

**Dataset S1. SNO-proteins identified following treatment of yeast lysates with SNO-CoA.**

ORF	Protein name and function
YAL005C	YAL005C SSA1 SGDID:S000000004, Chr I from 141433-139505, reverse complement, Verified ORF, ATPase involved in protein folding and nuclear localization signal (NLS)-directed nuclear transport; member of heat shock protein 70 (HSP70) family; forms a chaperone complex with Ydj1p; localized to the nucleus
YAL038W	YAL038W CDC19 SGDID:S000000036, Chr I from 71787-73289, Verified ORF, Pyruvate kinase
YAR010C	YAR010C YAR010C SGDID:S000000068, Chr I from 165867-164545, reverse complement, transposable_element_gene, Retrotransposon TYA Gag gene co-transcribed with TYB Pol; in YARCTY1-1 TYB is mutant and probably non-functional""
YBL024W	YBL024W NCL1 SGDID:S000000120, Chr II from 172537-174591, Verified ORF, S-adenosyl-L-methionine-dependent tRNA: m5C-methyltransferase
YBL027W	YBL027W RPL19B SGDID:S000000123, Chr II from 168426-168427,168812-169379, Verified ORF, Protein component of the large (60S) ribosomal subunit
YBL030C	YBL030C PET9 SGDID:S000000126, Chr II from 164000-163044, reverse complement, Verified ORF, Major ADP/ATP carrier of the mitochondrial inner membrane
YBL039C	YBL039C URA7 SGDID:S000000135, Chr II from 145731-143992, reverse complement, Verified ORF, Major CTP synthase isozyme (see also URA8)
YBL072C	YBL072C RPS8A SGDID:S000000168, Chr II from 89123-88521, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; identical to Rps8Bp and has similarity to rat S8 ribosomal protein""
YBL076C	YBL076C ILS1 SGDID:S000000172, Chr II from 84259-81041, reverse complement, Verified ORF, Cytoplasmic isoleucine-tRNA synthetase
YBL087C	YBL087C RPL23A SGDID:S000000183, Chr II from 60735-60694,60189-59818, reverse complement, Verified ORF, Protein component of the large (60S) ribosomal subunit
YBR025C	YBR025C OLA1 SGDID:S000000229, Chr II from 291865-290681, reverse complement, Verified ORF, P-loop ATPase with similarity to human OLA1 and bacterial YchF; identified as specifically interacting with the proteasome; protein levels are induced by hydrogen peroxide""
YBR031W	YBR031W RPL4A SGDID:S000000235, Chr II from 300166-301254, Verified ORF, N-terminally acetylated protein component of the large (60S) ribosomal subunit
YBR034C	YBR034C HMT1 SGDID:S000000238, Chr II from 305976-304930, reverse complement, Verified ORF, Nuclear SAM-dependent mono- and asymmetric arginine dimethylating methyltransferase that modifies hnRNPs
YBR048W	YBR048W RPS11B SGDID:S000000252, Chr II from 332829-332873,333385-333810, Verified ORF, Protein component of the small (40S) ribosomal subunit; identical to Rps11Ap and has similarity to E. coli S17 and rat S11 ribosomal proteins""
YBR056W	YBR056W YBR056W SGDID:S000000260, Chr II from 347877-349382, Uncharacterized ORF, Putative cytoplasmic protein of unknown function""
YBR061C	YBR061C TRM7 SGDID:S000000265, Chr II from 365717-364785, reverse complement, Verified ORF, 2'-O-ribose methyltransferase
YBR118W	YBR118W TEF2 SGDID:S000000322, Chr II from 477665-479041, Verified ORF, Translational elongation factor EF-1 alpha; also encoded by TEF1; functions in the binding reaction of aminoacyl-tRNA (AA-tRNA) to ribosomes""
YBR121C	YBR121C GRS1 SGDID:S000000325, Chr II from 483361-481358, reverse complement, Verified ORF, Cytoplasmic and mitochondrial glycyl-tRNA synthase that ligates glycine to the cognate anticodon bearing tRNA; transcription termination factor that may interact with the 3'-end of pre-mRNA to promote 3'-end formation""
ALD4	YBR143C SUP45 SGDID:S000000347, Chr II from 532176-530863, reverse complement, Verified ORF, Polypeptide release factor (eRF1) in translation termination; mutant form acts as a recessive omnipotent suppressor; methylated by Mtq2p-Trm112p in ternary complex eRF1-eRF3-GTP; mutation of methylation site confers resistance to zymocin""

YBR151W	YBR151W APD1 SGDID:S000000355, Chr II from 545022-545972, Verified ORF, Protein of unknown function
YBR181C	YBR181C RPS6B SGDID:S000000385, Chr II from 592769-592764,592411-591707, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; identical to Rps6Ap and has similarity to rat S6 ribosomal protein""
YBR191W	YBR191W RPL21A SGDID:S000000395, Chr II from 606265-606275,606664-607135, Verified ORF, Protein component of the large (60S) ribosomal subunit
YBR222C	YBR222C PCS60 SGDID:S000000426, Chr II from 668346-666715, reverse complement, Verified ORF, Peroxisomal AMP-binding protein
YBR234C	YBR234C ARC40 SGDID:S000000438, Chr II from 686587-685433, reverse complement, Verified ORF, Subunit of the ARP2/3 complex
YBR248C	YBR248C HIS7 SGDID:S000000452, Chr II from 716460-714802, reverse complement, Verified ORF, Imidazole glycerol phosphate synthase (glutamine amidotransferase:cyclase)
YBR249C	YBR249C ARO4 SGDID:S000000453, Chr II from 717989-716877, reverse complement, Verified ORF, 3-deoxy-D-arabino-heptulosonate-7-phosphate (DAHP) synthase
YCL030C	YCL030C HIS4 SGDID:S000000535, Chr III from 68333-65934, reverse complement, Verified ORF, Multifunctional enzyme containing phosphoribosyl-ATP pyrophosphatase
YCL040W	YCL040W GLK1 SGDID:S000000545, Chr III from 50838-52340, Verified ORF, Glucokinase
YCL043C	YCL043C PDI1 SGDID:S000000548, Chr III from 50221-48653, reverse complement, Verified ORF, Protein disulfide isomerase
YCL050C	YCL050C APA1 SGDID:S000000555, Chr III from 38801-37836, reverse complement, Verified ORF, Diadenosine 5'
YCL064C	YCL064C CHA1 SGDID:S000000569, Chr III from 16880-15798, reverse complement, Verified ORF, Catabolic L-serine (L-threonine) deaminase
YCR012W	YCR012W PGK1 SGDID:S000000605, Chr III from 137744-138994, Verified ORF, 3-phosphoglycerate kinase
YCR053W	YCR053W THR4 SGDID:S000000649, Chr III from 216693-218237, Verified ORF, Threonine synthase
YCR073W-A	YCR073W-A SOL2 SGDID:S000000718, Chr III from 246960-247907, Verified ORF, Protein with a possible role in tRNA export; shows similarity to 6-phosphogluconolactonase non-catalytic domains but does not exhibit this enzymatic activity; homologous to Sol1p
YCR088W	YCR088W ABP1 SGDID:S000000684, Chr III from 265065-266843, Verified ORF, Actin-binding protein of the cortical actin cytoskeleton
YDL007W	YDL007W RPT2 SGDID:S000002165, Chr IV from 438045-439358, Verified ORF, One of six ATPases of the 19S regulatory particle of the 26S proteasome involved in the degradation of ubiquitinated substrates; required for normal peptide hydrolysis by the core 20S particle""
YDL022W	YDL022W GPD1 SGDID:S000002180, Chr IV from 411823-412998, Verified ORF, NAD-dependent glycerol-3-phosphate dehydrogenase
YDL040C	YDL040C NAT1 SGDID:S000002198, Chr IV from 381435-378871, reverse complement, Verified ORF, Subunit of the N-terminal acetyltransferase NatA (Nat1p)
YDL055C	YDL055C PSA1 SGDID:S000002213, Chr IV from 356759-355674, reverse complement, Verified ORF, GDP-mannose pyrophosphorylase (mannose-1-phosphate guanyltransferase)
YDL061C	YDL061C RPS29B SGDID:S000002219, Chr IV from 340798-340628, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps29Ap and has similarity to rat S29 and E. coli S14 ribosomal proteins""
YDL084W	YDL084W SUB2 SGDID:S000002242, Chr IV from 305237-306577, Verified ORF, Component of the TREX complex required for nuclear mRNA export; member of the DEAD-box RNA helicase superfamily and is involved in early and late steps of spliceosome assembly; homolog of the human splicing factor hUAP56""
YDL097C	YDL097C RPN6 SGDID:S000002255, Chr IV from 286695-285391, reverse complement, Verified ORF, Essential

YDL100C	YDL100C GET3 SGDID:S000002258, Chr IV from 283176-282112, reverse complement, Verified ORF, Guanine nucleotide exchange factor for Gpa1p; amplifies G protein signaling; subunit of the GET complex
YDL103C	YDL103C QRI1 SGDID:S000002261, Chr IV from 276581-275148, reverse complement, Verified ORF, UDP-N-acetylglucosamine pyrophosphorylase
YDL126C	YDL126C CDC48 SGDID:S000002284, Chr IV from 238664-236157, reverse complement, Verified ORF, ATPase in ER
YDL131W	YDL131W LYS21 SGDID:S000002289, Chr IV from 227393-228715, Verified ORF, Homocitrate synthase isozyme
YDL136W	YDL136W RPL35B SGDID:S000002295, Chr IV from 217600-217602,218008-218367, Verified ORF, Protein component of the large (60S) ribosomal subunit
YDL143W	YDL143W CCT4 SGDID:S000002302, Chr IV from 199997-201583, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YDL147W	YDL147W RPN5 SGDID:S000002306, Chr IV from 190925-192262, Verified ORF, Essential
YDL160C	YDL160C DHH1 SGDID:S000002319, Chr IV from 171931-170411, reverse complement, Verified ORF, Cytoplasmic DExD/H-box helicase
YDL182W	YDL182W LYS20 SGDID:S000002341, Chr IV from 133438-134724, Verified ORF, Homocitrate synthase isozyme
YDL185W	YDL185W TFP1 SGDID:S000002344, Chr IV from 126788-130003, Verified ORF, Subunit A of the eight-subunit V1 peripheral membrane domain of the vacuolar H <sup>+</sup> -ATPase; protein precursor undergoes self-catalyzed splicing to yield the extein Tfp1p and the intein Vde (PI-SceI)
YDL229W	YDL229W SSB1 SGDID:S000002388, Chr IV from 44066-45907, Verified ORF, Cytoplasmic ATPase that is a ribosome-associated molecular chaperone
YDL236W	YDL236W PHO13 SGDID:S000002395, Chr IV from 32296-33234, Verified ORF, Alkaline phosphatase specific for p-nitrophenyl phosphate; also has protein phosphatase activity""
YDR002W	YDR002W YRB1 SGDID:S000002409, Chr IV from 453043-453648, Verified ORF, Ran GTPase binding protein; involved in nuclear protein import and RNA export
YDR012W	YDR012W RPL4B SGDID:S000002419, Chr IV from 471851-472939, Verified ORF, Protein component of the large (60S) ribosomal subunit
YDR023W	YDR023W SES1 SGDID:S000002430, Chr IV from 489506-490894, Verified ORF, Cytosolic seryl-tRNA synthetase
YDR035W	YDR035W ARO3 SGDID:S000002442, Chr IV from 521814-522926, Verified ORF, 3-deoxy-D-arabino-heptulosonate-7-phosphate (DAHP) synthase
YDR037W	YDR037W KRS1 SGDID:S000002444, Chr IV from 525438-527213, Verified ORF, Lysyl-tRNA synthetase""
YDR047W	YDR047W HEM12 SGDID:S000002454, Chr IV from 551859-552947, Verified ORF, Uroporphyrinogen decarboxylase
YDR099W	YDR099W BMH2 SGDID:S000002506, Chr IV from 653605-654426, Verified ORF, 14-3-3 protein
YDR127W	YDR127W ARO1 SGDID:S000002534, Chr IV from 704482-709248, Verified ORF, Pentafunctional arom protein
YDR129C	YDR129C SAC6 SGDID:S000002536, Chr IV from 715377-715357,715245-713338, reverse complement, Verified ORF, Fimbrin
YDR158W	YDR158W HOM2 SGDID:S000002565, Chr IV from 770355-771452, Verified ORF, Aspartic beta semi-aldehyde dehydrogenase
YDR170W-A	YDR170W-A YDR170W-A SGDID:S000007227, Chr IV from 803193-804515, transposable_element_gene, Retrotransposon TYA Gag gene; Gag is a nucleocapsid protein that is the structural constituent of virus-like particles (VLPs); similar to retroviral Gag; YDR170W-A is part of a mutant retrotransposon""
YDR188W	YDR188W CCT6 SGDID:S000002596, Chr IV from 836419-838059, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YDR212W	YDR212W TCP1 SGDID:S000002620, Chr IV from 887230-888909, Verified ORF, Alpha subunit of chaperonin-containing T-complex

YDR214W	YDR214W AHA1 SGDID:S000002622, Chr IV from 892873-893925, Verified ORF, Co-chaperone that binds to Hsp82p and activates its ATPase activity; similar to Hch1p; expression is regulated by stresses such as heat shock""
YDR226W	YDR226W ADK1 SGDID:S000002634, Chr IV from 916483-917151, Verified ORF, Adenylate kinase
YDR233C	YDR233C RTN1 SGDID:S000002641, Chr IV from 930354-929467, reverse complement, Verified ORF, ER membrane protein that interacts with Sey1p to maintain ER morphology; interacts with exocyst subunit Sec6p
YDR234W	YDR234W LYS4 SGDID:S000002642, Chr IV from 931126-933207, Verified ORF, Homoaconitase
YDR261C-D	YDR261C-D YDR261C-D SGDID:S000007395, Chr IV from 992346-991042,991040-987531, reverse complement, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; in YDRCTY1-3 TYB is mutant and probably non-functional""
YDR300C	YDR300C PRO1 SGDID:S000002708, Chr IV from 1062788-1061502, reverse complement, Verified ORF, Gamma-glutamyl kinase
YDR321W	YDR321W ASP1 SGDID:S000002729, Chr IV from 1108700-1109845, Verified ORF, Cytosolic L-asparaginase
YDR341C	YDR341C YDR341C SGDID:S000002749, Chr IV from 1153621-1151798, reverse complement, Verified ORF, Arginyl-tRNA synthetase
YDR346C	YDR346C SVF1 SGDID:S000002754, Chr IV from 1168654-1167209, reverse complement, Verified ORF, Protein with a potential role in cell survival pathways
YDR354W	YDR354W TRP4 SGDID:S000002762, Chr IV from 1184741-1185883, Verified ORF, Anthranilate phosphoribosyl transferase of the tryptophan biosynthetic pathway
YDR361C	YDR361C BCP1 SGDID:S000002769, Chr IV from 1196256-1195405, reverse complement, Verified ORF, Essential protein involved in nuclear export of Mss4p
YDR365W-A	YDR365W-A YDR365W-A SGDID:S000007400, Chr IV from 1206990-1208312, transposable_element_gene, Retrotransposon TYA Gag gene co-transcribed with TYB Pol; translated as TYA or TYA-TYB polyprotein; Gag is a nucleocapsid protein that is the structural constituent of virus-like particles (VLPs); similar to retroviral Gag""
YDR368W	YDR368W YPR1 SGDID:S000002776, Chr IV from 1213897-1214835, Verified ORF, NADPH-dependent aldo-keto reductase
YDR376W	YDR376W ARH1 SGDID:S000002784, Chr IV from 1226815-1228296, Verified ORF, Oxidoreductase of the mitochondrial inner membrane
YDR385W	YDR385W EFT2 SGDID:S000002793, Chr IV from 1243223-1245751, Verified ORF, Elongation factor 2 (EF-2)
YDR427W	YDR427W RPN9 SGDID:S000002835, Chr IV from 1322198-1323379, Verified ORF, Non-ATPase regulatory subunit of the 26S proteasome
YDR447C	YDR447C RPS17B SGDID:S000002855, Chr IV from 1355546-1355544,1355229-1354822, reverse complement, Verified ORF, Ribosomal protein 51 (rp51) of the small (40s) subunit; nearly identical to Rps17Ap and has similarity to rat S17 ribosomal protein""
YDR450W	YDR450W RPS18A SGDID:S000002858, Chr IV from 1359916-1359962,1360398-1360791, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps18Bp and has similarity to E. coli S13 and rat S18 ribosomal proteins""
YDR502C	YDR502C SAM2 SGDID:S000002910, Chr IV from 1454457-1453303, reverse complement, Verified ORF, S-adenosylmethionine synthetase
YEL034W	YEL034W HYP2 SGDID:S000000760, Chr V from 85676-86149, Verified ORF, Translation elongation factor eIF-5A
YEL037C	YEL037C RAD23 SGDID:S000000763, Chr V from 82603-81407, reverse complement, Verified ORF, Protein with ubiquitin-like N terminus
YEL038W	YEL038W UTR4 SGDID:S000000764, Chr V from 80462-81145, Verified ORF, Protein with sequence similarity to 2
YEL046C	YEL046C GLY1 SGDID:S000000772, Chr V from 68792-67629, reverse complement, Verified ORF, Threonine aldolase
YEL047C	YEL047C YEL047C SGDID:S000000773, Chr V from 66797-65385, reverse complement, Verified ORF, Soluble fumarate reductase

YEL058W	YEL058W PCMI SGDID:S000000784, Chr V from 43252-44925, Verified ORF, Essential N-acetylglucosamine-phosphate mutase; converts GlcNAc-6-P to GlcNAc-1-P
YEL071W	YEL071W DLD3 SGDID:S000000797, Chr V from 16355-17845, Verified ORF, D-lactate dehydrogenase
YER003C	YER003C PMI40 SGDID:S000000805, Chr V from 159117-159087,158993-157735, reverse complement, Verified ORF, Mannose-6-phosphate isomerase
YER006W	YER006W NUG1 SGDID:S000000808, Chr V from 162722-164284, Verified ORF, GTPase that associates with nuclear 60S pre-ribosomes
YER021W	YER021W RPN3 SGDID:S000000823, Chr V from 196947-198518, Verified ORF, Essential
YER023W	YER023W PRO3 SGDID:S000000825, Chr V from 201075-201935, Verified ORF, Delta 1-pyrroline-5-carboxylate reductase
YER025W	YER025W GCD11 SGDID:S000000827, Chr V from 205250-206833, Verified ORF, Gamma subunit of the translation initiation factor eIF2
YER043C	YER043C SAH1 SGDID:S000000845, Chr V from 237118-235769, reverse complement, Verified ORF, S-adenosyl-L-homocysteine hydrolase
YER052C	YER052C HOM3 SGDID:S000000854, Chr V from 257957-256374, reverse complement, Verified ORF, Aspartate kinase (L-aspartate 4-P-transferase); cytoplasmic enzyme that catalyzes the first step in the common pathway for methionine and threonine biosynthesis; expression regulated by Gcn4p and the general control of amino acid synthesis""
YER062C	YER062C HOR2 SGDID:S000000864, Chr V from 280680-279928, reverse complement, Verified ORF, One of two redundant DL-glycerol-3-phosphatases (RHR2/GPP1 encodes the other) involved in glycerol biosynthesis; induced in response to hyperosmotic stress and oxidative stress
YER070W	YER070W RNR1 SGDID:S000000872, Chr V from 298948-301614, Verified ORF, One of two large regulatory subunits of ribonucleotide-diphosphate reductase; the RNR complex catalyzes rate-limiting step in dNTP synthesis
YER086W	YER086W ILV1 SGDID:S000000888, Chr V from 328473-330203, Verified ORF, Threonine deaminase
YER091C	YER091C MET6 SGDID:S000000893, Chr V from 342163-339860, reverse complement, Verified ORF, Cobalamin-independent methionine synthase
YER110C	YER110C KAP123 SGDID:S000000912, Chr V from 382099-378758, reverse complement, Verified ORF, Karyopherin beta
YER120W	YER120W SCS2 SGDID:S000000922, Chr V from 401131-401865, Verified ORF, Integral ER membrane protein that regulates phospholipid metabolism via an interaction with the FFAT motif of Opi1p
YER165W	YER165W PAB1 SGDID:S000000967, Chr V from 510368-512101, Verified ORF, Poly(A) binding protein
YER168C	YER168C CCA1 SGDID:S000000970, Chr V from 522664-521024, reverse complement, Verified ORF, ATP (CTP):tRNA-specific tRNA nucleotidyltransferase; different forms targeted to the nucleus
YER177W	YER177W BMH1 SGDID:S000000979, Chr V from 545606-546409, Verified ORF, 14-3-3 protein
YFL022C	YFL022C FRS2 SGDID:S000001872, Chr VI from 95008-93497, reverse complement, Verified ORF, Alpha subunit of cytoplasmic phenylalanyl-tRNA synthetase
YFL037W	YFL037W TUB2 SGDID:S000001857, Chr VI from 56335-57708, Verified ORF, Beta-tubulin; associates with alpha-tubulin (Tub1p and Tub3p) to form tubulin dimer
YFL039C	YFL039C ACT1 SGDID:S000001855, Chr VI from 54695-54686,54377-53260, reverse complement, Verified ORF, Actin
YFL045C	YFL045C SEC53 SGDID:S000001849, Chr VI from 44392-43628, reverse complement, Verified ORF, Phosphomannomutase
YFR004W	YFR004W RPN11 SGDID:S000001900, Chr VI from 153388-154308, Verified ORF, Metalloprotease subunit of the 19S regulatory particle of the 26S proteasome lid; couples the deubiquitination and degradation of proteasome substrates; involved

YFR007W	YFR007W YFH7 SGDID:S000001903, Chr VI from 159293-160354, Verified ORF, Putative kinase with similarity to the phosphoribulokinase/uridine kinase/bacterial pantothenate kinase (PRK/URK/PANK) subfamily of P-loop kinases""
YFR010W	YFR010W UBP6 SGDID:S000001906, Chr VI from 165060-166559, Verified ORF, Ubiquitin-specific protease situated in the base subcomplex of the 26S proteasome
YFR053C	YFR053C HXK1 SGDID:S000001949, Chr VI from 255036-253579, reverse complement, Verified ORF, Hexokinase isoenzyme 1
YGL009C	YGL009C LEU1 SGDID:S000002977, Chr VII from 478657-476318, reverse complement, Verified ORF, Isopropylmalate isomerase
YGL011C	YGL011C SCL1 SGDID:S000002979, Chr VII from 475252-474494, reverse complement, Verified ORF, Alpha 1 subunit of the 20S proteasome involved in the degradation of ubiquitinated substrates; 20S proteasome is the core complex of the 26S proteasome; essential for growth; detected in the mitochondria""
YGL019W	YGL019W CKB1 SGDID:S000002987, Chr VII from 458161-458997, Verified ORF, Beta regulatory subunit of casein kinase 2
YGL039W	YGL039W YGL039W SGDID:S000003007, Chr VII from 423967-425013, Verified ORF, Oxidoreductase shown to reduce carbonyl compounds to chiral alcohols""
YGL040C	YGL040C HEM2 SGDID:S000003008, Chr VII from 420561-419533, reverse complement, Verified ORF, Aminolevulinate dehydratase
YGL043W	YGL043W DST1 SGDID:S000003011, Chr VII from 417487-418416, Verified ORF, General transcription elongation factor TFIIS
YGL048C	YGL048C RPT6 SGDID:S000003016, Chr VII from 411289-410072, reverse complement, Verified ORF, One of six ATPases of the 19S regulatory particle of the 26S proteasome involved in the degradation of ubiquitinated substrates; bound by ubiquitin-protein ligases Ubr1p and Ufd4p; localized mainly to the nucleus throughout the cell cycle""
YGL056C	YGL056C SDS23 SGDID:S000003024, Chr VII from 397624-396041, reverse complement, Verified ORF, One of two <i>S. cerevisiae</i> homologs (Sds23p and Sds24p) of the <i>S. pombe</i> Sds23 protein
YGL105W	YGL105W ARC1 SGDID:S000003073, Chr VII from 307440-308570, Verified ORF, Protein that binds tRNA and methionyl- and glutamyl-tRNA synthetases (Mes1p and Gus1p)
YGL123W	YGL123W RPS2 SGDID:S000003091, Chr VII from 277623-278387, Verified ORF, Protein component of the small (40S) subunit
YGL135W	YGL135W RPL1B SGDID:S000003103, Chr VII from 254646-255299, Verified ORF, N-terminally acetylated protein component of the large (60S) ribosomal subunit
YGL147C	YGL147C RPL9A SGDID:S000003115, Chr VII from 228334-227759, reverse complement, Verified ORF, Protein component of the large (60S) ribosomal subunit
YGL148W	YGL148W ARO2 SGDID:S000003116, Chr VII from 226404-227534, Verified ORF, Bifunctional chorismate synthase and flavin reductase
YGL157W	YGL157W YGL157W SGDID:S000003125, Chr VII from 209011-210054, Verified ORF, NADPH-dependent aldehyde reductase
YGL169W	YGL169W SUA5 SGDID:S000003137, Chr VII from 186065-187345, Verified ORF, Single-stranded telomeric DNA-binding protein
YGL189C	YGL189C RPS26A SGDID:S000003157, Chr VII from 148594-148235, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps26Bp and has similarity to rat S26 ribosomal protein""
YGL202W	YGL202W ARO8 SGDID:S000003170, Chr VII from 116063-117565, Verified ORF, Aromatic aminotransferase I
YGL234W	YGL234W ADE5,7 SGDID:S000003203, Chr VII from 56482-58890, Verified ORF, Bifunctional enzyme of the 'de novo' purine nucleotide biosynthetic pathway
YGL245W	YGL245W GUS1 SGDID:S000003214, Chr VII from 39023-41149, Verified ORF, Glutamyl-tRNA synthetase (GluRS)

YGL253W	YGL253W HXK2 SGDID:S000003222, Chr VII from 23935-25395, Verified ORF, Hexokinase isoenzyme 2 that catalyzes phosphorylation of glucose in the cytosol; predominant hexokinase during growth on glucose; functions in the nucleus to repress expression of HXK1 and GLK1 and to induce expression of its own gene""
YGR001C	YGR001C YGR001C SGDID:S000003233, Chr VII from 498038-498004,497941-497463,497369-497137, reverse complement, Uncharacterized ORF, Putative protein of unknown function with similarity to methyltransferase family members; green fluorescent protein (GFP)-fusion protein localizes to the cytoplasm; required for replication of Brome mosaic virus in <i>S. cerevisiae</i> ""
YGR007W	YGR007W MUQ1 SGDID:S000003239, Chr VII from 506973-507944, Verified ORF, Choline phosphate cytidyltransferase
YGR054W	YGR054W YGR054W SGDID:S000003286, Chr VII from 596697-598625, Verified ORF, Eukaryotic initiation factor (eIF) 2A; associates specifically with both 40S subunits and 80 S ribosomes
YGR061C	YGR061C ADE6 SGDID:S000003293, Chr VII from 615969-611893, reverse complement, Verified ORF, Formylglycinamidine-ribonucleotide (FGAM)-synthetase
YGR080W	YGR080W TWF1 SGDID:S000003312, Chr VII from 642014-643012, Verified ORF, Twinfilin
YGR085C	YGR085C RPL11B SGDID:S000003317, Chr VII from 648911-648387, reverse complement, Verified ORF, Protein component of the large (60S) ribosomal subunit
YGR094W	YGR094W VAS1 SGDID:S000003326, Chr VII from 672190-675504, Verified ORF, Mitochondrial and cytoplasmic valyl-tRNA synthetase""
YGR118W	YGR118W RPS23A SGDID:S000003350, Chr VII from 726978-727042,727363-727735, Verified ORF, Ribosomal protein 28 (rp28) of the small (40S) ribosomal subunit
YGR123C	YGR123C PPT1 SGDID:S000003355, Chr VII from 738208-736667, reverse complement, Verified ORF, Protein serine/threonine phosphatase with similarity to human phosphatase PP5; present in both the nucleus and cytoplasm; expressed during logarithmic growth; computational analyses suggest roles in phosphate metabolism and rRNA processing""
YGR124W	YGR124W ASN2 SGDID:S000003356, Chr VII from 739949-741667, Verified ORF, Asparagine synthetase
YGR180C	YGR180C RNR4 SGDID:S000003412, Chr VII from 856306-855269, reverse complement, Verified ORF, Ribonucleotide-diphosphate reductase (RNR)
YGR185C	YGR185C TYS1 SGDID:S000003417, Chr VII from 867525-866341, reverse complement, Verified ORF, Cytoplasmic tyrosyl-tRNA synthetase
YGR192C	YGR192C TDH3 SGDID:S000003424, Chr VII from 883815-882817, reverse complement, Verified ORF, Glyceraldehyde-3-phosphate dehydrogenase
YGR204W	YGR204W ADE3 SGDID:S000003436, Chr VII from 905939-908779, Verified ORF, Cytoplasmic trifunctional enzyme C1-tetrahydrofolate synthase
YGR208W	YGR208W SER2 SGDID:S000003440, Chr VII from 911888-912817, Verified ORF, Phosphoserine phosphatase of the phosphoglycerate pathway
YGR214W	YGR214W RPS0A SGDID:S000003446, Chr VII from 920580-920669,921125-921793, Verified ORF, Protein component of the small (40S) ribosomal subunit
YGR234W	YGR234W YHB1 SGDID:S000003466, Chr VII from 959908-961107, Verified ORF, Nitric oxide oxidoreductase
YGR256W	YGR256W GND2 SGDID:S000003488, Chr VII from 1004630-1006108, Verified ORF, 6-phosphogluconate dehydrogenase (decarboxylating)
YGR264C	YGR264C MES1 SGDID:S000003496, Chr VII from 1021859-1019604, reverse complement, Verified ORF, Methionyl-tRNA synthetase
YGR285C	YGR285C ZUO1 SGDID:S000003517, Chr VII from 1063160-1061859, reverse complement, Verified ORF, Cytosolic ribosome-associated chaperone that acts
YHL001W	YHL001W RPL14B SGDID:S000000993, Chr VIII from 104272-104400,104799-105086, Verified ORF, Protein component of the large (60S) ribosomal subunit
YHL013C	YHL013C OTU2 SGDID:S000001005, Chr VIII from 78350-77427, reverse complement, Verified ORF, Protein of unknown function that may interact with ribosomes

YHL034C	YHL034C SBP1 SGDID:S000001026, Chr VIII from 34075-33191, reverse complement, Verified ORF, Putative RNA binding protein; involved in translational repression and found in cytoplasmic P bodies; found associated with small nucleolar RNAs snR10 and snR11""
YHR007C	YHR007C ERG11 SGDID:S000001049, Chr VIII from 121678-120086, reverse complement, Verified ORF, Lanosterol 14-alpha-demethylase
YHR013C	YHR013C ARD1 SGDID:S000001055, Chr VIII from 131440-130724, reverse complement, Verified ORF, Subunit of N-terminal acetyltransferase NatA (Nat1p)
YHR019C	YHR019C DED81 SGDID:S000001061, Chr VIII from 143551-141887, reverse complement, Verified ORF, Cytosolic asparaginyl-tRNA synthetase
YHR020W	YHR020W YHR020W SGDID:S000001062, Chr VIII from 143989-146055, Verified ORF, Protein of unknown function that may interact with ribosomes
YHR021C	YHR021C RPS27B SGDID:S000001063, Chr VIII from 148662-148660,148109-147864, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps27Ap and has similarity to rat S27 ribosomal protein""
YHR025W	YHR025W THR1 SGDID:S000001067, Chr VIII from 159431-160504, Verified ORF, Homoserine kinase
YHR047C	YHR047C AAP1 SGDID:S000001089, Chr VIII from 201303-198733, reverse complement, Verified ORF, Arginine/alanine aminopeptidase
YHR049W	YHR049W FSH1 SGDID:S000001091, Chr VIII from 206455-207186, Verified ORF, Putative serine hydrolase that localizes to both the nucleus and cytoplasm; sequence is similar to S. cerevisiae Fsh2p and Fsh3p and the human candidate tumor suppressor OVCA2""
YHR063C	YHR063C PAN5 SGDID:S000001105, Chr VIII from 225171-224032, reverse complement, Verified ORF, 2-dehydropantoate 2-reductase
YHR064C	YHR064C SSZ1 SGDID:S000001106, Chr VIII from 227143-225527, reverse complement, Verified ORF, Hsp70 protein that interacts with Zuo1p (a DnaJ homolog) to form a ribosome-associated complex that binds the ribosome via the Zuo1p subunit; also involved in pleiotropic drug resistance via sequential activation of PDR1 and PDR5; binds ATP""
YHR068W	YHR068W DYS1 SGDID:S000001110, Chr VIII from 232135-233298, Verified ORF, Deoxyhypusine synthase
YHR070W	YHR070W TRM5 SGDID:S000001112, Chr VIII from 234883-236382, Verified ORF, tRNA(m(1)G37)methyltransferase
YHR104W	YHR104W GRE3 SGDID:S000001146, Chr VIII from 323412-324395, Verified ORF, Aldose reductase involved in methylglyoxal
YHR128W	YHR128W FUR1 SGDID:S000001170, Chr VIII from 362118-362768, Verified ORF, Uracil phosphoribosyltransferase
YHR174W	YHR174W ENO2 SGDID:S000001217, Chr VIII from 451327-452640, Verified ORF, Enolase II
YHR183W	YHR183W GND1 SGDID:S000001226, Chr VIII from 470960-472429, Verified ORF, 6-phosphogluconate dehydrogenase (decarboxylating)
YHR203C	YHR203C RPS4B SGDID:S000001246, Chr VIII from 505530-505517,505247-504476, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; identical to Rps4Ap and has similarity to rat S4 ribosomal protein""
YHR208W	YHR208W BAT1 SGDID:S000001251, Chr VIII from 517532-518713, Verified ORF, Mitochondrial branched-chain amino acid aminotransferase
YHR214C-B	YHR214C-B YHR214C-B SGDID:S000003534, Chr VIII from 549346-547931,547929-543964, reverse complement, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; transcribed/translated as one unit; polyprotein is processed to make a nucleocapsid-like protein (Gag)
YHR216W	YHR216W IMD2 SGDID:S000001259, Chr VIII from 554396-555967, Verified ORF, Inosine monophosphate dehydrogenase
YIL041W	YIL041W GVP36 SGDID:S000001303, Chr IX from 276524-277504, Verified ORF, BAR domain-containing protein that localizes to both early and late Golgi vesicles; required for adaptation to varying nutrient concentrations
YIL044C	YIL044C AGE2 SGDID:S000001306, Chr IX from 273845-272949, reverse complement, Verified ORF, ADP-ribosylation factor (ARF) GTPase activating protein (GAP) effector



YIL053W	YIL053W RHR2 SGDID:S000001315, Chr IX from 255113-255865, Verified ORF, Constitutively expressed isoform of DL-glycerol-3-phosphatase; involved in glycerol biosynthesis
YIL078W	YIL078W THS1 SGDID:S000001340, Chr IX from 212496-214700, Verified ORF, Threonyl-tRNA synthetase
YIL094C	YIL094C LYS12 SGDID:S000001356, Chr IX from 187629-186514, reverse complement, Verified ORF, Homo-isocitrate dehydrogenase
YIL116W	YIL116W HIS5 SGDID:S000001378, Chr IX from 142925-144082, Verified ORF, Histidinol-phosphate aminotransferase
YIL142W	YIL142W CCT2 SGDID:S000001404, Chr IX from 83302-84885, Verified ORF, Subunit beta of the cytosolic chaperonin Cct ring complex
YJL008C	YJL008C CCT8 SGDID:S000003545, Chr X from 421656-419950, reverse complement, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YJL014W	YJL014W CCT3 SGDID:S000003551, Chr X from 407551-409155, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YJL080C	YJL080C SCP160 SGDID:S000003616, Chr X from 289220-285552, reverse complement, Verified ORF, Essential RNA-binding G protein effector of mating response pathway
YJL111W	YJL111W CCT7 SGDID:S000003647, Chr X from 207872-209524, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YJL130C	YJL130C URA2 SGDID:S000003666, Chr X from 172363-165719, reverse complement, Verified ORF, Bifunctional carbamoylphosphate synthetase (CPSase)-aspartate transcarbamylase (ATCase)
YJL136C	YJL136C RPS21B SGDID:S000003672, Chr X from 157269-157246,156785-156546, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps21Ap and has similarity to rat S21 ribosomal protein""
YJL138C	YJL138C TIF2 SGDID:S000003674, Chr X from 154687-153500, reverse complement, Verified ORF, Translation initiation factor eIF4A
YJL167W	YJL167W ERG20 SGDID:S000003703, Chr X from 105008-106066, Verified ORF, Farnesyl pyrophosphate synthetase
YJL190C	YJL190C RPS22A SGDID:S000003726, Chr X from 75301-74909, reverse complement, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps22Bp and has similarity to E. coli S8 and rat S15a ribosomal proteins""
YJR007W	YJR007W SUI2 SGDID:S000003767, Chr X from 451012-451926, Verified ORF, Alpha subunit of the translation initiation factor eIF2
YJR009C	YJR009C TDH2 SGDID:S000003769, Chr X from 454673-453675, reverse complement, Verified ORF, Glyceraldehyde-3-phosphate dehydrogenase
YJR016C	YJR016C ILV3 SGDID:S000003777, Chr X from 466200-464443, reverse complement, Verified ORF, Dihydroxyacid dehydratase
YJR064W	YJR064W CCT5 SGDID:S000003825, Chr X from 555906-557594, Verified ORF, Subunit of the cytosolic chaperonin Cct ring complex
YJR065C	YJR065C ARP3 SGDID:S000003826, Chr X from 559150-557801, reverse complement, Verified ORF, Essential component of the Arp2/3 complex
YJR070C	YJR070C LIA1 SGDID:S000003831, Chr X from 570590-569613, reverse complement, Verified ORF, Deoxyhypusine hydroxylase
YJR072C	YJR072C NPA3 SGDID:S000003833, Chr X from 572116-570959, reverse complement, Verified ORF, Essential
YJR123W	YJR123W RPS5 SGDID:S000003884, Chr X from 651891-652568, Verified ORF, Protein component of the small (40S) ribosomal subunit
YJR148W	YJR148W BAT2 SGDID:S000003909, Chr X from 705734-706864, Verified ORF, Cytosolic branched-chain amino acid aminotransferase
YKL024C	YKL024C URA6 SGDID:S000001507, Chr XI from 392783-392169, reverse complement, Verified ORF, Uridylate kinase
YKL035W	YKL035W UGP1 SGDID:S000001518, Chr XI from 369534-371033, Verified ORF, UDP-glucose pyrophosphorylase (UGPase)

YKL056C	YKL056C TMA19 SGDID:S000001539, Chr XI from 334559-334056, reverse complement, Verified ORF, Protein that associates with ribosomes; homolog of translationally controlled tumor protein; green fluorescent protein (GFP)-fusion protein localizes to the cytoplasm and relocates to the mitochondrial outer surface upon oxidative stress"
YKL060C	YKL060C FBA1 SGDID:S000001543, Chr XI from 327131-326052, reverse complement, Verified ORF, Fructose 1
YKL104C	YKL104C GFA1 SGDID:S000001587, Chr XI from 245017-242864, reverse complement, Verified ORF, Glutamine-fructose-6-phosphate amidotransferase
YKL127W	YKL127W PGM1 SGDID:S000001610, Chr XI from 203185-204897, Verified ORF, Phosphoglucomutase
YKL128C	YKL128C PMU1 SGDID:S000001611, Chr XI from 201415-200528, reverse complement, Verified ORF, Putative phosphomutase
YKL145W	YKL145W RPT1 SGDID:S000001628, Chr XI from 174218-175621, Verified ORF, One of six ATPases of the 19S regulatory particle of the 26S proteasome involved in the degradation of ubiquitinated substrates; required for optimal CDC20 transcription; interacts with Rpn12p and the E3 ubiquitin-protein ligase Ubr1p"
YKL182W	YKL182W FAS1 SGDID:S000001665, Chr XI from 100676-106831, Verified ORF, Beta subunit of fatty acid synthetase
YKL210W	YKL210W UBA1 SGDID:S000001693, Chr XI from 39164-42238, Verified ORF, Ubiquitin activating enzyme (E1)
YKL211C	YKL211C TRP3 SGDID:S000001694, Chr XI from 38154-36700, reverse complement, Verified ORF, Bifunctional enzyme exhibiting both indole-3-glycerol-phosphate synthase and anthranilate synthase activities
YKR001C	YKR001C VPS1 SGDID:S000001709, Chr XI from 442365-440251, reverse complement, Verified ORF, Dynamin-like GTPase required for vacuolar sorting; also involved in actin cytoskeleton organization
YKR043C	YKR043C YKR043C SGDID:S000001751, Chr XI from 521354-520539, reverse complement, Uncharacterized ORF, Putative protein of unknown function; green fluorescent protein (GFP)-fusion protein localizes to the cytoplasm and nucleus"
YKR057W	YKR057W RPS21A SGDID:S000001765, Chr XI from 551299-551322,551645-551884, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps21Bp and has similarity to rat S21 ribosomal protein"
YKR080W	YKR080W MTD1 SGDID:S000001788, Chr XI from 590037-590999, Verified ORF, NAD-dependent 5
YLL024C	YLL024C SSA2 SGDID:S000003947, Chr XII from 97484-95565, reverse complement, Verified ORF, ATP binding protein involved in protein folding and vacuolar import of proteins; member of heat shock protein 70 (HSP70) family; associated with the chaperonin-containing T-complex; present in the cytoplasm
YLL036C	YLL036C PRP19 SGDID:S000003959, Chr XII from 68255-66744, reverse complement, Verified ORF, Splicing factor associated with the spliceosome; contains a U-box
YLR027C	YLR027C AAT2 SGDID:S000004017, Chr XII from 198086-196830, reverse complement, Verified ORF, Cytosolic aspartate aminotransferase
YLR044C	YLR044C PDC1 SGDID:S000004034, Chr XII from 234082-232391, reverse complement, Verified ORF, Major of three pyruvate decarboxylase isozymes
YLR048W	YLR048W RPS0B SGDID:S000004038, Chr XII from 242233-242322,242682-243350, Verified ORF, Protein component of the small (40S) ribosomal subunit
YLR058C	YLR058C SHM2 SGDID:S000004048, Chr XII from 259402-257993, reverse complement, Verified ORF, Cytosolic serine hydroxymethyltransferase
YLR060W	YLR060W FRS1 SGDID:S000004050, Chr XII from 260980-262767, Verified ORF, Beta subunit of cytoplasmic phenylalanyl-tRNA synthetase
YLR075W	YLR075W RPL10 SGDID:S000004065, Chr XII from 282928-283593, Verified ORF, Protein component of the large (60S) ribosomal subunit
YLR089C	YLR089C ALT1 SGDID:S000004079, Chr XII from 320016-318238, reverse complement, Uncharacterized ORF, Alanine transaminase (glutamic pyruvic transaminase); involved in alanine biosynthetic and catabolic processes; the authentic

YLR109W	YLR109W AHP1 SGDID:S000004099, Chr XII from 368782-369312, Verified ORF, Thiol-specific peroxiredoxin
YLR134W	YLR134W PDC5 SGDID:S000004124, Chr XII from 410724-412415, Verified ORF, Minor isoform of pyruvate decarboxylase
YLR153C	YLR153C ACS2 SGDID:S000004143, Chr XII from 447576-445525, reverse complement, Verified ORF, Acetyl-coA synthetase isoform which
YLR157C-B	YLR157C-B YLR157C-B SGDID:S000007374, Chr XII from 481602-480298,480296-476334, reverse complement, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; transcribed/translated as one unit; polyprotein is processed to make a nucleocapsid-like protein (Gag)
YLR180W	YLR180W SAM1 SGDID:S000004170, Chr XII from 515264-516412, Verified ORF, S-adenosylmethionine synthetase
YLR195C	YLR195C NMT1 SGDID:S000004185, Chr XII from 543306-541939, reverse complement, Verified ORF, N-myristoyl transferase
YLR244C	YLR244C MAP1 SGDID:S000004234, Chr XII from 626333-625170, reverse complement, Verified ORF, Methionine aminopeptidase
YLR249W	YLR249W YEF3 SGDID:S000004239, Chr XII from 636782-639916, Verified ORF, Translational elongation factor 3
YLR270W	YLR270W DCS1 SGDID:S000004260, Chr XII from 681188-682240, Verified ORF, Non-essential hydrolase involved in mRNA decapping
YLR304C	YLR304C ACO1 SGDID:S000004295, Chr XII from 737550-735214, reverse complement, Verified ORF, Aconitase
YLR316C	YLR316C TAD3 SGDID:S000004308, Chr XII from 766358-766250,766181-766130,766073-765266, reverse complement, Verified ORF, Subunit of tRNA-specific adenosine-34 deaminase
YLR354C	YLR354C TAL1 SGDID:S000004346, Chr XII from 837356-836349, reverse complement, Verified ORF, Transaldolase
YLR355C	YLR355C ILV5 SGDID:S000004347, Chr XII from 839252-838065, reverse complement, Verified ORF, Acetohydroxyacid reductoisomerase
YLR359W	YLR359W ADE13 SGDID:S000004351, Chr XII from 844281-845729, Verified ORF, Adenylosuccinate lyase
YLR367W	YLR367W RPS22B SGDID:S000004359, Chr XII from 856441-856573,857057-857316, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps22Ap and has similarity to E. coli S8 and rat S15a ribosomal proteins""
YLR388W	YLR388W RPS29A SGDID:S000004380, Chr XII from 898651-898821, Verified ORF, Protein component of the small (40S) ribosomal subunit; nearly identical to Rps29Bp and has similarity to rat S29 and E. coli S14 ribosomal proteins""
YLR401C	YLR401C DUS3 SGDID:S000004393, Chr XII from 924448-922442, reverse complement, Verified ORF, Dihydrouridine synthase
YLR432W	YLR432W IMD3 SGDID:S000004424, Chr XII from 1002554-1004125, Verified ORF, Inosine monophosphate dehydrogenase
YLR438W	YLR438W CAR2 SGDID:S000004430, Chr XII from 1012498-1013772, Verified ORF, L-ornithine transaminase (OTase)
YLR441C	YLR441C RPS1A SGDID:S000004433, Chr XII from 1018905-1018138, reverse complement, Verified ORF, Ribosomal protein 10 (rp10) of the small (40S) subunit; nearly identical to Rps1Bp and has similarity to rat S3a ribosomal protein""
YML008C	YML008C ERG6 SGDID:S000004467, Chr XIII from 252990-251839, reverse complement, Verified ORF, Delta(24)-sterol C-methyltransferase
YML022W	YML022W APT1 SGDID:S000004484, Chr XIII from 228937-229500, Verified ORF, Adenine phosphoribosyltransferase
YML028W	YML028W TSA1 SGDID:S000004490, Chr XIII from 220138-220728, Verified ORF, Thioredoxin peroxidase
YML056C	YML056C IMD4 SGDID:S000004520, Chr XIII from 164176-163717,163308-162194, reverse complement, Verified ORF, Inosine monophosphate dehydrogenase

YML063W	YML063W RPS1B SGDID:S000004528, Chr XIII from 146482-147249, Verified ORF, Ribosomal protein 10 (rp10) of the small (40S) subunit; nearly identical to Rps1Ap and has similarity to rat S3a ribosomal protein""
YML070W	YML070W DAK1 SGDID:S000004535, Chr XIII from 133475-135229, Verified ORF, Dihydroxyacetone kinase
YML085C	YML085C TUB1 SGDID:S000004550, Chr XIII from 99400-99376,99259-97941, reverse complement, Verified ORF, Alpha-tubulin; associates with beta-tubulin (Tub2p) to form tubulin dimer
YML086C	YML086C ALO1 SGDID:S000004551, Chr XIII from 97371-95791, reverse complement, Verified ORF, D-Arabinono-1
YML124C	YML124C TUB3 SGDID:S000004593, Chr XIII from 23684-23660,23361-22049, reverse complement, Verified ORF, Alpha-tubulin; associates with beta-tubulin (Tub2p) to form tubulin dimer
YML126C	YML126C ERG13 SGDID:S000004595, Chr XIII from 20536-19061, reverse complement, Verified ORF, 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA) synthase
YMR038C	YMR038C CCS1 SGDID:S000004641, Chr XIII from 348259-347510, reverse complement, Verified ORF, Copper chaperone for superoxide dismutase Sod1p
YMR045C	YMR045C YMR045C SGDID:S000004648, Chr XIII from 362626-361322,361320-357358, reverse complement, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; transcribed/translated as one unit; polyprotein is processed to make a nucleocapsid-like protein (Gag)
YMR079W	YMR079W SEC14 SGDID:S000004684, Chr XIII from 424988-424996,425153-426058, Verified ORF, Phosphatidylinositol/phosphatidylcholine transfer protein; involved in regulating PtdIns
YMR108W	YMR108W ILV2 SGDID:S000004714, Chr XIII from 484083-486146, Verified ORF, Acetolactate synthase
YMR116C	YMR116C ASC1 SGDID:S000004722, Chr XIII from 500687-500151,499877-499455, reverse complement, Verified ORF, G-protein beta subunit and guanine nucleotide dissociation inhibitor for Gpa2p; ortholog of RACK1 that inhibits translation; core component of the small (40S) ribosomal subunit; represses Gcn4p in the absence of amino acid starvation""
YMR146C	YMR146C TIF34 SGDID:S000004754, Chr XIII from 558523-557480, reverse complement, Verified ORF, eIF3i subunit of the core complex of translation initiation factor 3 (eIF3)
YMR170C	YMR170C ALD2 SGDID:S000004780, Chr XIII from 603081-601561, reverse complement, Verified ORF, Cytoplasmic aldehyde dehydrogenase
YMR205C	YMR205C PFK2 SGDID:S000004818, Chr XIII from 674765-671886, reverse complement, Verified ORF, Beta subunit of heterooctameric phosphofructokinase involved in glycolysis
YMR217W	YMR217W GUA1 SGDID:S000004830, Chr XIII from 701789-703366, Verified ORF, GMP synthase
YMR226C	YMR226C YMR226C SGDID:S000004839, Chr XIII from 722395-721592, reverse complement, Verified ORF, NADP(+)-dependent dehydrogenase; acts on serine
YMR235C	YMR235C RNA1 SGDID:S000004848, Chr XIII from 742734-741511, reverse complement, Verified ORF, GTPase activating protein (GAP) for Gsp1p
YMR237W	YMR237W BCH1 SGDID:S000004850, Chr XIII from 743748-745922, Verified ORF, Member of the ChAPs family (Chs5p-Arf1p-binding proteins: Bch1p)
YMR246W	YMR246W FAA4 SGDID:S000004860, Chr XIII from 759806-761890, Verified ORF, Long chain fatty acyl-CoA synthetase
YMR285C	YMR285C NGL2 SGDID:S000004898, Chr XIII from 841690-840143, reverse complement, Verified ORF, Protein involved in 5.8S rRNA processing; Ccr4p-like RNase required for correct 3'-end formation of 5.8S rRNA at site E; similar to Ngl1p and Ngl3p""
YMR290C	YMR290C HAS1 SGDID:S000004903, Chr XIII from 851590-850073, reverse complement, Verified ORF, ATP-dependent RNA helicase; localizes to both the nuclear periphery and nucleolus; highly enriched in nuclear pore complex fractions; constituent of 66S pre-ribosomal particles""

YMR300C	YMR300C ADE4 SGDID:S000004915, Chr XIII from 867090-865558, reverse complement, Verified ORF, Phosphoribosylpyrophosphate amidotransferase (PRPPAT; amidophosphoribosyltransferase)
YNL010W	YNL010W YNL010W SGDID:S000004955, Chr XIV from 613637-614362, Uncharacterized ORF, Putative protein of unknown function with similarity to phosphoserine phosphatases; green fluorescent protein (GFP)-fusion protein localizes to the cytoplasm and nucleus; homozygous diploid mutant shows an increase in glycogen accumulation""
YNL045W	YNL045W LAP2 SGDID:S000004990, Chr XIV from 542965-544980, Verified ORF, Leucyl aminopeptidase yscIV (leukotriene A4 hydrolase) with epoxide hydrolase activity
YNL112W	YNL112W DBP2 SGDID:S000005056, Chr XIV from 413641-414913,415916-416283, Verified ORF, Essential ATP-dependent RNA helicase of the DEAD-box protein family
YNL134C	YNL134C YNL134C SGDID:S000005078, Chr XIV from 373583-372453, reverse complement, Uncharacterized ORF, Putative protein of unknown function with similarity to dehydrogenases from other model organisms; green fluorescent protein (GFP)-fusion protein localizes to both the cytoplasm and nucleus and is induced by the DNA-damaging agent MMS""
YNL141W	YNL141W AAH1 SGDID:S000005085, Chr XIV from 359598-360641, Verified ORF, Adenine deaminase (adenine aminohydrolase)
YNL178W	YNL178W RPS3 SGDID:S000005122, Chr XIV from 302682-303404, Verified ORF, Protein component of the small (40S) ribosomal subunit
YNL207W	YNL207W RIO2 SGDID:S000005151, Chr XIV from 255354-256631, Verified ORF, Essential serine kinase involved in the processing of the 20S pre-rRNA into mature 18S rRNA; has similarity to Rio1p""
YNL209W	YNL209W SSB2 SGDID:S000005153, Chr XIV from 252060-253901, Verified ORF, Cytoplasmic ATPase that is a ribosome-associated molecular chaperone
YNL220W	YNL220W ADE12 SGDID:S000005164, Chr XIV from 234414-235715, Verified ORF, Adenylosuccinate synthase
YNL239W	YNL239W LAP3 SGDID:S000005183, Chr XIV from 200570-201934, Verified ORF, Cysteine aminopeptidase with homocysteine-thiolactonase activity; protects cells against homocysteine toxicity; has bleomycin hydrolase activity in vitro; transcription is regulated by galactose via Gal4p; orthologous to human BLMH""
YNL255C	YNL255C GIS2 SGDID:S000005199, Chr XIV from 167791-167330, reverse complement, Verified ORF, Protein with seven cysteine-rich CCHC zinc-finger motifs
YNL284C-A	YNL284C-A YNL284C-A SGDID:S000007386, Chr XIV from 102232-100910, reverse complement, transposable_element_gene, Retrotransposon TYA Gag gene co-transcribed with TYB Pol; translated as TYA or TYA-TYB polyprotein; Gag is a nucleocapsid protein that is the structural constituent of virus-like particles (VLPs); similar to retroviral Gag""
YNL292W	YNL292W PUS4 SGDID:S000005236, Chr XIV from 82806-84017, Verified ORF, Pseudouridine synthase
YNL301C	YNL301C RPL18B SGDID:S000005245, Chr XIV from 64562-64451,64018-63570, reverse complement, Verified ORF, Protein component of the large (60S) ribosomal subunit
YNL312W	YNL312W RFA2 SGDID:S000005256, Chr XIV from 48286-48292,48401-49215, Verified ORF, Subunit of heterotrimeric Replication Protein A (RPA)
YNL313C	YNL313C YNL313C SGDID:S000005257, Chr XIV from 48021-45307, reverse complement, Uncharacterized ORF, Essential protein of unknown function; fluorescent protein (GFP or YFP)-tagged protein localizes to cytoplasm and nucleus""
YNL316C	YNL316C PHA2 SGDID:S000005260, Chr XIV from 43074-42070, reverse complement, Verified ORF, Prephenate dehydratase
YOL022C	YOL022C TSR4 SGDID:S000005382, Chr XV from 281499-280273, reverse complement, Uncharacterized ORF, Cytoplasmic protein of unknown function; essential gene in S288C background
YOL052C	YOL052C SPE2 SGDID:S000005412, Chr XV from 233635-232445, reverse complement, Verified ORF, S-adenosylmethionine decarboxylase

YOL057W	YOL057W YOL057W SGDID:S000005418, Chr XV from 220766-222901, Verified ORF, Dipeptidyl-peptidase III; cleaves dipeptides from the amino terminus of target proteins; highly active on synthetic substrate Arg-Arg-2-naphthylamide; mammalian ortholog may be a biomarker for some cancers""
YOL058W	YOL058W ARG1 SGDID:S000005419, Chr XV from 219210-220472, Verified ORF, Arginosuccinate synthetase
YOL059W	YOL059W GPD2 SGDID:S000005420, Chr XV from 217126-218448, Verified ORF, NAD-dependent glycerol 3-phosphate dehydrogenase
YOL086C	YOL086C ADH1 SGDID:S000005446, Chr XV from 160594-159548, reverse complement, Verified ORF, Alcohol dehydrogenase
YOL097C	YOL097C WRS1 SGDID:S000005457, Chr XV from 137825-136527, reverse complement, Verified ORF, Cytoplasmic tryptophanyl-tRNA synthetase
YOL103W-A	YOL103W-A YOL103W-A SGDID:S000007349, Chr XV from 118000-119322, transposable_element_gene, Retrotransposon TYA Gag gene co-transcribed with TYB Pol; translated as TYA or TYA-TYB polyprotein; Gag is a nucleocapsid protein that is the structural constituent of virus-like particles (VLPs); similar to retroviral Gag""
YOL103W-B	YOL103W-B YOL103W-B SGDID:S000007350, Chr XV from 118000-119304,119306-123268, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; transcribed/translated as one unit; polyprotein is processed to make a nucleocapsid-like protein (Gag)
YOL151W	YOL151W GRE2 SGDID:S000005511, Chr XV from 43693-44721, Verified ORF, 3-methylbutanal reductase and NADPH-dependent methylglyoxal reductase (D-lactaldehyde dehydrogenase); stress induced (osmotic)
YOR027W	YOR027W STI1 SGDID:S000005553, Chr XV from 381053-382822, Verified ORF, Hsp90 cochaperone
YOR046C	YOR046C DBP5 SGDID:S000005572, Chr XV from 415908-414460, reverse complement, Verified ORF, Cytoplasmic ATP-dependent RNA helicase of the DEAD-box family involved in mRNA export from the nucleus; involved in translation termination""
YOR063W	YOR063W RPL3 SGDID:S000005589, Chr XV from 444688-445851, Verified ORF, Protein component of the large (60S) ribosomal subunit
YOR074C	YOR074C CDC21 SGDID:S000005600, Chr XV from 467591-466677, reverse complement, Verified ORF, Thymidylate synthase
YOR122C	YOR122C PFY1 SGDID:S000005648, Chr XV from 552888-552876,552666-552299, reverse complement, Verified ORF, Profilin
YOR136W	YOR136W IDH2 SGDID:S000005662, Chr XV from 580251-581360, Verified ORF, Subunit of mitochondrial NAD(+)-dependent isocitrate dehydrogenase
YOR168W	YOR168W GLN4 SGDID:S000005694, Chr XV from 649304-651733, Verified ORF, Glutamine tRNA synthetase
YOR184W	YOR184W SER1 SGDID:S000005710, Chr XV from 679358-680545, Verified ORF, 3-phosphoserine aminotransferase
YOR187W	YOR187W TUF1 SGDID:S000005713, Chr XV from 684031-685344, Verified ORF, Mitochondrial translation elongation factor Tu; comprises both GTPase and guanine nucleotide exchange factor activities
YOR197W	YOR197W MCA1 SGDID:S000005723, Chr XV from 717087-718385, Verified ORF, Putative cysteine protease similar to mammalian caspases; involved in regulation of apoptosis upon hydrogen peroxide treatment; proposed to be involved in cell cycle progression""
YOR204W	YOR204W DED1 SGDID:S000005730, Chr XV from 722912-724726, Verified ORF, ATP-dependent DEAD (Asp-Glu-Ala-Asp)-box RNA helicase
YOR209C	YOR209C NPT1 SGDID:S000005735, Chr XV from 737727-736438, reverse complement, Verified ORF, Nicotinate phosphoribosyltransferase
YOR243C	YOR243C PUS7 SGDID:S000005769, Chr XV from 792242-790212, reverse complement, Verified ORF, Pseudouridine synthase
YOR251C	YOR251C TUM1 SGDID:S000005777, Chr XV from 803465-802551, reverse complement, Verified ORF, Mitochondrial protein

YOR261C	YOR261C RPN8 SGDID:S000005787, Chr XV from 816931-815915, reverse complement, Verified ORF, Essential
YOR281C	YOR281C PLP2 SGDID:S000005807, Chr XV from 847128-846268, reverse complement, Verified ORF, Essential protein that interacts with the CCT (chaperonin containing TCP-1) complex to stimulate actin folding; has similarity to phosducins; null mutant lethality is complemented by mouse phosducin-like protein MgcPhLP"
YOR317W	YOR317W FAA1 SGDID:S000005844, Chr XV from 909340-911442, Verified ORF, Long chain fatty acyl-CoA synthetase with a preference for C12:0-C16:0 fatty acids; involved in the activation of imported fatty acids; localized to both lipid particles and mitochondrial outer membrane; essential for stationary phase"
YOR323C	YOR323C PRO2 SGDID:S000005850, Chr XV from 922902-921532, reverse complement, Verified ORF, Gamma-glutamyl phosphate reductase
YOR335C	YOR335C ALA1 SGDID:S000005862, Chr XV from 949106-946230, reverse complement, Verified ORF, Cytoplasmic and mitochondrial alanyl-tRNA synthetase
YOR340C	YOR340C RPA43 SGDID:S000005867, Chr XV from 960179-959199, reverse complement, Verified ORF, RNA polymerase I subunit A43"
YOR347C	YOR347C PYK2 SGDID:S000005874, Chr XV from 986459-984939, reverse complement, Verified ORF, Pyruvate kinase that appears to be modulated by phosphorylation; PYK2 transcription is repressed by glucose
YOR374W	YOR374W ALD4 SGDID:S000005901, Chr XV from 1039838-1041397, Verified ORF, Mitochondrial aldehyde dehydrogenase
YPL028W	YPL028W ERG10 SGDID:S000005949, Chr XVI from 498094-499290, Verified ORF, Acetyl-CoA C-acetyltransferase (acetoacetyl-CoA thiolase)
YPL061W	YPL061W ALD6 SGDID:S000005982, Chr XVI from 432585-434087, Verified ORF, Cytosolic aldehyde dehydrogenase
YPL079W	YPL079W RPL21B SGDID:S000006000, Chr XVI from 406633-406643,407065-407536, Verified ORF, Protein component of the large (60S) ribosomal subunit
YPL106C	YPL106C SSE1 SGDID:S000006027, Chr XVI from 352272-350191, reverse complement, Verified ORF, ATPase that is a component of the heat shock protein Hsp90 chaperone complex; binds unfolded proteins; member of the heat shock protein 70 (HSP70) family; localized to the cytoplasm"
YPL111W	YPL111W CAR1 SGDID:S000006032, Chr XVI from 339943-340944, Verified ORF, Arginase
YPL117C	YPL117C IDI1 SGDID:S000006038, Chr XVI from 328729-327863, reverse complement, Verified ORF, Isopentenyl diphosphate:dimethylallyl diphosphate isomerase (IPP isomerase)
YPL131W	YPL131W RPL5 SGDID:S000006052, Chr XVI from 303120-304013, Verified ORF, Protein component of the large (60S) ribosomal subunit with similarity to E. coli L18 and rat L5 ribosomal proteins; binds 5S rRNA and is required for 60S subunit assembly"
YPL160W	YPL160W CDC60 SGDID:S000006081, Chr XVI from 246989-250261, Verified ORF, Cytosolic leucyl tRNA synthetase
YPL231W	YPL231W FAS2 SGDID:S000006152, Chr XVI from 108652-114315, Verified ORF, Alpha subunit of fatty acid synthetase
YPL257W-B	YPL257W-B YPL257W-B SGDID:S000007358, Chr XVI from 56748-58052,58054-62016, transposable_element_gene, Retrotransposon TYA Gag and TYB Pol genes; transcribed/translated as one unit; polyprotein is processed to make a nucleocapsid-like protein (Gag)
YPL273W	YPL273W SAM4 SGDID:S000006194, Chr XVI from 25087-26064, Verified ORF, S-adenosylmethionine-homocysteine methyltransferase
YPR033C	YPR033C HTS1 SGDID:S000006237, Chr XVI from 639016-637376, reverse complement, Verified ORF, Cytoplasmic and mitochondrial histidine tRNA synthetase; encoded by a single nuclear gene that specifies two messages; efficient mitochondrial localization requires both a presequence and an amino-terminal sequence"
YPR035W	YPR035W GLN1 SGDID:S000006239, Chr XVI from 642205-643317, Verified ORF, Glutamine synthetase (GS)

YPR041W	YPR041W TIF5 SGDID:S000006245, Chr XVI from 648701-649918, Verified ORF, Translation initiation factor eIF-5; N-terminal domain functions as a GTPase-activating protein to mediate hydrolysis of ribosome-bound GTP; C-terminal domain is the core of ribosomal preinitiation complex formation"
YPR060C	YPR060C ARO7 SGDID:S000006264, Chr XVI from 675628-674858, reverse complement, Verified ORF, Chorismate mutase
YPR062W	YPR062W FCY1 SGDID:S000006266, Chr XVI from 677162-677638, Verified ORF, Cytosine deaminase
YPR108W	YPR108W RPN7 SGDID:S000006312, Chr XVI from 742452-743741, Verified ORF, Essential
YPR110C	YPR110C RPC40 SGDID:S000006314, Chr XVI from 746833-745826, reverse complement, Verified ORF, RNA polymerase subunit
YPR127W	YPR127W YPR127W SGDID:S000006331, Chr XVI from 790079-791116, Verified ORF, Protein of unknown function
YPR145W	YPR145W ASN1 SGDID:S000006349, Chr XVI from 822616-824334, Verified ORF, Asparagine synthetase
YPR191W	YPR191W QCR2 SGDID:S000006395, Chr XVI from 919377-920483, Verified ORF, Subunit 2 of the ubiquinol cytochrome-c reductase complex