytoplasmic chaperone	●	[5][11][17]
SSA4	YER103W	cytoplasmic chaperone	●	[5][11][17][22]
SSB1	YDL229W	cytoplasmic chaperone	●	[5][10][11][15][17][22][23][24][25]
SSB2	YNL209W	cytoplasmic chaperone	●	[10][11][15][17][22][23][25]
SSC1	YJR045C	chaperonin for mitochondrial proteins	●	[5][11][17][21][22][23][24]
SSE1	YPL106C	cytoplasmic chaperone	●	[10][11][17][20][22][23][24]
SSE2	YBR169C	cytoplasmic chaperone		[11]
SSQ1	YLR369W	mitochondrial Hsp70		[21][23]
STI1	YOR027W	heat shock protein	●	[5][11][15][17][20][22][23][24]
STM1	YLR150W	protein with affinity for guanine-rich quadruplex nucleic acids		[19]
SUB2	YDL084W	pre-mRNA splicing factor	●	[17]
SUP45	YBR143C	translational release factor eRF1	●	[11][15][17]
TAL1	YLR354C	transaldolase	●	[11][15][17]
TCM62	YBR044C	mitochondrial chaperone		[23]
TDH1	YJL052W	glyceraldehyde-3-phosphate dehydrogenase 1		[9][10][15][19]
TDH2	YJR009C	glyceraldehyde-3-phosphate dehydrogenase 2	●	[2][9][10][11][15][17][19][20][22][23][24]
TDH3	YGR192C	glyceraldehyde-3-phosphate dehydrogenase 3	●	[2][9][10][11][17][19][20][22][23][24][25]
TEF1/2	YPR080W/YBR118W	translation elongation factor EF-1alpha		[10][15][19][20][23]
TFS1	YLR178C	cell cycle regulator		[13][14][15][22]
THI11	YJR156C	biosynthesis of hydroxymethyl pyrimidine		[16]
THI12	YNL332W	biosynthesis of hydroxymethyl pyrimidine		[16]
THI13	YDL244W	biosynthesis of hydroxymethyl pyrimidine		[16]
THI4	YGR144W	thiamine repressed protein		[11][16]
THI5	YFL058W	biosynthesis of hydroxymethyl pyrimidine		[16]
THR1	YHR025W	homoserine kinase		[24]
THR4	YCR053W	threonine synthase	●	[11][15][17][22][23][24]
THS1	YIL078W	threonyl-tRNA synthetase	●	[11][17]
TIF1/2	YKR059W/YJL138C	translation initiation factor eIF4A	●	[9][11][15][17][20][22][23][24]
TIF3	YPR163C	translation initiation factor eIF4B	●	[17][24]
TIF34	YMR146C	translation initiation factor eIF3, p39 subunit	●	[17][24]
TIF45	YOL139C	translation initiation factor eIF4E	●	[11][17][22]
TIF5	YPR041W	translation initiation factor eIF5	●	[17]
TIF51A	YEL034W	translation initiation factor eIF5A	●	[5][9][11][17][20][24]
TIF6	YPR016C	translation initiation factor eIF6		[24]
TIM11	YDR322C-A	FO-ATP synthase subunit e		[21][23]
TIM23	YNR017W	translocase of inner membrane subunit		[23]
TIM44	YIL022W	translocase of inner membrane subunit		[23]
TIM50	YPL063W	translocase of inner membrane subunit		[23]
TKL1	YPR074C	transkelotase 1	●	[11][17][19][23]
TKL2	YBR117C	transkelotase 2	●	[17]
TMT1	YER175C	trans-aconitate methyltransferase		[24]
TOM20	YGR082W	protein of the mitochondrial import channel		[23]
TOM40	YMR203W	protein of the mitochondrial import channel	●	[15][17][21][23][24]
TOM70	YNL121C	protein-mitochondrial targeting		[21][23]
TPI1	YDR050C	triose-phosphate isomerase	●	[1][9][10][11][15][17][20][22][23][24]
TPM1	YNL079C	tropomyosine		[8][11][24]
TPS1	YBR126C	trehalose-6-phosphate synthase	●	[11][17][22]
TRP1	YDR007W	phosphoribosylanthranilate isomerase	●	[17]
TRP2	YER090W	anthranilate synthase component I	●	[17]
TRP3	YKL211C	anthranilate synthase component II	●	[17][24]
TRP4	YDR354W	anthranilate phosphoribosyl transferase	●	[17]
TRP5	YGL026C	tryptophan synthase	●	[11][17][24]
TRR1	YDR353W	thioredoxin-dependent peroxide reductase	●	[17][22]
TRX1/2	YLR043C/YGR209C	thioredoxin I/II		[13][24]
TSA1	YML028W	thioredoxin peroxidase	●	[11][15][17][22][23][24]
TSA2	YDR453C	thiol peroxidase		[13][22]
TUB1	YML085C	tubulin alpha-1 chain	●	[17][24]
TUB2	YFL037W	tubulin beta chain	●	[11][15][17][22][24]
TUB3	YML124C	tubulin alpha-3 chain	●	[17][24]
TUF1	YOR187W	mitochondrial translation elongation factor Tu	●	[17][21][22][23]
TUP1	YCR084C	repressor of RNA polymerase II transcription		[24]
UBA1	YKL210W	ubiquitin-activating enzyme	●	[11][17][24]
UBC4	YBR082C	ubiquitin-conjugating enzyme		[8][24]
UBI4	YLL039C	ubiquitin polyprotein		[13]

gene	ORF	protein	YPM	references
UGA1	YGR019W	butyrate transaminase		[22]
UGP1	YKL035W	UDP-glucose pyrophosphorylase	●	[17]
URA1	YKL216W	dihydroorotate dehydrogenase	●	[11][15][17][22][24]
URA3	YEL021W	orotidine-5'-phosphate decarboxylase	●	[17]
URA4	YLR420W	dihydroorotate		[14]
URA5	YML106W	orotate phosphoribosyltransferase		[15]
URA7	YBL039C	CTP synthase	●	[17]
VMA1	YDL185W	vacuolar ATPase subunit	●	[10][17][22][23][24]
VMA10	YHR039C-A	vacuolar ATPase subunit		[19]
VMA2	YBR127C	vacuolar ATPase subunit	●	[11][15][17][22][23][24]
VMA4	YOR332W	vacuolar ATPase subunit	●	[11][15][17][24]
VPH1	YOR270C	vacuolar ATPase subunit		[11]
WRS1	YOL097C	tryptophanyl-tRNA synthetase	●	[14][17]
WTM1	YOR230W	transcriptional modulator	●	[14][15][17][24]
YBL036C	YBL036C	unknown function		[8]
YBR025C	YBR025C	unknown function		[8][15][23]
YBR230C	YBR230C	unknown function		[23]
YBR277C	YBR277C	unknown function		[19]
YCR102C	YCR102C	unknown function		[11]
YDJ1	YNL064C	protein folding	●	[14][17]
YDL124W	YDL124W	NAD(P)H-dependent reductase		[11][15][20][22]
YDR341C	YDR341C	arginyl-tRNA synthetase	●	[17][24]
YEF3	YLR249W	translation elongation factor EF-3A	●	[11][17][22]
YEL047C	YEL047C	fumarate reductase		[15][20][24]
YER004W	YER004W	unknown function		[23]
YER036C	YER036C	probable ATP-dependent transporter	●	[17]
YER067W	YER067W	unknown function	●	[15][17][22]
YER078C	YER078C	protease		[23]
YER080W	YER080W	unknown function		[21][23]
YER182W	YER182W	unknown function		[23]
YFR011C	YFR011C	unknown function		[23]
YFR044C	YFR044C	protease	●	[14][15][17][22][23][24]
YGR043C	YGR043C	putative transaldolase	●	[17]
YGR207C	YGR207C	electron-transferring flavoprotein, beta chain		[21]
YGR287C	YGR287C	alpha glucosidase		[22]
YHB1	YGR234W	flavoheмоprotein	●	[14][17][20][21][22][23][24]
YHL021C	YHL021C	member of the gamma-butyrobetaine hydroxylase family		[21][23]
YHR198C	YHR198C	unknown function		[23]
YIL057C	YIL057C	unknown function		[23]
YIR035C	YIR035C	putative oxidoreductase		[24]
YJR003C	YJR003C	unknown function		[23]
YJR070C	YJR070C	involved in maintaining normal mitochondrial morphology	●	[11][17][24]
YJR085C	YJR085C	unknown function		[23]
YJR100C	YJR100C	unknown function		[23]
YJU3	YKL094W	unknown function		[23]
YKL027W	YKL027W	unknown function		[23]
YKL056C	YKL056C	translationally-controlled tumor protein homolog		[8][9][10][11][15][24]
YKR016W	YKR016W	unknown function		[21]
YKR065C	YKR065C	unknown function		[23]
YLR179C	YLR179C	unknown function	●	[11][17]
YLR201C	YLR201C	unknown function		[23]
YLR301W	YLR301W	unknown function	●	[17][20][24]
YLR387C	YLR387C	unknown function		[13]
YML079W	YML079W	unknown function		[24]
YMR226C	YMR226C	NADP+-dependent L-allo-threonine dehydrogenase		[15][20][23][24]
YMR31	YFR049W	mitochondrial ribosomal protein of the small subunit		[23]
YMR315W	YMR315W	putative oxydoreductase		[20]
YNL010W	YNL010W	unknown function	●	[11][15][17]
YNL123W	YNL123W	putative serine protease	●	[17]
YNL134C	YNL134C	alcohol dehydrogenase activity	●	[14][15][17][24]
YNL208W	YNL208W	unknown function		[19]
YNL274C	YNL274C	potential alpha-ketoisocaproate reductase		[13]
YOR021C	YOR021C	unknown function	●	[17]
YOR131C	YOR131C	unknown function		[23]
YOR215C	YOR215C	unknown function		[21][23]
YOR251C	YOR251C	thiosulfate sulfurtransferase		[23]
YOR285W	YOR285W	unknown function		[23][24]
YOR356W	YOR356W	oxidoreductase activity		[21][23]
YPL222W	YPL222W	unknown function		[23]

gene	ORF	protein	YPM	references
YPR004C	YPR004C	electron transfer flavoprotein alpha subunit		[21][23]
YPR125W	YPR125W	unknown function		[23]
YPR127W	YPR127W	unknown function	●	[17][22]
YRB1	YDR002W	Ran-specific GTPase-activating protein	●	[17]
ZPR1	YGR211W	unknown function		[24]
ZPS1	YOL154W	surface protein	●	[17]
ZWF1	YNL241C	glucose-6-phosphate dehydrogenase	●	[11][15][17]

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