

Expression Analysis: Pivot Tab

Descriptions	1511 total Avg Diff	1511 total Abs Call	1511 total Diff Call	1511 total Avg Diff Change	1511 total B=A	1511 total Fold Change
Sort Score						
AFFX-MurIL2_at		-295.4	A			
M16762 Mouse interleukin 2 (IL-2) gene, exon 4						
AFFX-MurIL10_at		148.3	A			
M37897 Mouse interleukin 10 mRNA, complete cds						
AFFX-MurIL4_at		-12.5	A			
M25892 Mus musculus interleukin 4 (Il-4) mRNA, complete cds						
AFFX-MurFAS_at		107.7	A			
M83649 Mus musculus Fas antigen mRNA, complete cds						
AFFX-BioB-5_at		2584.1	P			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioB-M_at		3327.2	P			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioB-3_at		3669.1	P			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioC-5_at		7387.3	P			
J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioC-3_at		7087.4	P			
J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioDn-5_at		2580.8	P			
J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioDn-3_at		8164.5	P			
J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-CreX-5_at		4327.1	P			
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-CreX-3_at		6407.7	P			
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioB-5_st		-47.8	A			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioB-M_st		-728.7	A			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioB-3_st		-524.8	A			
J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)						
AFFX-BioC-5_st		-956.2	A			
J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioC-3_st		171.7	A			
J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioDn-5_st		-135.0	A			
J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)						
AFFX-BioDn-3_st		454.7	A			

J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)  
AFFX-CreX-5\_st 164.5 A  
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)  
AFFX-CreX-3\_st -656.0 A  
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively)  
AFFX-DapX-5\_at 153.4 A  
L38424 B subtilis dapB, jojF, jojG genes corresponding to nucleotides 1358-3197 of L38424 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-DapX-M\_at 394.9 A  
L38424 B subtilis dapB, jojF, jojG genes corresponding to nucleotides 1358-3197 of L38424 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-DapX-3\_at -244.3 A  
L38424 B subtilis dapB, jojF, jojG genes corresponding to nucleotides 1358-3197 of L38424 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-LysX-5\_at -56.5 A  
X17013 B subtilis lys gene for diaminopimelate decarboxylase corresponding to nucleotides 350-1345 of X17013 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-LysX-M\_at -463.5 A  
X17013 B subtilis lys gene for diaminopimelate decarboxylase corresponding to nucleotides 350-1345 of X17013 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-LysX-3\_at 574.4 A  
X17013 B subtilis lys gene for diaminopimelate decarboxylase corresponding to nucleotides 350-1345 of X17013 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-PheX-5\_at -269.5 A  
M24537B subtilis pheB, pheA genes corresponding to nucleotides 2017-3334 of M24537 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-PheX-M\_at -298.0 A  
M24537B subtilis pheB, pheA genes corresponding to nucleotides 2017-3334 of M24537 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-PheX-3\_at 285.1 A  
M24537B subtilis pheB, pheA genes corresponding to nucleotides 2017-3334 of M24537 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-ThrX-5\_at 98.1 A  
X04603 B subtilis thrC, thrB genes corresponding to nucleotides 248-2229 of X04603 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-ThrX-M\_at 220.3 A  
X04603 B subtilis thrC, thrB genes corresponding to nucleotides 248-2229 of X04603 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-ThrX-3\_at 108.1 A  
X04603 B subtilis thrC, thrB genes corresponding to nucleotides 248-2229 of X04603 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-TrpnX-5\_at -19.2 A  
K01391 B subtilis TrpE protein, TrpD protein, TrpC protein corresponding to nucleotides 1883-4400 of K01391 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-TrpnX-M\_at -22.7 A  
K01391 B subtilis TrpE protein, TrpD protein, TrpC protein corresponding to nucleotides 1883-4400 of K01391 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-TrpnX-3\_at 30.6 A  
K01391 B subtilis TrpE protein, TrpD protein, TrpC protein corresponding to nucleotides 1883-4400 of K01391 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)  
AFFX-YFL039C5\_at 12324.0 P  
Saccharomyces cerevisiae /REF=V01288 /DEF=SGD:YFL039C Yeast S. cerevisiae gene for actin /LEN=1118 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YFL039CM\_at 10299.6 P  
 Saccharomyces cerevisiae /REF=V01288 /DEF=SGD:YFL039C Yeast S. cerevisiae gene for actin /LEN=1118 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YFL039C3\_at 9754.5 P  
 Saccharomyces cerevisiae /REF=V01288 /DEF=SGD:YFL039C Yeast S. cerevisiae gene for actin /LEN=1118 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER148w5\_at 5950.3 P  
 Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cerevisiae TATA-binding protein (tfl1d) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER148wM\_at 7368.0 P  
 Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cerevisiae TATA-binding protein (tfl1d) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER148w3\_at 10381.4 P  
 Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cerevisiae TATA-binding protein (tfl1d) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER022w5\_at 617.1 P  
 Saccharomyces cerevisiae /REF=L12026 /DEF=SGD:YER022W Yeast S. cerevisiae subunit of RNA polymerase II holoenzyme/mediator complex /LEN=2064 (5, M, 3 represent transcript regions 5 prime, Middle and 3 prime respectively)

AFFX-YER022wM\_at 1337.9 P  
 Saccharomyces cerevisiae /REF=L12026 /DEF=SGD:YER022W Yeast S. cerevisiae subunit of RNA polymerase II holoenzyme/mediator complex /LEN=2064 (5, M, 3 represent transcript regions 5 prime, Middle and 3 prime respectively)

AFFX-YER022w3\_at 1249.5 P  
 Saccharomyces cerevisiae /REF=L12026 /DEF=SGD:YER022W Yeast S. cerevisiae subunit of RNA polymerase II holoenzyme/mediator complex /LEN=2064 (5, M, 3 represent transcript regions 5 prime, Middle and 3 prime respectively)

AFFX-18srRnaa\_at 3132.9 P  
 Saccharomyces cerevisiae /REF=Z75578 /DEF=SGD:YLR154C Yeast S. cerevisiae 18S ribosomal RNA corresponds to 1-1799 in Z75578 /LEN=1799 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-18srRnab\_at 3877.0 P  
 Saccharomyces cerevisiae /REF=Z75578 /DEF=SGD:YLR154C Yeast S. cerevisiae 18S ribosomal RNA corresponds to 1-1799 in Z75578 /LEN=1799 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-18srRnac\_at 1342.2 P  
 Saccharomyces cerevisiae /REF=Z75578 /DEF=SGD:YLR154C Yeast S. cerevisiae 18S ribosomal RNA corresponds to 1-1799 in Z75578 /LEN=1799 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-18srRnad\_at 2512.8 P  
 Saccharomyces cerevisiae /REF=Z75578 /DEF=SGD:YLR154C Yeast S. cerevisiae 18S ribosomal RNA corresponds to 1-1799 in Z75578 /LEN=1799 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-18srRnae\_at 1426.5 P  
 Saccharomyces cerevisiae /REF=Z75578 /DEF=SGD:YLR154C Yeast S. cerevisiae 18S ribosomal RNA corresponds to 1-1799 in Z75578 /LEN=1799 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-25srRnaa\_at 5920.1 P  
 Saccharomyces cerevisiae /REF=J01355 /DEF=Z73326 SGD:YLR154C Yeast S. cerevisiae 25S ribosomal RNA corresponds to complement of 4212-7605 in Z73326 /LEN=3394 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-25srRnab\_at 2273.4 P  
 Saccharomyces cerevisiae /REF=J01355 /DEF=Z73326 SGD:YLR154C Yeast S. cerevisiae 25S ribosomal RNA corresponds to complement of 4212-7605 in Z73326 /LEN=3394 (regions a-e represent transcript regions 5 prime to 3 prime respectively)

AFFX-25srRnac\_at 751.4 P

Saccharomyces cerevisiae /REF=J01355 /DEF=Z73326 SGD:YLR154C Yeast S.cerevisiae 25S  
 ribosomal RNA corresponds to complement of 4212-7605 in Z73326 /LEN=3394 (regions a-e represent  
 transcript regions 5 prime to 3 prime respectively)  
 AFFX-25srRnad\_at 1355.5 P  
 Saccharomyces cerevisiae /REF=J01355 /DEF=Z73326 SGD:YLR154C Yeast S.cerevisiae 25S  
 ribosomal RNA corresponds to complement of 4212-7605 in Z73326 /LEN=3394 (regions a-e represent  
 transcript regions 5 prime to 3 prime respectively)  
 AFFX-25srRnae\_at 10901.3 P  
 Saccharomyces cerevisiae /REF=J01355 /DEF=Z73326 SGD:YLR154C Yeast S.cerevisiae 25S  
 ribosomal RNA corresponds to complement of 4212-7605 in Z73326 /LEN=3394 (regions a-e represent  
 transcript regions 5 prime to 3 prime respectively)  
 AFFX-YEL002c/WBP1\_at8874.2 P  
 X61388 SGD: YEL002C Yeast S.cerevisiae WBP1 Oligosaccharyltransferase beta subunit  
 AFFX-YEL018w/\_at 2463.7 P  
 U18530 SGD:YEL018W Yeast S. cerevisiae Protein of unknown function  
 AFFX-YEL024w/RIP1\_at 7323.6 P  
 M23316 SGD:YEL024C Yeast S.cerevisiae RIP1 Rieske iron-sulfur protein of the mitochondrial  
 cytochrome bc1 complex .  
 AFFX-YEL021w/URA3\_at970.0 P  
 K02207 SGD:YEL021W Yeast S.cerevisiae URA3 gene coding for OMP decarboxylase  
 11378\_at 1018.0 A  
 Aldehyde dehydrogenase 1, mitochondrial  
 11379\_at 758.1 P  
 Suppressor of Sulfoxide Ethionine resistance  
 11380\_at 509.6 P  
 hypothetical protein  
 11381\_at -33.0 A  
 putative pseudogene  
 11382\_at 170.8 A  
 putative pseudogene  
 11383\_at -17.7 A  
 putative pseudogene  
 11384\_at -135.9 A  
 hypothetical protein  
 11385\_s\_at 930.3 A  
 putative Flo1p homolog  
 11386\_at 374.5 A  
 NADP-linked glutamate dehydrogenase  
 11387\_at 432.4 A  
 similarity to alcohol/sorbitol dehydrogenase  
 11388\_at 4964.4 P  
 similarity to alcohol/sorbitol dehydrogenase  
 11389\_at 3913.6 P  
 ExtraCellular Mutant  
 11390\_at 1362.7 P  
 Calnexin and calreticulin homolog  
 11391\_at 462.0 A  
 questionable ORF  
 11392\_at 728.2 P  
 similarity to hypothetical protein YOR371c  
 11393\_at 3144.2 P  
 hypothetical protein  
 11356\_at 2116.7 P  
 inducible acetyl-coenzyme A synthetase  
 11357\_at 6197.0 P  
 strong similarity to hypothetical proteins YOR365c,YGL139w,YPL221w

11358\_at 1467.7 P  
 peroxisome proliferating transcription factor  
 11359\_at 8563.2 P  
 weak similarity to Legionella small basic protein sbpA  
 11360\_at 462.5 P  
 weak similarity to GTP-binding proteins  
 11361\_at 424.9 P  
 Spc72p interacts with Stu2p in the two-hybrid assay\; Spc72p localizes to the spindle pole bodies.  
 Molecular weight is 72 kD  
 11362\_at 2124.7 P  
 hypothetical protein  
 11363\_at 472.8 P  
 hypothetical protein  
 11364\_at 9182.0 P  
 H-protein subunit of the glycine cleavage system  
 11365\_at 2508.9 P  
 pre-tRNA processing  
 11366\_at -134.4 A  
 questionable ORF  
 11367\_at 10382.4 P  
 Function unknown now  
 11368\_at 1938.4 P  
 Guanine nucleotide exchange factor (a.k.a. GDP-release factor) for cdc42  
 11369\_at 4877.3 P  
 G(sub)1 cyclin  
 11370\_at 8620.5 P  
 cytochrome c heme lyase (CCHL)  
 11371\_at 7108.5 P  
 Pyruvate kinase  
 11372\_at 312.2 P  
 strong similarity to GTP-binding proteins  
 11373\_at 8923.4 P  
 Function unknown now  
 11374\_at 10355.6 P  
 97 kDa protein  
 11375\_at 82.0 A  
 questionable ORF  
 11376\_at 446.1 P  
 hypothetical protein  
 11377\_at 957.6 P  
 Function unknown now  
 11333\_at 4064.8 P  
 An integral subunit of RNase P and apparent subunit of RNase MRP  
 11334\_at 199.4 A  
 Function unknown now  
 11335\_at 1240.5 A  
 FUN21  
 11336\_at 3223.8 P  
 homolog of Snc2p, vesicle-associated membrane protein (synaptobrevin) homolog, forms a complex with  
 Snc2p and Sec9p  
 11337\_at 5992.7 P  
 homolog of Snc2p, vesicle-associated membrane protein (synaptobrevin) homolog, forms a complex with  
 Snc2p and Sec9p  
 11338\_at 4469.0 P  
 myosin  
 11339\_at 146.5 A

similarity to hypothetical protein YOR324c  
 11340\_at 675.6 P  
 hypothetical protein  
 11341\_at 1362.1 P  
 Membrane-spanning Ca-ATPase (P-type),member of the cation transport (E1-E2) ATPases  
 11342\_at 2565.5 P  
 putative nuclear protein  
 11343\_at 763.1 P  
 putative GTP-exchange protein  
 11344\_at 11107.1 P  
 dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase  
 11345\_at 4379.3 P  
 predicted membrane protein  
 11346\_at 7023.9 P  
 95 kDa containng leucine rich tandem repeats  
 11347\_at 2151.9 P  
 Protein with similarity to human RCC1 protein  
 11348\_at 2195.0 P  
 Shows homology to SNF2 transcriptional regulator  
 11349\_at 539.7 P  
 transmembrane domains  
 11350\_at 1931.2 P  
 Serine/threonine kinase  
 11351\_at 8357.8 P  
 protein phosphatase 2A regulatory subunit A  
 11352\_at 1006.9 P  
 DNA glycosylase  
 11353\_at 2710.4 P  
 protein of unknown function  
 11354\_at 4680.5 P  
 regulation of phospholipid metabolism  
 11355\_at 9991.1 P  
 cystathionine gamma-lyase  
 11310\_at 619.3 P  
 possible mitochondrial transit peptide  
 11311\_at 633.3 P  
 Mitochondrial outer membrane protein involved in mitochondrial morphology and inheritance  
 11312\_at 2574.5 P  
 sporulation protein  
 11313\_at 2170.0 P  
 protein of unknown function  
 11314\_at 6827.4 P  
 p24 protein involved in membrane trafficking  
 11315\_i\_at 5408.4 P  
 Heat shock protein of HSP70 family, cytoplasmic  
 11316\_r\_at 0.0 A  
 Heat shock protein of HSP70 family, cytoplasmic  
 11317\_s\_at 15729.1 P  
 Heat shock protein of HSP70 family, cytoplasmic  
 11318\_at 476.9 P  
 strong similarity to A.klebsiana glutamate dehydrogenase  
 11319\_at 9022.0 P  
 Translation elongation factor EF-1beta, GDPV GTP exchange factor for Tef1p/Tef2p  
 11320\_at 8993.6 P  
 Translation elongation factor EF-1beta, GDPV GTP exchange factor for Tef1p/Tef2p  
 11321\_at -498.9 A

Vps8p is a membrane-associated hydrophilic protein which contains a C-terminal cysteine-rich region that conforms to the H2 variant of the RING finger Zn<sup>2+</sup> binding motif.

11322_at	2438.2	P
transcription factor tau (TFIIIC) subunit 138		
11323_at	607.7	P
transcription factor tau (TFIIIC) subunit 138		
11324_at	5267.9	P
protein of unknown function		
11325_at	11304.9	P
p24 protein involved in membrane trafficking		
11326_at	2957.3	P
beta transducin domain		
11327_at	8318.0	P
69 kDa subunit of the heterotrimeric RPA (RF-A) single-stranded DNA binding protein, binds URS1 and CAR1		
11328_at	2261.9	P
34kDa subunit of the tetrameric tRNA splicing endonuclease		
11329_at	4656.9	P
maximal growth		
11330_at	7136.7	P
phosphoribosyl amino imidazolesuccinocarboxamide synthetase		
11331_at	587.8	P
protein kinase		
11332_at	854.6	P
protein kinase domain		
11287_f_at	564.2	P
strong similarity to members of the srp1p/Tip1p family		
11288_at	299.7	P
membrane protein		
11289_at	866.9	P
membrane protein		
11290_at	2278.9	P
membrane protein		
11291_at	172.1	P
membrane protein		
11292_at	-120.5	A
hypothetical protein		
11293_at	880.7	P
membrane protein		
11294_g_at	2366.7	P
membrane protein		
11295_r_at	1276.4	P
membrane protein		
11296_s_at	902.8	P
membrane protein		
11297_at	2138.6	P
Outer carnitine acetyltransferase, mitochondrial		
11298_at	2477.5	P
ankyrin repeat		
11299_at	1583.8	P
Shows homology to the human oxysterol binding protein (OSBP)		
11300_at	-22.9	A
predicted nuclear targeting signal		
11301_i_at	-542.4	A
FLO1 putative cell wall glycoprotein		
11302_at	364.5	P

predicted membrane protein  
 11303\_s\_at 359.7 P  
 strong similarity to hypothetical protein YHR212c  
 11304\_at 385.2 A  
 putative pseudogene  
 11305\_s\_at 144.3 A  
 putative pseudogene  
 11306\_at 554.7 P  
 Potential membrane protein  
 11307\_s\_at 2020.6 P  
 identical to YHR214w hypothetical protein, similarity to Sta1p  
 11308\_s\_at 240.6 A  
 Potential membrane protein  
 11309\_at 54.5 A  
 Potential membrane protein  
 11261\_at -1428.5 A  
 potential mitochondrial transit peptide  
 11262\_s\_at 14489.5 P  
 Acid phosphatase, secreted  
 11263\_f\_at 7054.5 P  
 strong similarity to IMP dehydrogenases  
 11264\_f\_at 8109.6 P  
 strong similarity to IMP dehydrogenases  
 11265\_i\_at 694.8 P  
 hypothetical protein  
 11266\_f\_at 3869.8 P  
 hypothetical protein  
 11267\_at 148.6 P  
 identified by SAGE  
 11268\_at -8.7 A  
 hypothetical protein  
 11269\_at 144.3 A  
 non-annotated SAGE orf Found forward in NC\_001133 between 101217 and 101354 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11270\_at -12.4 A  
 non-annotated SAGE orf Found forward in NC\_001133 between 23764 and 23898 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11271\_at 138.3 A  
 non-annotated SAGE orf Found reverse in NC\_001133 between 31215 and 31373 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11272\_at 434.8 P  
 non-annotated SAGE orf Found reverse in NC\_001133 between 222994 and 223152 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11273\_at 432.0 P  
 non-annotated SAGE orf Found forward in NC\_001133 between 73444 and 73614 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11274\_at 715.7 P  
 non-annotated SAGE orf Found reverse in NC\_001133 between 139298 and 139468 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11275\_at 946.9 P  
 non-annotated SAGE orf Found reverse in NC\_001133 between 166468 and 166617 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11276\_at 167.3 A  
 non-annotated SAGE orf Found reverse in NC\_001133 between 3170 and 3394 with 100% identity. See  
 citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11277\_at -6.9 A



non-annotated SAGE orf Found forward in NC\_001133 between 19729 and 19968 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11278\_f\_at 1065.3 P

non-annotated SAGE orf Found reverse in NC\_001133 between 19977 and 20123 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11279\_s\_at 496.7 P

non-annotated SAGE orf Found reverse in NC\_001133 between 22397 and 22687 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11280\_at 95.7 A

non-annotated SAGE orf Found reverse in NC\_001133 between 29012 and 29179 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11281\_at 200.2 A

non-annotated SAGE orf Found forward in NC\_001133 between 29954 and 30166 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11282\_i\_at -46.1 A

non-annotated SAGE orf Found reverse in NC\_001133 between 182850 and 183005 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11283\_r\_at 241.1 P

non-annotated SAGE orf Found reverse in NC\_001133 between 182850 and 183005 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11284\_f\_at 6673.9 P

non-annotated SAGE orf Found reverse in NC\_001133 between 182850 and 183005 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11285\_at -9.9 A

non-annotated SAGE orf Found forward in NC\_001133 between 198205 and 198339 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11286\_at 33.0 A

non-annotated SAGE orf Found reverse in NC\_001133 between 199737 and 199886 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11238\_at 76.9 A

non-annotated SAGE orf Found forward in NC\_001133 between 200934 and 201074 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11239\_at -370.0 A

non-annotated SAGE orf Found reverse in NC\_001133 between 203077 and 203223 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11240\_s\_at 103.1 P

non-annotated SAGE orf Found reverse in NC\_001133 between 219555 and 219719 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11241\_at 379.5 P

non-annotated SAGE orf Found reverse in NC\_001133 between 138484 and 138627 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11242\_f\_at 30.6 A

non-annotated SAGE orf Found forward in NC\_001133 between 223093 and 223230 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11243\_s\_at 432.9 P

non-annotated SAGE orf Found forward in NC\_001133 between 223253 and 223423 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11244\_s\_at 366.6 P

non-annotated SAGE orf Found forward in NC\_001133 between 223333 and 223476 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 11245\_i\_at -223.0 A

Centromere  
 11246\_r\_at -51.3 A

Centromere  
 11247\_s\_at 9611.9 P

strong similarity to members of the Sir1p/Tip1p family

11248\_s\_at 990.0 P  
 strong similarity to members of the Sir1p/Tip1p family  
 11249\_f\_at 2921.1 P  
 strong similarity to members of the Srp1p/Tip1p family  
 11250\_s\_at 1160.5 P  
 strong similarity to Pep1p  
 11251\_s\_at 347.5 P  
 homology to maltase(alpha-D-glucosidase)  
 11252\_s\_at -178.9 A  
 questionable ORF  
 11253\_s\_at 18.7 A  
 High-affinity hexose transporter  
 11254\_at 241.2 P  
 strong similarity to E.coli galactoside O-acetyltransferase  
 11255\_at 168.2 A  
 hypothetical protein  
 11256\_at -3.2 A  
 strong similarity to Mal62p  
 11257\_at 36.2 A  
 hypothetical protein  
 11258\_at 189.6 A  
 High-affinity hexose transporter  
 11259\_at 1302.2 P  
 similarity to Methanobacterium arylalkylphosphatase related protein  
 11260\_at 3019.9 P  
 strong similarity to S.pombe isp4 protein  
 11215\_at 123.3 M  
 questionable ORF  
 11216\_at 5045.9 P  
 CH3HC4 zinc-binding integral peroxisomal membrane protein  
 11217\_at 1270.8 P  
 Protein required for COB mRNA stability or 5' processing  
 11218\_at 3031.3 P  
 mitochondrial nuclease  
 11219\_at 1405.4 P  
 weak similarity to rat omega-conotoxin-sensitive calcium channel alpha-1 subunit rbB-I  
 11220\_at 736.2 P  
 similarity to YIL130p and Put3p  
 11221\_at 6475.4 P  
 involved in secretion of proteins that lack classical secretory signal sequences  
 11222\_at 2105.2 P  
 weak similarity to Tor2p  
 11223\_at 898.8 P  
 RNA splicing factor  
 11224\_at 92.1 A  
 questionable ORF  
 11225\_at 631.6 P  
 ExtraCellular Mutant  
 11226\_at 9197.4 P  
 strong similarity to aconitate hydratase  
 11227\_at 1451.2 P  
 hypothetical protein  
 11228\_at 9629.3 P  
 strong similarity to Pho87p  
 11229\_at 1335.1 P  
 ubiquitin carboxyl-terminal hydrolase

11230\_at 12584.7 P  
 Elongation enzyme 1, required for the elongation of the saturated fatty acid tetradecanoic acid (14:0) to that of hexadecanoic acid (16:0)

11231\_at -57.4 A  
 questionable ORF

11232\_at 1416.2 P  
 Protein involved in initiation of DNA replication

11233\_at 4504.4 P  
 similarity to Sly41p

11234\_at 3782.6 P  
 hypothetical protein

11235\_at 8195.7 P  
 Ribosomal protein S14B (rp59B)

11236\_at 4157.1 P  
 Ribosomal protein S22A (S24A) (rp50) (YS22)

11237\_at 11305.2 P  
 Ribosomal protein L39 (L46) (YL40)

11192\_at 743.5 P  
 questionable ORF

11193\_at 4465.7 P  
 protein kinase homolog

11194\_at 1953.2 P  
 putative mannosyltransferase

11195\_at 198.8 P  
 hypothetical protein

11196\_at 3157.5 P  
 hypothetical protein

11197\_at 6022.0 P  
 A new gene encoding a protein that is related to Mnn10p, and that is in a complex containing other MNN gene products.

11198\_at -81.3 A  
 questionable ORF

11199\_at 2078.4 P  
 similarity to hypothetical protein YJR030c

11200\_at 1275.0 P  
 essential for assembly of a functional F1-ATPase

11201\_at 1202.5 P  
 Putative homolog of subunit 1 of bovine prefoldin, a chaperone comprised of six subunits

11202\_at 7402.7 P  
 hypothetical protein

11203\_i\_at 13956.6 P  
 Ribosomal protein L17B (L20B) (YL17)

11204\_s\_at 8606.3 P  
 Ribosomal protein L17B (L20B) (YL17)

11205\_i\_at 7567.7 P  
 Ribosomal protein L17B (L20B) (YL17)

11206\_f\_at 13440.4 P  
 Ribosomal protein L17B (L20B) (YL17)

11207\_at 666.0 P  
 transcription factor

11208\_at 505.4 A  
 questionable ORF

11209\_at 8640.4 P  
 Cell wall beta-glucan assembly

11210\_at 10067.0 P  
 subunit 3 of replication factor-A

11211\_at 3712.5 P  
carboxypeptidase yscS  
11212\_at 6605.3 P  
similarity to YBR162c  
11213\_at -159.9 A  
An a-specific gene that is induced to a higher expression level by alpha factor  
11214\_at 36.4 A  
questionable ORF  
11170\_at 611.2 A  
transcription factor containing a SET domain  
11171\_at 8816.8 P  
Farnesyl diphosphate synthetase (FPP synthetase)  
11172\_at 7736.8 P  
Ubiquinol cytochrome-c reductase subunit 8 (11 kDa protein)  
11173\_at 2980.4 P  
Protein kinase homolog, mutant is salt and pH sensitive  
11174\_at 2642.7 P  
putative catalytic subunit of cAMP-dependent protein kinase  
11175\_at 178.7 P  
hypothetical protein  
11176\_at 492.0 A  
weak similarity to dnaJ proteins  
11177\_at 193.0 A  
hypothetical protein  
11178\_at 653.6 P  
member of the Pir1p/Hsp150p/Pir3p family  
11179\_at 8421.6 P  
Heat shock protein, secretory glycoprotein  
11180\_at 8426.0 P  
Protein with homology to Hsp150p and Pir1p, Pir2p, and Pir3p  
11181\_at 9180.0 P  
Factor arrest protein  
11182\_at 1384.2 P  
sensitive to sulfonylurea herbicides on complex media (YPD)  
11183\_at 1248.5 P  
Fructose-2,6-bisphosphatase  
11184\_at 1582.8 P  
Protein involved in vacuolar sorting  
11185\_at 136.4 P  
L-myo-inositol-1-phosphate synthase  
11186\_at 1654.4 P  
questionable ORF  
11187\_at 9700.8 P  
similarity to hypothetical protein YDL123w  
11188\_at 711.8 P  
questionable ORF  
11189\_at 681.7 P  
similarity to hypothetical protein YDR131c  
11190\_at 8587.2 P  
RNA polymerase I subunit, not shared (A34.5)  
11191\_at 938.7 P  
weak similarity to C.elegans hypothetical protein C43G2.4  
11147\_at 961.4 P  
IME2-Dependent Signalling  
11148\_at 4753.2 P  
weak similarity to T.pacificus retinal-binding protein

11149\_at 143.8 A  
hypothetical protein  
11150\_at 9976.8 P  
16.5 kDa inner membrane protein required for import of mitochondrial precursor proteins  
11151\_at 851.5 P  
questionable ORF  
11152\_g\_at 1953.8 P  
questionable ORF  
11153\_at 1108.9 P  
Serine-threonine protein kinase  
11154\_at 2292.2 P  
fourth-largest subunit of RNA polymerase II  
11155\_at 2186.0 P  
Probable glycosyltransferase of KRE2/KTR1VYUR1 family; located in the Golgi  
11156\_s\_at 11174.4 P  
translation initiation factor eIF4A  
11157\_at 592.2 P  
self-glucosylating initiator of glycogen synthesis; similar to mammalian glycogenin  
11158\_i\_at 4486.5 A  
Ribosomal protein S21B (S26B) (YS25)  
11159\_s\_at 10412.7 P  
Ribosomal protein S21B (S26B) (YS25)  
11160\_at 260.1 P  
questionable ORF  
11161\_at 5351.8 P  
putative plasma membrane transporter capable of transporting sphingoid long chain bases into cells  
11162\_at 1495.6 P  
mitochondrial carrier protein  
11163\_at 200.2 P  
weak similarity to human phospholipase D  
11164\_at 1481.5 P  
weak similarity to nonepidermal *Xenopus* keratin, type I  
11165\_at 10577.0 P  
carbamoyl-phosphate synthetase, aspartate transcarbamylase, and glutamine amidotransferase  
11166\_at 2045.9 P  
180 kDa high affinity potassium transporter  
11167\_at 2400.1 P  
MAP kinase kinase (MEK), may act as a scaffolding protein for Sho1p, Ste11p, and Hog1p  
11168\_at 375.0 P  
negative transcriptional regulator  
11169\_at 1348.2 P  
Nit2 nitrilase  
11124\_at 4053.2 P  
translational repressor of GCN4  
11125\_at 3124.8 P  
Like Sm-B protein; contains the Sm consensus motifs and most closely resembles Sm-B  
(Fromont-Racine et al, 1997 Nature Genetics 16:277-282)  
11126\_at 6857.7 P  
weak similarity to *D.melanogaster* troponin T and human nucleolin  
11127\_at 7670.5 P  
weak similarity to dog-fish transition protein S2  
11128\_at 11315.5 P  
D-ribulose-5-Phosphate 3-epimerase  
11129\_at 305.3 P  
questionable ORF  
11130\_at -221.2 A

questionable ORF  
11131\_at 4606.3 P  
hypothetical protein  
11132\_at 8498.1 P  
Putative inorganic phosphate transporter  
11133\_at 2575.5 P  
With NCA2, regulates proper expression of subunits 6 (Atp6p) and 8 (Atp8p ) of the Fo-F1 ATP synthase  
11134\_at 4169.3 P  
Anti-silencing protein that causes depression of silent loci when overexpressed  
11135\_at 1708.9 P  
similarity to Met30p and N.crassa sulfur controller-2  
11136\_at 4092.6 P  
Component of Chaperonin Containing T-complex subunit seven  
11137\_at 1241.6 P  
GATA zinc finger protein 3 homologous to Dal80 in structure and function  
11138\_at 6253.8 P  
weak similarity to ATPase Drs2p  
11139\_at 4008.7 P  
strong similarity to hypothetical S. pombe protein  
11140\_at 279.1 P  
similarity to hypothetical S. pombe protein  
11141\_at 443.7 P  
Serine\Threonine protein kinase, positively regulated by IME1  
11142\_at 24.0 A  
similarity to hypothetical protein YKR029c  
11143\_at 995.4 P  
weak similarity to C.elegans hypothetical protein F45G2.c  
11144\_at 486.4 P  
putative regulatory protein  
11145\_at 2652.2 P  
mitochondrial elongation factor G-like protein  
11146\_at 2250.9 P  
gamma-glutamylcysteine synthetase  
11102\_at 3572.6 P  
similarity to hypothetical C. elegans protein C56A3.8  
11103\_at 1463.4 P  
Involved in chitin biosynthesis and\or its regulation  
11104\_at 3157.6 P  
SIT4 associated protein, MW of 185 kDa  
11105\_at 9114.5 P  
similarity to hypothetical C. elegans protein T15B7.2  
11106\_at 4832.7 P  
ribosomal protein Yml49, mitochondrial  
11107\_at 1432.6 P  
putative 163 kDa protein kinase  
11108\_at 1772.9 P  
similarity to E.hirae NaH-antiporter NapA  
11109\_at 1135.7 P  
outward-rectifier potassium channel  
11110\_at 1591.9 P  
DNA helicase  
11111\_at 4896.0 P  
weak similarity to human G protein-coupled receptor  
11112\_at 1426.6 P  
Part of the DNA polymerase II complex, acts in a checkpoinnt pathway during S-phase  
11113\_at 127.2 A

shows homology to DNA binding domain of Gal4p, has a leucine zipper motif and acidic region\;

lexA-Sip4p activates transcription

11114\_at 1341.1 P

Ornithine carbamoyltransferase

11115\_at 1062.6 P

tRNA ligase

11116\_at 17.4 A

questionable ORF

11117\_at 246.5 P

70 kD component of the Exocyst complex\; required for exocytosis

11118\_at 1374.9 P

similarity to hypothetical protein YKR021w

11119\_at 1078.8 P

similarity to hypothetical protein YKR019c

11120\_at 1857.4 P

strong similarity to hypothetical protein YKR018c

11121\_at 3982.9 P

54.8 kDa actin-related protein

11122\_at 9733.9 P

May be required during cell division for faithful partitioning of the ER-nuclear envelope membranes, involved in control of mitotic chromosome transmission

11123\_at 6021.2 P

Similar to plant PR-1 class of pathogen related proteins

11079\_at 5316.5 P

Similar to plant PR-1 class of pathogen related proteins

11080\_at 183.9 A

hypothetical protein

11081\_at 6542.7 P

Establishes Silent omatin\; homolog of TOF2

11082\_at 307.3 P

questionable ORF

11083\_at 2210.7 P

required for structural maintenance of chromosomes

11084\_at 2220.4 P

DnaJ-like protein of the endoplasmic reticulum membrane

11085\_at 1700.4 P

hypothetical protein

11086\_at 1275.7 P

Acetylglutamate Synthase

11087\_at 572.4 P

similarity to AMP deaminases

11088\_at 4677.5 P

similarity to C.elegans hypothetical protein

11089\_at 4324.8 P

strong similarity to human esterase D

11090\_at 1018.3 A

questionable ORF

11091\_at 994.5 P

hypothetical protein

11092\_at 5400.9 P

weak similarity to DNA-directed DNA polymerase II chain C

11093\_at 116.2 A

hypothetical protein

11094\_at 6301.0 P

Mitochondrial ribosomal protein MRPL8 (YmL8) (E. coli L17)

11095\_at 2831.4 P

similarity to *S.pombe* SPAC13G6.3 protein  
 11096\_at 797.2 P  
 82-kDa protein, with putative coiled-coil domain, has carboxy-terminal domain, containing heptad repeats, that binds Nsp1p; nucleoporin  
 11097\_at 2939.7 P  
 similarity to kynurenine aminotransferase and glutamine-phenylpyruvate transaminase  
 11098\_at 612.6 P  
 Homolog of human CLN3  
 11099\_at 220.5 A  
 strong similarity to hypothetical protein YBR270c  
 11100\_at 192.5 P  
 probable serine/threonine kinase  
 11101\_at 1026.4 P  
 Metalloregulatory protein involved in zinc-responsive transcriptional regulation  
 11057\_at 10050.6 P  
 similarity to *R.fascians* hypothetical protein 6  
 11058\_at 3942.1 P  
 Translocase for the insertion of proteins into the mitochondrial inner membrane.  
 11059\_at 1634.8 P  
 Vacuolar protein similar to mouse gene H<beta>58  
 11060\_at 5961.0 P  
 Glyceraldehyde-3-phosphate dehydrogenase 1  
 11061\_g\_at 7194.3 P  
 Glyceraldehyde-3-phosphate dehydrogenase 1  
 11062\_at 928.9 P  
 hypothetical protein  
 11063\_at 4809.0 P  
 DEAD-box family helicase required for mRNA export from nucleus  
 11064\_at 877.9 P  
 hypothetical protein  
 11065\_at 3661.6 P  
 similarity to hypothetical protein YBR273c  
 11066\_at 593.3 P  
 Regulator of Ty1 Transposition  
 11067\_at 693.1 P  
 similarity to *E.coli* lipoate-protein ligase A  
 11068\_at 171.5 A  
 strong similarity to succinate dehydrogenase flavoprotein  
 11069\_at 699.2 P  
 GTPase-activating protein for Ypt6  
 11070\_at -2683.9 A  
 similarity to hypothetical protein YKR015c  
 11071\_at 7106.8 P  
 Putative microtubule-associated protein (MAP)  
 11072\_at 7437.0 P  
 Nucleoskeletal protein found in nuclear pores and spindle pole body  
 11073\_at 1676.3 P  
 similarity to human protein interacting with human nuclearpore protein Nup93  
 11074\_at 7.4 A  
 strong similarity to hypothetical protein YJL037w  
 11075\_at 1156.6 P  
 strong similarity to hypothetical protein YJL038c  
 11076\_at 527.8 P  
 weak similarity to Mvp1p  
 11077\_at 1758.0 P  
 weak similarity to *P.gingivalis* PgaA and *B.japonicum* nitrogen fixation protein



11078\_at 10720.9 P  
Homologue of mammalian BiP (GPR78) protein\; member of the HSP70 gene family  
11034\_at 5118.0 P  
putative RNA helicase  
11035\_at 743.7 P  
questionable ORF  
11036\_at 1219.7 P  
Geranylgeranyltransferase Type II alpha subunit (PGGTase-II, alpha subunit)  
11037\_at 1522.8 P  
spindle-assembly checkpoint protein  
11038\_at 2121.3 P  
similarity to C.elegans hypothetical protein T05G5.8  
11039\_at 72.8 A  
hypothetical protein  
11040\_at 1030.0 P  
hypothetical protein  
11041\_at 10651.5 P  
small subunit of ribonucleotide reductase  
11042\_at 795.9 P  
member of yeast Pol I core factor (CF) also composed of Rrn11p, Rrn6p and TATA-binding protein  
11043\_at 893.0 P  
similar to Aps1p and mammalian small subunit (sigma-2 adaptin) of plasma membrane-associated clathrin assembly complex (AP-2)  
11044\_at 320.4 P  
Nuclear gene encoding mitochondrial protein  
11045\_at -32.0 A  
questionable ORF  
11046\_at 2469.4 P  
weak similarity to S.pombe hypothetical protein SPAC23A1.16  
11047\_at 3960.1 P  
similarity to P.falciparum glutamic acid-rich protein  
11048\_at 243.0 P  
hypothetical protein  
11049\_g\_at 628.6 P  
hypothetical protein  
11050\_at 1982.4 P  
questionable ORF  
11051\_at 802.2 P  
hypothetical protein  
11052\_at 3285.9 P  
weak similarity to hypothetical protein YNL278w and YLR187w  
11053\_at 173.2 P  
questionable ORF  
11054\_at 6607.0 P  
Cytoplasmic chaperonin subunit gamma  
11055\_at 809.0 P  
Checkpoint protein required for cell cycle arrest in response to loss of microtubule function  
11056\_at 8931.3 P  
weak similarity to regulatory protein PHO81  
11010\_at 5229.2 P  
weak similarity to chicken hypothetical protein  
11011\_at 3166.6 P  
weak similarity to C.elegans hypothetical protei ZK792.5  
11012\_at 1139.1 P  
questionable ORF  
11013\_at 10980.1 P

Component of Chaperonin Containing T-complex subunit eight

11014\_at 68.2 A  
hypothetical protein

11015\_at 2919.4 P  
cyclin-related subunit of the kinase complex that phosphorylates the RPO21 CTD (carboxy-terminal domain)\; also called CTDK-I beta subunit

11016\_at 1665.8 P  
adenylate cyclase

11017\_at 2482.7 P  
Multicopy suppressor of ypt6 null mutation

11018\_at 1121.9 P  
hypothetical protein

11019\_at 12903.2 P  
64-kDa, alpha subunit of oligosaccharyltransferase complex\; homologous to mammalian ribophorin I

11020\_i\_at 3252.4 P  
Subunit of 20S proteasome

11021\_f\_at 4662.5 P  
Subunit of 20S proteasome

11022\_at 10417.2 P  
Subunit of 20S proteasome

11023\_at 8784.4 P  
weak similarity to A.thaliana aminoacid permease AAP4

11024\_at 4208.6 P  
Protein component of the U3 small nucleolar ribonucleoprotein (snoRNP)

11025\_at 1512.3 P  
hypothetical protein

11026\_at 10460.9 P  
alpha-agglutinin

11027\_at 1162.3 P  
beta-adaptin, large subunit of the clathrin-associated protein complex

11028\_at 1221.0 P  
DNA-directed DNA polymerase delta, 55 KD subunit

11029\_at 3836.3 P  
Translation initiation factor eIF-2 alpha subunit

11030\_at 206.1 A  
similarity to S.pombe hypothetical protein

11031\_s\_at 14492.8 P  
glyceraldehyde 3-phosphate dehydrogenase

11032\_at 1303.2 P  
ATP sulfurylase

11033\_at 1689.4 P  
Homologue of the SPC12 subunit of mammalian signal peptidase complex. Protein is important for efficient signal peptidase activity.

10988\_at 350.6 P  
hypothetical protein

10989\_at 839.3 P  
hypothetical protein

10990\_at 2901.4 P  
similarity to C.elegans B0491.1 protein

10991\_at 5525.9 P  
strong similarity to S.pombe hypothetical protein SPBC16C6.05

10992\_at 2981.5 P  
strong similarity to Sng1p

10993\_at 11716.9 P  
dihydroxyacid dehydratase

10994\_at 10818.4 P

Peptidyl-prolyl cis/trans isomerase (PPIase)  
 10995\_at 1805.1 P  
 questionable ORF  
 10996\_at 1946.0 P  
 peroxisomal acyl-CoA thioesterase  
 10997\_at 193.8 P  
 questionable ORF  
 10998\_at 230.4 P  
 meiotic recombination protein  
 10999\_at 36.7 A  
 meiotic recombination protein  
 11000\_at 737.3 P  
 Sm-like protein  
 11001\_at 8.9 A  
 hypothetical protein  
 11002\_at 6467.6 P  
 weak similarity to C.elegans Z49131\_E ZC373.5 protein  
 11003\_at 7758.9 P  
 3-hydroxyanthranilic acid dioxygenase  
 11004\_at 730.6 A  
 similarity to hypothetical protein YJL181w  
 11005\_at 2489.8 P  
 Component of a complex guanine nucleotide exchange activity for the ADP-ribosylation factor ARF  
 11006\_at 1150.5 P  
 cyclophilin related to the mammalian CyP-40\; physically interacts with RPD3 gene product a  
 11007\_at 977.9 P  
 similarity to Drosophila DmX gene  
 11008\_at 1067.2 P  
 Required for assembly of active cytochrome c oxidase  
 11009\_at 407.9 P  
 DNA-dependent ATPase, homologous to human Cockayne syndrome B gene ERCC6, that is a putative  
 helicase  
 10965\_at 703.7 P  
 similarity to human E6-associated protein  
 10966\_at 132.4 A  
 questionable ORF  
 10967\_at 328.6 A  
 questionable ORF  
 10968\_at 547.1 P  
 hypothetical protein  
 10969\_at 1232.0 P  
 putative transport protein involved in intracellular iron metabolism  
 10970\_at 3979.0 P  
 hypothetical protein  
 10971\_at 4610.1 P  
 Protein in nuclear pore complex\; may function in nuclear envelope integrity\; may also be involved in  
 tRNA biogenesis  
 10972\_at 82.6 A  
 third (55 kDa) subunit of DNA polymerase delta  
 10973\_at 8792.3 P  
 weak similarity to putative transport protein YKR103w  
 10974\_at 3820.0 P  
 Mitochondrial matrix protein involved in protein import\; subunit of Scel endonuclease  
 10975\_at 2364.2 P  
 weak similarity to Xenopus vimentin 4  
 10976\_at 3707.9 P

anaerobically expressed form of translation initiation factor eIF-5A  
10977\_at 12672.3 P  
iso-1-cytochrome c  
10978\_at 1909.8 P  
Associated with ferric reductase  
10979\_at 473.8 P  
Interacts with Syf1p: Isy1p was identified through a two-hybrid screen with Syf1p as bait (SYF1 is synthetic lethal with PRP17 KO). A subsequent screen with Isy1p as bait isolated Syf1p, Prp39p and YPL213p (a homologue of U2A ) suggesting an involvement in pre-mRNA splicing. Immunoprecipitation experiments demonstrated that Isy1p interacts with the spliceosome before step 1 of splicing, prior to the dissociation of Prp2p, and remains associated throughout both steps of splicing.  
10980\_at 1871.3 P  
osmotic growth protein  
10981\_at 3613.0 P  
Nucleotide excision repair protein involved in G(sub)2 repair of inactive genes  
10982\_at 329.5 P  
hypothetical protein  
10983\_at 1760.3 P  
similarity to hypothetical protein YML047c  
10984\_at 644.3 P  
Protein required for growth at high temperature  
10985\_at 1260.0 P  
hypothetical protein  
10986\_at 1947.9 P  
thymidylate kinase  
10987\_at 5327.0 P  
Clathrin-associated protein, small subunit  
10943\_at 2172.4 P  
Putative serine/threonine protein kinase that enhances spermine uptake  
10944\_at 99.6 M  
basic helix-loop-helix protein  
10945\_at -84.9 A  
similarity to Mnn4p  
10946\_at 1015.7 P  
52-kDa amidase specific for N-terminal asparagine and glutamine  
10947\_at 6127.8 P  
A12.2 subunit of RNA polymerase I  
10948\_at 11346.2 P  
subunit of chaperonin subunit epsilon  
10949\_at 7310.4 P  
actin-related gene  
10950\_at 1976.2 P  
phosphatidylinositol kinase homolog  
10951\_at 1879.9 P  
Essential protein of unknown function  
10952\_at 2467.9 P  
Subunit 2 of Replication Factor C\; homologous to human RFC 37 kDa subunit  
10953\_at 4287.6 P  
controls 6-N-hydroxylaminopurine sensitivity and mutagenesis  
10954\_at 12855.2 P  
similarity to C.elegans hypothetical protein C14A4.1  
10955\_at -131.2 A  
questionable ORF  
10956\_at 5636.6 P  
strong similarity to C.elegans hypothetical protein and similarity to YLR243w  
10957\_at 8643.2 P

Methylene-fatty-acyl-phospholipid synthase (unsaturated phospholipid N-methyltransferase)  
10958\_at 5862.2 P  
Protein interacts with Gsp1p  
10959\_at 2766.4 P  
putative mannosyltransferase  
10960\_at 3869.0 P  
Component of 10 nm filaments of mother-bud neck  
10961\_at 9150.0 P  
Mir1p has been purified as a mitochondrial import receptor (p32) which can bind to signal sequence regions of mitochondrial preproteins. In addition, it has been purified as PTP (PiC), a mitochondrial phosphate transport protein. Mir1p localizes between the inner and outer mitochondrial membranes  
10962\_at 1813.5 P  
similarity to mammalian indoleamine 2,3-dioxygenase  
10963\_at 1975.1 P  
questionable ORF  
10964\_at 4482.4 P  
hypothetical protein  
10920\_at 115.7 P  
questionable ORF  
10921\_at 432.8 P  
hypothetical protein  
10922\_at 618.9 P  
hypothetical protein  
10923\_at 1579.8 P  
weak similarity to *S.pombe* hypothetical protein SPAC1B3.08  
10924\_at 12131.8 P  
hypothetical protein  
10925\_at 1711.8 P  
gamma subunit of G protein coupled to mating factor receptors  
10926\_at 1013.5 P  
questionable ORF  
10927\_at 3076.5 P  
weak similarity to *S.pombe* hypothetical protein SPBC14C8.18c  
10928\_at 978.9 P  
hypothetical protein  
10929\_at 948.9 P  
box protein with several leucine rich repeats  
10930\_at 3536.9 P  
Benomyl dependent tubulin mutant  
10931\_at 1441.8 P  
Component of a pre-mRNA polyadenylation factor that interacts with poly(A) polymerase  
10932\_at 417.9 P  
meiotic gene expression\; meiosis inducing protein  
10933\_at 6584.3 P  
Ribosomal protein L43B  
10934\_at 237.0 P  
protein related to mitochondrial carriers  
10935\_at 1415.2 P  
similarity to *Corynebacterium* 2,5-diketo-D-gluconic acid reductase and aldehyde reductases  
10936\_at 647.5 P  
weak similarity to Caj1p  
10937\_at 841.2 P  
weak similarity to *Bacillus licheniformis* esterase  
10938\_at 543.1 P  
ubiquitin hydrolase  
10939\_at 1914.1 P

F

weak similarity to Bud3p  
 10940\_at 2881.1 P  
 weak similarity to superoxide dismutases  
 10941\_at 1401.8 P  
 hypothetical protein  
 10942\_at 5673.1 P  
 CTP synthase  
 10897\_at 7099.0 P  
 Cu, Zn superoxide dismutase  
 10898\_at 10511.2 P  
 strong similarity to human adenosine kinase  
 10899\_at 379.3 A  
 ExtraCellular Mutant  
 10900\_at 1215.3 P  
 weak similarity to acylglycerol lipase  
 10901\_at 275.9 A  
 similarity to hypothetical protein YIL014c-a  
 10902\_at 3047.6 P  
 carbamyl phosphate synthetase  
 10903\_at 934.5 P  
 similarity to human myotubularin  
 10904\_at 1756.9 P  
 weak similarity to E.coli colanic acid biosynthesis positive regulator RcsB  
 10905\_at 1221.9 P  
 involved in nuclear function  
 10906\_at 6658.9 P  
 similarity to bacterial, chloroplast and mitochondrial ribosomal protein S7  
 10907\_at 1123.7 A  
 questionable ORF  
 10908\_at 389.3 P  
 similarity to hypothetical protein YBL043w  
 10909\_at 4873.3 P  
 similarity to hypothetical protein YPR114w  
 10910\_at 6802.6 P  
 zinc metallo-protease that catalyzes the first step of N-terminal processing of the yeast a-factor precursor  
 10911\_at 3363.5 P  
 weak similarity to Helicobacter pylori UreD protein  
 10912\_at 249.5 P  
 similarity to human retinoblastoma binding protein 2  
 10913\_at -380.8 A  
 hypothetical protein  
 10914\_at 8456.5 P  
 F(1)F(0)-ATPase complex beta subunit, mitochondrial  
 10915\_at 723.5 P  
 CCR4 associated factor  
 10916\_at 10464.0 P  
 Ribosomal protein S5 (S2) (rp14) (YS8)  
 10917\_at 2192.9 P  
 weak similarity to Staphylococcus multidrug resistance protein  
 10918\_at 2468.3 P  
 similarity to human KIAA0171 protein  
 10919\_at 2337.2 P  
 similarity to human prostate-specific membrane antigen and transferrin receptor protein  
 10875\_at 2710.1 P  
 similarity to regulatory protein Ard1p  
 10876\_at -159.8 A

questionable ORF  
10877\_at 1045.6 P  
weak similarity to hypothetical protein YNL024c  
10878\_at 1970.2 P  
similarity to O-succinylhomoserine (thiol)-lyase  
10879\_at 912.4 P  
specific alpha-mannosidase  
10880\_at 1922.9 P  
Putative Upf1p interacting protein  
10881\_at 10956.9 P  
strong similarity to hypothetical protein YDR399w  
10882\_at 504.3 P  
similarity to paramyosin, myosin  
10883\_at 51.7 P  
Required for maintenance of chromosomes and minichromosomes  
10884\_at 1482.2 P  
weak similarity to human 3,5 -cyclic-GMP phosphodiesterase  
10885\_at 5143.9 P  
ExtraCellular Mutant  
10886\_at 854.3 P  
similarity to C.elegans hypothetical protein T08A11.1  
10887\_at 11307.7 P  
Homoserine dehydrogenase (L-homoserine:NADP oxidoreductase)  
10888\_at 1872.0 P  
involved in cell-cycle regulation of histone transcription  
10889\_at 927.3 P  
hypothetical protein  
10890\_at 1273.3 P  
similarity to thiamin pyrophosphokinase  
10891\_at 8875.4 P  
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase  
10892\_at 2875.0 P  
involved in mitochondrial genome maintenance  
10893\_s\_at 10939.4 P  
Ribosomal protein S4A (YS6) (rp5) (S7A)  
10894\_at 826.4 P  
questionable ORF  
10895\_at 3952.7 P  
heat shock transcription factor homolog  
10896\_at 9471.8 P  
Branched-Chain Amino Acid Transaminase  
10851\_at 1005.8 P  
similarity to 2-nitropropane dioxygenase  
10852\_at -119.5 A  
Protein induced during anaerobic growth  
10853\_at 1195.0 P  
similarity to mucin proteins, YKL224c, Sta1p  
10854\_at 1439.4 P  
allantoate permease  
10855\_at 333.7 P  
Endo-polygalacturonase  
10856\_at 353.8 P  
hypothetical protein  
10857\_at 1109.5 P  
Hypothetical aryl-alcohol dehydrogenase (AAD)  
10858\_s\_at 958.9 P

Thiamine biosynthetic enzyme

10859\_at 62.6 A

hypothetical protein

10860\_s\_at 334.7 P

hexose transporter

10861\_s\_at 2265.8 P

sorbitol-induced sorbitol dehydrogenase

10862\_s\_at 66.5 A

strong similarity to Mal31p

10863\_i\_at 1029.2 P

identified by SAGE

10864\_r\_at 1584.3 A

identified by SAGE

10865\_at 1387.0 P

C-terminal part of YJR030c

10866\_at 2725.7 P

similarity to human DDP gene, hypothetical protein of *S.pombe* (YA94\_SCHPO) and Mrs11p (YHR005c-a)

10867\_s\_at 2109.8 P

Co-assembles with Bud3p at bud sites

10868\_at 6190.6 P

non-annotated SAGE orf Found reverse in NC\_001142 between 159321 and 159545 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10869\_at 3277.4 P

non-annotated SAGE orf Found reverse in NC\_001142 between 181250 and 181408 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10870\_i\_at 95.0 P

non-annotated SAGE orf Found reverse in NC\_001142 between 227571 and 227705 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10871\_s\_at 1346.3 P

non-annotated SAGE orf Found reverse in NC\_001142 between 227571 and 227705 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10872\_at 4589.4 P

non-annotated SAGE orf Found reverse in NC\_001142 between 227590 and 227742 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10873\_at 127.8 A

non-annotated SAGE orf Found reverse in NC\_001142 between 471544 and 471738 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10874\_at 6477.6 P

non-annotated SAGE orf Found forward in NC\_001142 between 316419 and 316676 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10828\_at 529.4 A

non-annotated SAGE orf Found forward in NC\_001142 between 444820 and 444969 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10829\_at 1080.8 P

non-annotated SAGE orf Found forward in NC\_001142 between 445314 and 445592 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10830\_at 265.9 A

non-annotated SAGE orf Found reverse in NC\_001142 between 451797 and 451979 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10831\_s\_at 1162.0 P

non-annotated SAGE orf Found reverse in NC\_001142 between 731735 and 731896 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10832\_s\_at 474.2 P

non-annotated SAGE orf Found reverse in NC\_001142 between 740830 and 741003 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251



10833\_at 1113.2 P  
non-annotated SAGE orf Found forward in NC\_001142 between 106232 and 106426 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10834\_at 152.3 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 121504 and 121665 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10835\_at 1881.3 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 187528 and 187671 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10836\_at 3913.5 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 289382 and 289522 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10837\_at 242.6 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 312518 and 312670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10838\_at 12277.4 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 410923 and 411120 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10839\_at 310.3 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 518895 and 519053 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10840\_at -94.5 A  
non-annotated SAGE orf Found forward in NC\_001142 between 548093 and 548311 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10841\_at 1032.4 P  
non-annotated SAGE orf Found forward in NC\_001142 between 622714 and 622869 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10842\_at 4173.1 P  
non-annotated SAGE orf Found forward in NC\_001142 between 637618 and 637857 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10843\_at 24.5 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 136546 and 136695 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10844\_at 170.5 P  
non-annotated SAGE orf Found forward in NC\_001142 between 90020 and 90184 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10845\_at 239.6 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 116100 and 116291 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10846\_at 1035.6 M  
non-annotated SAGE orf Found forward in NC\_001142 between 142442 and 142669 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10847\_at 2906.5 P  
non-annotated SAGE orf Found forward in NC\_001142 between 180616 and 180768 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10848\_at 659.8 P  
non-annotated SAGE orf Found forward in NC\_001142 between 236437 and 236625 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10849\_at 547.8 A  
non-annotated SAGE orf Found forward in NC\_001142 between 337317 and 337583 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10850\_at 152.8 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 416236 and 416439 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10806\_at -11.9 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 424167 and 424301 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10807\_at 825.7 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 448028 and 448162 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10808\_at 159.4 A  
non-annotated SAGE orf Found forward in NC\_001142 between 471954 and 472142 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10809\_g\_at 216.8 P  
non-annotated SAGE orf Found forward in NC\_001142 between 471954 and 472142 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10810\_i\_at 80.2 P  
non-annotated SAGE orf Found forward in NC\_001142 between 471988 and 472161 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10811\_at 308.0 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 626834 and 627004 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10812\_s\_at 254.6 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 731905 and 732069 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10813\_s\_at -60.2 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 734995 and 735165 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10814\_s\_at 2391.3 P  
non-annotated SAGE orf Found forward in NC\_001142 between 741740 and 741883 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10815\_at 3585.3 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 104735 and 104932 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10816\_at 18.3 A  
non-annotated SAGE orf Found reverse in NC\_001142 between 172694 and 172930 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10817\_at 987.5 P  
non-annotated SAGE orf Found forward in NC\_001142 between 283262 and 283426 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10818\_at 900.9 P  
non-annotated SAGE orf Found forward in NC\_001142 between 322217 and 322453 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10819\_at 1088.9 P  
non-annotated SAGE orf Found reverse in NC\_001142 between 396887 and 397036 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10820\_at 2818.3 P  
non-annotated SAGE orf Found forward in NC\_001142 between 447886 and 448050 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10821\_g\_at 28.9 P  
non-annotated SAGE orf Found forward in NC\_001142 between 447886 and 448050 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10822\_at 99.4 A  
non-annotated SAGE orf Found forward in NC\_001142 between 447920 and 448102 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10823\_at 796.7 P  
non-annotated SAGE orf Found forward in NC\_001142 between 549543 and 549719 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10824\_at 328.6 A  
non-annotated SAGE orf Found forward in NC\_001142 between 578016 and 578222 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10825\_at 472.4 P

non-annotated SAGE orf Found reverse in NC\_001142 between 637602 and 637835 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10826\_at 19.1 A

non-annotated SAGE orf Found reverse in NC\_001142 between 727961 and 728134 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10827\_s\_at 552.2 P

non-annotated SAGE orf Found reverse in NC\_001142 between 737313 and 737453 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10782\_at 5927.5 P

small nuclear RNA128  
10783\_at 179.2 A

small nuclear RNA190  
10784\_at 1778.0 P

small nuclear RNA37  
10785\_at 1629.3 P

snRNA  
10786\_i\_at -72.1 A

Centromere  
10787\_at 2281.4 P

small nuclear RNA3  
10788\_at 39.0 A

ARS121 Found forward in NC\_001142 between 683650 and 683699 with 100% identity.  
10789\_f\_at 1171.0 P

strong similarity to members of the Srp1p/Tip1p family  
10790\_at 487.0 P

weak similarity to transcription factors, similarity to finger proteins YOR162c, YOR172w and YLR266c  
10791\_at -125.9 A

weak similarity to human X-linked PEST-containing transporter  
10792\_at 86.5 P

Ferric reductase, similar to Fre1p  
10793\_at 2738.6 P

Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p  
10794\_at 1262.1 P

threonine dehydratase  
10795\_at -116.6 A

carboxylic acid transporter protein homolog  
10796\_at 12092.4 P

dihydroorotate dehydrogenase  
10797\_at 3705.0 P

similarity to *P. aeruginosa* hyuA and hyuB  
10798\_at 5455.3 P

weak similarity to mouse transcriptional coactivator ALY  
10799\_at 4992.5 P

phospholipase A2-activating protein  
10800\_at 9341.6 P

integral membrane protein localizing to the ER and Golgi  
10801\_at 4467.1 P

anthranilate synthase Component II and indole-3-phosphate (multifunctional enzyme)  
10802\_at 8745.8 P

ubiquitin activating enzyme, similar to Uba2p  
10803\_at 245.4 P

ABC transporter, glycoprotein, component of a-factor secretory pathway  
10804\_at 1162.0 P

Subunit of complex involved in processing of the 3' end of cytochrome b pre-mRNA  
10805\_at 3782.2 P

hypothetical protein  
 10760\_at 1486.8 P  
 hypothetical protein  
 10761\_at 2608.9 P  
 nuclear protein LOS1  
 10762\_at 5558.6 P  
 probable purine nucleotide-binding protein  
 10763\_at 1808.6 P  
 phosphatidylinositol kinase homolog  
 10764\_at 265.4 A  
 questionable ORF  
 10765\_at 2846.6 P  
 member of the AAA-protein family  
 10766\_at 8256.2 P  
 v-SNARE  
 10767\_at 4207.9 P  
 similarity to rabbit histidine-rich calcium-binding protein  
 10768\_at 1067.1 P  
 mitochondrial threonine-tRNA synthetase  
 10769\_at 1607.0 P  
 Interacts with and may be a positive regulator of GLC7 which encodes type1 protein phosphatase  
 10770\_at 9510.0 P  
 acyl carrier protein  
 10771\_at 7921.4 P  
 diphthamide synthesis protein  
 10772\_at 1191.9 P  
 Type 2B protein phosphatase; regulatory B subunit of calcineurin  
 10773\_at 3282.7 P  
 Type 2B protein phosphatase; regulatory B subunit of calcineurin  
 10774\_at 884.3 P  
 The homologue in *Aspergillus nidulans*, *hymA*, is involved in development, see Karos, M. and Fischer, R. (1996). *hymA* (hypha-like metulae), a new developmental mutant of *Aspergillus nidulans*. *Microbiol.* 142:3211-3218.  
 10775\_at 259.3 P  
 peroxisomal ABC transporter 2  
 10776\_at 396.4 P  
 strong similarity to hypothetical protein YLR413w  
 10777\_at 2942.6 P  
 mRNA transport regulator  
 10778\_at 1659.0 P  
 probable purine nucleotide-binding protein  
 10779\_at 5192.8 P  
 Ornithine decarboxylase  
 10780\_at 1613.3 P  
 hypothetical protein  
 10781\_at 9190.5 P  
 pentafunctional enzyme consisting of the following domains : acetyl transferase, enoyl reductase, dehydratase and malonyl/palmitoyl transferase  
 10737\_at 12422.9 P  
 ribose-phosphate pyrophosphokinase  
 10738\_i\_at 226.9 A  
 Ribosomal protein L17A (L20A) (YL17)  
 10739\_f\_at 11203.0 P  
 Ribosomal protein L17A (L20A) (YL17)  
 10740\_at 3945.4 P  
 kinesin-like protein

10741\_at 8618.9 P  
factor receptor  
10742\_at 407.7 P  
questionable ORF  
10743\_at 1938.4 P  
hypothetical protein  
10744\_at 6553.9 P  
weak similarity to E.coli hypothetical protein  
10745\_at 1422.7 P  
probable transport protein  
10746\_at 2391.4 P  
U5 snRNP-specific protein related to EF-2  
10747\_at 6852.6 P  
Nucleolar protein  
10748\_at 650.9 P  
probable serine\threonine-specific protein kinase (EC 2.7.1.-)  
10749\_at 2389.8 P  
mitochondrial ribosomal protein L14  
10750\_at 706.0 P  
questionable ORF  
10751\_at 1218.7 P  
probable serine\threonine-specific protein kinase (EC 2.7.1.-)  
10752\_at 4648.9 P  
16 kDa mitochondrial ribosomal large subunit protein  
10753\_at 1189.9 P  
cAMP-dependent protein kinase catalytic subunit  
10754\_at 7543.9 P  
Morphogenesis Checkpoint Dependent  
10755\_at 11374.6 P  
Protein containing tandem internal repeats  
10756\_at 794.0 P  
Protein containing tandem internal repeats  
10757\_at 235.9 P  
hypothetical protein  
10758\_at 113.6 P  
probable serine\threonine-specific protein kinase (EC 2.7.1.-)  
10759\_at 9165.1 P  
similarity to hypothetical S. pombe protein  
10714\_at 1251.4 P  
hypothetical protein  
10715\_at 2344.9 P  
hypothetical protein  
10716\_at 5626.8 P  
aminopeptidase yscll  
10717\_at 11460.0 P  
40S ribosomal protein S27A (rp61) (YS20)  
10718\_at 695.7 P  
hypothetical protein  
10719\_at 1365.7 P  
signal recognition particle receptor, beta chain  
10720\_at 182.8 P  
questionable ORF  
10721\_at 10742.6 P  
Phosphoglycerate mutase  
10722\_at 2365.2 P  
similarity to C.elegans hypothetical protein R107.2

10723\_at 3869.6 P  
NADH-cytochrome b5 reductase  
10724\_at 900.0 P  
debranching enzyme  
10725\_at 3428.4 P  
flavoprotein subunit of succinate dehydrogenase  
10726\_at 563.0 P  
questionable ORF  
10727\_at 9425.2 P  
strong similarity to *S.pombe* hypothetical protein C3H1.09C  
10728\_at 11059.7 P  
putative ATPase, 26S protease subunit component  
10729\_at 2317.2 P  
Subunit of RNA polymerase III  
10730\_at 4758.1 P  
low temperature viability protein  
10731\_at 5497.7 P  
mitochondrial ribosomal protein  
10732\_at 8346.5 P  
succinate dehydrogenase cytochrome b  
10733\_at 2245.4 P  
triglyceride lipase-cholesterol esterase  
10734\_at 1399.0 P  
alpha subunit of the kinase which phosphorylates the RNA polymerase largest subunit CTD  
(carboxyl-terminal domain)  
10735\_at 3337.4 P  
15.5 kDa mitochondrial ribosomal protein YmL31  
10736\_at 1149.0 A  
hypothetical protein  
10692\_at 928.0 P  
questionable ORF  
10693\_at 2739.6 P  
Beta-adaptin, large subunit of the clathrin-associated protein (AP-1) complex  
10694\_at 341.1 P  
probable neutral zinc metalloproteinase  
10695\_at 293.1 P  
probable purine nucleotide-binding protein  
10696\_at 1633.4 P  
probable folyl-polyglutamate synthetase  
10697\_at 422.2 A  
questionable ORF  
10698\_at 1615.2 P  
Required for mother cell-specific HO expression  
10699\_at 804.1 P  
myosin I  
10700\_at 7775.3 P  
Phospo-mutase homolog  
10701\_at 5853.3 P  
phosphoglucomutase, minor isoform  
10702\_at 3704.2 P  
76.5 kDa Serine/threonine protein kinase with similarity to protein kinase C, is 90% identical to Ypk2p  
10703\_at 2800.8 P  
DNA-independent RNA Polymerase I transcription factor  
10704\_at 262.2 A  
suppressor of SHR3; confers leflunomide resistance when overexpressed  
10705\_g\_at -111.3 A

suppressor of SHR3\; confers leflunomide resistance when overexpressed  
 10706\_at 920.8 P  
 questionable ORF  
 10707\_at 6103.5 P  
 component of signal recognition particle  
 10708\_at 1097.7 P  
 strong similarity to YMR102c  
 10709\_at 11258.0 P  
 similarity to mitochondrial uncoupling proteins (MCF)  
 10710\_at 1829.4 P  
 25.2 kDa protein involved in assembly of vacuolar H(+) ATPase  
 10711\_at 170.8 P  
 questionable ORF  
 10712\_at 9483.8 P  
 Hsp90 (Ninety) Associated Co-chaperone  
 10713\_at 2710.4 P  
 probable serine\threonine-specific protein kinase (EC 2.7.1.-)  
 10669\_at 1631.6 M  
 questionable ORF  
 10670\_at 3275.7 P  
 major apurinic\apyrimidinic endonuclease\3 -repair diesterase  
 10671\_at 3364.1 P  
 42 kDa 5 to 3 exonuclease required for Okazaki fragment processing  
 10672\_at 2720.5 P  
 transcriptional activator and ARS1 binding protein  
 10673\_at 541.2 P  
 questionable ORF  
 10674\_at 6963.2 P  
 Protein involved in resistance to K. lactis killer toxin  
 10675\_at 4994.7 P  
 transcriptional activator protein of CYC1 (component of HAP2\HAP3 heteromer)  
 10676\_at -8.2 A  
 DNA replication and checkpoint protein 1  
 10677\_at -52.7 A  
 weak similarity to S.antibioticus probable oxidoreductase  
 10678\_at 3365.1 P  
 aspartate aminotransferase, mitochondrial  
 10679\_at 1196.3 P  
 similarity to YMR086w  
 10680\_at 7744.0 P  
 Glutamine\_fructose-6-phosphate amidotransferase (glucoseamine-6-phosphate synthase)  
 10681\_at 2391.9 P  
 vacuolar aminopeptidase ysc1  
 10682\_at -483.4 A  
 hypothetical protein  
 10683\_at 846.5 P  
 Putative protein kinase homologous to S. pombe cdr1\nim1  
 10684\_at 4206.2 P  
 similarity to C.elegans hypothetical protein  
 10685\_at 945.3 P  
 similarity to C.elegans hypothetical proteins C18G6.06 and C16C10.2  
 10686\_at 2416.4 P  
 hypothetical protein  
 10687\_at 72.8 A  
 hypothetical protein  
 10688\_at 8479.8 P

cell wall mannoprotein  
 10689\_at 4983.1 P  
 cell wall mannoprotein  
 10690\_at 489.1 P  
 similarity to C.elegans hypothetical proteins  
 10691\_at 6016.5 P  
 weak similarity to E.coli hypothetical protein  
 10646\_at 214.1 A  
 MBR1 protein precursor  
 10647\_at 627.6 P  
 GTPase-activating protein (GAP) for Rsr1pVBud1p  
 10648\_at 764.8 P  
 strong similarity to Sec14p  
 10649\_at 608.2 P  
 hypothetical protein  
 10650\_at 363.9 P  
 Centromere protein required for normal chromosome segregation and spindle integrity  
 10651\_at 935.7 P  
 similarity to C.tropicalis hal3 protein, to C-term. of Sis2p and to hypothetical protein YOR054c  
 10652\_at 2832.5 P  
 cytochrome c1 heme lyase  
 10653\_at 514.2 P  
 hypothetical protein  
 10654\_at 9342.6 P  
 mitochondrial malate dehydrogenase  
 10655\_at 5313.5 P  
 strong similarity to S.pombe hypothetical protein SPAC29B12  
 10656\_at 7186.3 P  
 weak similarity to C.elegans hypothetical protein  
 10657\_at 233.0 P  
 questionable ORF  
 10658\_at 8802.4 P  
 Translation elongation factor EF-1gamma  
 10659\_at 12324.9 P  
 Translation elongation factor EF-1gamma  
 10660\_at 8621.3 P  
 Vacuolar H-ATPas hydrophilic subunit C of V1 sector  
 10661\_at 1245.2 P  
 kinesin heavy chain homolog, but is not believed to act as a kinesin, colocalizes with Myo2p  
 10662\_at 2626.8 P  
 probable ATP-dependent RNA helicase  
 10663\_at 7627.7 P  
 hypothetical protein  
 10664\_at 534.9 P  
 questionable ORF  
 10665\_g\_at 1107.9 P  
 questionable ORF  
 10666\_at 1151.4 P  
 hypothetical protein  
 10667\_at 1779.4 P  
 involved in early pre-mRNA splicing  
 10668\_at 1888.9 P  
 novel member of the Hsp70 family of molecular chaperones that localizes to the lumen of the  
 endoplasmic reticulum:  
 10624\_at 578.5 P  
 Binds Sin3p in two-hybrid assay



10625\_at 223.4 A  
 weak similarity to A.parasiticus nor-1 protein  
 10626\_at 112.9 P  
 similarity to B.subtilis transcriptional regulatory protein  
 10627\_at 5033.5 P  
 strong similarity to hypothetical E.coli protein b1832  
 10628\_at 4090.3 P  
 Nuclear pore complex protein homologous to Nup116p  
 10629\_at 6359.9 P  
 Nucleoside diphosphate kinase  
 10630\_at 4228.0 P  
 hypothetical protein  
 10631\_at 7744.1 P  
 Yeast endoplasmic reticulum 25 kDa transmembrane protein  
 10632\_at 2877.8 P  
 overexpression overcomes manganese toxicity  
 10633\_at 2634.8 P  
 weak similarity to mammalian microtubule-associated protein MAP 1B  
 10634\_at 3485.5 P  
 zinc finger protein  
 10635\_at 526.5 P  
 hypothetical protein  
 10636\_at 9023.0 P  
 aldolase  
 10637\_at 2345.8 P  
 similarity to C.elegans hypothetical protein  
 10638\_at 3971.6 P  
 Transcription factor IIA, small chain  
 10639\_at 1539.3 P  
 100-kDa protein (predicted molecular weight is 120 kDa) with two leucine zipper motifs, coiled-coil region,  
 and some homology to Nup133p  
 10640\_at 10045.0 P  
 strong similarity to human IgE-dependent histamine-releasing factor  
 10641\_at 191.9 P  
 probable acetoacetyl-CoA reductase  
 10642\_at 10543.0 P  
 similarity to glutenin, high molecular weight chain proteins and Snf5p  
 10643\_at 9929.5 P  
 similarity to C.elegans hypothetical protein T09A5.7 (12.5 kD)  
 10644\_at 974.2 A  
 questionable ORF  
 10645\_at 1472.5 P  
 hypothetical protein  
 10601\_at 1465.7 P  
 hypothetical protein  
 10602\_at 236.9 P  
 similarity to YMR031c  
 10603\_at 833.7 P  
 high similarity to histone H3 and to human centromere protein CENP-A  
 10604\_at 535.7 P  
 protein kinase  
 10605\_at 1740.4 P  
 hypothetical protein  
 10606\_at 6999.9 P  
 strong similarity to YMR238w  
 10607\_at 1511.0 P

p58 polypeptide of DNA primase  
 10608\_at 5086.3 P  
 hypothetical protein  
 10609\_at 5879.0 P  
 putative transcription factor  
 10610\_at 2008.4 P  
 component of the spindle pole body  
 10611\_at 2111.7 P  
 endosomal Vps protein complex subunit  
 10612\_at 2439.7 P  
 NifU-like protein B  
 10613\_at 6372.0 P  
 Putative membrane protein  
 10614\_at 2777.7 P  
 transcriptional repressor and activator  
 10615\_at 1384.3 A  
 weak similarity to C.elegans ubc-2 protein  
 10616\_at -61.3 A  
 questionable ORF  
 10617\_at 11685.2 P  
 Uridinephosphoglucose pyrophosphorylase  
 10618\_at 3010.1 P  
 weak similarity to YOL013c  
 10619\_at 1218.5 P  
 hypothetical protein  
 10620\_at 7791.3 P  
 intrastrand crosslink recognition protein  
 10621\_at 786.7 A  
 hypothetical protein  
 10622\_at 255.8 A  
 questionable ORF  
 10623\_at 7639.8 P  
 mitochondrial malic enzyme  
 10579\_at 4387.0 P  
 Large subunit of transcription factor tflIE  
 10580\_at 2797.7 P  
 similarity to E.coli molybdopterin-converting factor chlN  
 10581\_at 1104.8 P  
 strong similarity to glutathione peroxidase  
 10582\_at 3593.6 P  
 76-kDa subunit of Pab1p-dependent poly(A) ribonuclease (PAN)  
 10583\_at 10142.8 P  
 uridine-monophosphate kinase (uridylylate kinase)  
 10584\_at 900.1 P  
 weak similarity to human cyclin II  
 10585\_at 1146.4 P  
 putative metal-binding nucleic acid-binding protein, interacts with Cdc23p and Cdc27p to catalyze the  
 conjugation of ubiquitin to cyclin B  
 10586\_at 3915.6 P  
 contains four beta-transducin repeats  
 10587\_at 1830.5 P  
 suppressor protein  
 10588\_at 3249.7 P  
 CAAX farnesyltransferase alpha subunit  
 10589\_at 2600.3 P  
 similarity to C.elegans hypothetical protein

10590\_at 972.2 P  
DNA helicase A  
10591\_at 5665.7 P  
ATP synthase d subunit  
10592\_at 1261.6 P  
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
10593\_at 3896.0 P  
hypothetical protein  
10594\_at 4683.3 P  
Arp Complex Subunit  
10595\_at 1292.9 P  
Splicing component that associates with the yeast U1 small nuclear ribonucleoprotein particle  
10596\_at 1112.8 P  
cruciform cutting endonuclease  
10597\_at 2906.6 P  
Ubiquitin Fusion Degradation  
10598\_at 10332.4 P  
mRNA turnover 4  
10599\_at 5755.9 P  
strong similarity to Lag1p  
10600\_at 4398.7 P  
alpha subunit of capping protein  
10555\_at 2200.2 P  
required for transport of proteins between an early and a later golgi compartment. possible NSF attachment protein receptor (V-SNARE)  
10556\_i\_at 18778.1 P  
Ribosomal protein L14A  
10557\_f\_at 10323.6 P  
Ribosomal protein L14A  
10558\_s\_at 11751.0 P  
Ribosomal protein L14A  
10559\_at 2278.6 P  
weak similarity to YKR029c and D.melanogaster transcription elongation factor DmS-II  
10560\_at 9488.2 P  
aureobasidin-resistance protein  
10561\_at 4571.8 P  
Mitochondrial ribosomal protein MRP17  
10562\_at 3014.5 P  
similarity to hypothetical protein YKL041w  
10563\_at 3259.3 P  
adenylylsulfate kinase  
10564\_at 3512.2 P  
putative GTP-binding protein\; similar to mammalian Mx proteins  
10565\_at 2367.1 P  
poly(A) polymerase  
10566\_at 2228.1 P  
similarity to Kes1p, Hes1p and Osh1p  
10567\_at 1129.0 P  
ExtraCellular Mutant  
10568\_at 613.2 P  
hypothetical protein  
10569\_at 6771.9 P  
mitochondrial ribosomal protein YmL13  
10570\_at 1955.5 P  
weak similarity to Streptococcus protein M5 precursor  
10571\_at 1628.6 P

Member of RSC complex.  
10572\_at 711.7 P  
peroxisomal multifunctional beta-oxidation protein  
10573\_at 231.1 A  
topoisomerase I interacting factor 2  
10574\_at 1063.3 P  
hypothetical protein  
10575\_at 1.8 A  
questionable ORF  
10576\_at 14918.0 P  
Similar to plant PR-1 class of pathogen related proteins  
10577\_at 2366.6 P  
probable purine nucleotide-binding protein  
10578\_at -15.1 A  
similarity to hypothetical protein YJL043w  
10533\_at 2357.9 P  
weak similarity to mysoin heavy chain proteins  
10534\_at 87.7 A  
similarity to human hypothetical KIAA0161 protein  
10535\_at 5422.3 P  
strong similarity to hypothetical protein YJL082w  
10536\_at 297.2 P  
Increased rDNA silencing  
10537\_at 131.5 A  
hypothetical protein  
10538\_at 888.7 P  
strong similarity to hypothetical protein YJL084c  
10539\_at 589.1 P  
hypothetical protein  
10540\_at 296.3 P  
similarity to *S.pombe* hypothetical protein SPAC23C4  
10541\_at 3849.2 P  
putative RNA helicase  
10542\_at 1860.9 P  
hypothetical protein  
10543\_at 6327.5 P  
translation initiation factor eIF2B, 34 KD, alpha subunit\; negative regulator of GCD12, thereby serving indirectly as a positive regulator of GCN4  
10544\_at 1484.2 P  
strong similarity to Chs6p  
10545\_at 3606.5 P  
Type 2A-related protein phosphatase  
10546\_at 1094.3 P  
similarity to YJL105w and *Lentinula* MFBA protein  
10547\_at 4541.4 P  
weak similarity to NADH dehydrogenases  
10548\_at 2269.1 P  
Phospholipase D  
10549\_at -94.7 A  
hypothetical protein  
10550\_at 296.3 A  
questionable ORF  
10551\_at -17.3 A  
negative regulator of multiple nitrogen catabolic genes  
10552\_at 4145.7 P  
RAD52 Inhibitor (Fifty Two Inhibitor)

10553_at	846.5	P
CCR4 associated factor		
10554_at	1109.2	P
component of spindle pole		
10510_at	3573.1	P
probable calcium-binding protein		
10511_at	413.3	A
general amino acid permease		
10512_at	1391.2	P
questionable ORF		
10513_at	30.8	M
hypothetical protein		
10514_at	10888.5	P
YOUTH, involved in determining yeast longevity		
10515_at	8947.5	P
weak similarity to phosphoglycerate mutase		
10516_at	1106.0	P
hypothetical protein		
10517_at	883.6	P
hypothetical protein		
10518_at	12850.8	P
hypothetical protein		
10519_at	2415.5	P
questionable ORF		
10520_at	10161.0	P
nucleosome assembly protein I		
10521_at	2220.9	P
hypothetical protein		
10522_at	1803.3	P
membrane protein\; low affinity potassium transport		
10523_at	821.2	P
similarity to C.elegans hypothetical protein		
10524_at	1261.1	P
mitochondrial carrier protein, highly homologous to Mrs3p		
10525_at	654.7	P
DHS-1-P phosphatase		
10526_at	2450.7	P
heavy chain of cytoplasmic dynein		
10527_at	1323.2	P
ras homolog--GTP binding protein		
10528_at	3244.3	P
endo-exonuclease yNucR		
10529_i_at	1959.4	A
Ribosomal protein S21A (S26A) (YS25)		
10530_at	182.5	P
self-glucosylating initiator of glycogen synthesis\; similar to mammalian glycogenin		
10531_at	2691.3	P
hypothetical protein		
10532_at	1374.4	P
putative mannosyltransferase\; type 2 membrane protein		
10487_at	2104.7	P
Small subunit of TFIIIE transcription factor		
10488_at	1119.2	P
May regulate expression of genes involved in bud formation and morphogenesis		
10489_at	908.3	P
weak similarity to transcription factors		

10490\_at 7034.0 P  
 hypothetical protein  
 10491\_at 6564.4 P  
 Cytochrome-c peroxidase  
 10492\_at 2817.5 P  
 strong similarity to Sct1p  
 10493\_at 6986.1 P  
 Hydrophilic protein that acts in conjunction with SNARE proteins in targeting and fusion of ER to Golgi transport vesicles  
 10494\_at 1817.3 P  
 siroheme synthase  
 10495\_at 2049.7 P  
 strong similarity to S. pombe phosphatidyl synthase  
 10496\_at 4806.8 P  
 weak similarity to C.elegans hypothetical protein  
 10497\_at 4902.5 P  
 sit4 suppressor  
 10498\_at 755.4 P  
 hypothetical protein  
 10499\_at 4857.1 P  
 strong similarity to hypothetical S. pombe protein  
 10500\_at 3323.3 P  
 weak similarity to negative regulator Reg1p  
 10501\_at 895.4 P  
 ExtraCellular Mutant  
 10502\_at 922.7 P  
 hypothetical protein  
 10503\_at 390.5 P  
 similarity to Vps5p  
 10504\_at 1758.3 P  
 similarity to S.pombe hypothetical protein SPAC1D4.10  
 10505\_at 5712.2 P  
 NAD-dependent 5,10-methylenetetrahydrofolate dehydrogenase  
 10506\_at 10159.0 P  
 hypothetical protein  
 10507\_at 3712.1 P  
 Nuclear pore complex protein involved in poly(A)+ RNA transport, nuclear pore distribution, and possibly in the biogenesis of functional tRNA  
 10508\_at 350.7 P  
 weak similarity to S.japonicum paramyosin  
 10509\_at 3151.4 P  
 Protein related to translation elongation factor EF-1alpha and to Suf12pVSup2pVGst1pVSup35p  
 10464\_at 3428.2 P  
 22.3 kDa mitochondrial ribosomal large subunit protein YmL20\; homologous to L17 of E. coli  
 10465\_at 1176.1 P  
 putative ATP-binding protein  
 10466\_at 2489.3 P  
 similarity to hypothetical Myxococcus xanthus protein  
 10467\_at 4047.9 P  
 weak similarity to b.subtilis spore germination protein II  
 10468\_at 1379.5 P  
 strong similarity to YOR081c  
 10469\_at 1819.4 P  
 similarity to chicken Lim protein kinase and Islet proteins  
 10470\_at 2292.9 P  
 Suppressor of rad53 lethality

10471\_at 11675.5 P  
 nucleolar protein that is immunologically and structurally related to rat Nopp140, a nonribosomal protein of the nucleolus and coiled bodies.

10472\_at 8800.0 P  
 Peptide transporter

10473\_i\_at 16378.0 P  
 Ribosomal protein L40B

10474\_s\_at 9099.5 P  
 Ribosomal protein L40B

10475\_at 1656.2 P  
 myosin-like protein

10476\_at 2720.4 P  
 similarity to mitochondrial aldehyde dehydrogenase Ald1p

10477\_g\_at 373.3 P  
 similarity to mitochondrial aldehyde dehydrogenase Ald1p

10478\_at 420.8 P  
 phosphoenolpyruvate carboxylkinase

10479\_at 999.6 P  
 Ubiquitin-specific protease

10480\_at 764.0 P  
 Transcription factor regulating basal and induced activity of histidine and adenine biosynthesis genes

10481\_at 2032.9 P  
 cause growth inhibition when overexpressed

10482\_at 350.8 P  
 repressor of silent mating loci

10483\_at 396.3 P  
 Protein with similarity to flocculation protein Flo1p

10484\_at 315.1 P  
 similarity to multidrug resistance proteins

10485\_at 173.1 P  
 similarity to multidrug resistance proteins

10486\_s\_at -46.3 A  
 strong similarity to Sge1p and hypothetical protein YCL069w

10442\_s\_at 523.9 P  
 regulates the mannosylphosphorylation

10443\_at -7.4 A  
 hypothetical protein identified by SAGE

10444\_at 835.2 P  
 hypothetical protein

10445\_s\_at 3225.9 P  
 regulates the mannosylphosphorylation

10446\_s\_at 1627.1 P  
 Protein of unknown function

10447\_s\_at 2444.5 P  
 probable serine/threonine-specific protein kinase (EC 2.7.1.-)

10448\_s\_at 3360.2 P  
 strong similarity to holacid-halidohydrolase

10449\_at -82.9 A  
 non-annotated SAGE orf Found forward in NC\_001143 between 91618 and 91755 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10450\_at 94.0 A  
 non-annotated SAGE orf Found forward in NC\_001143 between 94073 and 94228 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10451\_at 54.8 A  
 non-annotated SAGE orf Found forward in NC\_001143 between 146588 and 146755 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10452\_at 799.3 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 403218 and 403517 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10453\_at 119.4 M  
non-annotated SAGE orf Found forward in NC\_001143 between 618527 and 618670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10454\_at 128.9 A  
non-annotated SAGE orf Found forward in NC\_001143 between 618749 and 618886 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10455\_at 281.3 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 16801 and 17055 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10456\_at 6403.9 P  
non-annotated SAGE orf Found forward in NC\_001143 between 98250 and 98414 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10457\_at 51.6 A  
non-annotated SAGE orf Found forward in NC\_001143 between 145707 and 145880 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10458\_at 460.6 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 145751 and 145927 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10459\_at 1266.5 M  
non-annotated SAGE orf Found reverse in NC\_001143 between 164674 and 164820 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10460\_at 1089.7 P  
non-annotated SAGE orf Found forward in NC\_001143 between 178286 and 178429 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10461\_at 211.8 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 195028 and 195171 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10462\_at 3686.3 P  
non-annotated SAGE orf Found forward in NC\_001143 between 233585 and 233836 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10463\_at 70.1 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 261612 and 261797 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10419\_at 1482.4 P  
non-annotated SAGE orf Found forward in NC\_001143 between 320463 and 320651 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10420\_at 1715.5 P  
non-annotated SAGE orf Found forward in NC\_001143 between 612074 and 612223 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10421\_at 2120.4 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 638531 and 638722 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10422\_at 736.7 P  
non-annotated SAGE orf Found forward in NC\_001143 between 219150 and 219308 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10423\_at 219.3 A  
non-annotated SAGE orf Found forward in NC\_001143 between 298846 and 299052 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10424\_at -377.0 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 379033 and 379236 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

10425\_at 3606.2 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 464717 and 464851 with 100% identity.



See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10426\_at 39.0 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 18900 and 19061 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10427\_at 1462.9 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 38930 and 39151 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10428\_at -64.7 A  
non-annotated SAGE orf Found forward in NC\_001143 between 46506 and 46670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10429\_at 47.8 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 93914 and 94054 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10430\_at 239.1 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 98397 and 98609 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10431\_at -79.3 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 108918 and 109193 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10432\_at 675.5 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 136056 and 136247 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10433\_at 272.5 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 136275 and 136457 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10434\_at 1118.4 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 142825 and 142992 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10435\_at 1752.4 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 184805 and 185014 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10436\_at -55.1 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 219769 and 219951 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10437\_at 1477.5 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 264148 and 264333 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10438\_at 148.2 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 308237 and 308389 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10439\_at 1005.3 P  
non-annotated SAGE orf Found forward in NC\_001143 between 308848 and 309084 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10440\_at 363.9 P  
non-annotated SAGE orf Found reverse in NC\_001143 between 340484 and 340771 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10441\_at 61.7 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 468524 and 468670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10396\_at 120.3 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 468759 and 468899 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10397\_at -213.1 A  
non-annotated SAGE orf Found reverse in NC\_001143 between 527004 and 527159 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
10398\_at -236.0 A

non-annotated SAGE orf Found forward in NC\_001143 between 533255 and 533518 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10399\_at 31.0 A

non-annotated SAGE orf Found reverse in NC\_001143 between 137683 and 137847 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10400\_at 22.4 A

non-annotated SAGE orf Found forward in NC\_001143 between 173981 and 174175 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10401\_at 317.7 P

non-annotated SAGE orf Found reverse in NC\_001143 between 185056 and 185205 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10402\_at 727.8 P

non-annotated SAGE orf Found forward in NC\_001143 between 219794 and 219961 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10403\_at -68.0 A

non-annotated SAGE orf Found reverse in NC\_001143 between 442457 and 442639 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10404\_at 478.5 P

non-annotated SAGE orf Found reverse in NC\_001143 between 447932 and 448156 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10405\_at 261.3 P

non-annotated SAGE orf Found forward in NC\_001143 between 456740 and 456883 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10406\_at 2164.4 P

non-annotated SAGE orf Found forward in NC\_001143 between 619142 and 619375 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 10407\_at 207.6 P

snRNA  
 10408\_at 1880.3 P

snRNA  
 10409\_at 3242.1 P

snRNA  
 10410\_at 661.5 A

snRNA  
 10411\_f\_at 381.5 P

Growth INhibitory protein  
 10412\_f\_at 1876.1 P

strong similarity to members of the Srp1/Tip1p family  
 10413\_at 900.9 P

transacetylase  
 10414\_at 270.6 P

weak similarity to M.leprae meth2 protein  
 10415\_at 163.9 P

strong similarity to amino acid transport protein Gap1p  
 10416\_at 865.1 P

Glutathione transferase  
 10417\_at 3.2 A

hypothetical protein  
 10418\_at 1481.7 P

similarity to N.crassa O-succinylhomoserine (thiol)-lyase  
 10373\_at 38.7 A

similarity to E.coli dioxygenase  
 10374\_at 852.7 P

weak similarity to Y.pseudotuberculosis CDP-3,6-dideoxy-D-glycero-L-glycero-4-hexulose-5-epimerase  
 10375\_at 597.4 P

similarity to Dal5p

10376\_at 1131.3 P  
similarity to transcription factor Pip2p  
10377\_at 4155.1 P  
similarity to water channel proteins  
10378\_at 2516.4 P  
member of mip family transmembrane channels  
10379\_at 882.4 P  
similar to FRE2  
10380\_at 12785.8 P  
Cofilin, actin binding and severing protein  
10381\_at 525.8 P  
hypothetical protein  
10382\_at 9820.3 P  
yeast bile transporter, similar to mammalian bile transporter  
10383\_at 638.5 A  
questionable ORF  
10384\_at 183.6 A  
ribonucleoprotein 1  
10385\_i\_at 19291.4 P  
Ribosomal protein L8B (L4B) (rp6) (YL5)  
10386\_s\_at 15009.8 P  
Ribosomal protein L8B (L4B) (rp6) (YL5)  
10387\_at 458.7 P  
questionable ORF  
10388\_at 3651.8 P  
Suppressor of tps1Vfdp1 and member of the MIP family of transmembrane channels\; may be involved in glycerol efflux  
10389\_at 746.5 P  
hypothetical protein  
10390\_at 4739.0 P  
Succinate dehydrogenase (ubiquinone) iron-sulfur protein subunit  
10391\_at 3816.2 P  
involved in regulating membrane traffic  
10392\_at 1557.9 P  
ubiquitin  
10393\_at 701.3 P  
weak similarity to YJR125c and YDL161w  
10394\_at 90.3 A  
weak similarity to human platelet-activating factor receptor  
10395\_at 2367.9 P  
RNA splicing factor  
10351\_at 719.5 P  
hypothetical protein  
10352\_at 5734.8 P  
similarity to mammalian valosin  
10353\_at 301.3 P  
hypothetical protein  
10354\_at 771.8 P  
hypothetical protein  
10355\_at 4446.7 P  
similarity to hypothetical protein YJL062w  
10356\_at -224.4 A  
hypothetical protein  
10357\_at 2642.8 P  
similarity to M.jannaschii X-Pro dipeptidase and S.pombe hypothetical protein  
10358\_at 9163.6 P

similarity to multidrug resistance proteins  
 10359\_at 3131.6 P  
 similarity to H.influenzae and E.coli hypothetical proteins  
 10360\_at 5179.5 P  
 heat shock protein 104  
 10361\_f\_at 37.2 A  
 strong similarity to members of the Srp1p/Tip1p family  
 10362\_at 7817.3 P  
 member of 70 kDa heat shock protein family  
 10363\_at 7368.4 P  
 similarity to hypothetical protein YLR064w  
 10364\_at 4459.7 P  
 Hat1 Interacting Factor 1  
 10365\_at 3173.3 P  
 spindle pole antigen  
 10366\_i\_at 5170.0 P  
 questionable ORF  
 10367\_r\_at 4453.8 P  
 questionable ORF  
 10368\_s\_at 2939.6 P  
 questionable ORF  
 10369\_at 358.9 P  
 protein kinase homolog  
 10370\_at 12578.8 P  
 Aspartyl-tRNA synthetase, cytosolic  
 10371\_at 33.2 A  
 maybe part of SCD25  
 10372\_at 169.7 P  
 homologous to cdc25  
 10328\_at 1120.8 P  
 similarity to metal resistance proteins  
 10329\_at 5504.1 P  
 hypothetical protein  
 10330\_at 1875.8 P  
 similarity to Drosophila pumilio protein  
 10331\_at 5681.1 P  
 similarity to triacylglycerol lipases  
 10332\_at 6242.6 P  
 56 kDa nucleolar snRNP protein that shows homology to beta subunits of G-proteins and the splicing factor Prp4  
 10333\_at 2849.2 P  
 strong similarity to hypothetical protein YLR019w  
 10334\_at 3721.1 P  
 cysteine-rich cytoplasmic protein  
 10335\_at 2986.2 P  
 putative ATP dependent RNA helicase  
 10336\_at 275.8 P  
 hypothetical protein  
 10337\_at 1753.8 P  
 mitochondrial outer membrane protein  
 10338\_at 240.7 A  
 similarity to A.thaliana hyp1 protein  
 10339\_at 1367.2 P  
 Third subunit of the origin recognition complex  
 10340\_at 691.9 P  
 protein of unknown function

10341\_at 1530.7 P  
Killed in Mutagen, sensitive to diepoxybutane andVor mitomycin C  
10342\_at 1626.5 P  
Dynammin-related protein  
10343\_at 1135.6 P  
hypothetical protein  
10344\_at 4464.0 P  
similarity to hypothetical C. elegans protein  
10345\_at 3049.5 P  
hypothetical protein  
10346\_at 608.2 P  
similarity to allantoate transport protein  
10347\_at 5362.7 P  
Component of RNA polymerase transcription factor TFIIH  
10348\_at 812.4 P  
Two-component signal transducer that with Sln1p regulates osmosensing MAP kinase cascade(suppressor of sensor kinase)  
10349\_at 1180.5 P  
hypothetical protein  
10350\_at 6179.1 P  
similarity to hypothetical protein YNL328c  
10305\_at 7012.4 P  
similarity to ribosomal protein L24.e.B  
10306\_at 629.2 A  
weak similarity to Aquifex aeolicus adenylosuccinate synthetase  
10307\_at 1041.7 P  
weak similarity to E.coli hypothetical 20.4 kDa protein  
10308\_at -79.6 A  
hypothetical protein  
10309\_at -182.8 A  
weak similarity to nitrogen regulatory proteins  
10310\_at 1018.6 P  
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
10311\_at 582.0 P  
weak similarity to S.pombe hypothetical protein SPBC13G1  
10312\_at 628.4 P  
hypothetical protein  
10313\_at 5976.0 P  
Protein that regulates ADH2 gene expression  
10314\_at 2260.2 P  
hypothetical protein  
10315\_at 1668.6 P  
strong similarity to YLL010c  
10316\_at 1687.5 P  
similarity to triacylglycerol lipase  
10317\_at 1655.1 P  
hypothetical protein  
10318\_at 1747.7 P  
similarity to C.elegans and M.jannaschii hypothetical proteins  
10319\_at 6320.5 P  
similarity to S.pombe hypothetical protein SPAC30D11.11  
10320\_at 1217.3 P  
similarity to ubiquitin--protein ligase Ubr1p  
10321\_at 2697.9 P  
involved in derepression of SUC2 in response to glucose limitation  
10322\_at 916.2 P

Sed5p is a t-SNARE (soluble NSF attachment protein receptor) required in ER to Golgi transport.

10323_at	12250.3	P
aspartate aminotransferase, cytosolic		
10324_at	6889.7	P
5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) transformylase\IMP cyclohydrolase		
10325_at	12978.6	P
Ribosomal protein L15A (YL10) (rp15R) (L13A)		
10326_g_at	12168.1	P
Ribosomal protein L15A (YL10) (rp15R) (L13A)		
10327_at	-259.6	A
hypothetical protein		
10283_at	106.7	A
similarity to hypothetical protein YMR124w		
10284_at	1421.9	P
putative ATPase\DNA helicase		
10285_at	991.1	P
hypothetical protein		
10286_at	8068.9	P
strong similarity to SMF2 protein		
10287_at	586.9	P
similarity to human mutL protein homolog		
10288_at	2258.8	P
similarity to YIL089w		
10289_f_at	2376.4	P
strong similarity to members of the Srp1p/Tip1p family		
10290_at	10692.0	P
subunit VIb of cytochrome c oxidase		
10291_at	1411.4	P
involved in transcription of ribosomal proteins and ribosomal RNA		
10292_at	10252.4	P
weak similarity to hypothetical protein YIL011w		
10293_at	190.1	P
questionable ORF		
10294_at	1745.0	P
hypothetical protein		
10295_at	9100.7	P
thioredoxin		
10296_at	10523.4	P
pyruvate decarboxylase		
10297_at	2087.3	P
May play a role in attachment, organization, and\or dynamics of microtubule ends at the spindle pole body		
10298_at	656.0	P
strong similarity to Rta1p and Rtm1p protein		
10299_at	246.9	A
similarity to hypothetical protein YGL160w		
10300_f_at	11914.5	P
Ribosomal protein S0B		
10301_at	5881.8	A
Ribosomal protein S0B		
10302_g_at	8312.2	P
Ribosomal protein S0B		
10303_at	2440.4	P
hypothetical protein		
10304_at	8050.8	P
weak similarity to human MAC30 C-terminus		

10260_at	3271.0	P	similarity to human acidic 82 kDa protein
10261_at	1430.0	P	hypothetical protein
10262_at	51.8	A	hypothetical protein
10263_at	293.0	P	hypothetical protein
10264_at	3026.9	P	transcription factor, probable member of histone acetyltransferase SAGA complex
10265_at	10745.6	P	C-5 sterol desaturase
10266_at	1009.9	P	weak similarity to mouse alpha-mannosidase
10267_at	10168.5	P	serine hydroxymethyltransferase
10268_at	2683.8	P	suppressor of rna12/yme2
10269_at	9529.8	P	Phenylalanyl-tRNA synthetase, alpha subunit, cytoplasmic
10270_at	8316.3	P	Ribosomal protein L22A (L1c) (rp4) (YL31)
10271_at	584.4	P	questionable ORF
10272_at	1952.8	P	ser/thr protein kinase
10273_at	6319.4	P	weak similarity to Anopheles NADH-ubiquinone oxidoreductase, chain 4
10274_at	9265.3	P	hypothetical protein
10275_at	4736.1	P	signal peptidase subunit
10276_at	350.1	P	Involved in expression of mitochondrial COX1 by regulating translation of COX1 mRNA and by affecting transcription or stability of COX1 mRNAs
10277_at	-109.9	P	hypothetical protein
10278_at	5318.4	P	mitochondrial elongation factor G-like protein
10279_at	711.0	P	strong similarity to sugar dehydrogenases
10280_at	4119.7	P	component of RNA polymerase II holoenzyme/mediator complex, interacts with Sin4p, Gal11p, and a 50 kd polypeptide
10281_at	953.8	P	similarity to YFL042c, YFL043c, YDR326c and YHR080c
10282_at	1384.7	P	hypothetical protein
10238_at	6742.3	P	weak similarity to human zinc finger protein
10239_at	7523.7	P	Ribosomal protein L10; Ubiquinol-cytochrome C reductase complex subunit VI requiring protein
10240_at	1439.8	P	questionable ORF
10241_at	1953.6	P	weak similarity to Xenopus RCC1 protein

10242\_at 1716.6 P  
 necessary for vesicular transport from the ER to the Golgi complex  
 10243\_at 1808.9 P  
 P40 inhibitor of Cdc28p-Clb5 protein kinase complex  
 10244\_at 340.0 P  
 strong similarity to Emp47p  
 10245\_at 149.9 A  
 galactose permease  
 10246\_at 600.3 P  
 Suppressor of rad53 lethality  
 10247\_at 11242.0 P  
 integral membrane protein\; p24a protein  
 10248\_at 3809.3 P  
 weak similarity to S.pombe hypothetical protein SPAC6F6  
 10249\_at 1962.2 P  
 Actin-related protein  
 10250\_at 791.4 P  
 Smc4 protein, member of SMC family  
 10251\_at 2508.5 P  
 hypothetical protein  
 10252\_at 2868.0 P  
 Possible component of GPI:protein transamidase  
 10253\_at 11404.2 P  
 strong similarity to alanine transaminases  
 10254\_at 2437.3 P  
 Homolog of E. coli DnaJ, closely related to Ydj1p  
 10255\_at 131.9 A  
 hypothetical protein  
 10256\_at 1132.5 P  
 high affinity sulfate permease  
 10257\_at 1014.9 P  
 vacuolar v-SNARE  
 10258\_at 730.7 P  
 hypothetical protein  
 10259\_at 4070.2 P  
 hypothetical protein  
 10215\_at 3721.3 P  
 Serine\threonine protein kinase  
 10216\_at 541.9 P  
 hypothetical protein  
 10217\_at 548.8 P  
 DNA-binding transcriptional activator or CHA1  
 10218\_at 3257.0 P  
 similarity to YDR125c  
 10219\_at 10319.7 P  
 similarity to rat ovarian specific protein  
 10220\_at 401.7 P  
 questionable ORF  
 10221\_at 444.7 P  
 subunit of the anaphase promoting complex (APC)  
 10222\_at 1422.7 P  
 omosomal DNA replication initiation protein  
 10223\_at 2463.6 P  
 hypothetical protein  
 10224\_at 2993.8 P  
 tRNA splicing endonuclease subunit



10225\_at 2921.3 P  
similarity to Kaposi s sarcoma-associated herpes-like virus ORF73 homolog gene  
10226\_at 1077.0 P  
similarity to Pan troglodytes prot GOR  
10227\_at 620.9 P  
strong similarity to YDR132c  
10228\_at 11465.5 P  
similarity to C.boidinii peroxisomal membrane protein 20K A  
10229\_at 727.2 A  
strong similarity to Flo1p  
10230\_at -272.0 A  
hypothetical protein  
10231\_at 3887.4 P  
hypothetical protein  
10232\_at 8944.9 P  
mitogen-activated protein kinase (MAP kinase)  
10233\_at 1932.6 P  
similarity to C.elegans hypothetical protein and YOR054c  
10234\_at 1184.5 P  
Component of cleavage factor II (CF II); 105-kDa protein associated with polyadenylation factor 1 (PF I)  
10235\_at 2230.9 P  
Branchpoint bridging protein -- component of the splicing commitment complex  
10236\_at 680.7 P  
SYnthetic lethal with cdc40 (Forty)  
10237\_at 5050.1 P  
similarity to several esterases  
10192\_at 438.5 P  
suppressor of rna1-1 mutation  
10193\_at 6559.4 P  
GPI-anchored aspartic protease  
10194\_at 5311.2 P  
GPI-anchored aspartic protease  
10195\_at 20.3 A  
hypothetical protein  
10196\_g\_at 343.3 P  
hypothetical protein  
10197\_at 289.5 P  
questionable ORF  
10198\_at 432.0 P  
hypothetical protein  
10199\_at -80.3 A  
hypothetical protein  
10200\_at 114.4 A  
weak similarity to P.aeruginosa anthranilate synthase component II  
10201\_at 289.0 P  
subunit of the anaphase promoting complex (APC)  
10202\_at 717.6 P  
similarity to S.pombe hypothetical protein SPBC24E9  
10203\_at 5765.9 P  
DOM34 Interacting Protein  
10204\_at 6469.9 P  
Low-affinity zinc transport protein  
10205\_at 1767.3 P  
zinc finger transcription factor  
10206\_at 646.4 P  
hypothetical protein

10207_at	2586.1	P	choline kinase
10208_at	4901.4	P	pyruvate decarboxylase
10209_at	437.3	A	hypothetical protein
10210_at	177.3	A	zinc finger containing homolog of mammalian TIS11, glucose repressible gene
10211_at	1057.1	P	hypothetical protein
10212_at	1663.6	P	Putative Na <sup>+</sup> /H <sup>+</sup> antiporter
10213_at	435.1	P	73 kDa mitochondrial integral membrane protein
10214_at	99.0	A	questionable ORF
10170_g_at	5261.7	P	questionable ORF
10171_at	1268.9	P	transcription factor, member of UAF (upstream activation factor) along with Rrn9p and Rrn10p
10172_at	186.8	M	proline oxidase
10173_at	1477.8	P	weak similarity to Pyrococcus horikoshii hypothetical protein PHBJ017
10174_at	2749.0	P	Identified as an activity necessary for actin polymerization in permeabilized cells
10175_at	404.6	P	hypothetical protein
10176_at	1930.8	P	Spermine Synthase
10177_at	2286.5	P	encodes a core snRNP protein
10178_at	551.7	A	vacuolar membrane protein
10179_at	97.7	A	hypothetical protein
10180_at	12716.4	P	specific affinity for guanine-rich quadruplex nucleic acids
10181_at	515.8	P	weak similarity to A.thaliana hypothetical protein ATU78721
10182_at	1111.6	P	similarity to YOR3165w and YNL095c
10183_at	8445.3	P	acetyl-coenzyme A synthetase
10184_at	5095.3	P	hypothetical protein
10185_s_at	7989.7	P	nitrogen catabolite-regulated cell-wall L-asparaginase II
10186_s_at	101.8	A	identical to hypothetical proteins YLR161w and YLR159w
10187_at	4855.3	P	hypothetical protein
10188_at	3408.4	P	mitochondrial processing protease subunit
10189_at	647.0	A	strong similarity to Sdh4p

10190\_at 526.7 P  
 weak similarity to H.influenzae hypothetical protein HI0176  
 10191\_at 2078.8 P  
 100 kD component of the Exocyst complex\; required for exocytosis. The Exocyst complex contains the gene products encoded by SEC3, SEC5, SEC6, SEC8, SEC10, SEC15 and EXO70.  
 10147\_at 11508.1 P  
 Ribosomal protein S31 (S37) (YS24)  
 10148\_at 1949.9 P  
 probably involved in intramitochondrial protein sorting  
 10149\_at 674.1 A  
 questionable ORF  
 10150\_at 2498.6 P  
 clathrin-associated protein complex, small subunit  
 10151\_at 498.9 P  
 questionable ORF  
 10152\_at 7710.5 P  
 S-adenosylmethionine (AdoMet)-dependent methyltransferase of diphthamide biosynthesis  
 10153\_at 160.7 A  
 hypothetical protein  
 10154\_at -2261.7 A  
 Cytosolic form of NADP-dependent isocitrate dehydrogenase  
 10155\_at 10383.6 P  
 major low affinity 55 kDa Centromere\microtubule binding protein  
 10156\_at 1001.7 P  
 DNA binding protein, homologous to a family of mammalian RFX1-4 proteins which have a novel highly conserved DNA binding domain  
 10157\_at 3094.4 P  
 similarity to suppressor protein Psp5p  
 10158\_at 1906.2 P  
 suppressor of cdc25  
 10159\_at 13002.3 P  
 similarity to Tfs1p  
 10160\_at 8925.1 P  
 S-adenosylmethionine synthetase  
 10161\_g\_at 4723.3 A  
 S-adenosylmethionine synthetase  
 10162\_at 947.9 P  
 hypothetical protein  
 10163\_at 1449.6 P  
 regulatory protein  
 10164\_at 1201.9 P  
 similarity to YDR501w  
 10165\_at 667.3 P  
 weak similarity to ribulose-bisphosphate carboxylase  
 10166\_at 597.2 A  
 60S ribosomal protein L37A (L43) (YL35)  
 10167\_at 7853.4 P  
 strong similarity to S.pombe hypothetical protein C18G6.07C  
 10168\_at 955.2 P  
 similarity to hypothetical protein YNL278w  
 10169\_at 7425.4 P  
 ATP-binding cassette (ABC) transporter family member  
 10124\_at 2478.3 P  
 similarity to P.aeruginosa rhamnosyltransferase 1 chain B  
 10125\_at 2870.6 P  
 hypothetical protein

10126\_at 665.8 P  
 Peroxisomal membrane protein that contains Src homology 3 (SH3) domain  
 10127\_at 11179.0 P  
 weak similarity to fruit fly transcription factor 5 large chain  
 10128\_at 1707.1 P  
 similarity to G.gallus px19 and Msf1p  
 10129\_at 5440.2 P  
 hypothetical protein  
 10130\_at 4687.7 P  
 N-myristoyl transferase  
 10131\_at 9302.6 P  
 Protein with periodic tryptophan residues that resembles members of beta-transducin superfamily because of presence of WD-40 repeats  
 10132\_at 8719.8 P  
 homology to microtubule binding proteins and to X90565\_5.cds  
 10133\_at 1374.1 P  
 questionable ORF  
 10134\_at 2589.5 P  
 hypothetical protein  
 10135\_at 2959.0 P  
 Polypeptide 6 of a Yeast Non-native Actin Binding Complex, homolog of a component of the bovine NABC complex  
 10136\_at 2750.9 P  
 similarity to hypothetical S. pombe protein  
 10137\_at 625.9 P  
 questionable ORF  
 10138\_g\_at 731.0 P  
 questionable ORF  
 10139\_i\_at 14027.0 P  
 questionable ORF  
 10140\_r\_at 7265.5 P  
 questionable ORF  
 10141\_at 6713.6 P  
 Protein involved in maturation of COX1 and COB mRNA  
 10142\_at 3805.1 P  
 protein of unknown function  
 10143\_at 5149.0 P  
 hypothetical protein  
 10144\_at 4247.8 P  
 similarity to human trichyalin and protein KIAA0171  
 10145\_at 770.7 P  
 HMG-CoA Reductase Degradation  
 10146\_at 10580.7 P  
 cytoplasmic protein involved in release of transport vesicles from the ER  
 10101\_at 3744.2 P  
 strong similarity to purine-nucleoside phosphorylases  
 10102\_at 1190.4 P  
 G(sub)2-specific B-type cyclin  
 10103\_at 691.4 P  
 hypothetical protein  
 10104\_at 1733.3 P  
 gamma tubulin-like protein, interacts with Spc98p and Spc97p, the Tub4p-Spc98p-Spc97p complex may be part of the microtubule attachment site at the spindle pole body  
 10105\_at 580.8 P  
 similarity to UTR2 protein  
 10106\_at 9017.8 P

Ferric (and cupric) reductase  
 10107\_at 1413.1 P  
 strong similarity to rat cell cycle progression related D123 protein  
 10108\_at 11742.2 P  
 cyclophilin related to the mammalian CyP-40; physically interacts with RPD3 gene product  
 10109\_at 311.1 A  
 questionable ORF  
 10110\_at 1013.4 P  
 hypothetical protein  
 10111\_at 1792.6 P  
 hypothetical protein  
 10112\_at 1547.8 P  
 Possible transmembrane Ca<sup>2+</sup> transporter  
 10113\_at 4360.5 P  
 hypothetical protein  
 10114\_at 4124.5 P  
 similarity to Dip2p  
 10115\_at 2400.4 P  
 has a weak RNA-dependent ATPase activity which is not specific for rRNA  
 10116\_at 1439.6 P  
 hypothetical protein  
 10117\_at 3519.9 P  
 strong similarity to YDR222w  
 10118\_at 2160.1 P  
 hypothetical protein  
 10119\_at -26.6 A  
 hypothetical protein  
 10120\_at 2437.8 P  
 strong similarity to YDR213w, weak similarity to Lys14p  
 10121\_at 13786.1 P  
 member of the Rho subfamily of Ras-like proteins  
 10122\_at 213.7 P  
 questionable ORF  
 10123\_at 1917.2 P  
 strong similarity to rat kynureninase  
 10079\_at 156.6 A  
 questionable ORF  
 10080\_at 319.0 A  
 Telomere elongation protein (ever shorter telomeres)  
 10081\_at 266.7 P  
 DNA Topoisomerase III  
 10082\_at 432.3 P  
 questionable ORF  
 10083\_g\_at 171.2 A  
 questionable ORF  
 10084\_at 1056.7 A  
 hypothetical protein  
 10085\_at 3619.4 P  
 thiamine transporter  
 10086\_at 1166.5 P  
 similarity to YDR200c  
 10087\_at 1329.0 P  
 weak similarity to H.influenzae lipoate biosynthesis protein B  
 10088\_at 3230.3 P  
 phosphatidylinositol 3-kinase  
 10089\_at 1618.5 P

a

similarity to hypothetical *S.pombe* protein SPAC2G11.09  
 10090\_at 462.6 P  
 weak similarity to *C.elegans* R05H5.5 protein and Nup120p  
 10091\_at 5980.6 P  
 strong similarity to YOR262w  
 10092\_at 3393.1 P  
 methionine aminopeptidase  
 10093\_at 1376.4 P  
 strong similarity to *B.subtilis* cytidine deaminase  
 10094\_at 1714.5 P  
 similarity to human DHHC-domain-containing cysteine-rich protein  
 10095\_at 1654.9 P  
 similarity to *S.pombe* rad8 protein and Rdh54p  
 10096\_at 7384.2 P  
 Serine/threonine protein kinase  
 10097\_at 9481.8 P  
 EF-3 (translational elongation factor 3)  
 10098\_at 2923.8 P  
 secretory protein  
 10099\_at -78.0 P  
 similarity to peroxisomal rat membrane protein PMP22  
 10100\_at 411.8 P  
 questionable ORF  
 10055\_at 1293.1 P  
 weak similarity to bacterial aminoglycoside acetyltransferase regulators  
 10056\_at 893.8 P  
 hypothetical protein  
 10057\_at 374.5 P  
 hypothetical protein  
 10058\_at 1690.2 P  
 zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
 10059\_at 3665.5 P  
 hypothetical protein  
 10060\_at 1031.1 P  
 Glycogen synthase (UDP-glucose--starch glucosyltransferase)  
 10061\_at 8613.9 P  
 heat shock protein 60\; chaperonin protein  
 10062\_at 2222.0 P  
 sphingoid long chain base (LCB) kinase  
 10063\_i\_at 610.9 P  
 questionable ORF  
 10064\_s\_at 1762.5 P  
 questionable ORF  
 10065\_at 465.9 P  
 highly homologous to the human GTPase, Rab6  
 10066\_s\_at 2638.2 P  
 strong similarity to F49C12.11 (Z68227\_K) from *C. elegans*  
 10067\_at 308.5 A  
 Meiosis-specific protein involved in homologous chromosome synapsis and chiasmata formation\;  
 localizes to chromosome cores independently of Mei4p and Spo11p\; mRNA is induced in meiosis  
 10068\_i\_at 14084.3 P  
 Ribosomal protein S28B (S33B) (YS27)  
 10069\_f\_at 7334.8 P  
 Ribosomal protein S28B (S33B) (YS27)  
 10070\_at 86.1 P  
 hypothetical protein

10071_at	517.6	P	
			weak similarity to transcription factors
10072_at	-6.4	A	
			Bypass of PAM1
10073_at	3138.8	P	
			Synaptobrevin (v-SNARE) homolog present on ER to Golgi vesicles
10074_at	-35.1	A	
			questionable ORF
10075_at	2479.5	P	
			strong similarity to YOR173w
10076_at	365.0	P	
			hypothetical protein
10077_at	1100.4	P	
			similarity to human hypothetical ORF
10078_at	252.0	A	
			Protein similar to Gac1p, a putative type 1 protein phosphatase targeting subunit
10032_at	451.4	P	
			Member of complex that acts at ARS s to initiate replication
10033_at	1102.0	P	
			U1 snRNP protein of the Sm class
10034_at	6466.5	P	
			DEAD-Box Protein 9
10035_at	2518.6	P	
			subunit of Polyadenylation factor I (PF I)
10036_at	813.5	P	
			weak similarity to regulatory proteins
10037_at	1577.8	A	
			questionable ORF
10038_i_at	1521.2	P	
			questionable ORF
10039_s_at	168.8	A	
			questionable ORF
10040_at	186.1	A	
			similarity to polypeptide chain release factors
10041_at	544.8	A	
			questionable ORF
10042_at	278.8	P	
			weak similarity to Smc2p
10043_at	202.4	A	
			Peroxisomal enoyl-CoA hydratase
10044_at	4576.1	P	
			hypothetical protein
10045_at	17355.1	P	
			Endochitinase
10046_at	580.4	P	
			weak similarity to S.pombe hypothetical protein SPAC22E12
10047_f_at	10483.9	P	
			Ribosomal protein S30A
10048_at	861.5	P	
			involved in checkpoint control and DNA repair
10049_at	613.5	P	
			GTPase
10050_at	2397.7	P	
			hypothetical protein
10051_at	8346.1	P	
			translation initiation factor eIF2b, 43 kDa subunit; negative regulator of GCN4 expression

10052\_at 5341.8 P  
protein involved in membrane protein insertion into the ER  
10053\_at 12640.3 P  
GTP-binding protein  
10054\_at 8000.7 P  
questionable ORF  
10010\_at 6232.9 P  
ATP synthase subunit h  
10011\_at 200.7 P  
hypothetical protein  
10012\_at 1065.3 P  
weak similarity to *Vibrio vulnificus* VvpC protein  
10013\_at 387.0 P  
U1 snRNP protein required for pre-mRNA splicing  
10014\_at 2243.3 P  
gamma-glutamyltransferase homolog  
10015\_at 10205.2 P  
Exo-1,3-beta-glucanase  
10016\_at 7849.0 P  
hypothetical protein  
10017\_at -191.1 A  
questionable ORF  
10018\_at 11843.3 P  
O-Acetylhomoserine-O-Acetylserine Sulfhydrylase  
10019\_at 11256.1 P  
Aconitase, mitochondrial  
10020\_at 3944.9 P  
encodes a phosphatidylinositol-4-kinase, homologous to VPC34  
10021\_at 767.2 P  
Ubiquitin-conjugating enzyme  
10022\_at -154.3 A  
Chitin Deacetylase  
10023\_at -305.0 A  
Chitin Deacetylase  
10024\_at 4205.1 P  
similarity to human centromere protein E  
10025\_at 701.3 P  
regulatory protein of adenylate cyclase  
10026\_at -302.4 A  
weak similarity to *S.tarentolae* cryptogene protein G4  
10027\_at 33.2 A  
hypothetical protein  
10028\_at 662.1 A  
homologous to Spa2p, localizes to sites of polarized growth  
10029\_at 1068.3 P  
Component of 10 nm filaments of mother-bud neck  
10030\_at 229.0 A  
weak similarity to rat apolipoprotein A-IV  
10031\_at 3193.5 P  
weak similarity to *H.influenzae* hypothetical protein HI0906  
9986\_at 1106.6 P  
questionable ORF  
9987\_at 197.4 P  
103 kD basic protein, catalytic subunit of telomerase  
9988\_at 1263.8 P  
Actin Interacting Protein



9989\_at 805.4 P  
 hypothetical protein  
 9990\_at 2793.9 P  
 homolog of Snf5p, member of the chromatin remodeling complex, RSC  
 9991\_at 253.9 A  
 questionable ORF  
 9992\_at 933.7 P  
 weak similarity to N.crassa uvs2 protein  
 9993\_at 197.9 A  
 strong similarity to YGR004w  
 9994\_at 9949.3 P  
 Ribosomal protein L38  
 9995\_at 1679.0 P  
 hypothetical protein  
 9996\_at 323.2 P  
 strong similarity to Stf2p  
 9997\_at 5052.6 P  
 strong similarity to YGR010w  
 9998\_at -85.3 A  
 23 kDa protein containing a putative leucine zipper\; meiosis specific recombination protein\; mRNA is induced early in sporulation  
 9999\_at 3915.7 P  
 Involved in chitin synthase III activity, also required for homozygosis in the first stages of mating  
 10000\_at -2.1 A  
 questionable ORF  
 10001\_at 4381.4 P  
 Protein required for mating  
 10002\_i\_at 14668.7 P  
 Ribosomal protein S25B (S31B) (rp45) (YS23)  
 10003\_f\_at 12572.5 P  
 Ribosomal protein S25B (S31B) (rp45) (YS23)  
 10004\_at 55.0 A  
 questionable ORF  
 10005\_at 4210.9 P  
 nuclear pore complex protein with central repetitive domain similar to that of NSP1 and NUP1  
 10006\_at 2812.5 P  
 Suppressor of Glycerol Defect  
 10007\_at 4176.2 P  
 Proline-rich protein verprolin  
 10008\_at -203.4 A  
 questionable ORF  
 10009\_at 42.9 A  
 questionable ORF  
 9964\_at 3471.8 A  
 60S ribosomal protein P0 (A0) (L10E)  
 9965\_at 27.6 A  
 hypothetical protein  
 9966\_at 9738.3 P  
 1,3-beta-D-glucan synthase  
 9967\_at 394.9 P  
 strong similarity to Gas1p and C.albicans pH responsive protein  
 9968\_s\_at 6109.9 P  
 Ribosomal protein L26A (L33A) (YL33)  
 9969\_at 1488.4 P  
 similarity to Pfk26p and other 6-phosphofructo-2-kinases  
 9970\_at 817.4 P

weak similarity to YGR035c  
 9971\_at 2882.6 P  
 95 kDa structural and functional homolog of vertebrate karyopherin beta (importin 90)  
 9972\_at 9313.5 P  
 mitochondrial dicarboxylate transport protein  
 9973\_at 979.1 P  
 questionable ORF  
 9974\_at 10573.5 P  
 strong similarity to YGR038w  
 9975\_at 10262.2 P  
 Nit3 nitrilase  
 9976\_at 1326.4 P  
 hypothetical protein  
 9977\_at 2645.3 P  
 budding protein  
 9978\_at 10750.0 P  
 Transaldolase, enzyme in the pentose phosphate pathway  
 9979\_at 11836.2 P  
 acetohydroxyacid reductoisomerase  
 9980\_at 1217.6 P  
 similarity to SCM4 protein  
 9981\_at 664.4 P  
 questionable ORF  
 9982\_at 2754.3 P  
 Member of RSC complex.  
 9983\_at 8419.3 P  
 Adenylosuccinate Lyase  
 9984\_at 225.6 P  
 protein involved in vacuolar sorting  
 9985\_at 1847.3 P  
 similarity to YOR3329c  
 9941\_at 1380.5 P  
 Ser/Thr protein kinase; MEKK homolog  
 9942\_at 449.0 P  
 putative Upf1p-interacting protein  
 9943\_at 1606.9 P  
 hypothetical protein  
 9944\_at 112.5 P  
 weak similarity to Udf2p  
 9945\_at -41.5 A  
 hypothetical protein  
 9946\_at 8693.6 P  
 Ribosomal protein S22B (S24B) (rp50) (YS22)  
 9947\_i\_at 19105.2 P  
 Ribosomal protein S22B (S24B) (rp50) (YS22)  
 9948\_f\_at 11468.5 P  
 Ribosomal protein S22B (S24B) (rp50) (YS22)  
 9949\_at 1811.2 P  
 hypothetical protein  
 9950\_at 940.7 P  
 Hsp70 protein  
 9951\_at 3215.7 P  
 Arp2V3 Complex Subunit  
 9952\_at 2145.9 P  
 GDP-GTP Exchange Protein (GEP) for the Rho1p Small GTP-binding Protein; high copy suppressor of cik1 and kar3 deletion mutants.

9953\_at 11893.4 P  
 required for conversion of 24-carbon fatty acids to 26-carbon species  
 9954\_at 3732.1 P  
 similarity to hypothetical protein YGR071c  
 9955\_at 306.0 A  
 questionable ORF  
 9956\_at 4319.3 P  
 Involved in pre-tRNA splicing and in uptake of branched-chain amino acids  
 9957\_at 753.8 P  
 hypothetical protein  
 9958\_at 186.5 A  
 fructose-1,6-bisphosphatase  
 9959\_at 11903.6 P  
 membrane component of ER protein translocation apparatus  
 9960\_at -118.9 A  
 questionable ORF  
 9961\_at 5218.0 P  
 weak similarity to SEC14 protein  
 9962\_at 545.2 P  
 hypothetical protein  
 9963\_at 2161.8 P  
 mitochondrial leucyl tRNA synthetase  
 9918\_at 1576.6 P  
 Protein involved in recombination repair, homologous to *S. pombe* rad18  
 9919\_at 6495.3 P  
 confers sensitivity to killer toxin  
 9920\_at 173.9 P  
 hypothetical protein  
 9921\_at 1779.8 P  
 similarity to hypothetical *S. pombe* protein  
 9922\_at 4467.4 P  
 similarity to YBR267w  
 9923\_f\_at 8583.9 P  
 Ribosomal protein S29A (S36A) (YS29)  
 9924\_at 1870.6 P  
 protease involved in a-factor processing  
 9925\_at 2963.1 P  
 ExtraCellular Mutant  
 9926\_at 10210.1 P  
 Secretory Stress Response protein 1  
 9927\_at 318.0 P  
 hypothetical protein  
 9928\_at 710.9 P  
 essential for assembly of a functional mitochondrial ATPase complex  
 9929\_at 534.1 P  
 weak similarity to chicken RING zinc finger protein  
 9930\_at 8859.0 P  
 Cytochrome-c oxidase chain VIII  
 9931\_at 1215.2 P  
 Vacuolar sorting protein essential for vacuolar morphogenesis and function  
 9932\_at 4581.7 P  
 homology to the CDC48 gene product  
 9933\_at 4245.1 P  
 antiviral protein, putative helicase  
 9934\_at 2743.8 P  
 Bdf1p contains two bromodomains, localizes to the nucleus and to chomosomes in spread meiotic nuclei

but is excluded from the nucleolus  
9935\_at 260.6 P  
hypothetical protein  
9936\_at 2788.4 P  
similarity to A.brasilense nifR3 protein  
9937\_at 1633.8 P  
hypothetical protein  
9938\_at 1010.3 P  
split zinc finger protein  
9939\_at 986.0 A  
hypothetical protein  
9940\_at 2077.5 P  
similarity to A.brasilense nifR3 protein  
9895\_i\_at 8892.5 P  
Ribosomal protein L31B (L34B) (YL28)  
9896\_f\_at 9294.9 P  
Ribosomal protein L31B (L34B) (YL28)  
9897\_f\_at 18676.6 P  
Ribosomal protein L31B (L34B) (YL28)  
9898\_at 1346.8 P  
hypothetical protein  
9899\_at 713.6 P  
hypothetical protein  
9900\_at 5495.1 P  
strong similarity to S. pombe beta-transducin  
9901\_at 5137.4 P  
Homologous to S. pombe asp1+  
9902\_at 8904.6 P  
Copper Transporter  
9903\_at 2229.7 P  
weak similarity to Candida maltosa cytochrome P450  
9904\_at 5193.5 P  
strong similarity to YKL187c  
9905\_at 9007.4 P  
weak similarity to YLR413w  
9906\_at -323.0 A  
questionable ORF  
9907\_at 174.7 P  
hypothetical protein  
9908\_at 451.9 P  
defective in vacuolar protein sorting  
9909\_at 6130.3 P  
Accessory factor associated with RNA polymerase II by affinity chromatography  
9910\_at 2682.2 P  
similarity to helicases  
9911\_at 11297.8 P  
dihydroorotase  
9912\_at 8924.1 P  
weak similarity to human 42K membrane glycoprotein  
9913\_at 3498.7 P  
similarity to human DOCK180 protein  
9914\_at 325.3 P  
hypothetical protein  
9915\_at 164.8 P  
weak similarity to Stu1p  
9916\_at 1086.2 P

hypothetical protein  
 9917\_at 4631.8 P  
 weak similarity to 3-oxoacyl-[acyl-carrier-protein] reductase from E. coli  
 9873\_at 596.8 P  
 weak similarity to 3-oxoacyl-[acyl-carrier-protein] reductase from E. coli  
 9874\_at 3342.6 P  
 weak similarity to human transcription regulator Staf-5  
 9875\_at 1048.0 P  
 questionable ORF  
 9876\_at 4558.2 P  
 has homology to the Dictyostelium and human actin-binding protein coronin  
 9877\_at 2146.6 P  
 component of a nuclear-localized tRNA splicing complex  
 9878\_at 179.0 P  
 weak similarity to rabbit trichohyalin  
 9879\_f\_at 10618.3 P  
 strong similarity to IMP dehydrogenases, Pur5p and YML056c  
 9880\_at 4419.7 P  
 Calcineurin subunit A1; type 2B protein serine/threonine phosphatase catalytic subunit A1; cytoplasmic  
 9881\_at 3233.3 P  
 questionable ORF  
 9882\_at 2277.5 P  
 hypothetical protein  
 9883\_at 1926.4 P  
 ExtraCellular Mutant  
 9884\_at 2408.7 P  
 hypothetical protein  
 9885\_at 5790.5 P  
 ornithine aminotransferase  
 9886\_at 6137.4 P  
 Putative snRNP protein containing Sm-like domain; coprecipitates with U4, U5 and U6 snRNAs  
 9887\_at 3815.6 P  
 Mitochondrial 60S ribosomal protein L4  
 9888\_at 1793.4 P  
 hypothetical protein  
 9889\_i\_at 10567.6 P  
 Ribosomal protein S1A (rp10A)  
 9890\_s\_at 8257.0 P  
 Ribosomal protein S1A (rp10A)  
 9891\_at 1674.5 P  
 regulator of silent mating loci  
 9892\_at 1823.0 P  
 ExtraCellular Mutant  
 9893\_at 204.0 P  
 questionable ORF  
 9894\_at 14.5 A  
 hypothetical protein  
 9850\_at 154.2 A  
 weak similarity to hexokinases  
 9851\_at 8960.6 P  
 36 kDa subunit (D subunit of VO sector) of the vacuolar H(+) ATPase; required for assembly  
 9852\_at 10166.4 P  
 60S ribosomal subunit protein L6B (L17B) (rp18) (YL16)  
 9853\_at 7401.9 P  
 60 kDa nuclear FK506 binding protein  
 9854\_at 4826.4 P

3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase isozyme  
9855\_at 742.8 P

zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
9856\_at 6039.9 P

Protein involved in desensitization to alpha-factor pheromone  
9857\_at 237.6 P

Nuclear protein  
9858\_at 2705.3 P

similarity to YPR117w  
9859\_at 2022.2 P

weak similarity to human G/T mismatch binding protein  
9860\_at 733.4 P

strong similarity to YPR172w  
9861\_at 377.2 P

Nap1p-binding protein  
9862\_at -68.9 A

questionable ORF  
9863\_at 3894.0 P

cell division control protein  
9864\_at 257.2 A

similarity to C.carbonum toxD protein  
9865\_f\_at 1437.1 P

member of the seripauperin protein\gene family (see Gene\_class PAU)  
9866\_i\_at 483.7 M

questionable ORF  
9867\_s\_at 431.2 P

questionable ORF  
9868\_at 1516.3 P

hypothetical protein identified by SAGE  
9869\_at 4700.0 P

identified by SAGE  
9870\_s\_at 1867.8 P

Mitochondrial ribosomal protein MRPL15 (YmL15)  
9871\_at 1140.7 P

non-annotated SAGE orf Found forward in NC\_001144 between 230974 and 231108 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9872\_at 967.7 A

non-annotated SAGE orf Found forward in NC\_001144 between 320496 and 320642 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9826\_at 1237.4 P

non-annotated SAGE orf Found forward in NC\_001144 between 341326 and 341589 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9827\_at 2358.7 P

non-annotated SAGE orf Found forward in NC\_001144 between 433871 and 434059 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9828\_at 1690.5 P

non-annotated SAGE orf Found forward in NC\_001144 between 449727 and 449897 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9829\_at 1590.3 P

non-annotated SAGE orf Found forward in NC\_001144 between 449825 and 449998 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9830\_at 352.1 P

non-annotated SAGE orf Found forward in NC\_001144 between 449919 and 450077 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9831\_at 181.1 P

non-annotated SAGE orf Found forward in NC\_001144 between 603628 and 603825 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9832\_at -200.4 A  
non-annotated SAGE orf Found reverse in NC\_001144 between 789953 and 790117 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9833\_at 25.1 A  
non-annotated SAGE orf Found reverse in NC\_001144 between 867146 and 867343 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9834\_at 419.9 A  
non-annotated SAGE orf Found forward in NC\_001144 between 92566 and 92730 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9835\_at 5931.4 P  
non-annotated SAGE orf Found forward in NC\_001144 between 198937 and 199176 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9836\_at 12439.0 P  
non-annotated SAGE orf Found forward in NC\_001144 between 199191 and 199331 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9837\_s\_at 6091.0 P  
non-annotated SAGE orf Found forward in NC\_001144 between 451607 and 451783 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9838\_s\_at 9194.8 P  
non-annotated SAGE orf Found forward in NC\_001144 between 453992 and 454132 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9839\_s\_at 6861.8 P  
non-annotated SAGE orf Found forward in NC\_001144 between 455884 and 456024 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9840\_f\_at -69.3 A  
non-annotated SAGE orf Found reverse in NC\_001144 between 596345 and 596530 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9841\_at 193.8 P  
non-annotated SAGE orf Found forward in NC\_001144 between 687338 and 687550 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9842\_at 2969.7 P  
non-annotated SAGE orf Found reverse in NC\_001144 between 849381 and 849677 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9843\_at 55.2 A  
non-annotated SAGE orf Found reverse in NC\_001144 between 906354 and 906650 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9844\_at 8193.4 P  
non-annotated SAGE orf Found reverse in NC\_001144 between 52940 and 53083 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9845\_at 3483.2 P  
non-annotated SAGE orf Found reverse in NC\_001144 between 121784 and 121936 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9846\_at 62.4 A  
non-annotated SAGE orf Found reverse in NC\_001144 between 228693 and 228839 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9847\_at 2667.6 P  
non-annotated SAGE orf Found forward in NC\_001144 between 371240 and 371515 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9848\_at 289.7 P  
non-annotated SAGE orf Found forward in NC\_001144 between 373195 and 373335 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9849\_at 1672.5 P  
non-annotated SAGE orf Found forward in NC\_001144 between 390278 and 390421 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9804\_at 941.7 P

non-annotated SAGE orf Found forward in NC\_001144 between 441497 and 441667 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9805\_at 660.5 P

non-annotated SAGE orf Found reverse in NC\_001144 between 576670 and 576804 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9806\_at 9634.2 P

non-annotated SAGE orf Found reverse in NC\_001144 between 578108 and 578263 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9807\_at 861.8 A

non-annotated SAGE orf Found reverse in NC\_001144 between 669739 and 669894 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9808\_at 77.7 P

non-annotated SAGE orf Found reverse in NC\_001144 between 708168 and 708338 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9809\_at -31.3 A

non-annotated SAGE orf Found forward in NC\_001144 between 787418 and 787570 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9810\_at 530.0 A

non-annotated SAGE orf Found forward in NC\_001144 between 789869 and 790012 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9811\_at 476.3 P

non-annotated SAGE orf Found reverse in NC\_001144 between 315877 and 316053 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9812\_at 299.4 P

non-annotated SAGE orf Found reverse in NC\_001144 between 13652 and 13819 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9813\_at 575.4 P

non-annotated SAGE orf Found reverse in NC\_001144 between 223615 and 223821 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9814\_at 134.3 P

non-annotated SAGE orf Found forward in NC\_001144 between 293858 and 294037 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9815\_at 295.9 P

non-annotated SAGE orf Found reverse in NC\_001144 between 368522 and 368710 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9816\_s\_at 1647.5 P

non-annotated SAGE orf Found forward in NC\_001144 between 458168 and 458302 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9817\_at 575.1 P

non-annotated SAGE orf Found reverse in NC\_001144 between 460511 and 460774 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9818\_at -43.6 A

non-annotated SAGE orf Found forward in NC\_001144 between 677930 and 678073 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9819\_at 172.0 M

non-annotated SAGE orf Found reverse in NC\_001144 between 884820 and 884975 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9820\_s\_at 2236.9 P

non-annotated SAGE orf Found forward in NC\_001144 between 288 and 461 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9821\_at -98.3 A

non-annotated SAGE orf Found reverse in NC\_001144 between 156565 and 156759 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9822\_at 227.6 A

non-annotated SAGE orf Found forward in NC\_001144 between 171853 and 172017 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251



9823\_at 7524.3 P  
 non-annotated SAGE orf Found reverse in NC\_001144 between 185211 and 185492 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9824\_at 3775.1 P  
 non-annotated SAGE orf Found reverse in NC\_001144 between 388262 and 388474 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9825\_s\_at 844.7 P  
 non-annotated SAGE orf Found reverse in NC\_001144 between 468959 and 469195 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9779\_at 456.4 A  
 non-annotated SAGE orf Found forward in NC\_001144 between 514745 and 514888 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9780\_at 763.3 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 573921 and 574148 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9781\_at 41.7 A  
 non-annotated SAGE orf Found reverse in NC\_001144 between 658663 and 658803 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9782\_at -145.2 A  
 non-annotated SAGE orf Found forward in NC\_001144 between 672894 and 673055 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9783\_at 1316.4 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 710795 and 710935 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9784\_at 723.1 P  
 non-annotated SAGE orf Found reverse in NC\_001144 between 712124 and 712291 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9785\_at 850.0 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 949308 and 949442 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9786\_at 1276.5 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 949499 and 949633 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9787\_at 5728.9 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 964875 and 965030 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9788\_at 666.5 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 988140 and 988277 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9789\_at 1298.8 P  
 non-annotated SAGE orf Found forward in NC\_001144 between 1035773 and 1035940 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9790\_i\_at -47.9 A  
 Centromere

9791\_f\_at -18.8 A  
 Centromere

9792\_s\_at 1791.7 P  
 CEN12-associated

9793\_at 351.7 P  
 snRNA

9794\_at 4877.4 P  
 snRNA

9795\_at 4980.7 P  
 snRNA

9796\_at 1508.3 P

snRNA		
9797_i_at	513.7	P
snRNA		
9798_at	8372.3	P
snRNA		
9799_at	1254.8	P
snRNA		
9800_s_at	1745.4	A
hypothetical protein Y .2		
9801_at	460.1	P
similarity to human leukotriene b4 12-hydroxydehydrogenase		
9802_at	3080.0	P
required for protein disulfide bond formation in the ER		
9803_at	3707.3	P
mitochondrial membrane protein		
9757_at	724.4	P
C-terminal part starting with aa 262 cause growth inhibition when overexpressed		
9758_at	7364.5	P
weak similarity to Los1p		
9759_at	10747.1	P
Hydroxymethylglutaryl-CoA Synthase		
9760_at	7363.1	P
strong similarity to cytochrome-b5- and nitrate reductases		
9761_at	9041.2	P
alpha-tubulin		
9762_at	11694.6	P
inorganic phosphate transporter, transmembrane protein		
9763_at	47.3	A
hypothetical protein		
9764_at	4619.8	P
Putative small GTPase		
9765_at	3100.2	P
mitochondrial NADH ubiquinone 6 oxidoreductase		
9766_at	614.2	P
hypothetical protein		
9767_at	57.6	A
similarity to YMR285c		
9768_at	1501.9	P
similarity to YPL184c		
9769_g_at	2225.7	P
similarity to YPL184c		
9770_at	2930.4	P
questionable ORF		
9771_at	1614.2	P
predicted protein is very hydrophobic, has many membrane-spanning regions, several potential glycosylation sites, potential ATP-binding site		
9772_at	3448.9	P
Vanadate resistance protein		
9773_at	2395.0	P
hypothetical protein		
9774_at	3551.0	P
datin, an oligo(dA).oligo(dT)-binding protein		
9775_at	1018.2	P
CTD kinase-I gamma subunit		
9776_at	1535.8	P
strong similarity to ubiquitination protein Bul1p		

9777\_at 11691.1 P  
 DBF2 Interacting Protein  
 9778\_at 980.0 P  
 multicopy suppressor of a sin4 defect  
 9734\_at 1159.7 P  
 hypothetical protein  
 9735\_at 2739.8 P  
 hypothetical protein  
 9736\_at 10481.5 P  
 Orotate phosphoribosyltransferase 1  
 9737\_at 5033.9 P  
 signal recognition particle subunit, homologue of mammalian SRP19  
 9738\_at 1043.7 P  
 Intermediate filament protein involved in organelle inheritance  
 9739\_at 2217.0 P  
 Nucleoporin  
 9740\_at 2726.6 P  
 p60 subunit of the yeast omatin Assembly Factor-I (CAF-I)  
 9741\_at -422.5 A  
 questionable ORF  
 9742\_at 5166.2 P  
 weak similarity to YMR264w  
 9743\_at 1832.5 P  
 123 kD regulatory subunit of trehalose-6-phosphate synthase/phosphatase complex; homologous to  
 TPS3 gene product  
 9744\_at 683.9 P  
 questionable ORF  
 9745\_at 666.4 P  
 zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
 9746\_at 1807.8 P  
 TFIIID subunit  
 9747\_at 3839.0 P  
 required for Golgi to vacuole trafficking, shares similarity to mammalian ras inhibitors  
 9748\_at 1346.7 P  
 similarity to asparagine synthases  
 9749\_at 352.9 P  
 Endonuclease (with Rad1p) that degrades single-stranded DNA for repair  
 9750\_at 79.0 A  
 questionable ORF  
 9751\_at 5715.3 P  
 Putative homolog of subunit 5 of bovine prefoldin, a chaperone comprised of six subunits  
 9752\_at 3306.5 P  
 similarity to P.falciparum liver stage antigen LSA-1  
 9753\_at 12206.0 P  
 proteasome component Y7  
 9754\_at 1577.3 P  
 subunit of mitochondrial RNase P  
 9755\_at 37.1 A  
 hypothetical protein  
 9756\_at -21.0 A  
 questionable ORF  
 9711\_at 1323.6 P  
 hypothetical protein  
 9712\_at 28.8 A  
 strong similarity to YML125c, similarity to cytochrome-b5- and nitrate reductases  
 9713\_at 8032.6 P

D-arabinono-1,4-lactone oxidase  
9714\_at 12274.1 P  
alpha-tubulin  
9715\_at -180.0 A  
hypothetical protein  
9716\_at 7.7 A  
hypothetical protein  
9717\_at 1683.5 P  
similarity to *N.crassa* O-succinylhomoserine (thiol)-lyase  
9718\_at 2901.3 P  
strong similarity to ZMS1 protein  
9719\_at 2618.6 P  
similarity to *A.brasilense* nifR3 protein  
9720\_at 2073.8 P  
weak similarity to *Synechocystis* sp. hypothetical protein sll1188  
9721\_at 11077.3 P  
cyclophilin-3 (cyclosporin-sensitive proline rotamase-3)  
9722\_at 4909.6 P  
Bet5pV18kD component of TRAPP  
9723\_at 1529.8 P  
weak similarity to transcription factor  
9724\_at 10062.1 P  
3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase isozyme  
9725\_at 9628.7 P  
Prolyl cis-trans isomerase, also called proline rotamase or peptidylprolyl cis-trans isomerase (PPIase)  
9726\_at 12816.8 P  
Ribosomal protein L6A (L17A) (rp18) (YL16)  
9727\_at 6997.5 P  
similarity to YOR3141c and YNL087w  
9728\_at 3894.1 P  
hypothetical protein  
9729\_at 5158.5 P  
putative dihydroxyacetone kinase  
9730\_at 4705.0 P  
Binds to catalytic subunit of DNA polymerase alpha (Pol1p)  
9731\_at 712.3 P  
similarity to *C.elegans* hypothetical protein  
9732\_at 6367.7 P  
weak similarity to YAL042w  
9733\_at 310.9 A  
hypothetical protein  
9689\_at 1401.2 P  
120-kDa (largest) subunit of origin recognition complex (ORC); shows homology to Cdc6p, Cdc18p, and Sir3p and to proteins from *K. lactis*, *S. pombe*, and humans  
9690\_at 1153.9 P  
GTP-binding protein of the ras superfamily involved in termination of M-phase  
9691\_i\_at 13228.1 P  
Ribosomal protein S1B (rp10B)  
9692\_at 1090.3 P  
Protein involved in mitochondrial import of fusion proteins  
9693\_at 1361.1 P  
to 3 DNA helicase  
9694\_at 2975.9 P  
43-kDa 8-oxo-guanine DNA glycosylase  
9695\_at 2475.2 P  
similarity to *C.elegans* ZK370.4 protein

9696\_at 8616.2 P  
 Suppressor of mec lethality  
 9697\_at 123.1 A  
 questionable ORF  
 9698\_at 2593.9 P  
 Catalytic A subunit of calcineurin, type 2B protein serine/threonine phosphatase; redundant with Cna1; cytoplasmic  
 9699\_at 10668.6 P  
 strong similarity to IMP dehydrogenases  
 9700\_at 11828.4 P  
 strong similarity to IMP dehydrogenases  
 9701\_at 5749.1 P  
 subunit of signal peptidase complex, homologous to mammalian protein SPC25  
 9702\_at 367.0 P  
 Cytochrome b2 [L--lactate cytochrome-c oxidoreductase]  
 9703\_at 3499.5 P  
 hypothetical protein  
 9704\_at 7809.0 P  
 putative integral membrane protein  
 9705\_at 5698.7 P  
 regulatory protein  
 9706\_at 384.5 P  
 weak similarity to potato sucrose cleavage protein  
 9707\_at 2064.3 P  
 RNA splicing and ER to Golgi transport  
 9708\_at 6462.0 P  
 Glucose Signaling Factor  
 9709\_at 684.4 P  
 questionable ORF  
 9710\_at 427.7 P  
 strong similarity to YJR054w  
 9666\_at 2578.4 P  
 RNA splicing factor associated with U1 snRNP  
 9667\_at 369.8 P  
 Component of rDNA transcription factor CF, which also contains Rrn6p and Rrn7p, which is required for rDNA transcription by RNA polymerase I  
 9668\_at 477.1 A  
 Carnitine O-acetyltransferase, peroxisomal and mitochondrial  
 9669\_at 2891.1 P  
 hypothetical protein  
 9670\_at 3269.7 P  
 hypothetical protein  
 9671\_at 280.2 A  
 hypothetical protein  
 9672\_at 1803.0 P  
 weak similarity to C.elegans hypothetical protein CELW03F8  
 9673\_at 3678.6 P  
 putative alpha-mannosidase  
 9674\_at 166.4 A  
 questionable ORF  
 9675\_at 1085.4 P  
 similarity to YDR458c  
 9676\_at 1293.5 P  
 similarity to YDR458c  
 9677\_at 3408.9 P  
 Interacts with Rad51p by two hybrid analysis. mRNA is induced in meiosis during recombination

9678_at	693.2	A
questionable ORF		
9679_at	4109.1	P
Nuclear envelope protein with multiple putative transmembrane domains		
9680_at	4299.9	P
hypothetical protein		
9681_at	1966.6	P
hypothetical protein		
9682_at	9439.3	P
Thiol-specific antioxidant		
9683_at	5708.1	P
Homeobox-domain containing protein		
9684_s_at	13469.2	P
Ribosomal protein S18B		
9685_at	1609.2	P
ribosomal protein, mitochondrial		
9686_s_at	7001.1	P
Ribosomal protein S17A (rp51A)		
9687_at	2865.0	P
weak similarity to Nmd2p		
9688_at	8024.8	P
Adenine phosphoribosyltransferase		
9643_at	2727.6	P
uracil DNA glycosylase		
9644_at	1680.6	P
hypothetical protein		
9645_at	6732.7	P
Putative new 37kDa subunit of N-oligosaccharyltransferase complex		
9646_at	4022.8	P
similarity to YDR438w		
9647_at	395.3	P
Polymerase suppressor 2\; Suppressors of group II intron-splicing defect.		
9648_at	2214.1	P
serine-threonine phosphatase Z		
9649_at	1678.2	P
TFIID subunit		
9650_at	2318.8	P
similarity to C.elegans hypothetical protein C14B1.5		
9651_at	1825.6	P
hypothetical protein		
9652_at	-78.8	A
questionable ORF		
9653_at	10860.8	P
Component of the COPII coat of certain ER-derived vesicles		
9654_at	1994.0	P
hypothetical protein		
9655_at	1668.8	P
transcription factor		
9656_g_at	7039.2	P
transcription factor		
9657_i_at	652.6	P
questionable ORF		
9658_r_at	256.0	P
questionable ORF		
9659_at	585.7	P
questionable ORF		

9660\_at 8327.0 P  
 Mitochondrial ribosomal protein MRPL39 (YmL39)  
 9661\_at 11372.2 P  
 S-adenosylmethionine: delta 24-methyltransferase  
 9662\_at 1423.9 P  
 jun-like transcription factor  
 9663\_at 3060.2 P  
 hypothetical protein  
 9664\_at 902.4 P  
 similarity to hypothetical *S.pombe* protein  
 9665\_at 7870.3 P  
 lactoylglutathione lyase (glyoxalase I)  
 9620\_at 181.9 P  
 hypothetical protein  
 9621\_at 365.2 P  
 hypothetical protein  
 9622\_at 8543.8 P  
 GTP-binding protein of the rab family\; required for homotypic fusion event in vacuole inheritance, for endosome-endosome fusion, and for fusion of endosomes to vacuoles when expressed from high copy plasmid  
 9623\_at 2499.9 P  
 protein kinase which functions at the G(sub)2VM boundary  
 9624\_at 8825.4 P  
 similarity to hypothetical *S.pombe* and *C.elegans* proteins  
 9625\_at 1908.5 P  
 hypothetical protein  
 9626\_at 4051.4 P  
 Protein required for sorting proteins to the vacuole  
 9627\_at 3837.5 P  
 Protein required for protein synthesis  
 9628\_at 6710.5 P  
 strong similarity to Plb1p  
 9629\_at 232.4 P  
 hypothetical protein  
 9630\_at 9079.1 P  
 Phospholipase B (lypophospholipase)  
 9631\_at 7755.1 P  
 weak similarity to *P.aeruginosa* regulatory protein mmsR  
 9632\_at 2667.4 P  
 weak similarity to hypothetical protein YDR352w  
 9633\_at 8610.3 P  
 high affinity hexose transporter-2  
 9634\_at 7027.9 P  
 CLU1 is similar to the *Dictyostelium cluA* gene  
 9635\_at 922.1 P  
 membrane protein required for core glycosylation  
 9636\_at 2363.9 P  
 weak similarity to *S.pombe* hypothetical protein SPAC4F10  
 9637\_at 8267.6 P  
 cytochrome P450 involved in C-22 denaturation of the ergosterol side-chain  
 9638\_at 1731.2 P  
 displays homologies to several transcription factors  
 9639\_at 34.1 A  
 DBF2 Interacting Protein\; SNAP 25 homolog  
 9640\_at 153.7 A  
 similarity to tetratricopeptide-repeat protein PAS10

9641\_at 935.2 P  
 Binds Sin3p in two-hybrid assay  
 9642\_at 885.2 P  
 Multicopy suppressor of fenpropimorph resistance (fen2 mutant), shows similarity to Candida albicans  
 corticosteroid-binding protein CBP1  
 9598\_at 1529.4 P  
 metal-binding transcriptional activator  
 9599\_at 7033.9 P  
 ubiquitin conjugating enzyme  
 9600\_at 608.3 P  
 putative mitochondrial GTPase  
 9601\_at 2932.4 P  
 Mitochondrial ribosomal protein MRPL3 (YmL3)  
 9602\_at 662.0 A  
 hypothetical protein  
 9603\_at 1163.1 P  
 C3HC4 zinc-binding integral peroxisomal membrane protein  
 9604\_at 5655.4 P  
 High level expression reduced Ty3 Transposition  
 9605\_at 425.5 P  
 42 kDa protein that physically associates with the PP2A and SIT4 protein phosphatase catalytic subunits  
 9606\_at 726.4 P  
 weak similarity to human nuclear autoantigen  
 9607\_at 438.9 P  
 hypothetical protein  
 9608\_at 1550.3 P  
 similarity to YKL050c and human restin  
 9609\_at 358.6 A  
 questionable ORF  
 9610\_at 1887.2 P  
 Cytokinesis  
 9611\_at 4595.6 P  
 Actin-related protein  
 9612\_at 213.5 A  
 weak similarity to YPR201w  
 9613\_at 1232.6 P  
 Inner membrane protease (mitochondrial protein)  
 9614\_at 1329.3 P  
 homolog of S. pombe cdc25  
 9615\_at 3027.8 P  
 zinc finger protein  
 9616\_at 8310.9 P  
 Homocitrate  
 9617\_at 6546.8 P  
 suppressor of TFIIB mutations  
 9618\_at 504.2 P  
 strong similarity to Yet1p  
 9619\_at 806.6 P  
 weak similarity to Pseudomonas L-fucose dehydrogenase  
 9575\_at 1740.6 P  
 Regulator of arginine-responsive genes with ARG81 and ARG82  
 9576\_at 6658.0 P  
 putative transcriptional activator of alpha-specific genes  
 9577\_at 4416.8 P  
 hypothetical protein  
 9578\_at 4005.0 P



Nuclear pore complex protein that is member of GLFG repeat-containing family of nucleoporins and is highly homologous to Nup100p

9579\_at 787.4 P

hypothetical protein

9580\_at 8908.4 P

weak similarity to A.thaliana PRL1 protein

9581\_at 192.9 P

Required for arrest in G1 in response to pheromone

9582\_at 290.2 A

questionable ORF

9583\_at 61.6 A

Binds Sin3p in two-hybrid assay and is part of large protein complex with Sin3p and Stb1p

9584\_at 3767.3 P

vacuolar proton pumping ATPase, 110-kDa subunit; not in vacuole membrane

9585\_at 1993.0 P

Protein required for cell cycle arrest in response to loss of microtubule function

9586\_at 1859.5 P

mitochondrial ADP/VATP translocator

9587\_at -47.4 A

hypothetical protein

9588\_at 8561.9 P

multicopper oxidase

9589\_at 1652.3 P

15kDa subunit of the tetrameric tRNA splicing endonuclease

9590\_at 1120.8 P

mitochondrial import receptor, heterodimerizes with Tom70p, preferentially recognizes the mature regions of precursor proteins associated with ATP-dependent cytosolic chaperones

9591\_at 653.9 P

component of the cleavage and polyadenylation factor CF I involved in pre-mRNA 3'-end processing

9592\_at 1944.2 P

acetylornithine acetyltransferase

9593\_at 255.7 A

Regulator of Rim1p, required for IME1 expression

9594\_at 1076.2 P

basic, hydrophilic protein of 59 kDa

9595\_at 843.8 P

appears to be required for the completion of nuclear membrane fusion and may play a role in the organization of the membrane fusion complex

9596\_at 147.9 M

Synthesis Of Var

9597\_at 1967.3 P

hypothetical protein

9553\_at 279.7 P

weak similarity to mouse transcription factor NF-kappaB

9554\_at 441.3 P

hypothetical protein

9555\_at 843.3 P

2 Cys2-His2 zinc fingers at c-terminus, glutamine and asparagine rich

9556\_at 7385.9 P

hypothetical protein

9557\_at 8409.8 P

HMG-1 homolog, mitochondrial

9558\_at 2634.9 P

weak similarity to C-terminal part of cytochrome b5 and b2

9559\_at 2950.2 P

strong similarity to hypothetical S. pombe protein

9560\_at 549.0 P  
 weak similarity to human Mi-2 protein  
 9561\_at 128.3 A  
 questionable ORF  
 9562\_at 2427.6 P  
 Precocious Dissociation of Sister chromatids  
 9563\_at 992.4 P  
 similarity to SNF7 protein  
 9564\_at 1969.3 P  
 chromosome transmission  
 9565\_at 9634.2 P  
 phosphatidylinositol transfer protein  
 9566\_at 3162.6 P  
 putative helicase  
 9567\_at 467.2 A  
 May regulate NAM7 function, possibly at level of mRNA turnover  
 9568\_at 311.9 A  
 hypothetical protein  
 9569\_at 11918.9 P  
 alcohol dehydrogenase isoenzyme III  
 9570\_at 299.5 A  
 putative pseudogene  
 9571\_at -1.4 A  
 putative pseudogene  
 9572\_at 2258.7 P  
 similarity to YKL105c  
 9573\_at 379.5 A  
 questionable ORF  
 9574\_at 458.5 P  
 hypothetical protein  
 9530\_at 4094.5 P  
 similarity to multidrug resistance proteins  
 9531\_at 3470.3 P  
 mitochondrial membrane ATPase of the CDC48VPAS1VSEC18 (AAA) family  
 9532\_at 552.4 P  
 strong similarity to B. subtilis conserved hypothetical protein yhfK  
 9533\_at 1631.3 P  
 nuclear protein localization factor  
 9534\_at 3400.7 P  
 Protein localizes to actin cortical patches. Probable binding site on actin lies on front surface of subdomain 3 and 4.  
 9535\_at 3996.9 P  
 weak similarity to Pwp2p  
 9536\_at 125.7 P  
 58 kd component (Cbf3c) of the multisubunit Cbf3 kinetochore protein complex, which binds to the CDE III element of centromeres  
 9537\_at 608.0 P  
 SNZ1 proximal ORF, stationary phase induced gene  
 9538\_at 1187.0 P  
 encodes highly conserved 35 kDa protein that shows increased expression after entry into stationary phase  
 9539\_at 813.0 P  
 weak similarity to M.genitalium hypothetical protein homolog MG442  
 9540\_at 1085.5 P  
 hypothetical protein  
 9541\_at 7387.6 P

similarity to P.ciliare possible apospory-associated protein  
 9542\_at 1257.9 P  
 Homolog of samB gene of Aspergillus nidulans (deletion of samB results in mislocalization of septa  
 9543\_at 465.8 P  
 similarity to YBR002c  
 9544\_at 2950.7 P  
 strong similarity to YKL121w  
 9545\_at 1199.5 P  
 hypothetical protein  
 9546\_at 407.1 P  
 protein kinase  
 9547\_at 1076.6 P  
 Phosphoglucomutase  
 9548\_at 579.2 P  
 Ku80 homolog, exhibits DNA binding activity on its own, associates with Hdf1p to form major DNA  
 end-binding complex  
 9549\_at -24.0 A  
 hypothetical protein  
 9550\_at 9205.1 P  
 acetolactate synthase  
 9551\_at 4107.9 P  
 myosin I  
 9552\_at 6689.2 P  
 similarity to aldehyde dehydrogenase  
 9507\_at 445.3 P  
 weak similarity to MSN1 protein  
 9508\_at 1733.8 P  
 hypothetical protein  
 9509\_at 4319.5 P  
 similarity to folylpolyglutamate synthetases and strong similarity to YKL132c  
 9510\_at 110.8 A  
 similarity to B. subtilis conserved hypothetical proteins yoqW and yoaM  
 9511\_at 1533.1 P  
 similarity to YKL133c  
 9512\_at 9325.3 P  
 WD repeat protein (G-beta like protein) that interacts with the translational machinery  
 9513\_at 9224.5 P  
 WD repeat protein (G-beta like protein) that interacts with the translational machinery  
 9514\_at 99.8 P  
 component of spindle pole  
 9515\_at -8.4 A  
 strong similarity to succinate dehydrogenase  
 9516\_at 1640.4 P  
 similarity to YNL008c  
 9517\_g\_at 3432.1 P  
 similarity to YNL008c  
 9518\_at 1530.1 P  
 questionable ORF  
 9519\_at 5316.6 P  
 5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) transformylase/VIMP cyclohydrolase  
 9520\_at 7231.8 P  
 Ribosomal protein L15B (YL10) (L13B) (rp15R)  
 9521\_at 478.3 A  
 hypothetical protein  
 9522\_at 10622.2 P  
 resistance against Pichia farinosa killer toxin (SMK toxin) when expressed by a multi copy plasmid

9523\_at 648.9 P  
 weak similarity to YLR031w  
 9524\_at 4180.9 P  
 transcriptional activator of glycolytic genes  
 9525\_at 923.3 P  
 hypothetical protein  
 9526\_at 638.6 P  
 Protein involved in silencing HMR, homologous to acetyltransferases  
 9527\_at 4444.4 P  
 ExtraCellular Mutant  
 9528\_at 4565.2 P  
 Nuclear pore membrane glycoprotein  
 9529\_at 439.2 P  
 similarity to D.melanogaster Dreg-2 protein  
 9484\_at 8272.0 P  
 similarity to human retinoblastoma-binding protein  
 9485\_at 223.8 P  
 similarity to hypothetical S. pombe protein  
 9486\_at -24.0 A  
 mRNA is induced early in sporulation  
 9487\_at 2756.0 P  
 hypothetical protein  
 9488\_at 619.0 P  
 hypothetical protein  
 9489\_at 164.4 A  
 questionable ORF  
 9490\_at 870.9 P  
 weak similarity to YIR013c and YLR013w  
 9491\_at 361.9 A  
 interstrand crosslink repair protein  
 9492\_at 945.6 A  
 GTP-binding protein  
 9493\_at 3840.0 P  
 Serine/threonine protein kinase, phosphorylates the mitotic activator IME1  
 9494\_at 2480.7 P  
 hypothetical protein  
 9495\_at 115.4 A  
 hypothetical protein  
 9496\_at 15602.3 P  
 Ribosomal protein L13B  
 9497\_i\_at 2853.6 P  
 Ribosomal protein S16A (rp61R)  
 9498\_f\_at 10310.7 P  
 Ribosomal protein S16A (rp61R)  
 9499\_at 292.2 P  
 weak similarity to Mlp1p  
 9500\_at 8807.1 P  
 mitochondrial cytosolically directed NADH dehydrogenase  
 9501\_at 9808.0 P  
 p39 subunit of translation initiation factor eIF3  
 9502\_at 1767.4 P  
 hypothetical protein  
 9503\_at 6142.5 P  
 hypothetical protein  
 9504\_at 8365.8 P  
 oligosaccharyl transferase glycoprotein complex, delta subunit

9505\_at 3946.9 P  
 Inner membrane protease (mitochondrial protein)  
 9506\_at 118.3 A  
 hypothetical protein  
 9462\_at 1233.9 P  
 mitochondrial inner membrane protease  
 9463\_at 2858.6 P  
 similarity to Asm4p  
 9464\_at -24.1 A  
 questionable ORF  
 9465\_at 151.7 A  
 Involved in proteolytic processing of Rim1p  
 9466\_at 680.1 P  
 weak similarity to E.coli hypothetical protein f402  
 9467\_at 630.3 P  
 weak similarity to S.pombe hypothetical protein SPAC23C11  
 9468\_at 3085.7 P  
 hypothetical protein  
 9469\_at 1323.4 P  
 weak similarity to E.coli ribosomal S8 protein  
 9470\_at -253.5 A  
 questionable ORF  
 9471\_at -3.6 A  
 Protein homologous to human Sin3 complex component SAP18, possible coiled-coil protein  
 9472\_at 1389.6 P  
 weak similarity to fruit fly ecdysone-inducible protein  
 9473\_at 1084.8 P  
 Homologous to E coli dnaJ protein  
 9474\_at 651.7 P  
 similarity to ATPases  
 9475\_at 294.5 P  
 hypothetical protein  
 9476\_at 1093.8 P  
 Predicted 758 amino acid polypeptide with poly-glutamine and poly-asparagine domains  
 9477\_at 1782.3 P  
 involved in plasmid maintenance  
 9478\_at 2487.8 P  
 similarity to members of the mitochondrial carrier protein family  
 9479\_at 308.1 A  
 MutL homolog, forms a complex with Pms1p and Msh2p to repair mismatched DNA  
 9480\_at 282.3 P  
 contains an N-terminal Zn2Cys6 type zinc finger domain, a C-terminal acidic domain and a putative coiled  
 coil dimerization domain  
 9481\_at 367.1 P  
 Aldehyde Dehydrogenase (NAD(P)+)  
 9482\_g\_at 2054.8 P  
 Aldehyde Dehydrogenase (NAD(P)+)  
 9483\_at 627.3 P  
 aldehyde dehydrogenase, (NAD(P)+), likely cytosolic  
 9439\_at 402.2 P  
 similarity to YKL124w  
 9440\_at 418.0 P  
 similarity to MSN1 protein  
 9441\_at -948.0 A  
 questionable ORF  
 9442\_s\_at 5906.3 P

flocculent specific protein\; contains >35 repeats of the amino acid sequence NNNDYGS

9443\_at 9152.8 P

questionable ORF

9444\_at 1122.5 P

Cytoplasmic inhibitor of proteinase Pep4p

9445\_at 20.3 A

protein of unknown function

9446\_at 401.1 P

ExtraCellular Mutant

9447\_at 1416.0 P

Protein involved in mitochondrial iron accumulation

9448\_at 1849.2 P

similarity to C.elegans hypothetical protein

9449\_at 494.5 P

non-specific DNA binding protein

9450\_at 860.6 P

similarity to YPL228w

9451\_at 523.0 P

similarity to YPL229w

9452\_at 374.0 P

Putative transcriptional repressor with proline-rich zinc fingers

9453\_at 3676.2 P

SSO1 and SSO2 encode syntaxin homologs\; act in late stages of secretion

9454\_at 3331.3 P

hypothetical protein

9455\_at 1487.5 P

hypothetical protein

9456\_at 8932.6 P

constitutively expressed heat shock protein

9457\_g\_at 5548.9 P

constitutively expressed heat shock protein

9458\_at 2895.9 P

hypothetical protein

9459\_at 1875.0 P

weak similarity to bacterial ribosomal protein S17

9460\_at 4742.1 P

Glycine decarboxylase complex (P-subunit), glycine synthase (P-subunit), Glycine cleavage system (P-subunit)

9461\_at 759.2 P

has DNA helicase signature motifs

9416\_at 2813.8 P

hypothetical protein

9417\_at 158.1 M

similarity to mouse Tbc1 protein

9418\_at 3714.3 P

Mitochondrial ribosomal protein MRPL24 (YmL24)

9419\_at 494.7 P

questionable ORF

9420\_i\_at 3948.6 P

Ribosomal protein L36A (L39) (YL39)

9421\_s\_at 13408.4 P

Ribosomal protein L36A (L39) (YL39)

9422\_at 4424.7 P

similarity to YPL250c

9423\_at 704.0 P

hypothetical protein

9424\_at 2430.5 P  
 Vti1p is a v-SNARE that interacts with two t-SNARES, Sed5p and Pep12p  
 9425\_at 2154.4 P  
 spindle pole body associated protein  
 9426\_at 3648.3 P  
 G(sub)1 cyclin  
 9427\_at 5023.5 P  
 putative membrane protein  
 9428\_at 592.7 P  
 human xeroderma pigmentosum group A DNA repair gene homolog  
 9429\_at 14237.5 P  
 C-8 sterol isomerase  
 9430\_at 11203.7 P  
 Mitochondrial outer membrane protein\; forms the outer membrane import channel  
 9431\_at 706.0 P  
 weak similarity to D.melanogaster hypothetical protein DMC39E1  
 9432\_at 11894.3 P  
 phosphofructokinase beta subunit  
 9433\_at -288.7 A  
 weak similarity to hypothetical protein YNR014w  
 9434\_at 645.2 P  
 Similar to acetyl-coenzyme A carboxylase  
 9435\_at 5950.2 P  
 mevalonate kinase  
 9436\_at 1694.8 P  
 hypothetical protein  
 9437\_at 1713.0 P  
 similarity to P.glauca late embryogenesis abundant protein and YBR177c and YPL095c  
 9438\_at 1271.5 P  
 weak similarity to beta tubulins  
 9394\_at 2988.3 P  
 weak similarity to myosins  
 9395\_at 420.5 P  
 S. cerevisiae homologue of S. pombe cdc5+  
 9396\_at 5046.1 P  
 dnaJ homolog  
 9397\_at 6991.2 P  
 similarity to GAS1 protein  
 9398\_at 4785.3 P  
 Serine Protein Kinase  
 9399\_at 11582.6 P  
 GMP synthase  
 9400\_at 1471.4 P  
 hypothetical protein  
 9401\_at 1520.1 P  
 Establishes Silent omatin  
 9402\_at 11438.7 P  
 48 kDa Phosphomevalonate kinase  
 9403\_at 8292.5 P  
 weak similarity to photosystem II protein D2  
 9404\_at 5184.4 P  
 similarity to S.pombe dihydrofolate reductase  
 9405\_at 1918.1 P  
 encodes putative deubiquitinating enzyme  
 9406\_at 954.0 P  
 localizes to discrete sites in rad50s mutants. Mre11p, Rad50p, Mer2p and Xrs2p function in a complex by

immunoprecipitation and two-hybrid analyses\; mutations in these genes have similar phenotypes. mRNA is induced in meiosis

9407\_at 2909.7 P

Mitochondrial ribosomal protein MRPL44 (YmL44)

9408\_at 2477.8 P

Mitochondrial ribosomal protein MRPL44 (YmL44)

9409\_at 10633.4 P

similarity to ketoreductases

9410\_at 887.6 P

TFIID subunit

9411\_at 1793.2 P

Mitochondrial RNA polymerase specificity factor

9412\_at 9602.6 P

Protein required for processing of pre-rRNA

9413\_f\_at 281.0 P

Ribosomal protein S10B

9414\_f\_at 8240.3 P

Ribosomal protein S10B

9415\_at 457.1 P

peripheral vacuolar membrane protein\; putative Zn-finger protein

9371\_at 453.7 P

involved in cell fusion during mating, also required for the alignment of parental nuclei before nuclear fusion

9372\_at 2927.4 P

strong similarity to YOR295w

9373\_at 421.8 P

ribonuclease H

9374\_at 6274.7 P

Protein involved in RNA processing and export from nucleus

9375\_at 7431.3 P

TFIID subunit

9376\_at 4555.7 P

similarity to CHS6 protein

9377\_at 5665.7 P

Protein required for filamentous growth, cell polarity, and cellular elongation

9378\_at 2586.7 P

Ribonuclease III

9379\_at 613.7 P

U2 snRNP protein

9380\_at 9211.6 P

DNA-binding protein, mtDNA stabilizing protein, mitochondrial inner membrane protein with low homology to RIM2

9381\_s\_at 13869.8 P

Ribosomal protein L20A (L18A)

9382\_at 10324.9 P

Zinc- and cadmium-resistance protein

9383\_at 182.3 P

similarity to Uth1p, Nca3p, YIL123w and Sun4p

9384\_at 3359.7 P

questionable ORF

9385\_at 1280.9 P

weak similarity to mouse thyrotropin-releasing hormone receptor

9386\_at 7933.7 P

long-chain fatty acid--CoA ligase and synthetase 4

9387\_at 5423.7 P

hypothetical protein



9388\_at 596.3 P  
 similarity to glutamate decarboxylases  
 9389\_at 173.0 P  
 strong similarity to YKR076w and YGR154c  
 9390\_at 7499.2 P  
 hyperosmolarity-responsive gene  
 9391\_at 1035.8 P  
 hypothetical protein  
 9392\_at 679.0 P  
 strong similarity to YPL264c  
 9393\_at 126.6 M  
 hypothetical protein  
 9349\_at 946.4 P  
 hypothetical protein  
 9350\_at 10834.7 P  
 subunit VII of cytochrome c oxidase  
 9351\_at 673.4 P  
 translational activator of cytochrome c oxidase subunit II  
 9352\_at 1051.9 P  
 hypothetical protein  
 9353\_at 2165.3 P  
 hypothetical protein  
 9354\_at 9002.6 P  
 Translation initiation factor eIF1A  
 9355\_at 4021.9 P  
 115 kD regulatory subunit of trehalose-6-phosphate synthase/phosphatase complex  
 9356\_at 731.8 P  
 similarity to *S.pombe* scn1 protein  
 9357\_at 906.9 P  
 subunit of the histone deacetylase B complex  
 9358\_at 4181.9 P  
 Cue1p assembles with Ubc7p. Cue1p recruits Ubc7p to the cytosolic surface of the endoplasmic  
 reticulum. Assembly with Cue1p is a prerequisite for the function of Ubc7p  
 9359\_at 855.1 P  
 hypothetical protein  
 9360\_at 8793.6 P  
 similarity to *A.thaliana* hyp1 protein  
 9361\_at 1857.4 P  
 mitochondrial inorganic pyrophosphatase  
 9362\_at 515.1 P  
 U4/U6 snRNA-associated splicing factor  
 9363\_at 2072.5 P  
 weak similarity to *C.elegans* hypothetical protein CELT23B3  
 9364\_at 1341.3 P  
 Upstream activation factor subunit  
 9365\_at 433.1 P  
 Orotate phosphoribosyltransferase 2  
 9366\_at 7866.2 P  
 desaturase/hydroxylase enzyme  
 9367\_at 2447.0 P  
 Negative regulator of cell polarity  
 9368\_at 1321.5 P  
 Protease involved in ras and a-factor terminal proteolysis  
 9369\_at 1913.9 P  
 Involved in the ubiquitination pathway, possibly by functioning with Rsp5  
 9370\_at 10599.4 P

ubiquitin-like protein  
 9326\_at 1733.7 P  
 TFIIIF interacting Component of CTD Phosphatase  
 9327\_at 1323.2 P  
 similarity to phosphomannomutases  
 9328\_at 412.2 A  
 strong similarity to aminotriazole resistance protein  
 9329\_at 4.6 A  
 Zinc-cluster protein involved in activating gluconeogenic genes\; related to Gal4p  
 9330\_at 1775.5 P  
 hypothetical protein  
 9331\_at 1032.5 P  
 basic, hydrophilic 67.5 kDa protein  
 9332\_at 910.8 P  
 Initiator methionine tRNA 2'-O-ribosyl phosphate transferase  
 9333\_at 817.1 P  
 DNA binding protein  
 9334\_at 1247.1 P  
 similarity to Ccr4p  
 9335\_at 5177.0 P  
 Mitochondrial ribosomal protein MRPL33 (YmL33) (E. coli L30)  
 9336\_at 845.1 P  
 Protein essential for mitochondrial biogenesis  
 9337\_at 1130.7 P  
 strong similarity to hypothetical S.pombe and C.elegans proteins  
 9338\_at 1579.6 P  
 hypothetical protein  
 9339\_at 6425.3 P  
 Putative RNA-dependent helicase  
 9340\_at 41.9 A  
 questionable ORF  
 9341\_at 974.1 P  
 similarity to ser/thr protein kinase  
 9342\_at 8719.5 P  
 strong similarity to C.elegans hypothetical protein  
 9343\_at 836.4 P  
 similarity to amidases  
 9344\_at 280.5 P  
 Coiled-coil domain protein required for proper nuclear migration during mitosis (but not during conjugation)  
 9345\_at 567.2 A  
 questionable ORF  
 9346\_at 12843.1 P  
 similarity to YGR273c  
 9347\_at 7703.5 P  
 Probable component of serine palmitoyltransferase, which catalyzes the first step in biosynthesis of long-chain sphingolipids  
 9348\_at 11066.3 P  
 carboxypeptidase Y (proteinase C)  
 9304\_at 9772.2 P  
 hypothetical protein  
 9305\_at 347.6 P  
 weak similarity to hypothetical protein YJL062w  
 9306\_at 1337.6 P  
 phosphoribosylpyrophosphate amidotransferase  
 9307\_at 2125.8 P

mitochondrial ABC transporter protein  
9308\_at 2056.8 P  
Integral membrane mitochondrial protein  
9309\_at 1304.7 P  
alcohol dehydrogenase II  
9310\_at 1028.7 P  
encodes putative deubiquitinating enzyme  
9311\_at 443.6 P  
questionable ORF  
9312\_at 13047.5 P  
member of the glucanase gene family  
9313\_at 66.6 P  
Protein with similarity to Gls1p and Gls2p (GB:Z49212)  
9314\_at 213.0 A  
questionable ORF  
9315\_at 9414.3 P  
cell surface glycoprotein 115-120 kDa  
9316\_at 12853.7 P  
Karyopherin  
9317\_at 6823.4 P  
~100 kDa cytoplasmic protein  
9318\_at 4497.3 P  
similarity to YGR283c  
9319\_at 1631.1 P  
Regulates activity of protein phosphatase 1, Glc7p, which is involved in proper chromosome segregation  
9320\_at 4983.9 P  
hypothetical protein  
9321\_at 915.9 P  
similarity to YKR089c and YOR081c  
9322\_at 11341.0 P  
alpha-type of subunit of 20S proteasome  
9323\_at 9309.8 P  
similarity to hypothetical S. pombe protein  
9324\_at 2851.3 P  
similarity to YOR385w and YNL165w  
9325\_at 752.5 A  
questionable ORF  
9281\_at 1230.1 P  
questionable ORF  
9282\_at -41.0 A  
similarity to mucins, glucan 1,4-alpha-glucosidase and exo-alpha-sialidase  
9283\_at 8483.8 P  
strong similarity to alcohol-dehydrogenase  
9284\_at 2193.0 P  
Low-affinity Fe(II) transport protein  
9285\_at 552.8 P  
hypothetical protein  
9286\_s\_at 7879.2 P  
strong similarity to hypothetical proteins YPL273w and YLL062c  
9287\_s\_at 38.1 M  
strong similarity to YPL280w, YOR391c and YDR533c  
9288\_s\_at 508.6 P  
strong similarity to phosphopyruvate hydratases  
9289\_at 108.8 P  
strong similarity to YBL108w, YCR103c and YKL223w  
9290\_f\_at 1265.4 P

strong similarity to members of the Srp1p/Tip1p family

9291\_at 11487.2 P

protein associated to the ATP synthase

9292\_at 148.1 P

hypothetical protein identified by SAGE

9293\_at 802.0 P

identified by SAGE

9294\_at 8083.4 P

hypothetical protein

9295\_g\_at 4923.6 A

hypothetical protein

9296\_at 155.8 P

non-annotated SAGE orf Found reverse in NC\_001145 between 159029 and 159169 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9297\_at 498.3 P

non-annotated SAGE orf Found reverse in NC\_001145 between 390825 and 390965 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9298\_at 468.4 P

non-annotated SAGE orf Found forward in NC\_001145 between 31875 and 32045 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9299\_at 309.3 A

non-annotated SAGE orf Found reverse in NC\_001145 between 122312 and 122605 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9300\_at 58.1 P

non-annotated SAGE orf Found reverse in NC\_001145 between 503463 and 503660 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9301\_at 45.2 A

non-annotated SAGE orf Found reverse in NC\_001145 between 503665 and 503799 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9302\_at -0.8 A

non-annotated SAGE orf Found reverse in NC\_001145 between 768049 and 768219 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9303\_at 425.3 A

non-annotated SAGE orf Found forward in NC\_001145 between 769282 and 769425 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9258\_at -79.0 A

non-annotated SAGE orf Found forward in NC\_001145 between 46024 and 46185 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9259\_at 228.4 P

non-annotated SAGE orf Found forward in NC\_001145 between 171311 and 171469 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9260\_at 406.9 A

non-annotated SAGE orf Found reverse in NC\_001145 between 347179 and 347406 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9261\_at -60.8 A

non-annotated SAGE orf Found forward in NC\_001145 between 363103 and 363273 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9262\_at 334.4 P

non-annotated SAGE orf Found forward in NC\_001145 between 390814 and 390981 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9263\_at 599.0 P

non-annotated SAGE orf Found reverse in NC\_001145 between 492187 and 492357 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9264\_at 467.2 A

non-annotated SAGE orf Found forward in NC\_001145 between 632094 and 632234 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9265\_at 462.4 P  
non-annotated SAGE orf Found forward in NC\_001145 between 752987 and 753121 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9266\_at 933.1 P  
non-annotated SAGE orf Found forward in NC\_001145 between 762231 and 762389 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9267\_at 11107.5 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 849877 and 850053 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9268\_at 1339.2 P  
non-annotated SAGE orf Found forward in NC\_001145 between 863528 and 863674 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9269\_at 4604.5 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 910809 and 910946 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9270\_at -99.9 A  
non-annotated SAGE orf Found forward in NC\_001145 between 272960 and 273100 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9271\_at 6250.5 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 426343 and 426489 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9272\_at 74.0 A  
non-annotated SAGE orf Found forward in NC\_001145 between 486399 and 486548 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9273\_at -228.4 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 501944 and 502096 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9274\_at 96.3 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 29913 and 30104 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9275\_g\_at -64.5 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 29913 and 30104 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9276\_at 70.8 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 30023 and 30229 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9277\_at 80.2 P  
non-annotated SAGE orf Found forward in NC\_001145 between 115459 and 115659 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9278\_at -62.9 A  
non-annotated SAGE orf Found forward in NC\_001145 between 286805 and 287002 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9279\_at 290.1 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 297849 and 297983 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9280\_at 294.0 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 433097 and 433231 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9234\_at 66.9 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 433419 and 433640 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9235\_at 892.4 P  
non-annotated SAGE orf Found forward in NC\_001145 between 433828 and 434049 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9236\_at 741.4 A  
non-annotated SAGE orf Found forward in NC\_001145 between 434355 and 434564 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9237\_at 806.6 P  
non-annotated SAGE orf Found forward in NC\_001145 between 465271 and 465411 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9238\_at 297.9 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 465281 and 465418 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9239\_at 16.3 A  
non-annotated SAGE orf Found forward in NC\_001145 between 478063 and 478257 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9240\_at 44.8 A  
non-annotated SAGE orf Found forward in NC\_001145 between 480651 and 480791 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9241\_at 914.7 P  
non-annotated SAGE orf Found forward in NC\_001145 between 480923 and 481186 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9242\_i\_at -10.9 A  
non-annotated SAGE orf Found forward in NC\_001145 between 481528 and 481713 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9243\_at 237.9 A  
non-annotated SAGE orf Found forward in NC\_001145 between 481925 and 482149 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9244\_at 205.5 A  
non-annotated SAGE orf Found forward in NC\_001145 between 482056 and 482289 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9245\_at 30.2 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 511289 and 511522 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9246\_at 591.2 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 556676 and 556891 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9247\_g\_at 761.9 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 556676 and 556891 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9248\_at 216.2 A  
non-annotated SAGE orf Found reverse in NC\_001145 between 556746 and 556970 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9249\_i\_at 50.7 A  
non-annotated SAGE orf Found forward in NC\_001145 between 625379 and 625540 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9250\_f\_at -33.8 A  
non-annotated SAGE orf Found forward in NC\_001145 between 625379 and 625540 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9251\_at 349.0 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 646818 and 647009 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9252\_at 10604.1 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 762446 and 762586 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9253\_at 9998.8 P  
non-annotated SAGE orf Found reverse in NC\_001145 between 762597 and 762764 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9254\_at 579.8 A  
non-annotated SAGE orf Found forward in NC\_001145 between 837034 and 837171 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9255\_at -146.7 A

non-annotated SAGE orf Found reverse in NC\_001145 between 915029 and 915199 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9256\_at -106.6 A

non-annotated SAGE orf Found reverse in NC\_001145 between 9829 and 10008 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9257\_at -90.1 A

non-annotated SAGE orf Found reverse in NC\_001145 between 13361 and 13621 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9209\_at 5110.4 P

non-annotated SAGE orf Found reverse in NC\_001145 between 27916 and 28077 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9210\_at 1577.0 P

non-annotated SAGE orf Found forward in NC\_001145 between 49819 and 49965 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9211\_at 5494.0 P

non-annotated SAGE orf Found reverse in NC\_001145 between 62403 and 62543 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9212\_at -3.2 A

non-annotated SAGE orf Found reverse in NC\_001145 between 79732 and 79890 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9213\_at 42.9 A

non-annotated SAGE orf Found reverse in NC\_001145 between 151565 and 151720 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9214\_at -175.9 A

non-annotated SAGE orf Found reverse in NC\_001145 between 234512 and 234685 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9215\_at 348.9 A

non-annotated SAGE orf Found forward in NC\_001145 between 271996 and 272136 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9216\_at 127.9 P

non-annotated SAGE orf Found reverse in NC\_001145 between 302614 and 302787 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9217\_at 622.3 P

non-annotated SAGE orf Found forward in NC\_001145 between 337312 and 337602 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9218\_at 291.8 P

non-annotated SAGE orf Found forward in NC\_001145 between 426559 and 426696 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9219\_i\_at 97.3 P

non-annotated SAGE orf Found forward in NC\_001145 between 483361 and 483495 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9220\_r\_at 115.0 A

non-annotated SAGE orf Found forward in NC\_001145 between 483361 and 483495 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9221\_f\_at -32.9 A

non-annotated SAGE orf Found forward in NC\_001145 between 483361 and 483495 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9222\_at 132.5 A

non-annotated SAGE orf Found reverse in NC\_001145 between 509507 and 509701 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9223\_at 40.5 A

non-annotated SAGE orf Found forward in NC\_001145 between 611313 and 611507 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
9224\_at 726.9 P

non-annotated SAGE orf Found reverse in NC\_001145 between 623382 and 623516 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9225\_at 349.4 P  
 non-annotated SAGE orf Found forward in NC\_001145 between 652852 and 653010 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9226\_at 547.7 A  
 non-annotated SAGE orf Found forward in NC\_001145 between 667253 and 667450 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9227\_i\_at 7705.8 P  
 non-annotated SAGE orf Found reverse in NC\_001145 between 671528 and 671701 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9228\_r\_at 5399.8 P  
 non-annotated SAGE orf Found reverse in NC\_001145 between 671528 and 671701 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9229\_i\_at 322.6 P  
 non-annotated SAGE orf Found forward in NC\_001145 between 733267 and 733455 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9230\_r\_at 288.7 P  
 non-annotated SAGE orf Found forward in NC\_001145 between 733267 and 733455 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9231\_s\_at 774.5 P  
 non-annotated SAGE orf Found forward in NC\_001145 between 733267 and 733455 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9232\_at 96.0 A  
 non-annotated SAGE orf Found forward in NC\_001145 between 733313 and 733531 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9233\_at 1856.1 P  
 non-annotated SAGE orf Found forward in NC\_001145 between 774146 and 774280 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

9186\_at 3269.8 P  
 snRNA

9187\_i\_at 104.8 P  
 Centromere

9188\_at 290.8 P  
 snRNA

9189\_at 11701.2 P  
 snRNA

9190\_at 547.0 P  
 snRNA

9191\_at 2654.8 P  
 snRNA

9192\_at 391.8 P  
 snRNA

9193\_at 1785.8 P  
 snRNA

9194\_at 2798.8 P  
 snRNA

9195\_at 8469.0 P  
 snRNA

9196\_s\_at 374.6 A  
 similarity to M.verrucaria cyanamide hydratase, identical to hypothetical protein YFL061w

9197\_s\_at 2217.5 P  
 SNZ2 proximal ORF, stationary phase induced gene

9198\_s\_at 810.9 P  
 Snooze: stationary phase-induced gene family

9199\_at 1964.7 P  
 Hypothetical aryl-alcohol dehydrogenase

9200\_at 2363.0 P



histone deacetylase  
9201\_at 915.1 P  
Member of the AAA-protein family that includes NSFp and PEX1p

9202\_at 364.2 P  
Protein of the mitochondrial inner membrane with similarity to E. coli DnaJ and other DnaJ-like proteins, function partially overlaps that of Mdj1p

9203\_at 6246.8 P  
Cell-cycle regulation protein, may be involved in the correct timing of cell separation after cytokinesis

9204\_at 1348.7 P  
similarity to YOL003c, YLR246w and C.elegans hypothetical protein ZK757.1

9205\_at 768.4 P  
FIG4 expression is induced by mating factor.

9206\_at 123.0 A  
hypothetical protein

9207\_at 3308.4 P  
strong similarity to YCR094w and YNR048w

9208\_at 9916.3 P  
Cell wall beta-glucan assembly

9163\_at 3438.8 P  
weak similarity to Vcx1p

9164\_at 3369.5 P  
strong similarity to S.pombe Bem46 protein

9165\_at 348.7 A  
questionable ORF

9166\_at -53.0 A  
hexose transport protein

9167\_at 1177.4 P  
similarity to A.thaliana PRL1/2 protein

9168\_at 1457.4 P  
prephenate dehydratase

9169\_at 4899.3 P  
essential for assembly of a functional F1-ATPase

9170\_at 1263.2 P  
positive regulator of allophanate inducible genes

9171\_at 3306.0 P  
similarity to C.elegans hypothetical protein

9172\_at 5731.9 P  
subunit 2 of replication factor RF-A; 29% identical to the human p34 subunit of RF-A

9173\_at 488.7 P  
hypothetical protein

9174\_at 3545.1 P  
similarity to S.pombe hypothetical protein SPAC24H6.02c

9175\_at 378.9 A  
Binds Sin3p in two-hybrid assay and is present in a large protein complex with Sin3p and Stb2p

9176\_at 7874.0 P  
similarity to S.pombe and C.elegans hypothetical proteins

9177\_at 9130.5 P  
43.1 kDa Serine/threonine/tyrosine protein kinase

9178\_at 2729.8 P  
ribosomal protein of the small subunit, mitochondrial

9179\_at 6082.5 P  
similarity to C-term. of A.nidulans regulatory protein (qutR)

9180\_at 669.9 P  
similarity to Ypt1p and rab GTP-binding proteins

9181\_at 1293.2 P  
hypothetical protein

9182\_s\_at 8924.7 P  
 Ribosomal protein S19B (rp55B) (S16aB) (YS16B)  
 9183\_s\_at 7333.6 P  
 Ribosomal protein L18B (rp28B)  
 9184\_at 11466.0 P  
 Ribosomal protein L18B (rp28B)  
 9185\_at 10307.0 P  
 hypothetical protein  
 9140\_at 542.0 P  
 exhibits homology to Trf4p and Top1p  
 9141\_at 2264.4 P  
 protein kinase, homologous to Ste20p, interacts with CDC42  
 9142\_at 3183.9 P  
 similarity to S.pombe hypothetical protein SPAC23D3.13c  
 9143\_at 222.5 P  
 questionable ORF  
 9144\_at 491.9 P  
 hypothetical protein  
 9145\_at 803.6 P  
 hypothetical protein  
 9146\_at 663.1 P  
 Multicopy Suppressor of Bud Emergence  
 9147\_at 3156.6 P  
 Pseudouridine synthase  
 9148\_at 3125.0 P  
 N-glycosylated integral plasma membrane protein  
 9149\_at 2313.6 P  
 Subunit 3 of Replication Factor C\; homologous to human RFC 36 kDa subunit  
 9150\_at 1519.1 P  
 G(sub)1 cyclin that associates with PHO85  
 9151\_at 3182.7 P  
 strong similarity to C.elegans hypothetical protein  
 9152\_at 8753.6 P  
 non-clathrin coat protein involved in transport between ER and Golgi  
 9153\_at 1019.9 P  
 Cold sensitive U2 snRNA Supressor  
 9154\_at 426.7 P  
 hypothetical protein  
 9155\_at 3053.4 P  
 Mitochondrial ribosomal protein MRPL10 (YmL10)  
 9156\_at 3349.5 P  
 Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC3  
 and WSC4  
 9157\_at 1007.9 P  
 involved in processsing of tRNAs and rRNAs  
 9158\_at 7863.3 P  
 strong similarity to YDR214w  
 9159\_at 5973.5 P  
 sterol C-14 reductase  
 9160\_at 976.5 P  
 hypothetical protein  
 9161\_at 1506.6 P  
 similarity to YLR187w  
 9162\_at 7.1 A  
 homoserine O-trans-acetylase  
 9118\_at 462.6 M  
 questionable ORF

9119\_at 1680.2 P  
 similarity to human band 3 anion transport protein  
 9120\_at 1300.5 P  
 similarity to glycerate- and formate-dehydrogenases  
 9121\_at 1720.8 P  
 topoisomerase I interacting factor 1  
 9122\_at 935.6 P  
 Protein with coiled-coil domain essential for vesicular transport  
 9123\_at 4008.7 P  
 contains formin homology domains\; homologous to BNR1 (BNI1 related protein)  
 9124\_at 695.1 P  
 Protein highly homologous to permeases Can1p and Lyp1p for basic amino acids  
 9125\_at 35.1 A  
 hypothetical protein  
 9126\_at 9145.0 P  
 lysine permease  
 9127\_at 1783.9 P  
 Phosphatidylinositol 4-kinase  
 9128\_at 502.8 A  
 questionable ORF  
 9129\_at 654.6 P  
 similarity to human protein KIAA0174  
 9130\_at 2398.4 P  
 weak similarity to Sec14p  
 9131\_at 4652.7 P  
 YIP1-Interacting Factor, shows similarity to NADH dehydrogenases  
 9132\_at 2726.7 P  
 DNA polymerase II  
 9133\_at 1655.2 P  
 Fifth largest subunit of origin recognition complex\; contains possible ATP-binding site  
 9134\_at 575.0 P  
 hypothetical protein  
 9135\_at 5158.8 P  
 Antioxidant protein and metal homeostasis factor, protects against oxygen toxicity  
 9136\_at 1624.1 P  
 hypothetical protein  
 9137\_at 1331.2 P  
 Interacts with SNF1 protein kinase  
 9138\_at 2674.8 P  
 similarity to bacterial dihydropteroate synthase  
 9139\_at 11974.0 P  
 strong similarity to nucleic acid-binding proteins  
 9095\_at 268.4 P  
 hypothetical protein  
 9096\_at 635.3 P  
 hypothetical protein  
 9097\_at 3145.4 P  
 ribosomal protein of the large subunit (YmL30), mitochondrial  
 9098\_at 1852.9 P  
 RNA recognition motif-containing protein that participates in sequence-specific regulation of nuclear pre-mRNA abundance  
 9099\_at 654.9 P  
 protein contains a purine-binding domain, two heptad repeats and a hydrophobic tail, Rad50p interacts with Mre11p and Xrs2p in two-hybrid and immunoprecipitation analyses\; it co-localizes to spots with Mre11p and Xrs2p in a rad50s background  
 9100\_at 360.4 P

similarity to YDR109c  
 9101\_at 8470.1 P  
 49-kDa alpha subunit of RNA polymerase A  
 9102\_at 6401.6 P  
 cysteinyl-tRNA synthetase  
 9103\_at 4119.7 P  
 similarity to D.melanogaster SET protein  
 9104\_at 878.8 P  
 hypothetical protein  
 9105\_at 10242.0 P  
 translation initiation factor 3 (eIF3)  
 9106\_at 7920.2 P  
 transmembrane protein  
 9107\_at 968.4 P  
 similarity to human hypothetical protein KIAA0404  
 9108\_at 9157.2 P  
 Glucose-6-phosphate dehydrogenase  
 9109\_at 2429.5 P  
 strong similarity to K.marxianus LET1 protein  
 9110\_at 4672.5 P  
 Ca<sup>2+</sup>-dependent serine protease  
 9111\_at 190.6 P  
 Yeast putative Transmembrane Protein  
 9112\_at 2815.6 P  
 component of RNA polymerase II holoenzyme\mediator complex  
 9113\_at 273.2 A  
 questionable ORF  
 9114\_at 372.1 P  
 weak similarity to mouse hemoglobin zeta chain  
 9115\_at 2110.5 P  
 Is required to link Chs3p and Chs4p to the septins  
 9116\_at 3746.5 P  
 hypothetical protein  
 9117\_at 3819.7 P  
 weak similarity to Sec14p  
 9073\_at 1035.0 P  
 weak similarity to mammalian transcription elongation factor elongin A  
 9074\_at 2223.9 P  
 transcriptional regulator, putative glutathione transferase  
 9075\_at 565.0 P  
 similarity to dnaJ-like proteins  
 9076\_at 2.5 A  
 questionable ORF  
 9077\_at -226.9 A  
 questionable ORF  
 9078\_at 888.1 P  
 chaotic nuclear migration\; predicted mass is 67kDa  
 9079\_at 1143.0 P  
 hypothetical protein  
 9080\_at 94.7 P  
 Aut2p interacts with Tub1p and Tub2p\; Aut2p forms a protein complex with Aut7p\; Aut2p mediates attachment of autophagosomes to microtubules  
 9081\_at 2812.3 P  
 functionally related to TFIIIB, affects start site selection in vivo  
 9082\_at 3151.0 P  
 Component of nuclear RNase P and RNase MRP

9083\_at 9841.3 P  
 adenylosuccinate synthetase  
 9084\_at 5965.3 P  
 mannosyltransferase  
 9085\_at 115.3 A  
 similarity to E.coli hypothetical protein in serS 5 region  
 9086\_at 2360.8 P  
 weak similarity to E.coli bis(5 -nucleosyl)-tetrphosphatase  
 9087\_at 1919.7 P  
 repressor activator protein  
 9088\_at 473.3 P  
 similarity to hypothetical S. pombe protein  
 9089\_at 426.7 P  
 23 kDa peroxisome associated protein, binds Pex14p  
 9090\_at 1156.5 P  
 hypothetical protein  
 9091\_at 3790.4 P  
 weak similarity to C.cardunculus cypro4 protein  
 9092\_at 1394.7 P  
 hypothetical protein  
 9093\_at 54.0 P  
 encodes protein with RNA-binding motifs required for MRE2-dependent mRNA splicing  
 9094\_s\_at 10659.6 P  
 Heat shock protein of HSP70 family, homolog of SSB1  
 9050\_at 11173.1 P  
 weak similarity to Colletotrichum gloeosporioides nitrogen starvation-induced glutamine rich protein  
 9051\_at 5813.7 P  
 similarity to M.jannaschii hypothetical protein MJ1073  
 9052\_at 1574.9 P  
 similarity to structure-specific recognition proteins  
 9053\_at -120.2 A  
 questionable ORF  
 9054\_g\_at 90.6 P  
 questionable ORF  
 9055\_at 316.5 P  
 sporulation-specific protein  
 9056\_at -236.0 A  
 weak similarity to B.subtilis CDP-diacylglycerol--serine O-phosphatidyltransferase  
 9057\_at 732.2 P  
 peroxisomal 2,4-dienoyl-CoA reductase  
 9058\_at 1355.4 P  
 involved in regulation of carbon metabolism  
 9059\_at 747.4 P  
 strong similarity to human TGR-CL10C  
 9060\_at 802.2 P  
 Activates transcription of glycolytic genes\; homologous to GCR1\; may function in complex with Gcr2p  
 9061\_at 187.3 A  
 questionable ORF  
 9062\_at 1765.2 P  
 Protein involved in regulation of cell size  
 9063\_at -250.7 A  
 sporulation-specific protein with a leucine zipper motif, regulated by the transcription factor Ume6 and expressed early in meiosis  
 9064\_at 937.6 P  
 hypothetical protein  
 9065\_at -83.9 A

strong similarity to YDL222c and similarity to Sur7p  
9066\_at 1441.6 P  
hypothetical protein  
9067\_at 4316.0 P  
chitin synthase 1  
9068\_at 1708.5 P  
similarity to Synechocystis hypothetical protein  
9069\_at 12103.5 P  
hypothetical protein  
9070\_at 5577.7 P  
karyopherin alpha homolog of 60 kDa  
9071\_at 475.4 P  
involved in spindle pole body duplication and karyogamy, interacts with Cdc31p, localizes to the spindle pole body  
9072\_at 611.2 P  
hypothetical protein  
9028\_at 9884.4 P  
deubiquitinating enzyme  
9029\_at 1436.2 P  
ribosomal protein of the large subunit, mitochondrial  
9030\_at 1007.2 P  
questionable ORF  
9031\_at 1539.1 P  
protein kinase homolog  
9032\_at 2213.8 P  
weak similarity to S.pombe hypothetical protein  
9033\_at 3291.8 P  
similarity to hypothetical S. pombe protein  
9034\_at 349.2 P  
hypothetical protein  
9035\_at 10306.6 P  
Ribosomal protein S3 (rp13) (YS3)  
9036\_at 1169.9 P  
hypothetical protein  
9037\_at 2108.5 P  
weak similarity to Hkr1p  
9038\_at 6567.5 P  
similarity to S.pombe Rnp24p  
9039\_at 838.8 P  
hypothetical protein  
9040\_at 940.3 P  
multicopy suppressor of bem1 mutation, may be involved in G-protein mediated signal transduction  
9041\_at 2044.1 P  
Component of the anaphase-promoting complex  
9042\_at 176.3 A  
questionable ORF  
9043\_at 300.3 P  
questionable ORF  
9044\_at 8848.5 P  
Phosphatidylserine Decarboxylase 1  
9045\_at 3648.4 P  
similarity to C.elegans ZK688.3 protein and E.coli hpcEp  
9046\_at 2538.0 P  
CREB like repressor, bZIP protein that binds to CRE motifs, interacts with Mig1p  
9047\_at 1970.5 P  
hypothetical protein

a

9048\_at 1511.9 P  
 similarity to YOR385w and YMR316w  
 9049\_at 2088.5 P  
 hypothetical protein  
 9005\_at 3035.9 P  
 translation elongation factor eEF4  
 9006\_s\_at 10771.3 P  
 Ribosomal protein L42A (YL27) (L41A)  
 9007\_at 1598.5 P  
 Protein kinase  
 9008\_at 3403.4 P  
 YGP1 encodes gp37, a glycoprotein synthesized in response to nutrient limitation which is homologous to the sporulation-specific SPS100 gene  
 9009\_at 954.6 P  
 hypothetical protein  
 9010\_at 868.3 P  
 hypothetical protein  
 9011\_at 4622.9 P  
 weak similarity to S.pombe hypothetical protein SPAC10F6  
 9012\_at 7316.8 P  
 similarity to YHR133c  
 9013\_at 1729.1 P  
 hypothetical protein  
 9014\_at 3102.5 P  
 membrane-bound casein kinase I homolog  
 9015\_at 6518.1 P  
 Putative homolog of subunit 4 of bovine prefoldin, a chaperone comprised of six subunits  
 9016\_at 1462.7 P  
 hypothetical protein  
 9017\_at 3829.3 P  
 31-kDa subunit of RNA polymerase III (C); HMG1 like protein  
 9018\_at 1231.2 P  
 hypothetical protein  
 9019\_at 4707.9 P  
 weak similarity to S.pombe hypothetical protein  
 9020\_at 817.0 A  
 cofactor B  
 9021\_at 1680.0 P  
 Sm-like protein  
 9022\_at 266.3 P  
 hypothetical protein  
 9023\_at 21.6 A  
 mating a-factor pheromone precursor  
 9024\_at 101.3 A  
 similarity to YHR131c  
 9025\_at 222.1 P  
 hypothetical protein  
 9026\_at 461.3 P  
 Ammonia transport protein  
 9027\_at 7655.2 P  
 Adenosine deaminase/adenine aminohydrolase  
 8982\_i\_at 754.7 P  
 questionable ORF  
 8983\_s\_at 2056.6 P  
 questionable ORF  
 8984\_at 11142.4 P

70-kDa adenylyl cyclase-associated protein  
8985\_at 5132.1 P  
putative mitochondrial S4 ribosomal protein  
8986\_at 1240.9 P  
similarity to neurofilament triplet M protein  
8987\_at 9563.8 P  
peptidylprolyl cis-trans isomerase  
8988\_at 10300.9 P  
similarity to C.carbonum toxD gene  
8989\_at 1029.8 P  
hypothetical protein  
8990\_at 1926.1 P  
similarity to A.ambisexualis antheridiol steroid receptor  
8991\_at 5298.2 P  
Mitochondrial import receptor complex protein  
8992\_at 8690.2 P  
sn-1,2-diacylglycerol cholinephosphotransferase  
8993\_at 1867.4 P  
weak similarity to M.pneumoniae uridine kinase udk  
8994\_at 101.4 A  
Similar to human tumor suppressor gene known as TEP1, MMAC1 and PTEN1. Contains sequence motifs characteristic of protein tyrosine phosphatases.  
8995\_at 1224.5 P  
similarity to C.elegans hypothetical protein  
8996\_at 140.5 P  
spindle pole body component, associates in a complex with Spc97p and Tub4p perhaps as part of the microtubule attachment site of the SBP  
8997\_at 5095.6 P  
Protein with similarity to mammalian monocarboxylate transporters MCT1 and MCT2  
8998\_at 2659.5 P  
similarity to hypothetical S. pombe protein  
8999\_at 6340.4 P  
weak similarity to C.jejuni serine protease  
9000\_at 1071.0 P  
hypothetical protein  
9001\_at 6756.6 P  
70 kDa mitochondrial specialized import receptor of the outer membrane  
9002\_at 266.3 A  
questionable ORF  
9003\_at 2278.5 P  
weak similarity to M.jannaschii hypothetical protein MJ1257  
9004\_at 851.2 P  
essential suppressor of the respiratory deficiency of a pet mutant  
8959\_at 342.1 A  
carbon-catabolite sensitive malate synthase  
8960\_at 1374.1 P  
weak similarity to RING zinc finger protein from Gallus gallus  
8961\_at 995.8 P  
weak similarity to S.pombe hypothetical protein SPAC23C11  
8962\_at 1429.7 P  
questionable ORF  
8963\_at 10645.5 P  
subunit common to RNA polymerases I (A) and III (C)  
8964\_at 7574.7 P  
ATP-dependent RNA helicase of DEAD box family  
8965\_at 9595.1 P



ATP-dependent RNA helicase of DEAD box family  
8966\_at 11345.3 P  
cytochrome b5  
8967\_at 7285.5 P  
weak similarity to fruit fly RNA-binding protein  
8968\_at 290.4 A  
weak similarity to cytochrome-c oxidase  
8969\_at 4499.0 P  
strong similarity to YOR110w  
8970\_at 1994.3 P  
similarity to human AF-9 protein  
8971\_at 1331.5 P  
inositol polyphosphate 5-phosphatase  
8972\_at 11.9 A  
questionable ORF  
8973\_at 9450.1 P  
alpha-isopropylmalate synthase (2-Isopropylmalate Synthase)  
8974\_at 1105.3 P  
member of the leucine zipper family of transcriptional activators  
8975\_at 6375.8 P  
DNA polymerase I alpha subunit, p180  
8976\_at 2789.7 P  
similarity to YKL146w  
8977\_at 1859.2 P  
hypothetical protein  
8978\_at 4847.1 P  
similarity to YNL032w, YNL056w and YDR067c  
8979\_at 6767.9 P  
Ras proto-oncogene homolog  
8980\_at 764.7 P  
involved in transcriptional regulation of PHO5  
8981\_at 10098.3 P  
Ribosomal protein S7B (rp30)  
8936\_at 14725.9 P  
Ribosomal protein S7B (rp30)  
8937\_at 1261.6 P  
strong similarity to YOR092w  
8938\_at 813.1 P  
similarity to S.pombe hypothetical protein  
8939\_at 3.8 A  
rab5-like GTPase involved in vacuolar protein sorting and endocytosis  
8940\_at -3.8 A  
similarity to hypothetical C. elegans proteins Y48E1C.2 and Y48E1C.c  
8941\_at 3126.9 P  
similarity to chicken h-caldesmon, Uso1p and YKL201c  
8942\_at 2892.3 P  
GTP-binding protein of the rho subfamily of ras-like proteins  
8943\_at -185.4 A  
questionable ORF  
8944\_at 2876.3 P  
topoisomerase II, Top2p localizes to axial cores in meiosis  
8945\_at 4467.4 P  
weak similarity to synaptogamines  
8946\_at 4254.2 P  
hypothetical protein  
8947\_at 5437.7 P

Protein involved in propagation of M2 dsRNA satellite of L-A virus  
8948\_at 1257.8 P  
Required for endocytosis and organization of the cytoskeleton  
8949\_at 1686.9 P  
weak similarity to rabbit peroxisomal Ca-dependent solute carrier  
8950\_at 777.4 P  
MutL homolog, similar to Mlh1p, associates with Mlh1p, possibly forming a heterodimer, Pms1p and Msh1p act in concert to bind to a Msh2p-heteroduplex complex containing a G-T mismatch  
8951\_at 1626.5 P  
similarity to ribosomal protein S13  
8952\_at 3090.7 P  
hypothetical protein  
8953\_at 10133.1 P  
tropomyosin I  
8954\_at 5221.1 P  
hypothetical protein  
8955\_at 382.7 P  
similarity to dnaJ protein homolog YDJ1  
8956\_at 2113.2 P  
negative regulator of Ras cAMP pathway, shares weak homology with Spt2p  
8957\_at 7386.1 P  
similarity to YHR088w and C.elegans hypothetical protein F44G4.1  
8958\_at 1356.2 P  
Protein of unknown function  
8914\_at 1707.1 P  
mitochondrial lysine-tRNA synthetase  
8915\_at 2062.4 P  
RNase H(35), a 35 kDa ribonuclease H  
8916\_at 6165.0 P  
Dihydrolipoamide acetyltransferase component (E2) of pyruvate dehydrogenase complex  
8917\_at 8355.3 P  
translocase of the outer mito. membrane  
8918\_at 13506.8 P  
Ribosomal protein L16B (L21B) (rp23) (YL15)  
8919\_at 1472.1 P  
Fork Head homolog two  
8920\_i\_at 12328.4 P  
Ribosomal protein L9B (L8B) (rp24) (YL11)  
8921\_s\_at 10156.2 P  
Ribosomal protein L9B (L8B) (rp24) (YL11)  
8922\_at 11842.6 P  
Protein involved in the aging process  
8923\_at 3268.0 P  
similarity to resistance proteins  
8924\_at 7795.2 P  
yeast dnaJ homolog (nuclear envelope protein); heat shock protein  
8925\_at 1101.0 P  
weak similarity to Mycoplasma protoporphyrinogen oxidase  
8926\_at 5128.0 P  
RNA-binding (zeta) subunit of translation initiation factor 3 (eIF-3)  
8927\_at 9809.0 P  
90-kDa protein, located in nucleolus, that is homologous to a human proliferation-associated nucleolar protein, p120  
8928\_at 1262.5 P  
Actin-related protein  
8929\_at 4958.6 P

similarity to YIL117c  
 8930\_at 229.1 P  
 questionable ORF  
 8931\_at 3503.5 P  
 similarity to YNL032w and YNL099c  
 8932\_at 13815.1 P  
 Outer mitochondrial membrane porin (voltage-dependent anion channel, or VDAC)  
 8933\_at 1701.6 P  
 vacuolar protein  
 8934\_at 940.0 P  
 Tyrosine protein phosphatase involved in adaptation response to pheromone  
 8935\_at 9570.0 P  
 Cytochrome-c oxidase chain Va  
 8891\_at 981.0 P  
 hypothetical protein  
 8892\_at 754.2 P  
 hypothetical protein  
 8893\_at 1821.2 P  
 putative zinc finger protein  
 8894\_at 4026.0 P  
 Required for asparagine-linked glycosylation  
 8895\_at 1400.1 P  
 similarity to probable transcription factor Ask10p and hypothetical protein YPR115w, and strong similarity  
 to hypothetical protein YIL105c  
 8896\_at 2773.5 P  
 hypothetical protein  
 8897\_at 4236.0 P  
 strong similarity to human leukotriene-A4 hydrolase  
 8898\_at 181.2 P  
 questionable ORF  
 8899\_at 991.3 P  
 Bypass of PAM1  
 8900\_at 1631.9 P  
 weak similarity to Mlp1  
 8901\_at 1494.2 P  
 weak similarity to M.genitalium alanine--tRNA ligase  
 8902\_at 2463.8 P  
 90 kd subunit of TFIIB, also called TFIIB90 or B or B 90 component  
 8903\_at 1327.4 P  
 hypothetical protein  
 8904\_at 4440.5 P  
 alpha-4-beta-4 subunit of mitochondrial isocitrate dehydrogenase 1  
 8905\_at 3474.8 P  
 involved in secretion of proteins that lack classical secretory signal sequences  
 8906\_at 1146.7 P  
 hypothetical protein  
 8907\_s\_at 67.0 A  
 nearly identical to YNL018c  
 8908\_s\_at 238.1 A  
 nearly identical to YNL019c  
 8909\_at 2699.7 P  
 Tyrosine phosphatase  
 8910\_at 10454.5 P  
 Histone H3 (HHT1 and HHT2 code for identical proteins)  
 8911\_s\_at 10171.7 P  
 Histone H4 (HHF1 and HHF2 code for identical proteins)

8912\_at 2105.9 P  
 Putative mannosyltransferase of the KRE2 family  
 8913\_at -191.2 A  
 questionable ORF  
 8868\_at 1508.0 P  
 putative transcription factor  
 8869\_at 2705.9 P  
 similarity to *S.pombe* hypothetical protein  
 8870\_at 381.7 P  
 C-type cyclin associated with the Ssn3p cyclin-dependent kinase  
 8871\_at 1049.7 P  
 weak similarity to YBR271w and YJR129c  
 8872\_at 1248.3 P  
 Transcription factor homolog\; similarity to *Drosophila melanogaster* shuttle craft protein\; similarity to human NFx1 protein\; similarity to human DNA-binding protein tenascin  
 8873\_at 2639.0 P  
 weak similarity to *C.burnetii* FMU protein  
 8874\_at 2819.0 P  
 histone deacetylase, shares sequence similarity with Rpd3p, Hos1p, Hos2p, and Hos3p  
 8875\_at 203.5 P  
 Predicted SerVthr kinase  
 8876\_i\_at 1069.5 P  
 hypothetical protein  
 8877\_r\_at 310.0 A  
 hypothetical protein  
 8878\_s\_at -127.2 A  
 hypothetical protein  
 8879\_at 8993.6 P  
 poly(A)+ RNA-binding protein  
 8880\_at 2521.4 P  
 Proteinase inhibitor I2B (PBI2), that inhibits protease Prb1p (yscB)  
 8881\_at 203.4 A  
 translation elongation factor eEF3 homolog  
 8882\_at 215.8 P  
 questionable ORF  
 8883\_at 107.7 P  
 encodes a protein with high similarity to phospholipase B  
 8884\_at 887.6 P  
 similarity to hypothetical *A. thaliana* protein T14G11.21  
 8885\_at 8081.2 P  
 weak similarity to *B.subtilis* hypothetical protein ykrX  
 8886\_at 318.6 P  
 peroxisomal NADP-dependent isocitrate dehydrogenase  
 8887\_at 2947.8 P  
 similarity to YMR119w  
 8888\_at 9918.4 P  
 sit4 suppressor, dnaJ homolog  
 8889\_at 4142.5 P  
 Required for amino acid permease transport from the Golgi to the cell surface  
 8890\_at 2365.0 P  
 Mitochondrial ribosomal protein MRP7 (YmL2) (*E. coli* L27)  
 8845\_at 3909.3 P  
 hypothetical RNA-binding protein  
 8846\_at 910.0 P  
 Member of family of mitochondrial carrier proteins  
 8847\_at 7908.0 P

Significant sequence similarity to RPL7B, but neither can functionally replace the other. Does not correspond to any ribosomal component identified so far, based on its biochemical features

8848\_at 2742.2 P

an ORF of unknown function located in a centromeric region duplicated between chromosomes III and XIV (DOM34 homologue on chromosome III is a pseudogene)

8849\_at 10716.4 P

citrate synthase. Nuclear encoded mitochondrial protein.

8850\_at 180.0 A

Putative transmembrane protein

8851\_at 1632.6 P

34-kDa subunit of RNA polymerase III (C)

8852\_at 80.2 P

weak similarity to bovine interferon gamma precursor

8853\_at 6.6 A

questionable ORF

8854\_at 2243.3 P

hydrophilic protein); has cysteine rich putative zinc finger essential for function

8855\_at 728.1 P

Protein involved in autophagocytosis during starvation

8856\_at 3416.7 P

weak similarity to human phosphatidylcholine--sterol O-acyltransferase

8857\_at 1404.8 P

hypothetical protein

8858\_at 1112.7 P

Protein required for accurate mitotic chromosome segregation

8859\_at 572.8 P

putative RNA-dependent ATPase

8860\_at 1588.7 P

Uridine kinase

8861\_at 6511.4 P

similarity to Pho87p and YJL198w

8862\_at 232.8 P

weak similarity to hypothetical protein YMR206w

8863\_at 2538.9 P

Suppressor of Mitochondrial Mutation in the tRNA<sup>asp</sup> gene

8864\_at 12615.9 P

acetyl-CoA carboxylase

8865\_at 7839.8 P

23 kDa mitochondrial inner membrane protein

8866\_at 9139.2 P

hypothetical protein

8867\_at 1717.3 P

Acyl-CoA cholesterol acyltransferase (sterol-ester synthetase)

8823\_at 718.3 P

hypothetical protein

8824\_at 5401.5 P

hypothetical protein

8825\_at 1034.5 P

weak similarity to protein phosphatases

8826\_at 1940.1 P

73 kDa subunit of the SWI/SNF transcription activation complex, homolog of Rsc6p subunit of the RSC chromatin remodeling complex

8827\_at 1829.5 P

weak similarity to Rpc31p

8828\_at 1319.4 P

questionable ORF

8829\_at 2796.4 P  
 Guanine nucleotide exchange factor for Sar1p.  
 8830\_at 3759.1 P  
 similarity to human pyridoxal kinase  
 8831\_at 1848.2 P  
 Cyclophilin  
 8832\_at 3986.7 P  
 similarity to P.denitrificans cobW protein  
 8833\_at 4609.9 P  
 ExtraCellular Mutant  
 8834\_at 2714.5 P  
 MAP kinase kinase kinase\; activator of Pbs2p  
 8835\_at 3501.5 P  
 Serine\threonine protein phosphatase involved in glycogen accumulation  
 8836\_at 1943.7 P  
 para-aminobenzoate synthase, PABA synthase  
 8837\_at 947.3 P  
 shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains\; homologous to Sol2p and Sol3p  
 8838\_at 3499.6 P  
 Arp Complex Subunit  
 8839\_at 5735.4 P  
 strong similarity to ribosomal protein S12  
 8840\_at 2109.6 P  
 strong similarity to Mycoplasma ribosomal protein S19  
 8841\_at 5319.3 P  
 putative RNA helicase  
 8842\_at 1713.3 P  
 weak similarity to Anopheles mitochondrial NADH dehydrogenase subunit 2  
 8843\_at 663.1 P  
 hypothetical protein  
 8844\_at 2892.0 P  
 para hydroxybenzoate: polyprenyl transferase  
 8800\_at 985.9 A  
 hypothetical protein  
 8801\_at 13222.2 P  
 mevalonate pyrophosphate decarboxylase  
 8802\_at 11408.8 P  
 anchorage subunit of a-agglutinin  
 8803\_at 576.4 P  
 translational activator of cytochrome c oxidase  
 8804\_at 6513.9 P  
 strong similarity to S.pombe hypothetical protein SPAC31A2.02  
 8805\_at 598.3 P  
 similarity to ser/thr protein kinases  
 8806\_at 625.5 P  
 strong similarity to YCR094w and YNL323w  
 8807\_at 1582.9 P  
 small hydrophilic protein, enriched in microsomal membrane fraction, interacts with Sec1p  
 8808\_at 7421.6 P  
 Saccharopine dehydrogenase (NADP+, L-glutamate forming) (saccharopine reductase) (EC 1.5.1.10)  
 8809\_at 1649.2 P  
 weak similarity to chicken nucleolin  
 8810\_at 5106.0 P  
 Putative transcription factor  
 8811\_at 7002.4 P

A

strong similarity to human breast tumor associated autoantigen  
 8812\_at 5499.1 P  
 strong similarity to human breast tumor associated autoantigen  
 8813\_at 2255.0 P  
 similarity to C.elegans hypothetical protein CEESL47F  
 8814\_at 5901.3 P  
 Putative ion transporter similar to the major facilitator superfamily of transporters  
 8815\_at 211.7 A  
 transmembrane regulator of KAPA/DAPA transport  
 8816\_at 1131.8 P  
 dethiobiotin synthetase  
 8817\_at 592.4 P  
 7,8-diamino-pelargonic acid aminotransferase (DAPA) aminotransferase  
 8818\_at 438.6 P  
 similarity to alpha-1,3-mannosyltransferase  
 8819\_at 450.3 P  
 similar to FRE2  
 8820\_at 1315.2 P  
 weak similarity to hypothetical protein YDL218w  
 8821\_at 167.0 P  
 weak similarity to H.influenzae L-lactate permease (lctP) homolog  
 8822\_at 175.3 A  
 weak similarity to CYC1/CYP3 transcription activator  
 8776\_at -123.1 A  
 similarity to R.capsulatus 1-chloroalkane halidohydrolase  
 8777\_at 4135.5 P  
 strong similarity to YJL222w, YIL173w and Pep1p  
 8778\_at 851.9 P  
 strong similarity to Pep1p  
 8779\_at 4113.4 P  
 similarity to beta-glucan-elicitor receptor - Glycine max  
 8780\_at 413.3 P  
 similarity to Bul1p  
 8781\_at -39.0 A  
 similarity to central part of Bul1p  
 8782\_at 92.1 A  
 strong similarity to Snq2p  
 8783\_at 297.6 P  
 strong similarity to UDP-glucose 4-epimerase Gal10p  
 8784\_s\_at 342.6 A  
 strong similarity to E.coli D-mannonate oxidoreductase, identical to YEL070w  
 8785\_at 2781.5 P  
 weak similarity to B.subtilis nitrite reductase (nirB)  
 8786\_f\_at 1939.7 P  
 member of the seripauperin protein\gene family  
 8787\_at 2018.1 P  
 hypothetical protein identified by SAGE  
 8788\_at 641.8 P  
 hypothetical protein  
 8789\_s\_at 7137.3 P  
 Aminopeptidase of cysteine protease family  
 8790\_s\_at 5306.9 P  
 protein of unknown function  
 8791\_at 226.9 A  
 non-annotated SAGE orf Found reverse in NC\_001146 between 60023 and 60190 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8792\_at -104.0 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 60181 and 60321 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8793\_at 736.2 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 118895 and 119086 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8794\_i\_at -176.5 A  
non-annotated SAGE orf Found forward in NC\_001146 between 440983 and 441117 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8795\_r\_at 290.4 A  
non-annotated SAGE orf Found forward in NC\_001146 between 440983 and 441117 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8796\_at 924.7 P  
non-annotated SAGE orf Found forward in NC\_001146 between 728144 and 728293 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8797\_f\_at 244.6 P  
non-annotated SAGE orf Found forward in NC\_001146 between 101909 and 102082 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8798\_at -307.4 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 301931 and 302119 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8799\_at 557.4 P  
non-annotated SAGE orf Found forward in NC\_001146 between 499414 and 499554 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8752\_f\_at 233.3 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 519600 and 519773 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8753\_at 505.0 A  
non-annotated SAGE orf Found forward in NC\_001146 between 547109 and 547366 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8754\_at 13.3 A  
non-annotated SAGE orf Found forward in NC\_001146 between 568130 and 568402 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8755\_at 2702.1 P  
non-annotated SAGE orf Found forward in NC\_001146 between 716393 and 716575 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8756\_i\_at 14020.9 P  
non-annotated SAGE orf Found forward in NC\_001146 between 94941 and 95090 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8757\_at -355.9 A  
non-annotated SAGE orf Found forward in NC\_001146 between 281645 and 281881 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8758\_g\_at 81.4 A  
non-annotated SAGE orf Found forward in NC\_001146 between 281645 and 281881 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8759\_at 19.0 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 351383 and 351577 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8760\_at 12.1 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 412222 and 412371 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8761\_at -2.4 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 413306 and 413485 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8762\_at 3088.7 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 478137 and 478292 with 100% identity.



See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8763\_at 279.4 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 478228 and 478365 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8764\_at 573.1 P  
non-annotated SAGE orf Found forward in NC\_001146 between 482996 and 483139 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8765\_at 1633.3 P  
non-annotated SAGE orf Found forward in NC\_001146 between 663707 and 663856 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8766\_at 2627.4 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 17705 and 17908 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8767\_at 2178.5 P  
non-annotated SAGE orf Found forward in NC\_001146 between 140489 and 140683 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8768\_at 147.2 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 254027 and 254161 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8769\_g\_at -207.1 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 254027 and 254161 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8770\_i\_at 234.3 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 254055 and 254201 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8771\_r\_at 2.9 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 254055 and 254201 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8772\_at 3528.0 P  
non-annotated SAGE orf Found forward in NC\_001146 between 283359 and 283541 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8773\_at 4669.5 P  
non-annotated SAGE orf Found forward in NC\_001146 between 465994 and 466167 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8774\_at 6062.9 P  
non-annotated SAGE orf Found reverse in NC\_001146 between 586598 and 586816 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8775\_at 1698.0 P  
non-annotated SAGE orf Found forward in NC\_001146 between 89019 and 89186 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8729\_at 2017.2 P  
non-annotated SAGE orf Found forward in NC\_001146 between 89212 and 89394 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8730\_g\_at 9338.9 P  
non-annotated SAGE orf Found forward in NC\_001146 between 89212 and 89394 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8731\_at -30.5 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 240147 and 240317 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8732\_at -62.6 A  
non-annotated SAGE orf Found reverse in NC\_001146 between 286092 and 286301 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8733\_at 880.8 P  
non-annotated SAGE orf Found forward in NC\_001146 between 330326 and 330544 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8734\_at 56.7 A

non-annotated SAGE orf Found reverse in NC\_001146 between 335742 and 335897 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8735\_at 1176.4 P

non-annotated SAGE orf Found reverse in NC\_001146 between 355301 and 355477 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8736\_at 166.8 P

non-annotated SAGE orf Found forward in NC\_001146 between 366082 and 366222 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8737\_i\_at 22.6 A

non-annotated SAGE orf Found reverse in NC\_001146 between 546974 and 547210 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8738\_s\_at -8.6 P

non-annotated SAGE orf Found reverse in NC\_001146 between 546974 and 547210 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8739\_at 79.5 P

non-annotated SAGE orf Found forward in NC\_001146 between 553015 and 553233 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8740\_f\_at 59.3 A

non-annotated SAGE orf Found forward in NC\_001146 between 563260 and 563397 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8741\_at 736.4 A

non-annotated SAGE orf Found forward in NC\_001146 between 586648 and 586803 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8742\_at 303.2 A

non-annotated SAGE orf Found forward in NC\_001146 between 591162 and 591341 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8743\_at 247.8 P

non-annotated SAGE orf Found reverse in NC\_001146 between 604522 and 604659 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8744\_at 303.9 A

non-annotated SAGE orf Found reverse in NC\_001146 between 661997 and 662158 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8745\_at 544.8 P

non-annotated SAGE orf Found reverse in NC\_001146 between 663592 and 663789 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8746\_at 9.4 A

non-annotated SAGE orf Found reverse in NC\_001146 between 779443 and 779604 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8747\_at 188.2 P

non-annotated SAGE orf Found forward in NC\_001146 between 91546 and 91713 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8748\_at 279.8 A

non-annotated SAGE orf Found reverse in NC\_001146 between 104727 and 104876 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8749\_at -24.1 A

non-annotated SAGE orf Found forward in NC\_001146 between 116677 and 116865 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8750\_at -92.8 A

non-annotated SAGE orf Found forward in NC\_001146 between 191051 and 191257 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8751\_at 1854.4 P

non-annotated SAGE orf Found reverse in NC\_001146 between 267404 and 267571 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8705\_at 1006.6 P

non-annotated SAGE orf Found reverse in NC\_001146 between 342215 and 342487 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8706\_at 167.4 P  
 non-annotated SAGE orf Found forward in NC\_001146 between 394507 and 394662 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8707\_at 318.8 P  
 non-annotated SAGE orf Found forward in NC\_001146 between 449543 and 449731 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8708\_at 208.5 A  
 non-annotated SAGE orf Found forward in NC\_001146 between 452136 and 452276 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8709\_at 1637.0 P  
 non-annotated SAGE orf Found reverse in NC\_001146 between 614367 and 614516 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8710\_at 763.2 P  
 non-annotated SAGE orf Found forward in NC\_001146 between 623131 and 623265 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8711\_i\_at -132.3 A  
 non-annotated SAGE orf Found reverse in NC\_001146 between 651893 and 652045 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8712\_r\_at 110.7 A  
 non-annotated SAGE orf Found reverse in NC\_001146 between 651893 and 652045 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8713\_at 3995.3 P  
 snRNA

8714\_at 165.9 P  
 snRNA

8715\_at 67.7 A  
 hypothetical protein

8716\_s\_at 1088.4 P  
 Hypothetical aryl-alcohol dehydrogenase (AAD)

8717\_at 370.9 P  
 similarity to Pseudomonas alkyl sulfatase

8718\_at 160.3 A  
 similarity to P.putida phthalate transporter

8719\_at 307.9 A  
 strong similarity to hypothetical protein YIL166c

8720\_f\_at -164.5 P  
 strong similarity to members of the Srp1p/Tip1p family

8721\_at 7.5 A  
 hypothetical protein

8722\_at 838.9 P  
 hypothetical protein

8723\_at 3843.3 P  
 similarity to subtelomeric encoded proteins

8724\_at 2714.2 P  
 similarity to glucan 1,4-alpha-glucosidase Sta1p and YAR066w

8725\_g\_at 3305.3 P  
 similarity to glucan 1,4-alpha-glucosidase Sta1p and YAR066w

8726\_at 492.2 P  
 similarity to S.fumigata Asp FII

8727\_at -9.7 A  
 strong similarity to Cps1p

8728\_at 1277.5 P  
 similar to FRE2

8683\_at 499.9 P  
 induced by osmotic stress\; similar to dihydroflavonol 4-reductase from plants

8684\_at 105.9 A

questionable ORF  
8685\_at 1672.3 P  
Decapping protein involved in mRNA degradation  
8686\_at 497.3 P  
transcription factor, member of the histone acetyltransferase SAGA complex  
8687\_at 7218.5 P  
Peroxisomal membrane protein  
8688\_at 2365.8 P  
hypothetical protein  
8689\_at 513.7 P  
CTR9 is required for normal CLN1 and CLN2 G1 cyclin expression  
8690\_at 1167.7 P  
hypothetical protein  
8691\_at 10263.9 P  
6,7-dimethyl-8-ribityllumazine synthase (DMRL synthase)  
8692\_at 8849.0 P  
strong similarity to hypothetical S. pombe protein  
8693\_at 519.4 P  
similarity to YDR435c and C.elegans hypothetical protein  
8694\_at 2107.6 P  
Acetylnithine aminotransferase  
8695\_at 10220.0 P  
mRNA cap binding protein eIF-4E  
8696\_at 1062.7 P  
hypothetical protein  
8697\_at 1207.1 P  
weak similarity to tetracycline resistance proteins  
8698\_at 1167.8 P  
6-phosphofructo-2-kinase  
8699\_at 1491.8 P  
Stoichiometric member of mediator complex  
8700\_at 14.8 A  
questionable ORF  
8701\_at 4980.2 P  
High level expression Reduces Ty3 Transposition  
8702\_at 937.6 P  
similarity to glycopospholipid-anchored surface glycoprotein Gas1p  
8703\_at 64.2 A  
hypothetical protein  
8704\_at 3024.3 P  
ALuminium Resistance 1  
8660\_at 6167.7 P  
similarity to hypothetical S. pombe protein  
8661\_at 1592.4 P  
strong similarity to protein kinase Mck1p  
8662\_at 12176.1 P  
Ribosomal protein L25 (rpl6L) (YL25)  
8663\_at 12427.1 P  
cytosolic malate dehydrogenase  
8664\_at 2046.2 P  
hypothetical protein  
8665\_at 4708.1 P  
weak similarity to M.jannaschii hypothetical protein  
8666\_at 6319.0 P  
Putative polyadenylated-RNA-binding protein located in nucleus; similar to vertebrate hnRNP AVB protein family

8667\_at 4279.4 P  
 has been localized to both the plasma membrane and the mitochondrial membrane  
 8668\_at 13335.0 P  
 Ribosomal protein L18A (rp28A)  
 8669\_at 3389.4 P  
 similarity to monocarboxylate transporter proteins  
 8670\_at 137.1 P  
 hypothetical protein  
 8671\_at 468.1 P  
 weak similarity to human sodium channel alpha chain HBA  
 8672\_at 452.4 P  
 43 kDa protein, transcriptional activator  
 8673\_at 1177.1 P  
 homologous to Trf5p and Top1p, associates with Smc1p and Smc2p  
 8674\_at 316.2 P  
 similarity to human DS-1 protein  
 8675\_at 537.6 P  
 Serine/threonine protein kinase with similarity to Ste20p and Cla4p  
 8676\_at 1322.9 P  
 Multicopy Suppressor of Bud Emergence  
 8677\_at 6030.9 P  
 weak similarity to human ubiquitin-like protein GDY  
 8678\_at 3191.6 P  
 Involved in RAS localization and palmitoylation  
 8679\_at 10269.9 P  
 Overexpression yields resistance to Zeocin  
 8680\_at 846.5 P  
 Transcription factor involved in activation of phospholipid synthetic genes  
 8681\_at 391.1 P  
 weak similarity to human PL6 protein  
 8682\_at 704.6 P  
 questionable ORF  
 8638\_at 1136.5 P  
 Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC2  
 and WSC4  
 8639\_at 356.9 P  
 Involved in meiotic chromosome segregation\; may stabilize homologous DNA interactions at telomeres  
 and is required for a telomere activity in distributive segregation\; is associated with telomeres  
 8640\_at 5208.8 P  
 myo-inositol transporter  
 8641\_at 2201.0 P  
 tRNA 2'-phosphotransferase  
 8642\_at 1017.7 P  
 similarity to YOL002c and YDR492w  
 8643\_at 176.2 P  
 Ser/Thr protein kinase  
 8644\_at 135.5 A  
 questionable ORF  
 8645\_at 7137.0 P  
 similarity to hypothetical S.pombe protein  
 8646\_at 10981.2 P  
 cytoplasmic tryptophanyl-tRNA synthetase  
 8647\_at 1387.9 P  
 3,4-dihydroxy-5-hexaprenylbenzoate methyltransferase  
 8648\_at 715.9 P  
 Helicase in Mitochondria

8649\_at 1357.6 P  
 Subunit 4 of Replication Factor C\; homologous to human RFC 40 kDa subunit  
 8650\_at 1457.2 P  
 similarity to C.elegans hypothetical protein F25H8.1  
 8651\_at 6608.4 P  
 strong similarity to YBR147w  
 8652\_at 26.0 A  
 hypothetical protein  
 8653\_at 1823.3 P  
 MutS homolog encoding major mismatch repair activity in mitosis and meiosis, functions with Pms1p and Pms2\MLh1p in a complex which interacts with either Pms3\MLh6p to repair single-base and insertion-deletion mispairs, or Msh3p to repair only insertion-deletion mispairs  
 8654\_at 1526.2 P  
 putative transcription factor\; contains a zinc finger  
 8655\_at 1652.5 P  
 protein disulfide isomerase related protein  
 8656\_at 880.0 P  
 similarity to S.pombe hypothetical protein  
 8657\_at 7350.3 P  
 Alcohol dehydrogenase  
 8658\_at 27.7 A  
 hypothetical protein  
 8659\_at 272.4 P  
 similarity to A.thaliana hyp1 protein  
 8615\_at 918.6 P  
 similarity to YOL082w  
 8616\_at 1900.0 P  
 similarity to YOL083w  
 8617\_at 1155.8 P  
 encodes a GTPase activating protein, highly homologous to Ira1p, homologue of neurofibromin  
 8618\_at 2618.3 P  
 strong similarity to X.laevis XPMC2 protein  
 8619\_at 224.1 A  
 similarity to NADH dehydrogenases  
 8620\_at 600.7 P  
 hypothetical protein  
 8621\_at 7265.8 P  
 strong similarity to C.elegans K12H4.3 protein  
 8622\_at 1828.2 P  
 Dislikes Extra CIN8, (MDM) Mitochondrial distribution and morphology  
 8623\_at 1293.3 P  
 similarity to A.gambiae ATP-binding-cassette protein  
 8624\_at 2209.5 P  
 hypothetical protein  
 8625\_at 2804.9 P  
 hypothetical protein  
 8626\_at 1061.1 P  
 similarity to hypothetical S. pombe protein  
 8627\_at 1293.3 P  
 hypothetical protein  
 8628\_at 259.9 A  
 53-kDa coiled-coil protein  
 8629\_at 4377.7 P  
 Homolog of SIR2  
 8630\_at 284.5 P  
 Transcription factor (bHLH) involved in interorganelle communication between mitochondria,

peroxisomes, and nucleus  
 8631\_at 2442.2 P  
 DRAP deaminase  
 8632\_at 669.5 P  
 inositol polyphosphate 5-phosphatase  
 8633\_at 5148.3 P  
 (2)5-bisphosphate nucleotidase  
 8634\_at 1005.8 P  
 hypothetical protein  
 8635\_at 1870.0 P  
 Clathrin associated protein, medium subunit  
 8636\_at 7931.1 P  
 Phosphoribosylpyrophosphate synthetase (ribose-phosphate pyrophosphokinase)  
 8637\_at 2046.3 P  
 similarity to C.elegans hypothetical protein M02F4.4  
 8592\_at 3225.8 P  
 Glycerol-3-phosphate dehydrogenase (NAD+)  
 8593\_at 5305.9 P  
 arginosuccinate synthetase  
 8594\_at 380.3 P  
 similarity to hypothetical C. elegans protein F02E9.6  
 8595\_at 1535.4 P  
 phosphoglycerate mutase  
 8596\_at 939.1 P  
 similarity to B. subtilis transcriptional activator tenA  
 8597\_at 1305.1 P  
 weak similarity to transcription factors  
 8598\_at 948.4 P  
 hypothetical protein  
 8599\_at 2430.7 P  
 DNA Damage Responsive  
 8600\_at 6779.9 P  
 S-adenosylmethionine decarboxylase  
 8601\_at 2799.9 P  
 Component of the RNA polymerase II holoenzyme complex, positive and negative transcriptional  
 regulator of genes involved in mating-type specialization  
 8602\_at 168.3 P  
 questionable ORF  
 8603\_at 4772.4 P  
 Glutathione Synthetase  
 8604\_at 680.8 P  
 similarity to YAL018c and YOL047c  
 8605\_at 207.7 A  
 weak similarity to hypothetical proteins YAL018c and YOL048c  
 8606\_at -33.7 A  
 questionable ORF  
 8607\_at 1723.5 P  
 similarity to ser/thr protein kinase  
 8608\_at 1251.7 P  
 44 kDa phosphorylated integral peroxisomal membrane protein  
 8609\_at 1570.2 P  
 Endonuclease III-like glycosylase 2  
 8610\_at 1608.3 P  
 similarity to CCR4 protein  
 8611\_at 1805.5 P  
 weak similarity to M.sativa nuM1, hnRNP protein from C. tentans and D. melanogaster, murine/bovine

poly(A) binding protein II, and Nsr1p  
8612\_at 10205.9 P  
40S ribosomal protein S15 (S21) (rp52) (RIG protein)  
8613\_at 8825.6 P  
60S acidic ribosomal protein P2A (L44) (A2) (YP2alpha)  
8614\_at 10161.9 P  
alpha-type of subunit of 20S proteasome  
8570\_at 86.2 P  
questionable ORF  
8571\_at 3061.4 P  
weak similarity to YMR317w  
8572\_at 357.3 A  
questionable ORF  
8573\_at 727.8 P  
similarity to S.pombe rad18 and rpgL29 genes and other members of the SMC superfamily  
8574\_at 649.3 P  
Mitochondrial glutamyl-tRNA synthetase  
8575\_at 477.8 P  
hypothetical protein  
8576\_at 1581.4 P  
weak similarity to Y.lipolytica SIs1 protein precursor  
8577\_at 6582.1 P  
strong similarity to glycoprotein Gas1p  
8578\_at 1988.6 P  
hypothetical protein  
8579\_at 1225.8 P  
bZIP protein  
8580\_at 3489.3 P  
similarity to YPR125w  
8581\_at 7124.9 P  
hypothetical protein  
8582\_at 1799.4 P  
Affects longevity  
8583\_at 362.5 A  
hypothetical protein  
8584\_at 510.6 P  
mitochondrial initiation factor 2  
8585\_at 3909.8 P  
weak similarity to rat apoptosis protein RP-8  
8586\_at 3532.8 P  
possible component of RCC1-Ran pathway  
8587\_at 3574.4 P  
Tryptophan permease, high affinity  
8588\_at 6066.8 P  
similarity to Rim9p and YFR012w  
8589\_at 687.9 P  
tSNARE that affects a Late Golgi compartment  
8590\_at 189.8 P  
similarity to YFR013w  
8591\_at 1913.6 P  
Calmodulin-dependent protein kinase  
8547\_at -304.2 A  
weak similarity to YKR015c  
8548\_at 1617.2 P  
hypothetical protein  
8549\_at 870.4 P



#### Hmg-coa Reductase Degradation

8550\_at 7555.5 P

An evolutionarily conserved member of the histone H2A FVZ family of histone variants

8551\_at 829.2 P

strong similarity to phospholipases

8552\_at 2634.7 P

putative RNA 3'-terminal phosphate cyclase

8553\_at 1722.1 P

Mdm12p is a mitochondrial outer membrane protein. An Mdm12p homolog exists in *S. Pombe* which confers a dominant negative phenotype when expressed in *S. cerevisiae*

8554\_at 1270.5 P

hypothetical protein

8555\_at 2092.3 P

Appears to be a structural component of the chitin synthase 3 complex

8556\_at 2343.1 P

topoisomerase I

8557\_at 5995.6 P

RNA polymerase II subunit, homologous to *S. pombe* Rpb11p subunit

8558\_at 5406.6 P

DNA binding protein involved in transcriptional regulation

8559\_at 1651.5 P

similarity to *C.elegans* hypothetical protein, YDR126w, YNL326c and YLR246w

8560\_at 5448.7 P

strong similarity to YDR492w and *S.pombe* hypothetical protein

8561\_at 1830.1 P

negative transcriptional regulator

8562\_at 5150.8 P

#### Ribosomal RNA Processing

8563\_at 4186.3 P

Required for glucosylation in the N-linked glycosylation pathway

8564\_at 1566.8 P

subtilisin-like protease III

8565\_at 8428.7 P

weak similarity to hypothetical protein YDR339c

8566\_at 205.0 P

ATP dependent DNA ligase

8567\_at 1697.1 P

similarity to *M.jannaschii* hypothetical protein MJ0708

8568\_at 9008.0 P

small glutamine-rich tetratricopeptide repeat containing protein

8569\_at 1908.2 P

Cell wall integrity and stress response component 1

8525\_at -6.8 A

Killed In Mutagen, reduced growth in diepoxybutane and/or mitomycin C

8526\_at 2186.7 P

similarity to Tir1p and Tir2p

8527\_at 6127.4 P

Cold-shock induced protein of the Srp1p/Tir1p family of serine-alanine-rich proteins

8528\_at 1333.5 P

strong similarity to ATP-dependent permeases

8529\_at 498.1 P

similarity to YDR391c

8530\_g\_at 571.4 P

similarity to YDR391c

8531\_at 1528.4 P

strong similarity to YDR391c

8532_at	2118.2	P	
			B-type regulatory subunit of protein phosphatase 2A (PP2A)
8533_at	3618.2	P	
			hypothetical protein
8534_at	2240.6	P	
			p24 protein involved in membrane trafficking
8535_at	2701.0	P	
			Mitochondrial membrane protein
8536_at	630.4	P	
			Resistance to o-dinitrobenzene, calcium, and zinc
8537_at	362.7	P	
			similarity to YDR474c
8538_at	11069.9	P	
			10 kDa mitochondrial heat shock protein
8539_at	7635.5	P	
			similarity to Pyrococcus horikoshii hypothetical protein PHBQ041
8540_at	731.6	P	
			weak similarity to D.melanogaster probable Ca <sup>2+</sup> transporter rdgB
8541_at	2841.0	P	
			hypothetical protein
8542_at	382.3	P	
			hypothetical protein
8543_at	636.1	P	
			Homolog of SIR2
8544_at	2023.1	P	
			Protein required for cell cycle arrest in response to loss of microtubule function
8545_at	10589.3	P	
			Heat shock protein also induced by canavanine and entry into stationary phase
8546_at	973.3	P	
			bZIP protein, can activate transcription from a promoter containing a Yap recognition site
8502_at	217.0	A	
			hypothetical protein
8503_at	388.9	P	
			involved in invasive growth upon nitrogen starvation
8504_at	818.7	P	
			Metallothionein-like protein
8505_at	783.6	P	
			myc-family transcription factor homolog
8506_at	941.0	P	
			Protein that complements a drug-hypersensitive mutation
8507_at	768.8	P	
			Protein involved in constitutive endocytosis of Ste3p
8508_at	888.2	P	
			Required for mother cell-specific HO expression
8509_at	363.1	P	
			integral membrane protein\; c-terminal TMD\; located in endosome
8510_at	658.2	P	
			cytochrome c mitochondrial import factor
8511_at	3127.0	P	
			putative repressor protein\; contains nuclear targeting signal
8512_at	3675.5	P	
			Casein kinase II, beta subunit
8513_at	221.2	P	
			Mitochondrial glyoxylase-II
8514_at	278.1	P	
			questionable ORF

8515\_at 1470.8 P  
 weak similarity to YDR273w  
 8516\_at 1196.5 P  
 Protein involved in growth regulation  
 8517\_at 2531.9 P  
 weak similarity to YDR275w  
 8518\_at 11839.7 P  
 outer mitochondrial membrane protein, component of the mitochondrial protein translocation complex,  
 associates with Isp42p  
 8519\_at 11759.5 P  
 RNA helicase  
 8520\_at 5652.2 P  
 homologous to MTH1\; interacts with the SNF1 protein kinase and TBP in two-hybrid and in in vitro  
 binding studies  
 8521\_at 1378.5 P  
 RNA trafficking protein\; transcription activator  
 8522\_at -55.5 A  
 similarity to YER185w, Rta1p  
 8523\_at 112.8 A  
 hypothetical protein  
 8524\_at 4028.6 P  
 weak similarity to myosin heavy chain proteins  
 8480\_at 3992.4 P  
 hypothetical protein  
 8481\_at 1060.3 P  
 similarity to protamines  
 8482\_at 1112.0 P  
 similarity to Sis2p protein and C.tropicalis hal3 protein  
 8483\_at 41.3 A  
 questionable ORF  
 8484\_at 4449.4 P  
 weak similarity to human phosphorylation regulatory protein HP-10  
 8485\_at 1062.7 P  
 G2 allele of *skp1* suppressor  
 8486\_at 1257.0 P  
 encodes component of the spindle midzone  
 8487\_at 2090.2 P  
 weak similarity to YGL144c  
 8488\_at 667.0 P  
 hypothetical protein  
 8489\_at 7219.9 P  
 alpha subunit of casein kinase II  
 8490\_at 1626.3 P  
 strong similarity to YKR075c  
 8491\_at 11718.0 P  
 Ribosomal protein L3 (rp1) (YL1)  
 8492\_at 2119.6 P  
 weak similarity to human retinoblastoma binding protein 2  
 8493\_at 5094.0 P  
 Cytochrome c1  
 8494\_at 2104.0 P  
 hypothetical protein  
 8495\_at 7256.3 P  
 glycosyl transferase  
 8496\_at 116.6 A  
 hypothetical protein

8497\_at 767.9 P  
 GTPase activating protein  
 8498\_at 942.0 P  
 strong similarity to Thi10p  
 8499\_at 497.4 A  
 hypothetical protein  
 8500\_at 1003.5 P  
 hypothetical protein  
 8501\_at 967.4 P  
 endoplasmic reticulum t-SNARE, coprecipitates with Sec20p, Tip1p. and Sec22p  
 8457\_at 1364.9 P  
 similarity to Hbs1p, Sup2p and EF1-alpha  
 8458\_at 166.9 P  
 similarity to mouse KIN17 protein  
 8459\_at 3484.4 P  
 weak similarity to YMR172w  
 8460\_at 3322.7 P  
 Multi-copy suppressor of SOD-linked defects  
 8461\_at 1502.4 P  
 hypothetical protein  
 8462\_at 5077.1 P  
 strong similarity to YKR089c  
 8463\_at 992.9 P  
 questionable ORF  
 8464\_at 803.4 P  
 weak similarity to YKR091w  
 8465\_at 5378.8 P  
 hypothetical protein  
 8466\_at 7568.2 P  
 34-kDa, gamma subunit of oligosaccharyl transferase glycoprotein complex  
 8467\_at 3503.0 P  
 weak similarity to synaptogamines  
 8468\_at 1516.0 P  
 hypothetical protein  
 8469\_g\_at 1848.0 P  
 hypothetical protein  
 8470\_at 1766.3 P  
 weak similarity to human calcium influx channel  
 8471\_at 4270.1 P  
 small GTP-binding protein\; geranylgeranylated\; geranylgeranylation required for membrane association\;  
 also involved in endocytosis post vesicle internalization  
 8472\_at 1518.8 P  
 similarity to ser/thr protein phosphatases  
 8473\_at 994.2 P  
 similarity to hypothetical S.pombe protein D83992\_G  
 8474\_at 1588.0 P  
 ExtraCellular Mutant  
 8475\_at 960.7 P  
 similarity to S.pombe hypothetical protein SPAC22F3.04  
 8476\_at 2954.1 P  
 GTP-binding ADP-ribosylation factor  
 8477\_at 6978.4 P  
 Ribose-5-phosphate ketol-isomerase  
 8478\_at 13228.6 P  
 Ribosomal protein S7A (rp30)  
 8479\_at 5585.8 P

Ribosomal protein S7A (rp30)  
 8434\_at 829.5 P  
 hypothetical protein  
 8435\_at 4297.6 P  
 nuclear pore complex protein  
 8436\_at 6056.1 P  
 type 2 membrane protein\; probable secretory protein  
 8437\_at 155.7 P  
 similarity to mitochondrial carrier proteins  
 8438\_at 5787.3 P  
 ras proto-oncogene homolog  
 8439\_at 13.5 A  
 questionable ORF  
 8440\_at 1906.3 P  
 16-kDa, epsilon subunit of oligosaccharyltransferase complex\; 40\% identical to vertebrate DAD1 protein  
 8441\_at 884.0 P  
 hypothetical protein  
 8442\_g\_at 907.1 P  
 hypothetical protein  
 8443\_at 465.0 P  
 member of the syntaxin family of proteins\; predicted C-terminal TMD  
 8444\_at 524.4 A  
 weak similarity to human G-0/G-1 switch regulatory protein 8  
 8445\_at 6191.5 P  
 putative isoform of Leu4p  
 8446\_at 2927.8 P  
 inositol polyphosphate 5-phosphatase  
 8447\_at 2367.7 P  
 TFIIIC (transcription initiation factor) subunit, 55 kDa  
 8448\_at 370.6 P  
 weak similarity to B.subtilis maf protein  
 8449\_at 1571.9 P  
 similarity to C.elegans hypothetical protein  
 8450\_at 270.1 P  
 probable transcription factor, asparagine-rich zinc-finger protein, suppressor of mutation in the nuclear  
 gene for the core subunit of mitochondrial RNA polymerase  
 8451\_at 305.6 P  
 hypothetical protein  
 8452\_at 2316.7 P  
 involved in targeting and fusion of ER to golgi transport vesicles  
 8453\_at 2802.7 P  
 RNA polymerase III large subunit  
 8454\_at 7278.5 P  
 Probable 26S protease subunit and member of the CDC48VPAS1VSEC18 family of ATPases  
 8455\_at 968.4 P  
 hypothetical protein  
 8456\_at 1075.9 P  
 similarity to a C.elegans ZK632.3 protein  
 8412\_at 1084.7 P  
 Similar to mammalian aldo\keto reductases  
 8413\_at 27.7 A  
 questionable ORF  
 8414\_at 12338.0 P  
 profilin (actin-binding protein)  
 8415\_at 4490.7 P  
 extremely hydrophilic protein

8416\_at 3086.1 P  
 Ubiquitin-specific protease  
 8417\_at 1034.0 P  
 may encode a protein involved in one or more monooxygenase or hydroxylase steps of ubiquinone biosynthesis  
 8418\_at 1838.0 P  
 isoamyl acetate hydrolytic enzyme  
 8419\_at 2083.7 P  
 rho type GTPase activating protein  
 8420\_at 6613.2 P  
 phosphoribosylamino-imidazole-carboxylase  
 8421\_at 1645.1 P  
 hypothetical protein  
 8422\_at 749.3 P  
 mitochondrial integral membrane protein  
 8423\_at 3161.7 P  
 weak similarity to E.coli hypothetical 27K protein  
 8424\_at 3313.6 P  
 Peripheral membrane protein required for vacuolar protein sorting  
 8425\_s\_at 12114.7 P  
 translation elongation factor 2 (EF-2)  
 8426\_at -277.2 A  
 GTPase activating protein (GAP)  
 8427\_at -43.7 A  
 questionable ORF  
 8428\_at 9721.7 P  
 NAD+-dependent isocitrate dehydrogenase  
 8429\_at 707.3 P  
 similarity to YLR361c  
 8430\_at 1837.1 P  
 hypothetical protein  
 8431\_at 528.0 A  
 questionable ORF  
 8432\_at 2992.3 P  
 Transcription factor  
 8433\_at 1766.8 P  
 Actin-related protein  
 8389\_at 7794.5 P  
 Succinate-CoA Ligase (ADP-Forming)  
 8390\_at 769.6 P  
 Thiamin pyrophosphokinase  
 8391\_at 1866.8 P  
 weak similarity to human DNA-binding protein PO-GA and to bacterial H+-transporting ATP synthases  
 8392\_at 10141.9 P  
 strong similarity to hypothetical S. pombe protein and to hypothetical C. elegans protein  
 8393\_at 115.6 M  
 questionable ORF  
 8394\_at 175.9 P  
 similarity to YHR194w  
 8395\_at 1854.1 P  
 required for final stages of spliceosome maturation\; promotes step 1 of splicing  
 8396\_at 587.8 P  
 Involved in plasmid maintenance  
 8397\_at 2805.9 P  
 ribosomal protein of the large subunit, mitochondrial  
 8398\_at 7561.9 P

second largest subunit of RNA polymerase II  
 8399\_at 189.5 P  
 hypothetical protein  
 8400\_at 8528.0 P  
 multidrug resistance transporter  
 8401\_at 1385.3 P  
 similarity to hypothetical A. thaliana proteins F19G10.15 and T19F06.21  
 8402\_at 1210.8 P  
 similarity to 5'-flanking region of the Pichia MOX gene  
 8403\_at 348.9 P  
 Interacts with C-terminus of CDC12  
 8404\_at 10174.9 P  
 putative proteasome subunit  
 8405\_at 2245.6 P  
 Mitochondrial ribosomal protein of small subunit  
 8406\_at 1913.4 P  
 homologue of human E core protein  
 8407\_at 2587.2 P  
 Protein involved in mRNA transport from nucleus to cytoplasm  
 8408\_at 543.4 P  
 similarity to C.elegans cosmid F35C8  
 8409\_at 936.6 P  
 transcription factor  
 8410\_at 4086.8 P  
 strong similarity to S.pombe SPAC13G6.14 protein  
 8411\_at 3418.1 P  
 hypothetical protein  
 8366\_at 3072.0 P  
 similarity to E.histolytica surface lectin  
 8367\_at 1434.2 P  
 hypothetical protein  
 8368\_i\_at 10482.6 P  
 Ribosomal protein S28A (S33A) (YS27)  
 8369\_f\_at 9029.5 P  
 Ribosomal protein S28A (S33A) (YS27)  
 8370\_at 6053.8 P  
 glutaminyl-tRNA synthetase  
 8371\_at 711.8 P  
 questionable ORF  
 8372\_at 196.5 P  
 questionable ORF  
 8373\_at 1072.1 P  
 sphingoid long chain base (LCB) kinase  
 8374\_at 1652.0 P  
 similarity to finger protein YKL222c, YOR162c and YLR266c  
 8375\_at 129.5 P  
 strong similarity to YLR270w  
 8376\_at 2609.8 P  
 Stoichiometric member of mediator complex  
 8377\_at 4714.8 P  
 similarity to human and murine C3f protein  
 8378\_at 4027.9 P  
 ferrochelatase (protoheme ferrolyase)  
 8379\_at 207.9 P  
 weak similarity to rat SCP1 protein  
 8380\_at 41.0 A

Regulatory subunit for Glc7p  
 8381\_at 1235.3 P  
 similarity to BRR5 protein  
 8382\_at 160.8 P  
 Peroxisomal enoyl-CoA hydratase  
 8383\_at 1781.2 P  
 Actin assembly factor  
 8384\_f\_at 10007.7 P  
 Ribosomal protein S30B  
 8385\_at -66.6 A  
 hypothetical protein  
 8386\_at 8916.3 P  
 phosphoserine transaminase  
 8387\_at 1179.8 P  
 GTP binding protein, almost identical to Gsp1p  
 8388\_at 425.9 A  
 hypothetical protein  
 8343\_at 8173.4 P  
 Translation elongation factor Tu, mitochondrial  
 8344\_at 1722.3 P  
 Protein that may play a role in polarity establishment and bud formation  
 8345\_at 1656.1 P  
 weak similarity to chicken nonhistone chromosomal protein HMG-2  
 8346\_at 56.5 A  
 sporulation-specific exo-1,3-beta-glucanase  
 8347\_at 644.0 P  
 contains motifs that are present in a family of DNA-dependent ATPases, the SWI2/SNF2-like proteins  
 8348\_i\_at 1261.0 P  
 strong similarity to Thi10p  
 8349\_f\_at 2027.6 P  
 strong similarity to Thi10p  
 8350\_at 298.4 P  
 weak similarity to YPL112c  
 8351\_at 2083.9 P  
 Transcription factor IIA, large chain  
 8352\_at 734.1 P  
 possible leucine zipper  
 8353\_at 2273.3 P  
 Involved in lipoic acid metabolism  
 8354\_at 5997.7 P  
 hypothetical protein  
 8355\_at 8394.1 P  
 Multicopy suppressor of BFA (Brefeldin A)-induced lethality; implicated in secretion and nuclear segregation  
 8356\_at -31.1 A  
 questionable ORF  
 8357\_at 531.4 P  
 questionable ORF  
 8358\_at 3908.6 P  
 Ribose methyltransferase for mitochondrial 21S rRNA  
 8359\_at 4816.9 P  
 imidazoleglycerol-phosphate dehydratase  
 8360\_at 1323.1 P  
 questionable ORF  
 8361\_at 7644.7 P  
 ATP-dependent RNA helicase of DEAD box family; suppressor of a pre-mRNA splicing mutation, prp8-1



8362\_at 1546.0 P  
 hypothetical protein  
 8363\_at 3075.4 P  
 similarity to Brettanomyces RAD4 and to S.pombe hypothetical protein  
 8364\_at 8477.7 P  
 second-largest subunit of RNA polymerase III  
 8365\_at 2384.9 P  
 protein tyrosine phosphatase  
 8320\_at 7945.8 P  
 homology to bacterial nicotinate phosphoribosyl transferase  
 8321\_at 9960.3 P  
 RNA polymerase II subunit  
 8322\_at 829.9 P  
 encodes protein with GTP-binding domain related to dynamin  
 8323\_at 6102.2 P  
 beta subunit of G protein coupled to mating factor receptor  
 8324\_at 460.1 P  
 Involved in silencing at telomeres, HML and HMR  
 8325\_at -160.0 A  
 hypothetical protein  
 8326\_at 1498.8 P  
 similarity to M.xanthus hypothetical protein  
 8327\_at 780.1 P  
 Relieves uso1-1 Transport Defect  
 8328\_at 2964.0 P  
 Subunit 1 of Replication Factor C\; homologous to human RFC 140 kDa subunit  
 8329\_at 1065.0 P  
 questionable ORF  
 8330\_at 3109.4 P  
 dipeptidyl aminopeptidase  
 8331\_at 3603.7 P  
 hypothetical protein  
 8332\_at 1925.2 P  
 malonyl-CoA:ACP transferase  
 8333\_at 18.5 A  
 malonyl-CoA:ACP transferase  
 8334\_at 896.6 P  
 similarity to ADP/ATP carrier proteins  
 8335\_at 1071.2 P  
 protein of unknown function  
 8336\_at 12340.4 P  
 16-kDa RNA polymerase subunit (common to polymerases I, II and III)  
 8337\_at 1552.2 P  
 questionable ORF  
 8338\_at 9701.0 P  
 NifU-like protein A  
 8339\_at 1641.6 P  
 similarity to microtubule-interacting protein Mhp1p  
 8340\_at 3030.0 P  
 weak similarity to YNR013c  
 8341\_at 4209.5 P  
 Transcriptional modulator  
 8342\_at 11201.2 P  
 Transcriptional modulator  
 8297\_at 1814.8 P  
 protein kinase involved in protein kinase C pathway

8298\_at 3325.4 P  
 GrpE homolog, mitochondrial matrix protein  
 8299\_at 4089.9 P  
 protein kinase  
 8300\_f\_at 9785.3 P  
 Ribosomal protein L33B (L37B) (rp47) (YL37)  
 8301\_at -14.9 A  
 encodes snRNA U3, SNR17B also encodes snRNA U3  
 8302\_at 2588.6 P  
 dihydrofolate reductase  
 8303\_at -46.8 A  
 homology to human oxysterol binding protein  
 8304\_at 2698.8 P  
 similarity to hypothetical S. pombe protein  
 8305\_at 2066.0 P  
 hypothetical protein  
 8306\_at 3945.5 P  
 similarity to C.elegans ZK1058.5 protein  
 8307\_at 7083.5 P  
 tetrahydrofolylpolyglutamate synthase  
 8308\_at 354.2 P  
 Sporulation Specific  
 8309\_at 6522.9 P  
 similarity to M.jannaschii hypothetical protein MJ0588  
 8310\_at 1892.7 P  
 Acetyltransferase in the SAS gene family  
 8311\_at 2694.7 P  
 similarity to hypothetical C. elegans proteins  
 8312\_at 5171.0 P  
 weak similarity to reductases  
 8313\_at 11357.1 P  
 Suppressor of rad53 lethality  
 8314\_g\_at 11835.2 P  
 Suppressor of rad53 lethality  
 8315\_i\_at 8722.2 P  
 questionable ORF  
 8316\_at 668.6 P  
 subunit of the anaphase promoting complex  
 8317\_at 1399.6 P  
 CLeavage/Polyadenylation factor IA subunit; interacts with Pcf11p in the 2-hybrid system  
 8318\_at 3821.4 P  
 similarity to thiosulfate sulfurtransferases  
 8319\_at 1706.1 P  
 hypothetical protein  
 8274\_at 2130.4 P  
 hypothetical protein  
 8275\_at 2388.0 P  
 Protein involved in protein import into ER  
 8276\_at -14.6 A  
 hypothetical protein  
 8277\_at 1293.8 P  
 strong similarity to secretory protein Ssp134p  
 8278\_at 3593.3 P  
 calcium-binding protein component of spindle pole bodies, localizes to half-bridges and interacts with  
 KAR1  
 8279\_at 772.5 P

hypothetical protein  
 8280\_at 6430.9 P  
 ATPase\; component of the 26S proteasome cap subunit  
 8281\_at 8962.5 P  
 translation initiation factor eIF2b gamma subunit\; negative regulator in the general control of amino acid biosynthesis  
 8282\_at 4505.2 P  
 Subunit of the regulatory particle of the proteasome  
 8283\_at 1597.6 P  
 similarity to YLR243w  
 8284\_at 52.9 A  
 questionable ORF  
 8285\_at 1585.0 P  
 hypothetical protein  
 8286\_at 5509.4 P  
 Binds to beta-tubulin and may participate in microtubule morphogenesis  
 8287\_at 409.7 P  
 Pentamidine resistance protein  
 8288\_at 6820.8 P  
 similarity to ser/thr protein kinases  
 8289\_at 203.7 P  
 hypothetical protein  
 8290\_at 510.6 P  
 Required for viability in the absence of the kinesin-related Cin8p mitotic motor.  
 8291\_at 9674.0 P  
 Vacuolar H-ATPase 100 kDa subunit of membrane (V0) sector, essential for vacuolar acidification and vacuolar H-ATPase activity  
 8292\_at 11807.2 P  
 strong similarity to Rattus tricarboxylate carrier  
 8293\_at 7435.6 P  
 microtubule-associated protein  
 8294\_at 3221.2 P  
 similarity to resistance proteins  
 8295\_at 935.0 P  
 transfer RNA isopentenyl transferase  
 8296\_at 538.4 P  
 similarity to A.nidulans palA protein  
 8252\_at 10234.7 P  
 Binds to eIF4E, the mRNA cap-binding protein, and represses cap-dependent translation initiation by interfering with the interaction of eIF4E and eIF4G  
 8253\_at 184.4 A  
 questionable ORF  
 8254\_at 1925.9 P  
 uroporphyrinogen III synthase  
 8255\_at 131.3 M  
 hypothetical protein  
 8256\_at 2820.5 P  
 similarity to S.pombe dihydrofolate reductase  
 8257\_at 5554.2 P  
 weak similarity to phosducins  
 8258\_at 209.0 A  
 questionable ORF  
 8259\_at 2768.1 P  
 weak similarity to phosphoglycerate mutases  
 8260\_at 928.1 P  
 weak similarity to M.jannaschii hypothetical protein MJ0694

8261\_at 9271.0 P  
 similarity to D.melanogaster heat shock protein 67B2  
 8262\_at 7942.7 P  
 similarity to D.melanogaster heat shock protein 67B2  
 8263\_at 1256.3 P  
 weak similarity to PITSLRE protein kinase isoforms  
 8264\_at 1610.0 P  
 Disulfide isomerase related protein  
 8265\_at 404.1 P  
 similarity to C.elegans hypothetical protein  
 8266\_at 4476.8 P  
 transcriptional regulator  
 8267\_at 3178.3 P  
 similarity to cation translocating ATPases  
 8268\_at 756.3 P  
 similarity to human and mouse glomerulosclerosis protein Mpv17  
 8269\_f\_at 8240.9 P  
 Ribosomal protein S10A  
 8270\_f\_at 16812.3 P  
 Ribosomal protein S10A  
 8271\_at 4274.9 P  
 similarity to human hypothetical protein  
 8272\_at 175.3 P  
 weak similarity to SWI/SNF complex 60 KDa subunit from man and mouse  
 8273\_at 1103.0 P  
 similarity to hypothetical S. pombe protein  
 8229\_at 4042.9 P  
 similarity to Sdh4p  
 8230\_at 58.7 A  
 required for meiosis  
 8231\_at 9031.7 P  
 multiprotein bridging factor  
 8232\_at 2045.5 P  
 BUD site selection  
 8233\_g\_at 1713.4 P  
 BUD site selection  
 8234\_at 175.6 A  
 questionable ORF  
 8235\_at 3315.8 P  
 hypothetical protein  
 8236\_at 3694.9 P  
 CPA1 leader peptide  
 8237\_at 5671.2 P  
 Carbamoyl phosphate synthetase, arginine specific  
 8238\_at 1281.5 P  
 has strong homology to Drosophila ISWI  
 8239\_at 1888.7 P  
 AIP3 binding protein  
 8240\_at 1491.1 P  
 hypothetical protein  
 8241\_at 3931.8 P  
 similarity to human X-linked PEST-containing transporter  
 8242\_at 3172.3 P  
 homolog of chloroplast phosphate transporter  
 8243\_at 781.5 P  
 weak similarity to YIL149c

8244\_i\_at 12386.7 P  
 questionable ORF  
 8245\_r\_at 1329.1 P  
 questionable ORF  
 8246\_s\_at 8945.0 P  
 questionable ORF  
 8247\_at 11383.9 P  
 57 kDa nucleolar protein  
 8248\_at 8346.8 P  
 similarity to hypothetical *S. pombe* protein  
 8249\_at 456.7 P  
 sporulation-specific protein  
 8250\_at 239.7 A  
 hypothetical protein  
 8251\_at 1847.8 P  
 hypothetical protein  
 8206\_at 2398.8 P  
 Protein involved in cobalt accumulation\; dosage dependent suppressor of cobalt toxicity  
 8207\_at 5318.0 P  
 long chain fatty acyl:CoA synthetase  
 8208\_at 177.7 M  
 hypothetical protein  
 8209\_at 488.5 P  
 homolog of mammalian splicing factorVU2 snRNP protein  
 8210\_at 1798.3 P  
 hypothetical protein  
 8211\_at 1852.4 P  
 dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase  
 8212\_at 2418.6 P  
 similarity to hypothetical *S.pombe* protein SPAC1F12.05  
 8213\_at 10536.3 P  
 gamma-glutamyl phosphate reductase  
 8214\_at 788.6 P  
 similarity to YAL028w  
 8215\_at -33.8 A  
 questionable ORF  
 8216\_at 3891.7 P  
 myosin-1  
 8217\_at 9512.4 P  
 vesicle-associated membrane protein (synaptobrevin) homolog  
 8218\_at 2388.4 P  
 Putative ABC transporter highly similar to Pdr5p  
 8219\_at 1280.0 P  
 Multicopy suppressor of clathrin deficiency and of ts mutants of IPL1  
 8220\_at 513.1 P  
 catalytic subunit of mitochondrial DNA polymerase  
 8221\_at 420.7 P  
 questionable ORF  
 8222\_at 8034.4 P  
 27-kDa subunit of the vacuolar ATPase\; E subunit of V1 sector  
 8223\_at 190.8 P  
 questionable ORF  
 8224\_at 994.7 P  
 splicing factor  
 8225\_at 7079.9 P  
 Cytoplasmic alanyl-tRNA synthetase gene

8226\_at 3223.4 P  
 Appears to function early in (1,6)-beta-D-glucan synthesis pathway  
 8227\_at 2162.9 P  
 Mutants are defective in Ty1 Enhancer-mediated Activation  
 8228\_at 1081.1 P  
 similarity to YAL034c  
 8183\_at -87.6 A  
 strong similarity to E2 ubiquitin-conjugating enzymes  
 8184\_at 4229.6 P  
 DNA-dependent RNA polymerase I subunit A43  
 8185\_at 11424.2 P  
 RNA polymerase I subunit 190 (alpha)  
 8186\_at 2533.1 P  
 weak similarity to YAI037w  
 8187\_at 313.3 A  
 hypothetical protein  
 8188\_at 2665.8 P  
 TYE7, a 33 kDa serine-rich protein, is a potential member of the basic region/helix-loop-helix/leucine-zipper protein family  
 8189\_at 63.0 A  
 questionable ORF  
 8190\_at 1214.1 P  
 deoxycytidyl transferase  
 8191\_at 1795.7 P  
 Pyruvate kinase, glucose-repressed isoform  
 8192\_at 360.0 P  
 putative proline-specific permease  
 8193\_at 56.3 A  
 Protein involved in chromosome segregation, required for microtubule stability  
 8194\_at 325.8 A  
 weak similarity to Esp1p and mitochondrial *L.illustris* cytochrome oxidase I  
 8195\_at -66.8 A  
 mRNA is induced in meiosis, encodes a meiosis-specific serine/threonine protein kinase which interacts with and is believed to phosphorylate Hop1p  
 8196\_at 1013.3 P  
 hypothetical protein  
 8197\_at 824.5 P  
 weak similarity to adenylate cyclases  
 8198\_at 1969.8 P  
 hypothetical protein  
 8199\_at 4318.8 P  
 nam9-1 suppressor  
 8200\_at 5539.7 P  
 strong similarity to human electron transfer flavoprotein-ubiquinone oxidoreductase  
 8201\_at 1730.7 P  
 Grd19p that is epitope tagged with the HA epitope at the C-terminus is functional, migrates at 28 kDa, fractionates predominantly in the cytosolic fraction (however a minor amount associates with membranes), and shows diffuse cytosolic labeling when immunolocalized in wild-type yeast; however, in *vps27* mutant cells (a class E *vps* mutant, which accumulates a prevacuolar compartment), Grd19p-HA co-localizes with the vacuolar H<sup>+</sup>-ATPase in the prevacuolar compartment; Grd19p contains PX domain, which is found in proteins such as human SNX1 (Sorting Nexin-1) (Ponting, C.P. 1996. Protein Science 5:2353-2357)  
 8202\_at 822.8 P  
 Component, along with Hap2p and Hap3p, of CCAAT-binding transcription factor  
 8203\_at 4017.4 P  
 hypothetical protein

8204_at	1747.7	P	low-Km (high-affinity) cAMP phosphodiesterase
8205_at	9727.5	P	translation initiation factor eIF3 subunit
8161_at	7950.8	P	proteasome component YC1 (protease yscE subunit 1)
8162_at	677.2	P	Activator of peroxisome proliferation
8163_at	271.2	P	hypothetical protein
8164_at	49.3	A	strong similarity to YAL053w
8165_at	146.2	P	questionable ORF
8166_at	2276.8	P	Calponin homolog
8167_at	312.6	A	encodes a putative 3 ->5 exonuclease
8168_at	12863.5	P	40S ribosomal protein S12
8169_at	3133.5	P	protein of the TCDV/MRS6 family of GDP dissociation inhibitors (Rab escort protein)\; component of Rab geranylgeranyl transferase
8170_at	345.1	P	similarity to YAL056w
8171_at	2096.7	P	hypothetical protein
8172_at	1402.4	P	nucleosome assembly protein I
8173_at	4596.4	P	aldehyde dehydrogenase (E.C. 1.2.1.5) (sold by SIGMA under the catalogue number A5550, according to A. Blomberg)
8174_at	9857.0	P	NADP-specific glutamate dehydrogenase
8175_at	216.5	A	hypothetical protein
8176_at	654.3	P	Alcohol acetyltransferase
8177_at	59.1	A	strong similarity to aminotriazole resistance protein
8178_at	107.3	A	questionable ORF
8179_at	761.6	P	weak similarity to Pdr3p
8180_at	202.6	P	similar to FRE2
8181_at	1148.1	P	hypothetical protein
8182_at	7089.3	P	weak similarity to L.mexicana secreted acid phosphatase 2
8138_at	-36.1	A	similar to FRE2
8139_at	2052.8	P	strong similarity to hypothetical protein YMR316w
8140_at	240.7	P	photolyase

8141\_at -20.7 A  
 strong similarity to YGL258w  
 8142\_s\_at -30.2 A  
 Protein with similarity to formate dehydrogenases  
 8143\_at 793.7 P  
 strong similarity to putative pseudogenes YPL277c and YPL278c  
 8144\_g\_at 467.5 P  
 strong similarity to putative pseudogenes YPL277c and YPL278c  
 8145\_s\_at 2056.2 P  
 nearly identical to YPL279c  
 8146\_at 86.1 P  
 hypothetical protein  
 8147\_s\_at 55.0 A  
 strong similarity to members of the Srp1p/Tip1p family  
 8148\_at 138.7 P  
 hypothetical protein identified by SAGE  
 8149\_at 1020.9 P  
 identified by SAGE  
 8150\_s\_at 955.3 P  
 Sorting nexin I homologue  
 8151\_s\_at 2282.8 P  
 Thymidylate synthase  
 8152\_f\_at 585.2 P  
 Thymidylate synthase  
 8153\_at 2881.9 P  
 non-annotated SAGE orf Found forward in NC\_001147 between 33183 and 33335 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8154\_at -78.3 A  
 non-annotated SAGE orf Found reverse in NC\_001147 between 35996 and 36175 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8155\_at 361.0 A  
 non-annotated SAGE orf Found forward in NC\_001147 between 242830 and 243045 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8156\_g\_at -117.7 A  
 non-annotated SAGE orf Found forward in NC\_001147 between 242830 and 243045 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8157\_at 284.6 P  
 non-annotated SAGE orf Found forward in NC\_001147 between 571039 and 571224 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8158\_g\_at 3298.6 P  
 non-annotated SAGE orf Found forward in NC\_001147 between 571039 and 571224 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8159\_at 366.5 P  
 non-annotated SAGE orf Found forward in NC\_001147 between 571131 and 571283 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8160\_at 339.5 A  
 non-annotated SAGE orf Found reverse in NC\_001147 between 882274 and 882417 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8112\_at 787.6 P  
 non-annotated SAGE orf Found reverse in NC\_001147 between 14772 and 15044 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8113\_at 446.0 P  
 non-annotated SAGE orf Found reverse in NC\_001147 between 241012 and 241308 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 8114\_i\_at -116.9 A  
 non-annotated SAGE orf Found forward in NC\_001147 between 464469 and 464630 with 100% identity.



See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8115\_f\_at 3559.4 P  
non-annotated SAGE orf Found forward in NC\_001147 between 464469 and 464630 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8116\_f\_at 90.8 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 599528 and 599743 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8117\_i\_at 46.2 A  
non-annotated SAGE orf Found forward in NC\_001147 between 703721 and 703864 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8118\_i\_at 239.7 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 703986 and 704222 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8119\_f\_at 385.4 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 703986 and 704222 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8120\_at 1644.4 P  
non-annotated SAGE orf Found forward in NC\_001147 between 60049 and 60273 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8121\_at 268.8 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 85271 and 85453 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8122\_at -36.3 A  
non-annotated SAGE orf Found forward in NC\_001147 between 106351 and 106605 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8123\_at 185.3 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 136277 and 136426 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8124\_at 1562.7 P  
non-annotated SAGE orf Found forward in NC\_001147 between 185437 and 185643 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8125\_at 580.5 A  
non-annotated SAGE orf Found forward in NC\_001147 between 254904 and 255071 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8126\_at 3099.0 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 290642 and 290797 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8127\_at -97.9 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 316261 and 316395 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8128\_at 997.8 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 372047 and 372184 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8129\_at 1217.8 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 397425 and 397667 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8130\_at 97.0 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 414243 and 414401 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8131\_at 300.9 P  
non-annotated SAGE orf Found forward in NC\_001147 between 423955 and 424104 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8132\_at 5176.0 P  
non-annotated SAGE orf Found forward in NC\_001147 between 646896 and 647093 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8133\_at 86.6 A

non-annotated SAGE orf Found forward in NC\_001147 between 658442 and 658603 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8134\_at -220.4 A

non-annotated SAGE orf Found reverse in NC\_001147 between 671186 and 671422 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8135\_at 190.0 A

non-annotated SAGE orf Found forward in NC\_001147 between 680789 and 680935 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8136\_at 4480.0 P

non-annotated SAGE orf Found reverse in NC\_001147 between 715388 and 715549 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8137\_at 9714.4 P

non-annotated SAGE orf Found forward in NC\_001147 between 738543 and 738683 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8088\_i\_at -255.8 A

non-annotated SAGE orf Found forward in NC\_001147 between 792336 and 792482 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8089\_at 3559.4 P

non-annotated SAGE orf Found forward in NC\_001147 between 850067 and 850213 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8090\_at 163.9 P

non-annotated SAGE orf Found forward in NC\_001147 between 918334 and 918558 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8091\_at 98.4 A

non-annotated SAGE orf Found reverse in NC\_001147 between 922939 and 923082 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8092\_i\_at 6218.1 P

non-annotated SAGE orf Found forward in NC\_001147 between 1004376 and 1004510 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8093\_r\_at 3012.9 P

non-annotated SAGE orf Found forward in NC\_001147 between 1004376 and 1004510 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8094\_f\_at 4752.4 P

non-annotated SAGE orf Found forward in NC\_001147 between 1004376 and 1004510 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8095\_at 61.3 A

non-annotated SAGE orf Found forward in NC\_001147 between 301047 and 301238 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8096\_at 531.2 P

non-annotated SAGE orf Found forward in NC\_001147 between 413491 and 413682 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8097\_i\_at -18.3 A

non-annotated SAGE orf Found reverse in NC\_001147 between 798316 and 798483 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8098\_at 147.0 A

non-annotated SAGE orf Found forward in NC\_001147 between 980859 and 981032 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8099\_at 51.0 A

non-annotated SAGE orf Found reverse in NC\_001147 between 17812 and 17970 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8100\_at -40.2 A

non-annotated SAGE orf Found forward in NC\_001147 between 18708 and 18944 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8101\_at 327.6 A  
non-annotated SAGE orf Found forward in NC\_001147 between 27811 and 27948 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8102\_at 1868.6 P  
non-annotated SAGE orf Found forward in NC\_001147 between 136219 and 136404 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8103\_at 4.4 A  
non-annotated SAGE orf Found forward in NC\_001147 between 158885 and 159076 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8104\_at 1621.9 P  
non-annotated SAGE orf Found forward in NC\_001147 between 159172 and 159444 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8105\_at -10.1 A  
non-annotated SAGE orf Found forward in NC\_001147 between 226577 and 226801 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8106\_at 923.4 P  
non-annotated SAGE orf Found forward in NC\_001147 between 418190 and 418375 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8107\_at 464.1 P  
non-annotated SAGE orf Found forward in NC\_001147 between 438710 and 438853 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8108\_at -117.2 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 682213 and 682368 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8109\_at -87.9 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 682295 and 682447 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8110\_at 49.9 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 759487 and 759765 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8111\_g\_at 125.4 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 759487 and 759765 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8063\_at 2302.3 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 775471 and 775614 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8064\_at -46.0 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 836569 and 836709 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8065\_at 56.9 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 854174 and 854314 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8066\_at 582.4 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 969027 and 969179 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8067\_i\_at 3204.3 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 974085 and 974252 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8068\_at 47.1 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 978298 and 978459 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8069\_at -55.5 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 978494 and 978640 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

8070\_at 73.4 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 979330 and 979470 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8071\_f\_at 298.2 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 1086064 and 1086357 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8072\_i\_at 293.9 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 1086206 and 1086379 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8073\_f\_at 99.2 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 1086206 and 1086379 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8074\_s\_at 965.7 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 1089906 and 1090073 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8075\_s\_at 719.2 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 1090615 and 1090749 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8076\_at 155.7 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 16559 and 16696 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8077\_at -138.7 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 16638 and 16781 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8078\_at 150.0 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 16760 and 16939 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8079\_s\_at 62.5 A  
non-annotated SAGE orf Found forward in NC\_001147 between 27083 and 27217 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8080\_at 791.2 P  
non-annotated SAGE orf Found forward in NC\_001147 between 27147 and 27371 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8081\_at -29.2 A  
non-annotated SAGE orf Found forward in NC\_001147 between 42706 and 42873 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8082\_at 117.8 A  
non-annotated SAGE orf Found forward in NC\_001147 between 43030 and 43167 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8083\_at 16.8 A  
non-annotated SAGE orf Found forward in NC\_001147 between 43142 and 43348 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8084\_at -121.3 A  
non-annotated SAGE orf Found forward in NC\_001147 between 108972 and 109109 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8085\_at 1258.0 P  
non-annotated SAGE orf Found forward in NC\_001147 between 180361 and 180495 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8086\_at -67.4 A  
non-annotated SAGE orf Found forward in NC\_001147 between 193557 and 193784 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8087\_at 240.8 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 271475 and 271732 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8039\_at 292.5 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 301017 and 301250 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8040\_at 1180.4 P  
non-annotated SAGE orf Found forward in NC\_001147 between 524856 and 525080 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8041\_at 1457.2 P  
non-annotated SAGE orf Found reverse in NC\_001147 between 609691 and 609825 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8042\_at 280.1 A  
non-annotated SAGE orf Found forward in NC\_001147 between 690271 and 690495 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8043\_at -10.7 A  
non-annotated SAGE orf Found forward in NC\_001147 between 692115 and 692309 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8044\_at 7078.1 P  
non-annotated SAGE orf Found forward in NC\_001147 between 758077 and 758286 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8045\_at -25.2 A  
non-annotated SAGE orf Found forward in NC\_001147 between 778364 and 778516 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8046\_at 355.7 P  
non-annotated SAGE orf Found forward in NC\_001147 between 825297 and 825503 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8047\_at 789.9 P  
non-annotated SAGE orf Found forward in NC\_001147 between 877184 and 877345 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
8048\_at 7534.3 P  
non-annotated SAGE orf Found forward in NC\_001147 between 1004147 and 1004431 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8049\_at 30.2 A  
non-annotated SAGE orf Found forward in NC\_001147 between 1070794 and 1071003 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8050\_at -76.4 A  
non-annotated SAGE orf Found forward in NC\_001147 between 1071000 and 1071164 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8051\_i\_at -10.2 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 1074040 and 1074183 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8052\_r\_at 58.7 A  
non-annotated SAGE orf Found reverse in NC\_001147 between 1074040 and 1074183 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
8053\_at 715.2 A  
snRNA  
8054\_at 1137.8 P  
snRNA  
8055\_i\_at -65.3 A  
Centromere  
8056\_at 2639.0 P  
snRNA

8057_i_at	194.0	P	
snRNA			
8058_r_at	248.5	P	
snRNA			
8059_at	684.7	P	
snRNA			
8060_at	1476.8	P	
snRNA			
8061_at	2313.8	P	
snRNA			
8062_at	7441.0	P	
snRNA			
8016_at	84.8	A	
snRNA			
8017_at	5244.7	P	
snRNA			
8018_i_at	165.3	P	
strong similarity to hypothetical protein YOR389w/putative pseudogene			
8019_s_at	316.7	P	
strong similarity to hypothetical protein YOR389w/putative pseudogene			
8020_s_at	-14.1	A	
putative formate dehydrogenase/putative pseudogene			
8021_at	4755.2	P	
strong similarity to amino-acid transport proteins			
8022_at	3895.7	P	
weak similarity to M.leprae methH2 protein, and strong similarity to hypothetical protein YLL062c			
8023_at	73.4	A	
hypothetical protein			
8024_at	9326.5	P	
nuclear gene for ATP synthase epsilon subunit			
8025_at	2378.9	P	
ATP-binding cassette (ABC) transporter family member			
8026_at	698.1	P	
Cortical protein required for cytoplasmic microtubule orientation\; localizes to the tip of shmoo projections and to the tip of budding cells in a cell-cycle dependent manner			
8027_at	1186.8	P	
phosphoinositide-specific phospholipase C			
8028_at	753.6	P	
weak similarity to C.elegans transcription factor unc-86			
8029_at	7222.4	P	
dimethyladenosine transferase			
8030_at	10473.5	P	
dicarboxylic amino acid permease			
8031_at	666.8	P	
strong similarity to YMR253c			
8032_at	1387.4	P	
similarity to Kel2p and Kel3p			
8033_at	15353.9	P	
mitochondrial and cytoplasmic fumarase (fumarate hydralase)			
8034_at	198.7	A	
questionable ORF			
8035_at	2163.7	P	
hypothetical protein			
8036_at	1471.1	P	
medium subunit of the clathrin-associated protein complex			
8037_at	611.0	P	

similarity to *B.subtilis* transcriptional activator tenA, and strong similarity to hypothetical proteins YOL055c and YPR121w

8038\_at 86.4 A

weak similarity to YIL029c

7993\_at 2902.2 P

G(sub)1 cyclin

7994\_at 240.0 P

Involved in mitotic cell cycle and meiosis

7995\_at 2247.3 P

transcription factor, member of AdaVGcn5 protein complex

7996\_at 205.8 A

Cik1p homolog

7997\_at 7544.4 P

iron-sulfur protein homologous to human adrenodoxin

7998\_at 105.5 A

questionable ORF

7999\_at 5371.4 P

weak similarity to YMR195w

8000\_i\_at 7473.5 P

Ribosomal protein L36B (L39) (YL39)

8001\_at 93.8 P

similarity to mouse Tbc1 protein

8002\_at 995.2 P

zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type

8003\_at 1410.0 P

similarity to human HAN11 protein and petunia an11 protein

8004\_at 7379.0 P

weak similarity to mouse proteinase activated receptor 2

8005\_at 3121.3 P

weak similarity to human mutL protein homolog

8006\_at 3337.2 P

weak similarity to human UDP-galactose transporter related isozyme 1

8007\_at 3120.1 P

component of signal recognition particle

8008\_at 681.9 P

Homolog of the mammalian IQGAP1 and 2 genes; probable regulator of cellular morphogenesis, inducing actin-ring formation in association with cytokinesis

8009\_at 1606.9 P

involvement in microtubule function

8010\_i\_at 8150.1 P

heat shock protein

8011\_at 7036.0 P

YAR1 encodes a 200-amino-acid protein with two ANK repeat motifs and an acidic C terminus rich in PEST-like sequences

8012\_at 1521.5 P

questionable ORF

8013\_at 8200.9 P

beta subunit of translation initiation factor eIF-2

8014\_at 347.1 P

similarity to Prk1p, and serine/threonine protein kinase homolog from *A. thaliana*

8015\_at 6324.7 P

strong similarity to TATA-binding protein-interacting protein 49 from rat

7970\_at 8748.3 P

17-kDa subunit C of vacuolar membrane H(+)-ATPase

7971\_at 559.2 P

hypothetical protein

7972\_at 5996.7 P  
 SSO1 and SSO2 encode syntaxin homologs; act in late stages of secretion  
 7973\_at 9474.1 P  
 alpha subunit of fatty acid synthase  
 7974\_at -22.3 A  
 Up in StarVation  
 7975\_at 1211.3 P  
 weak similarity to YMR181c  
 7976\_at 2233.5 P  
 mRNA capping enzyme beta subunit (80 kDa), RNA 5'-triphosphatase  
 7977\_at 2632.1 P  
 UDP-glucose:dolichyl-phosphate glucosyltransferase  
 7978\_at 11778.8 P  
 similarity to translation elongation factor eEF3  
 7979\_at 6044.0 P  
 hypothetical protein  
 7980\_at 2617.4 P  
 Protein involved in mitochondrial iron accumulation  
 7981\_at 340.8 P  
 Induced by osmotic stress  
 7982\_at 82.4 P  
 similarity to C.perfringens hypothetical protein  
 7983\_at 5866.3 P  
 Bypass of PAM1  
 7984\_s\_at 9438.3 P  
 Ribosomal protein L1A, forms part of the 60S ribosomal subunit  
 7985\_at 1028.2 P  
 PHO85 cyclin  
 7986\_at 10175.7 P  
 GTP binding protein  
 7987\_at 3192.8 P  
 similarity to human hypothetical protein KIAA0187  
 7988\_at 201.2 P  
 similarity to YGL133w  
 7989\_at 1447.0 P  
 Protein required for assembly of ubiquinol cytochrome-c reductase complex (cytochrome bc1 complex)  
 7990\_at 1540.3 P  
 TMP pyrophosphorylase, hydroxyethylthiazole kinase  
 7991\_at 604.4 P  
 similarity to A.thaliana U2 snRNP protein A  
 7992\_at 5226.1 P  
 intranuclear protein which exhibits a nucleotide-specific intron-dependent tRNA pseudouridine synthase activity  
 7947\_at 6503.5 P  
 Nip7p is required for 60S ribosome subunit biogenesis  
 7948\_at 3088.4 P  
 component of signal recognition particle  
 7949\_at 320.2 P  
 Protein kinase  
 7950\_at 1228.7 P  
 similarity to YHL039w  
 7951\_at 4133.6 P  
 similarity to hypothetical proteins from A. fulgidus, M. thermoautotrophicum and M. jannaschii  
 7952\_at 7206.8 P  
 weak similarity to glycerophosphoryl diester phosphodiesterases  
 7953\_at 441.1 P



questionable ORF  
7954\_at 5535.1 P  
casein kinase I isoform  
7955\_at 2538.6 P  
cAMP-dependent protein kinase catalytic subunit  
7956\_at 937.3 P  
similarity to cell size regulation protein Rcs1p  
7957\_at 0.1 A  
hypothetical protein  
7958\_at -39.7 A  
hypothetical protein  
7959\_at 6730.4 P  
weak similarity to T.cruzi p284 protein  
7960\_i\_at 7361.5 P  
Ribosomal protein L7B (L6B) (rp11) (YL8)  
7961\_f\_at 7558.9 P  
Ribosomal protein L7B (L6B) (rp11) (YL8)  
7962\_s\_at 11296.9 P  
Ribosomal protein L7B (L6B) (rp11) (YL8)  
7963\_at 391.1 P  
questionable ORF  
7964\_at 1182.8 P  
weak similarity to S.pombe hypothetical protein SPAC8C9  
7965\_at 1453.9 P  
delta-like subunit of the yeast AP-3 adaptin component of the membrane-associated clathrin assembly  
complex  
7966\_at 782.7 P  
DNA damage checkpoint gene  
7967\_at 484.2 P  
weak similarity to human centromere protein E  
7968\_at 494.0 A  
hypothetical protein  
7969\_at 219.7 P  
strong similarity to YGL082w  
7924\_at 1721.8 P  
polyadenylated RNA-binding protein  
7925\_at 181.0 P  
strong similarity to YGL084c  
7926\_at 1591.3 P  
similarity to Utr1p and YEL041w  
7927\_at 9515.8 P  
mating factor alpha  
7928\_at 330.9 P  
weak similarity to Xenopus protein xlgv7  
7929\_at 27.8 A  
questionable ORF  
7930\_at 2357.4 P  
weak similarity to Pub1p  
7931\_at 3951.1 P  
ribosomal protein L36, mitochondrial  
7932\_at 4170.9 P  
similarity to Taf90p  
7933\_at 645.9 P  
questionable ORF  
7934\_at 570.5 P  
weak similarity to YKR029c

7935\_at 2353.3 P  
weak similarity to human I-caldesmon I  
7936\_at 2541.6 P  
protein phosphatase Q  
7937\_at 4429.2 P  
Small subunit of nuclear cap-binding protein complex  
7938\_at 5528.6 P  
putative DNA binding protein which shows similarity in homeobox domain to human proto-oncogene PBX1  
7939\_at 1900.7 P  
similarity to chinese hamster transferrin receptor protein  
7940\_at 1569.7 P  
N-acetylglucosaminyl-phosphatidylinositol biosynthetic protein  
7941\_at 217.2 P  
Nuclear import protein  
7942\_at 2015.4 P  
Mitochondrial ribosomal protein MRPL40 (YmL40)  
7943\_at 1827.6 P  
Putative farnesyl transferase required for heme A synthesis  
7944\_at 616.3 P  
NAD(P)H dehydrogenase  
7945\_at 2535.9 P  
similarity to C.elegans LIM homeobox protein  
7946\_at 5251.9 P  
INvolved in nuclear mRNA export, binds both poly(A)  
7902\_at 36.3 P  
weak similarity to E.coli bfpB protein  
7903\_at 546.2 P  
DNA polymerase  
7904\_at 39.2 A  
weak similarity to paramyosins  
7905\_at -64.5 A  
weak similarity to YHR207c  
7906\_at 486.6 A  
similarity to mismatch repair protein Mlh1p  
7907\_at 10807.3 P  
Serine and threonine rich protein.  
7908\_at 1151.5 P  
hypothetical protein  
7909\_at 715.4 P  
Involved in polarity establishment and bud emergence\; interacts with the Rho1p small GTP-binding protein  
7910\_at 9095.3 P  
cytosolic leucyl tRNA synthetase  
7911\_at 1088.5 P  
weak similarity to YPR151c  
7912\_at 4462.9 P  
weak similarity to human nucleolin  
7913\_at 724.8 P  
weak similarity to S.pombe hypothetical protein SPAC2G11.15c  
7914\_at 1067.7 P  
weak similarity to YDL010w  
7915\_at 823.1 P  
kinesin-related protein  
7916\_at 9834.9 P  
vacuolar proteinase A

7917\_at 217.3 P  
protein kinase, Mec1p and Tel1p regulate rad53p phosphorylation  
7918\_at 1095.2 P  
Resistant to Rapamycin Deletion 2  
7919\_at 2075.9 P  
strong similarity to *A.thaliana* PRL1 and PRL2 proteins  
7920\_at 375.1 P  
similarity to ser/thr protein kinases  
7921\_at 1535.5 P  
involved in autophagy  
7922\_at 1209.0 P  
Phosphopantetheine  
7923\_at 170.2 P  
Pxa1p and Pxa2p appear to be subunits of a peroxisomal ATP-binding cassette transporter necessary for transport of long-chain fatty acids into peroxisomes  
7879\_at 1283.9 P  
weak similarity to myosin heavy chain proteins  
7880\_at 6799.1 P  
Homologous to human oxysterol-binding protein\; implicated in ergosterol biosynthesis and regulation of Golgi-derived transport vesicle biogenesis  
7881\_at 4587.4 P  
encodes snRNA U3, SNR17A also encodes snRNA U3  
7882\_f\_at 12365.3 P  
Ribosomal protein L33A (L37A) (YL37) (rp47)  
7883\_at 639.4 P  
questionable ORF  
7884\_at 1444.2 P  
strong similarity to protein kinase Kin4p  
7885\_at 393.2 P  
protein kinase  
7886\_at 443.3 P  
Transcriptional modulator  
7887\_at 1300.4 P  
weak similarity to fruit fly polycomblike nuclear protein  
7888\_at 1566.4 P  
similarity to microtubule-interacting protein Mhp1p and to hypothetical protein YOR227w  
7889\_at -226.8 A  
questionable ORF  
7890\_at 5146.7 P  
NifU-like protein A  
7891\_at 878.1 P  
similarity to ADP/ATP carrier proteins  
7892\_at 924.7 P  
weak similarity to transcription factors  
7893\_at 1883.3 P  
Putative heme A biosynthetic enzyme involved in forming the formyl group at position 8 of the porphyrin ring  
7894\_at 9598.5 P  
Ribosomal protein L5 (L1a)(YL3)  
7895\_at 208.2 P  
hypothetical protein  
7896\_at 4410.2 P  
TFIIF subunit (transcription initiation factor), 30 kD  
7897\_at 2196.7 P  
TTAGGG repeat binding factor  
7898\_at 4319.6 P

histone H1  
 7899\_at 2241.4 P  
 weak similarity to fruit fly TFIID subunit p85  
 7900\_at 2570.8 P  
 weak similarity to YDR395w and cellular apoptosis susceptibility protein  
 7901\_at 265.3 P  
 Nuclear import protein  
 7857\_at 236.2 P  
 similarity to ribonucleases  
 7858\_at 1830.8 P  
 TFIID subunit Tfb2; has homology to CAK and human IIF subunits  
 7859\_at -22.9 A  
 Meiotic protein required for synapsis and meiotic recombination  
 7860\_at 1027.8 P  
 Required for sorting and delivery of soluble hydrolases to the vacuole.  
 7861\_at 581.1 P  
 putative ATP-dependent RNA helicase; Dead box protein  
 7862\_at 2322.9 P  
 Component of small subunit of the mitochondrial ribosome  
 7863\_at 5824.3 P  
 Isopentenyl diphosphate:dimethylallyl diphosphate isomerase (IPP isomerase)  
 7864\_at 513.6 P  
 Protein with similarity to Hda1p, Rpd3p, Hos2p, and Hos1p  
 7865\_at 4089.3 P  
 has GTPase-activating protein activity toward the essential bud-site assembly GTPase Cdc42  
 7866\_at 801.0 P  
 questionable ORF  
 7867\_at 274.1 P  
 similarity to glycerate dehydrogenases  
 7868\_at 3571.3 P  
 weak similarity to YOR193w  
 7869\_at 4575.8 P  
 arginase  
 7870\_at 2450.7 P  
 similarity to C.elegans hypothetical protein, weak similarity to Pho81p  
 7871\_at 452.8 P  
 similarity to aminoglycoside acetyltransferase regulator from P. stuartii  
 7872\_at 1035.3 P  
 hypothetical protein  
 7873\_at 544.3 P  
 hypothetical protein  
  
 7874\_at 10211.3 P  
 HSP70 family member, highly homologous to Ssa1p and Sse2p  
 7875\_at 3419.7 P  
 similarity to Smy2p  
 7876\_at 2219.0 P  
 Aspartyl-tRNA synthetase, mitochondrial  
 7877\_at 2480.0 P  
 similarity to hypothetical M. tuberculosis protein  
 7878\_at 870.5 P  
 questionable ORF  
 7834\_at 4044.0 P  
 hypothetical protein  
 7835\_at 1353.5 P  
 similarity to YFR021w

7836\_at 1432.9 P  
 weak similarity to Sulfolobus hypothetical protein  
 7837\_at 8491.5 P  
 similarity to S.pombe hypothetical protein  
 7838\_at 932.1 P  
 Tyrosyl-tRNA synthetase  
 7839\_at 1836.9 P  
 hypothetical protein  
 7840\_at 1141.2 P  
 strong similarity to YBR177c  
 7841\_at 5746.8 P  
 membrane component of ER protein translocation apparatus  
 7842\_at 8375.3 P  
 similarity to M.jannaschii GTP-binding protein, GTP1/OBG-family, weak similarity to other GTP-binding proteins  
 7843\_at 1541.0 P  
 sensitive to sulfite  
 7844\_at 7485.1 P  
 Glutathione oxidoreductase  
 7845\_s\_at 10991.6 P  
 Ribosomal protein S6A (S10A) (rp9) (YS4)  
 7846\_at 3136.6 P  
 serum response factor-like protein  
 7847\_at 1176.1 P  
 similarity to aryl-alcohol dehydrogenases  
 7848\_at 5576.9 P  
 strong similarity to YBR183w  
 7849\_at 2371.7 P  
 Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs  
 7850\_at 1898.3 P  
 multidomain vesicle coat protein that interacts with Sec23p  
 7851\_at 878.6 P  
 BCK1-like resistance to osmotic shock  
 7852\_at 722.2 P  
 54kDa subunit of the tetrameric tRNA splicing endonuclease  
 7853\_at 2220.5 P  
 putative helicase  
 7854\_i\_at 6075.4 P  
 Ribosomal protein S9A (S13) (rp21) (YS11)  
 7855\_f\_at 7866.3 P  
 Ribosomal protein S9A (S13) (rp21) (YS11)  
 7856\_at 182.6 P  
 hypothetical protein  
 7811\_at 5245.7 A  
 Ribosomal protein L21B  
 7812\_at 4984.4 P  
 F(1)F(0)-ATPase complex delta subunit, mitochondrial  
 7813\_at 277.4 P  
 weak similarity to YBR197c  
 7814\_at 1836.1 P  
 Required for synthesis of N-acetylglucominyolphosphatidylinositol, the first intermediate in synthesis of glycosylphosphatidylinositol (GPI) anchors  
 7815\_at 632.7 P  
 similarity to Vps4p and YER047c  
 7816\_at -52.4 A  
 questionable ORF

7817\_at 484.6 P  
 encodes putative deubiquitinating enzyme  
 7818\_at 675.4 P  
 hypothetical protein  
 7819\_at 689.0 P  
 weak similarity to Vps9p  
 7820\_at 738.8 P  
 geranylgeranyl diphosphate synthase  
 7821\_at 815.6 P  
 hypothetical protein  
 7822\_at 3031.1 P  
 hypothetical protein  
 7823\_at 2135.0 P  
 hypothetical protein  
 7824\_at 1497.3 P  
 soluble, hydrophilic protein involved in transport of precursors for soluble vacuolar hydrolases from the late endosome to the vacuole  
 7825\_at 1705.3 P  
 weak similarity to S.pombe peptidyl-prolyl cis-trans isomerase  
 7826\_at 5249.1 P  
 similarity to hypothetical protein YLR019w, YLL010c and S.pombe hypothetical protein SPAC2F7.02c  
 7827\_at 301.3 A  
 hypothetical protein  
 7828\_at 12266.5 P  
 cytosolic aldehyde dehydrogenase  
 7829\_at 284.2 P  
 strong similarity to Mrs2p  
 7830\_at 4356.0 P  
 similarity to glutaredoxins  
 7831\_at 6600.7 P  
 multidrug resistance transporter  
 7832\_at 3656.9 P  
 Multicopy suppressor of *cls2-2*; also suppresses *rvs161* mutations  
 7833\_at 1479.9 P  
 hypothetical protein  
 7788\_at 968.6 P  
 hypothetical protein  
 7789\_at 311.7 P  
 protein of unknown function  
 7790\_at 6934.3 P  
 mannosylphosphate transferase  
 7791\_at 3575.5 P  
 hypothetical protein  
 7792\_at 1372.5 P  
 strong similarity to ADP-ribosylation factors  
 7793\_at 3810.2 P  
 Protein required for complex glycosylation  
 7794\_at 5318.4 P  
 MAP kinase-associated protein  
 7795\_at 7557.4 P  
 Calcium and phospholipid binding protein homologous to translation elongation factor 1-gamma (EF-1gamma)  
 7796\_at 2060.2 P  
 hypothetical protein  
 7797\_at 1898.4 P  
 Elongin C transcription elongation factor

7798_at	1188.5	P	
Vacuolar sorting protein			
7799_at	348.0	P	
questionable ORF			
7800_at	5830.9	P	
RNA recognition motif-containing protein			
7801_at	1333.9	P	
cyclin(SSN8)-dependent serine/threonine protein kinase			
7802_at	1372.8	P	
hypothetical protein			
7803_at	1324.9	P	
nuclear encoded mitochondrial isoleucyl-tRNA synthetase			
7804_at	837.9	P	
hypothetical protein			
7805_at	764.5	P	
zinc finger DNA binding factor, transcriptional regulator of sulfur amino acid metabolism, highly homologous to Met32p			
7806_at	9580.9	P	
GAL4 enhancer protein, has similarity to human transcription factor BTF3			
7807_at	613.0	P	
plasma membrane ATPase			
7808_at	420.2	P	
questionable ORF			
7809_at	1056.0	P	
questionable ORF			
7810_at	75.1	A	
weak similarity to YLR426w			
7766_at	6397.2	P	
styryl dye vacuolar localization			
7767_at	4882.6	P	
negative transcriptional regulator, protein kinase homolog			
7768_at	1964.6	P	
similarity to C.elegans hypothetical protein			
7769_at	1018.1	P	
putative ATP-dependent helicase			
7770_at	7136.1	P	
acetoacetyl CoA thiolase			
7771_at	457.4	A	
hypothetical protein			
7772_at	1842.5	P	
serine/threonine protein kinase homologous to Ran1p			
7773_at	109.2	A	
questionable ORF			
7774_at	528.1	P	
(N)egative regulator of (C)ts1 (E)xpression			
7775_at	3620.9	P	
putative methylenetetrahydrofolate reductase (mthfr)			
7776_at	615.7	P	
UV endonuclease			
7777_at	89.7	A	
ExtraCellular Mutant\; similar to SRD1			
7778_at	2773.7	P	
weak similarity to Smt4p			
7779_at	8429.0	P	
strong similarity to YFL004w, similarity to YJL012c			
7780_at	1123.5	P	

a

Important for chromosome segregation

7781\_at -59.9 A

strong similarity to Lpd1p and other dihydrolipoamide dehydrogenases

7782\_at 1614.3 P

Zinc-finger transcription factor

7783\_at 2109.0 P

Homolog of SIR2

7784\_at 917.5 P

hypothetical protein

7785\_at 3863.7 P

ribosomal protein S16, mitochondrial

7786\_at 5988.9 P

hypothetical protein

7787\_at 1195.0 P

Component of the TAF(II) complex (TBP-associated protein complex)

7743\_at 5812.3 P

coatamer complex zeta chain

7744\_at 3757.7 P

similarity to M.jannaschii hypothetical protein

7745\_at 800.0 P

kinetochore protein in the DEAH box family

7746\_at 1181.4 P

hypothetical protein

7747\_at 4506.2 P

predicted transmembrane protein

7748\_at 652.4 P

weak similarity to Nup2p

7749\_at 10047.5 P

strong similarity to YGR086c

7750\_at 427.6 P

Required for activation of RUB1 (ubiquitin-like protein) together with UBA3. Related to AOS1 and to N-terminus of UBA1. Collaborates with UBC12 in conjugation of RUB1 to other proteins. Required for modification of CDC53/cullin with RUB1

7751\_at 996.8 P

appears to be functionally related to SNF7

7752\_at 1279.4 P

histone acetyltransferase

7753\_at 147.2 A

Mitochondrial isoform of citrate synthase

7754\_at 341.6 P

similarity to B.subtilis mmgE protein

7755\_at 231.6 M

similarity to sulphate transporter proteins

7756\_at 5320.2 P

strong similarity to electron transfer flavoproteins alpha chain

7757\_at 436.6 A

polar 32k Da cytoplasmic protein

7758\_at 1480.2 P

Isocitrate lyase, may be nonfunctional

7759\_at -144.0 A

hypothetical protein

7760\_at 1713.7 P

similarity to transcription factor

7761\_at 2018.4 P

similarity to sterol uptake protein Sut1p

7762\_at 10078.2 P



RNA polymerase I subunit A135  
 7763\_at 2354.9 P  
 similarity to ADP/ATP carrier proteins and Graves disease carrier protein  
 7764\_at 892.3 A  
 hypothetical protein  
 7765\_at 1139.4 P  
 similarity to transcription factors  
 7721\_at -1.7 A  
 hypothetical protein  
 7722\_at 288.5 A  
 similarity to transcription factors  
 7723\_at 8128.3 P  
 similar to human translation initiation factor 6 (eIF6)  
 7724\_at 1451.8 P  
 GDP dissociation factor for Sec4p  
 7725\_at 694.1 P  
 p90 subunit of yeast omatin Assembly Factor-I (CAF-I)  
 7726\_at 1781.9 P  
 essential for initiation of DNA replication\; homolog of S. pombe CDC21  
 7727\_at 3302.0 P  
 hypothetical protein  
 7728\_at 510.2 P  
 similarity to human citrate transporter protein  
 7729\_at 1020.6 P  
 weak similarity to fruit fly dorsal protein and Snf5p  
 7730\_at 7081.4 P  
 similarity to human hypothetical protein  
 7731\_at 2296.8 P  
 Mitochondrial protein of the CDC48VPAS1VSEC18 family of ATPases  
 7732\_at 1196.9 P  
 novel cyclin gene\; encodes subunits of TFIIK, a subcomplex of transcription factor TFIIH  
 7733\_at 361.4 P  
 null mutant is viable\; increased tolerance to dehydration, freezing, and toxic levels of ethanol  
 7734\_at 242.3 A  
 similarity to YNL019c and YNL033w  
 7735\_at 9209.4 P  
 Ypt Interacting Protein  
 7736\_at 10744.6 P  
 Ypt Interacting Protein  
 7737\_at 5376.1 P  
 Gamma-adaptin, large subunit of the clathrin-associated protein (AP) complex  
 7738\_at 207.1 A  
 similarity to YBL101c  
 7739\_at 630.2 P  
 similarity to human zinc-finger protein BR140  
 7740\_at 1208.9 P  
 yeast homolog of the Drosophila tumor suppressor, lethal giant larvae  
 7741\_at 9172.3 P  
 cytoplasmic and mitochondrial histidine tRNA synthetases  
 7742\_at 1820.3 P  
 Actin-related protein  
 7698\_at 13337.3 P  
 glutamine synthetase  
 7699\_at 10247.5 P  
 54-kDa vacuolar H(+) ATPase subunit of V1 sector  
 7700\_at 4682.4 P

similarity to Erv1p and rat ALR protein  
 7701\_at 114.9 A  
 questionable ORF  
 7702\_g\_at 1243.7 P  
 questionable ORF  
 7703\_at 629.8 A  
 questionable ORF  
 7704\_at 1405.0 P  
 similarity to C.elegans C02C2.6 protein  
 7705\_at 5727.6 P  
 Translation initiation factor eIF-5  
 7706\_at 1903.7 P  
 similarity to Jsn1p  
 7707\_i\_at 16993.8 P  
 Ribosomal protein L43A  
 7708\_f\_at 8279.5 P  
 Ribosomal protein L43A  
 7709\_at 434.8 P  
 questionable ORF  
 7710\_at 396.1 P  
 similarity to C.elegans hypothetical protein  
 7711\_at 869.9 P  
 Required for chromosome segregation  
 7712\_at 602.5 P  
 alpha subunit of yeast mitochondrial phenylalanyl-tRNA synthetase  
 7713\_at 2703.2 P  
 similarity to M.domestica NADPH--ferrihemoprotein reductase and mammalian nitric-oxide synthases  
 7714\_at 1456.0 P  
 similarity to Uso1p  
 7715\_at 581.4 P  
 questionable ORF  
 7716\_at 4169.3 P  
 N-acetyltransferase  
 7717\_at 8507.9 P  
 11-kDa nonhistone chromosomal protein  
 7718\_g\_at 8832.1 P  
 11-kDa nonhistone chromosomal protein  
 7719\_at 1973.9 P  
 questionable ORF  
 7720\_at -28.7 A  
 MAP kinase  
 7675\_at 805.5 P  
 121 kDa component of the Exocyst complex, which is required for exocytosis, and which also contains the  
 gene products encoded by SEC3, SEC5, SEC6, SEC10, SEC15, and EXO70  
 7676\_at 2305.4 P  
 Component of RNA polymerase transcription initiation TFIIH (factor b), 37 kDa subunit  
 7677\_at 1540.7 P  
 Protein involved in snRNP biogenesis  
 7678\_at 6845.8 P  
 putative mitochondrial carrier protein  
 7679\_at 338.3 P  
 questionable ORF  
 7680\_at 7278.1 P  
 chorismate mutase  
 7681\_at 210.1 P  
 weak similarity to Synechococcus sp. DnaJ protein

7682_at	7853.4	P
cytosine deaminase		
7683_at	8459.6	P
hypothetical protein		
7684_at	-21.7	A
hypothetical protein		
7685_at	2306.0	P
site-specific DNA binding protein, repressor		
7686_at	752.3	P
ubiquitin-like protein activating enzyme		
7687_at	1307.5	P
weak similarity to F.alni nitrogen fixation protein		
7688_at	219.5	P
Protein with similarity to Hda1p, Rpd3p, Hos2p, and Hos3p		
7689_at	7418.3	P
putrescine aminopropyltransferase (spermidine synthase)		
7690_at	813.3	P
hypothetical protein		
7691_at	1587.8	P
strong similarity to YIL029c		
7692_at	3336.3	P
member of the NOT complex, a global negative regulator of transcription		
7693_at	1922.1	P
18-kDa phosphotyrosine phosphatase of unknown function		
7694_at	11301.7	P
Transketolase 1		
7695_at	1064.9	P
imparts Far- phenotype		
7696_at	8.7	A
questionable ORF		
7697_i_at	113.1	P
questionable ORF		
7653_s_at	-115.3	A
questionable ORF		
7654_at	129.7	A
hypothetical protein		
7655_at	792.7	P
weak similarity to human insulin-like growth factor 2 receptor		
7656_s_at	11700.0	P
translational elongation factor EF-1 alpha		
7657_at	1324.7	P
strong similarity to glycyl-tRNA synthetases		
7658_at	2272.2	P
S. pombe dim1+ in budding yeast		
7659_at	611.5	P
hypothetical protein		
7660_at	1309.9	P
hypothetical protein		
7661_at	428.9	P
hypothetical protein		
7662_at	6643.3	P
transcription factor TFIIB homolog		
7663_at	475.0	P
questionable ORF		
7664_at	7722.5	P
Signal recognition particle subunit (homolog of mammalian SRP54)		

7665_at	1192.7	P	
questionable ORF			
7666_at	4801.6	P	
hypothetical protein			
7667_at	1337.9	P	
weak similarity to C.elegans LIM homeobox protein			
7668_at	169.1	M	
questionable ORF			
7669_at	584.1	P	
weak similarity to zinc-finger proteins			
7670_at	3572.0	P	
weak similarity to chicken lim-3 protein			
7671_at	616.2	P	
Suppressor of Ypt3			
7672_at	410.7	P	
hypothetical protein			
7673_at	3796.7	P	
hypothetical protein			
7674_at	8510.4	P	
hypothetical protein			
7629_at	175.2	P	
questionable ORF			
7630_at	3616.7	P	
weak similarity to C.elegans hypothetical protein CEC25A1			
7631_at	1097.9	P	
splicing factor			
7632_i_at	18948.0	P	
Ribosomal protein L11A (L16A) (rp39A) (YL22)			
7633_s_at	13348.9	P	
Ribosomal protein L11A (L16A) (rp39A) (YL22)			
7634_at	11142.5	P	
proteasome subunit			
7635_at	497.4	P	
Protein with a domain similar to the fork head DNA-binding domain found in the developmental fork head protein of Drosophila melanogaster and in the HNF-3 family of hepatocyte mammalian transcription factors.			
7636_at	2027.8	P	
hypothetical protein			
7637_at	794.0	P	
protein kinase			
7638_at	1382.4	P	
Yeast 30kDa Homologue			
7639_at	7222.1	P	
Subunit of the regulatory particle of the proteasome			
7640_at	844.0	P	
weak similarity to human nicotinic acetylcholine receptor delta chain			
7641_at	6668.9	P	
RNA polymerase III (C) subunit			
7642_at	114.9	A	
kinase required for late nuclear division			
7643_at	336.1	P	
kinase required for late nuclear division			
7644_at	1283.5	P	
similarity to RNA-binding proteins			
7645_at	11137.8	P	
phosphatidylinositol synthase			

7646\_at 8639.8 P  
similarity to YJR116w  
7647\_at 3590.4 P  
similarity to probable transcription factor Ask10p, and to YNL047c and YIL105c  
7648\_at -307.5 A  
hypothetical protein  
7649\_at 915.5 P  
similarity to YLR454w  
7650\_at 1291.5 P  
similarity to M.jannaschii translation initiation factor, eIF-2B  
7651\_at 1210.1 P  
G(sub)2-specific B-type cyclin  
7652\_at 3596.5 P  
B-type cyclin  
7607\_at 1110.3 P  
similarity to B.subtilis transcriptional activator tenA, strong similarity to hypothetical proteins YPL258c and YOL055c  
7608\_at 1219.8 P  
putative homolog of human insulin-degrading endoprotease  
7609\_at 1104.8 P  
questionable ORF  
7610\_at 6737.2 P  
High affinity copper transporter into the cell, probable integral membrane protein  
7611\_at 7336.1 P  
suppressor of mrs2-1 mutation  
7612\_at 832.5 P  
questionable ORF  
7613\_at 1655.6 P  
similarity to C-term. of N.tabacum auxin-induced protein  
7614\_at 5180.0 P  
similarity to carrier protein FLX1  
7615\_at 3207.0 P  
multicopy suppressor of clathrin deficiency  
7616\_at 451.7 P  
questionable ORF  
7617\_at 3123.0 P  
similarity to N-acetyltransferases  
7618\_f\_at 17445.1 P  
Ribosomal protein S23B (S28B) (rp37) (YS14)  
7619\_s\_at 7941.4 P  
Ribosomal protein S23B (S28B) (rp37) (YS14)  
7620\_at 3286.9 P  
similarity to C.elegans hypothetical protein  
7621\_at 11144.2 P  
Translocase of the Outer Mitochondrial membrane  
7622\_at 1255.2 P  
Protein involved in splicing intron a15beta of COX1  
7623\_at 1410.3 P  
DNA polymerase alpha binding protein  
7624\_at 230.1 P  
questionable ORF  
7625\_at 4942.2 P  
weak similarity to Taf90p  
7626\_at 3417.9 P  
NH4+ transporter, highly similar to Mep1p and Mep2p  
7627\_at 2251.6 P

hypothetical protein  
 7628\_at 1341.4 P  
 similarity to human BTHS gene involved in Barth syndrome  
 7584\_at 1143.4 P  
 kinesin-like nuclear fusion protein  
 7585\_at 657.7 P  
 questionable ORF  
 7586\_at 1941.9 P  
 hypothetical protein  
 7587\_at 2398.8 P  
 similarity to YDR060w and C.elegans hypothetical protein  
 7588\_at 10029.0 P  
 asparagine synthetase  
 7589\_at 1305.4 P  
 questionable ORF  
 7590\_at 2291.0 P  
 hypothetical protein  
 7591\_at 3448.4 P  
 hypothetical protein  
 7592\_at 8980.6 P  
 involved in secretion of proteins that lack classical secretory signal sequences  
 7593\_at 125.1 A  
 questionable ORF  
 7594\_at 693.5 P  
 weak similarity to YPL159c  
 7595\_at 607.6 P  
 hypothetical protein  
 7596\_at 647.5 P  
 hypothetical protein  
 7597\_at 4474.2 P  
 similarity to chicken growth factor receptor-binding protein GRB2 homolog  
 7598\_at 529.8 P  
 Regulates proper expression of subunits 6 (Atp6p) and 8 (Atp8p) of the Fo-F1 ATP synthase  
 7599\_i\_at 90.6 P  
 similarity to multidrug resistance proteins  
 7600\_s\_at 12252.7 P  
 similarity to multidrug resistance proteins  
 7601\_at 452.4 P  
 strong similarity to YGR141w  
 7602\_at 1295.9 P  
 similarity to YGR142w  
 7603\_at 7540.6 P  
 potential beta-glucan synthase  
 7604\_at 326.7 A  
 Glycogen phosphorylase  
 7605\_at 1685.4 P  
 CDC28/cdc2 related protein kinase  
 7606\_at 2450.2 P  
 56-kDa subunit of origin recognition complex (ORC)  
 7561\_at 10490.2 P  
 Translation initiation factor eIF-4B  
 7562\_at 428.7 P  
 killed in mutagen, sensitive to diepoxybutane and/or mitomycin C  
 7563\_at 9391.4 P  
 GTP-binding protein of the rho subfamily of ras-like proteins  
 7564\_at 4075.7 P

14 kDa mitochondrial ribosomal protein\; homologous to E. coli S14 protein  
7565\_at 756.6 P  
phosphoadenylylsulfate reductase  
7566\_at 324.0 A  
negative regulator of URS2 of the HO promoter  
7567\_at 4643.1 P  
hypothetical protein  
7568\_at -8.9 A  
hypothetical protein  
7569\_at 615.9 P  
hypothetical protein  
7570\_at 874.6 P  
strong similarity to YLR456w  
7571\_at 3694.0 P  
defective in vacuolar protein sorting  
7572\_at 492.5 P  
weak similarity to Nbp1p  
7573\_at 769.1 P  
DNA polymerase epsilon, subunit B  
7574\_at 4526.2 P  
Geranylgeranyltransferase Type II beta subunit  
7575\_at 294.7 A  
questionable ORF  
7576\_at 1319.4 P  
associated with the U4/U6 snRNP  
7577\_at 388.1 P  
hypothetical protein  
7578\_at 4144.7 P  
Along with Uba2p forms a heterodimeric activating enzyme for Smt3p  
7579\_at 1591.9 P  
cytoplasmic GTPase-activating protein  
7580\_at 6117.8 P  
Sm or Sm-like snRNP protein  
7581\_at 10260.3 P  
dolichol phosphate mannose synthase  
7582\_at 1386.9 P  
similarity to human 4-alpha-glucanotransferase (EC 2.4.1.25)/amylo-1,6-glucosidase (EC 3.2.1.33)  
7583\_at 901.9 P  
Autophagy  
7538\_at 216.1 P  
Transcription factor IIIA (TFIIIA) with putative Zn-fingers  
7539\_at 9009.1 P  
subunit common to RNA polymerases I, II, and III  
7540\_at 986.0 P  
similarity to calmodulin and calmodulin-related proteins  
7541\_at 1241.9 P  
Contains 8 copies of the TPR domain  
7542\_at 5191.9 P  
82-kDa subunit of RNA polymerase III (C)  
7543\_at 10458.2 P  
40 kDa ubiquinol cytochrome-c reductase core protein 2  
7544\_at 255.1 A  
similarity to plasma membrane and water channel proteins  
7545\_at 94.2 A  
Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs  
7546\_at 194.8 A

similarity to *S.pombe* isp4 protein  
 7547\_at 64.1 A  
 hypothetical protein  
 7548\_at 263.1 P  
 strong similarity to regulatory protein Mal63p  
 7549\_g\_at 3760.4 P  
 strong similarity to regulatory protein Mal63p  
 7550\_at 73.9 P  
 questionable ORF  
 7551\_at 3139.2 P  
 multi-copy suppressor of gal11 null; member of drug-resistance protein family  
 7552\_at 1595.4 P  
 Similar to transcriptional regulatory elements YAP1 and cad1  
 7553\_at 229.8 A  
 Required for arsenate but not for arsenite resistance  
 7554\_at -22.1 A  
 involved in arsenite transport  
 7555\_s\_at 2171.7 P  
 trans-acting positive regulator of the enolase and glyceraldehyde-3-phosphate dehydrogenase gene families  
 7556\_at 1110.9 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 188306 and 188512 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7557\_at 12262.5 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 582456 and 582632 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7558\_at 56.6 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 744172 and 744384 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7559\_at 692.2 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 744464 and 744637 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7560\_at 124.3 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 824685 and 824921 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7512\_at 4420.9 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 132446 and 132580 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7513\_f\_at 245.8 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 809943 and 810116 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7514\_at 512.6 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 810533 and 810709 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7515\_f\_at 27.5 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 853160 and 853345 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7516\_at 1282.2 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 212813 and 212956 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7517\_at 775.6 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 278112 and 278294 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7518\_at 298.0 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 411416 and 411688 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251



7519\_at 1711.9 P  
non-annotated SAGE orf Found forward in NC\_001148 between 431473 and 431622 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7520\_at 7275.5 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 592171 and 592326 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7521\_at 5947.8 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 624294 and 624434 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7522\_at -13.1 A  
non-annotated SAGE orf Found forward in NC\_001148 between 700058 and 700300 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7523\_at 524.7 P  
non-annotated SAGE orf Found forward in NC\_001148 between 706696 and 706830 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7524\_at 1523.2 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 718768 and 718944 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7525\_at 1306.7 P  
non-annotated SAGE orf Found forward in NC\_001148 between 743828 and 743980 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7526\_i\_at 4712.5 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 773596 and 773742 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7527\_r\_at 54.7 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 773596 and 773742 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7528\_f\_at 276.0 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 773596 and 773742 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7529\_at 507.6 P  
non-annotated SAGE orf Found forward in NC\_001148 between 819135 and 819326 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7530\_s\_at 1127.3 M  
non-annotated SAGE orf Found forward in NC\_001148 between 880290 and 880439 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7531\_at 6401.6 P  
non-annotated SAGE orf Found forward in NC\_001148 between 883373 and 883558 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7532\_at 1354.0 P  
non-annotated SAGE orf Found forward in NC\_001148 between 897142 and 897291 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7533\_at 8312.9 P  
non-annotated SAGE orf Found forward in NC\_001148 between 298197 and 298373 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7534\_i\_at -633.6 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 700274 and 700456 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7535\_f\_at -55.3 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 700274 and 700456 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7536\_at 608.4 P  
non-annotated SAGE orf Found forward in NC\_001148 between 754361 and 754570 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7537\_at 416.5 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 812874 and 813047 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7489\_at 449.0 A  
non-annotated SAGE orf Found forward in NC\_001148 between 860478 and 860687 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7490\_at 591.6 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 927488 and 927640 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7491\_at 88.2 P  
non-annotated SAGE orf Found forward in NC\_001148 between 14739 and 14888 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7492\_at 335.5 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 85401 and 85580 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7493\_at 6799.8 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 296871 and 297017 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7494\_at 187.5 A  
non-annotated SAGE orf Found forward in NC\_001148 between 297125 and 297292 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7495\_at -54.6 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 411982 and 412140 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7496\_at 594.8 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 445295 and 445444 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7497\_at 0.2 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 588920 and 589057 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7498\_at -5.6 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 588994 and 589242 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7499\_at 818.5 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 678411 and 678614 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7500\_at 123.1 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 769132 and 769359 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7501\_at -187.7 A  
non-annotated SAGE orf Found forward in NC\_001148 between 775843 and 775980 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7502\_at 264.4 P  
non-annotated SAGE orf Found forward in NC\_001148 between 822144 and 822302 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7503\_i\_at 2637.4 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 880229 and 880366 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7504\_r\_at 244.7 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 880229 and 880366 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7505\_at 177.6 A  
non-annotated SAGE orf Found reverse in NC\_001148 between 921211 and 921453 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7506\_at 1205.8 P  
non-annotated SAGE orf Found reverse in NC\_001148 between 324023 and 324286 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7507\_at 588.2 M

non-annotated SAGE orf Found reverse in NC\_001148 between 408869 and 409009 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7508\_at 411.7 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 408896 and 409066 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7509\_at 357.0 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 409022 and 409276 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7510\_at 1393.8 M  
 non-annotated SAGE orf Found forward in NC\_001148 between 427735 and 427896 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7511\_at -386.8 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 497768 and 497959 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7466\_at 69.8 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 560044 and 560235 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7467\_at 163.4 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 596567 and 596728 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7468\_at 20.1 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 633787 and 633930 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7469\_at 45.0 M  
 non-annotated SAGE orf Found forward in NC\_001148 between 703978 and 704121 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7470\_at 10756.8 P  
 non-annotated SAGE orf Found reverse in NC\_001148 between 733362 and 733532 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7471\_at 66.7 A  
 non-annotated SAGE orf Found forward in NC\_001148 between 780342 and 780503 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7472\_at 545.9 P  
 non-annotated SAGE orf Found forward in NC\_001148 between 831698 and 831880 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7473\_at 1520.3 P  
 snRNA  
 7474\_at 2197.7 P  
 snRNA  
 7475\_at 4989.4 P  
 snRNA  
 7476\_at 2306.4 P  
 snRNA  
 7477\_at 658.9 P  
 snRNA  
 7478\_s\_at 768.9 P  
 similarity to subtelomeric encoded proteins  
 7479\_at 1286.3 P  
 hypothetical protein  
 7480\_at 800.7 P  
 yeast homolog of the Drosophila tumor suppressor, lethal giant larvae  
 7481\_at 1692.6 P  
 putative protein kinase  
 7482\_at 1977.3 P  
 hypothetical protein  
 7483\_at 966.8 P

Probable cytochrome c subunit, copper binding  
 7484\_at 6929.5 P  
 suppressor of sed5 ts mutants  
 7485\_at 1748.5 P  
 ExtraCellular Mutant  
 7486\_at 205.7 A  
 questionable ORF  
 7487\_at 8445.3 P  
 mitochondrial F1F0-ATPase alpha subunit  
 7488\_at 2267.1 P  
 similarity to human and D.melanogaster kynurenine 3-monooxygenase  
 7443\_at 53.7 P  
 BARRN, a gene with sequence similarity to Drosophila barren and Xenopus XCAP-H, and a functional homolog of human BRRN1  
 7444\_at 2862.3 P  
 questionable ORF  
 7445\_at 1562.9 P  
 similarity to C.albicans hypothetical protein  
 7446\_at 679.4 P  
 questionable ORF  
 7447\_at 1884.6 P  
 RNA polymerase II holoenzyme\mediator subunit  
 7448\_at 11201.3 P  
 Ribosomal protein L32  
 7449\_at 2886.8 P  
 weak similarity to SCS2  
 7450\_at 10489.6 P  
 methionine aminopeptidase 2  
 7451\_at 343.7 P  
 Component of the small subunit of mitochondrial ribosomes  
 7452\_at 2133.0 P  
 weak similarity to A.thaliana aminoacid permease AAP3  
 7453\_at 921.8 P  
 putative phosphatidylinositol kinase  
 7454\_s\_at 11606.7 P  
 Ribosomal protein L23A (L17aA) (YL32)  
 7455\_at 606.6 P  
 involved in sugar metabolism  
 7456\_at 2798.5 P  
 BEM1-binding protein  
 7457\_at 3107.4 P  
 component of the anaphase-promoting complex  
 7458\_i\_at 188.4 P  
 questionable ORF  
 7459\_s\_at 3253.9 P  
 questionable ORF  
 7460\_at 4043.6 P  
 putative Dol-P-Man dependent alpha(1-3) mannosyltransferase involved in the biosynthesis of the lipid-linked oligosaccharide  
 7461\_at 2073.0 P  
 hypothetical protein  
 7462\_at 425.7 P  
 62-kDa protein  
 7463\_at 2490.0 P  
 Nucleoporin highly similar to Nup157p and to mammalian Nup155p (nup170 mutant can be complemented with NUP155)

7464\_at 3311.8 P  
Form a protein complex with Aut2p, to mediate attachment of autophagosomes to microtubules. Aut7p shows homologies to LC3, a microtubule-associated protein from rat. AUT7 was identified as a suppressor of mutant phenotypes of aut2-1 cells. Uptake of precursor Aminopeptidase I into the vacuole depends on Aut2p and Aut7p.

7465\_at 407.1 P  
questionable ORF

7421\_at 10216.3 P  
cytoplasmic isoleucyl-tRNA synthetase

7422\_at 376.8 P  
heat-inducible cytosolic member of the 70 kDa heat shock protein family

7423\_at 600.7 P  
splices pre mRNA of the MATa1 cistron

7424\_at 108.0 A  
questionable ORF

7425\_s\_at 11696.7 P  
Ribosomal protein S8A (S14A) (rp19) (YS9)

7426\_at 641.8 P  
hypothetical protein

7427\_at -13.6 A  
questionable ORF

7428\_at 7139.9 P  
ribose-phosphate pyrophosphokinase 4

7429\_at 1306.8 P  
ubiquitin carboxyl-terminal hydrolase

7430\_at 180.1 A  
putative transcription factor

7431\_at 233.9 A  
questionable ORF

7432\_at 2365.9 P  
Homolog to thiol-specific antioxidant

7433\_at 196.9 P  
kinesin related protein

7434\_at 472.4 P  
questionable ORF

7435\_at 2143.3 P  
protoplast regeneration and killer toxin resistance gene, may be a post-translational regulator of chitin synthase III activity, interacts with Chs3p

7436\_at 387.5 P  
hypothetical protein

7437\_at 208.1 P  
weak similarity to hypothetical protein YER093c-a

7438\_at 1125.6 P  
weak similarity to hypothetical protein YER093c-a

7439\_at 7927.2 P  
isolated as a suppressor of the lethality caused by overexpression of the phosphoprotein phosphatase 1 catalytic subunit encoded by GLC7

7440\_at 2316.9 P  
strong similarity to hypothetical S.pombe protein

7441\_at 2074.1 P  
protein phosphatase type 2C

7442\_at 2520.4 P  
similarity to hypothetical S.pombe protein

7398\_at 3120.0 P  
Homolog to myb transforming proteins

7399\_at 1694.6 A

questionable ORF  
7400\_at 603.8 P  
SAS3 for Something about silencing, gene 3. Influences silencing at HMR.  
7401\_at 3696.5 P  
similarity to *S.pombe* Z66568\_C protein  
7402\_at 3529.3 P  
peripheral membrane protein required for vesicular transport between ER and Golgi  
7403\_at 143.6 P  
hypothetical protein  
7404\_at 194.0 P  
hypothetical protein  
7405\_at 4480.2 P  
USO1 homolog (*S. cerevisiae*), cytoskeletal-related transport protein, Ca<sup>++</sup> binding  
7406\_at 2785.5 P  
weak similarity to hypothetical protein YOR054c  
7407\_at 8159.9 P  
44 kDa core protein of yeast coenzyme QH2 cytochrome c reductase  
7408\_at 49.5 A  
hypothetical protein  
7409\_at 916.0 P  
ExtraCellular Mutant  
7410\_at 10029.7 P  
uridine permease  
7411\_at 8599.9 P  
proteasome subunit  
7412\_at 3543.3 P  
encodes the HDEL receptor required for retention of ER proteins  
7413\_at 9581.1 P  
CTP synthase, highly homologous to URA8 CTP synthase  
7414\_at 1240.9 P  
Mitochondrial ribosomal protein MRPL16  
7415\_at 1083.5 P  
clathrin Associated Protein complex Large subunit  
7416\_at 3115.1 P  
Homolog to twitching motility protein (*P. aeruginosa*)  
7417\_at 2119.6 P  
subunit of DNA polymerase alpha-primase complex  
7418\_at 1845.1 P  
suppressor of cold-sensitive tub2 mutation\; shown to be a component of the mitotic spindle  
7419\_at 5134.1 P  
GTP cyclohydrolase II  
7420\_at 7389.7 P  
weak similarity to hnRNP complex protein homolog YBR233w  
7374\_at 241.6 P  
hypothetical protein  
7375\_at 12610.6 P  
mitochondrial ADPVATP translocator  
7376\_at 1058.0 P  
hypothetical protein  
7377\_at 3356.7 P  
involved in mating-type regulation  
7378\_s\_at 14742.0 P  
Ribosomal protein L19B (YL14) (L23B) (rpl5L)  
7379\_i\_at 315.1 P  
snRNA-associated protein of the Sm class  
7380\_f\_at 150.8 P

B

snRNA-associated protein of the Sm class  
 7381\_at 3652.1 P  
 snRNA-associated protein of the Sm class  
 7382\_at 730.0 P  
 Upstream activation factor subunit  
 7383\_at 7343.5 P  
 Probable proliferating-cell nucleolar antigen (human p120)  
 7384\_at 3757.0 P  
 Minichromosome maintenance protein, transcription factor  
 7385\_at 8780.8 P  
 mitochondrial ATP-dependent protease  
 7386\_at 1542.8 P  
 transcriptional activator protein of CYC1  
 7387\_at 3976.6 P  
 67 kDa integral membrane protein  
 7388\_at 339.3 P  
 AP endonuclease  
 7389\_at 3189.4 P  
 integral subunit of RNase P and apparent subunit of RNase MRP  
 7390\_at 6020.6 P  
 carboxypeptidase Y sorting receptor in late Golgi; Type I integral membrane protein 166aa cytoplasmic  
 tail, 1300 aa luminal domain  
 7391\_at 4855.0 P  
 cdc2+VCDC28 related kinase with positive role in conjugation  
 7392\_at 2477.9 P  
 acetyl CoA hydrolase  
 7393\_at 1003.0 P  
 member of yeast Pol I core factor (CF) also composed of Rrn11p, Rrn7p and TATA-binding protein  
 7394\_at 871.4 A  
 Probable met-tRNA formyltransferase, mitochondrial  
 7395\_at 155.4 A  
 questionable ORF  
 7396\_at 4405.6 P  
 High copy suppressor of choline-transport mutants  
 7397\_at 563.6 P  
 hypothetical protein  
 7352\_at 2326.7 P  
 strong similarity to DNA damage responsive Alk1p  
 7353\_at 729.8 P  
 putative repressor protein homologous to yeast Tup1p and mammalian retinal transducin; contains  
 nuclear targeting signal  
 7354\_at 4956.0 P  
 contains 3 SH3 domains, interacts with Bee1p  
 7355\_at 3428.4 P  
 hypothetical protein  
 7356\_at 748.3 P  
 Pleiotropic drug resistance protein 3  
 7357\_at 4020.5 P  
 weak similarity to Papaya ringspot virus polyprotein  
 7358\_s\_at 17772.9 P  
 Histone H2A (HTA1 and HTA2 code for nearly identical proteins)  
 7359\_at 13773.8 P  
 Histone H2B (HTB1 and HTB2 code for nearly identical proteins)  
 7360\_at 6745.6 P  
 ExtraCellular Mutant  
 7361\_at 1512.2 P

Neutral trehalase, highly homologous to Nth1p  
 7362\_at 2768.0 P  
 strong similarity to hypothetical protein YMR101c  
 7363\_at 5478.5 P  
 hexaprenyl pyrophosphate synthetase  
 7364\_at 3292.9 P  
 similarity to *S.pombe* hypothetical protein SPAC18B11.05  
 7365\_at 1743.9 P  
 strong similarity to hypothetical protein YDR003w  
 7366\_at 1443.4 P  
 hypothetical protein  
 7367\_at 1737.7 P  
 Major Facilitator Transporter  
 7368\_i\_at 8192.7 P  
 Histone H3 (HHT1 and HHT2 code for identical proteins)  
 7369\_s\_at 9057.7 P  
 Histone H3 (HHT1 and HHT2 code for identical proteins)  
 7370\_at 13904.4 P  
 Inorganic pyrophosphatase  
 7371\_at 1193.3 P  
 hypothetical protein  
 7372\_at 990.6 P  
 hypothetical protein  
 7373\_at 2538.8 P  
 Glutaredoxin homolog  
 7328\_at 5038.0 P  
 Type II transmembrane protein  
 7329\_at 8090.0 P  
 strong similarity to hypothetical proteins YDL012c and YDR210w  
 7330\_at 3803.7 P  
 karyopherin beta 2, yeast transportin  
 7331\_at 157.2 A  
 galactose-1-phosphate uridyl transferase  
 7332\_at 15.8 M  
 UDP-glucose 4-epimerase  
 7333\_at 152.0 A  
 galactokinase  
 7334\_at 4241.6 P  
 uracil permease  
 7335\_at 1620.6 P  
 hypothetical protein  
 7336\_at 7788.9 P  
 chitin synthase 3  
 7337\_at 1427.3 P  
 SCO1 protein homolog (*S. cerevisiae*)  
 7338\_at 9156.6 P  
 probable purine nucleotide-binding protein  
 7339\_at 1481.2 P  
 Nuclear protein that binds to T-rich strand of core consensus sequence of autonomously replicating sequence  
 7340\_at 433.0 P  
 hypothetical protein  
 7341\_at 969.3 P  
 Probable ser/vthr-specific protein kinase, homolog to YKR2 and YPK1 (*S. cerevisiae*)  
 7342\_at 5223.0 P  
 CDP-diacylglycerol synthase, CTP-phosphatidic acid cytidyltransferase, CDP-diglyceride synthetase



7343\_at 1460.8 P  
involved in inositol biosynthesis  
7344\_i\_at 1615.4 P  
Ribosomal protein L4A (L2A) (rp2) (YL2)  
7345\_s\_at 13508.1 P  
Ribosomal protein L4A (L2A) (rp2) (YL2)  
7346\_at 854.3 P  
hypothetical protein  
7347\_at 90.9 A  
Probable regulatory Zn-finger protein, V homolog to YKL251V  
7348\_at 5980.5 P  
nuclear protein arginine methyltransferase (mono- and asymmetrically dimethylating enzyme)  
7349\_at 5900.6 P  
pyridoxine (pyridoxiamine) phosphate oxidase  
7350\_at 6107.9 P  
contains 9 or 10 putative membrane spanning regions; putative Ca<sup>2+</sup> binding protein (homology to EF-hand Ca<sup>2+</sup> binding site)  
7351\_at 3170.6 P  
inner mitochondrial membrane protein  
7306\_at 1958.7 P  
chitin synthase 2  
7307\_at 10584.3 P  
gamma subunit of mitochondrial ATP synthase  
7308\_at 648.4 P  
integral membrane protein  
7309\_at 2260.9 P  
Fatty acid transporter  
7310\_at 2144.3 P  
Probable membrane-bound small GTPase  
7311\_at 2569.2 P  
similarity to benomyl/methotrexate resistance protein  
7312\_at 1119.3 A  
similarity to chaperonin HSP60 proteins  
7313\_at 49.4 A  
Glc7-interacting protein.  
7314\_at 1695.2 P  
Homolog to quinone oxidoreductase (E. coli)  
7315\_at 782.5 P  
hypothetical protein  
7316\_s\_at 9254.6 P  
Ribosomal protein S11B (S18B) (rp41B) (YS12)  
7317\_at 1306.0 P  
RNA polymerase I enhancer binding protein  
7318\_at 654.9 P  
Possible regulatory subunit for the PP1 family protein phosphatase Glc7p  
7319\_at 216.5 A  
questionable ORF  
7320\_at 8000.3 P  
Homolog to YCR004, obr1 (S. pombe), trp repressor binding protein (E. coli)  
7321\_at 1423.0 P  
similarity to rat regucalcin  
7322\_at 2665.8 P  
Homolog to HSP30 heat shock protein YRO1 (S. cerevisiae) 7  
7323\_at 1917.3 P  
RNA splicing factor  
7324\_at 512.6 P

Homolog to glucan-1,3--glucosidase (EC 3.2.1.5); *S. cerevisiae*) 2  
 7325\_at 854.4 P  
 Muddled Meiosis  
 7326\_at 1954.1 P  
 Ubiquitin-specific protease  
 7327\_at 1442.3 P  
 Probable protein kinase  
 7283\_at 2929.8 P  
 origin recognition complex subunit 2  
 7284\_at 4949.2 P  
 Homolog to ftsJ protein (*E. coli*) ,V YCR054V  
 7285\_at 6596.7 P  
 similarity to rat neurodegeneration associated protein 1  
 7286\_at 826.6 P  
 Probable phosphopantethein-binding protein  
 7287\_at 85.1 A  
 questionable ORF  
 7288\_at 312.3 A  
 ExtraCellular Mutant  
 7289\_at 1564.0 P  
 Probable Zn-finger protein  
 7290\_at 9476.2 P  
 cell wall mannoprotein  
 7291\_at 8980.4 P  
 probable amino acid permease for leucine, valine, and isoleucine  
 7292\_at 3806.4 P  
 Probable amino acid transport protein  
 7293\_at 2020.7 P  
 osmotolerance protein  
 7294\_at 1321.0 P  
 hypothetical protein  
 7295\_at 835.6 P  
 heat shock protein 26  
 7296\_at 2495.6 P  
 Putative helicase similar to RAD54  
 7297\_at 2404.5 P  
 Homolog to aminopeptidase Y (*S. cerevisiae*)  
 7298\_at 1633.4 P  
 hypothetical protein  
 7299\_at 139.7 A  
 ExtraCellular Mutant  
 7300\_at 3025.7 P  
 hypothetical protein  
 7301\_at 10728.3 P  
 Homolog to sporulation specific protein SPS2 (*S. cerevisiae*)  
 7302\_at 9201.6 P  
 Homolog to sporulation specific protein SPS2 (*S. cerevisiae*)  
 7303\_at 7585.5 P  
 Exhibits significant sequence similarity with a subunit of the mammalian translation initiation factor 3  
 7304\_at 4270.2 P  
 cytoplasmic protein involved in protein transport between ER and Golgi; ATPase  
 7305\_at 1949.6 P  
 transcription factor, member of the histone acetyltransferase SAGA complex  
 7260\_at 12374.3 P  
 ubiquitin-conjugating enzyme  
 7261\_at 9134.0 P

transcription factor of the TEAVATTS DNA-binding domain family, regulator of Ty1 expression  
7262\_at 8550.1 P  
mitochondrial C1-tetrahydroflavate synthase  
7263\_at 2455.4 P  
mitochondrial ADPVATP translocator  
7264\_at 7409.4 P  
Probable transmembrane protein  
7265\_at 2485.5 P  
Subunit 5 of Replication Factor C\; homologous to human RFC 38 kDa subunit  
7266\_at 6396.0 P  
proliferating cell nuclear antigen (PCNA)\; accessory factor for DNA polymerase delta, mRNA increases in G1, peaks in S in mitosis, and increases prior to DNA synthesis in meiosis  
7267\_at -7.4 A  
questionable ORF  
7268\_at 2487.5 P  
11-kDa nonhistone chromosomal protein  
7269\_g\_at 2729.2 P  
11-kDa nonhistone chromosomal protein  
7270\_i\_at 10930.1 P  
questionable ORF  
7271\_at 176.1 A  
questionable ORF  
7272\_at 2843.0 P  
Nuclear protein involved in mitochondrial intron splicing  
7273\_at 9738.1 P  
Acid phosphatase, constitutive  
7274\_at 5898.0 P  
Acid phosphatase, repressible  
7275\_at 1173.5 P  
weak similarity to pig tubulin-tyrosine ligase  
7276\_at 3527.8 P  
hypothetical protein  
7277\_at 2410.7 P  
hypothetical protein  
7278\_at 1879.5 P  
Myristoylated Serine/threonine protein kinase involved in vacuolar protein sorting  
7279\_at 176.4 P  
putative transcriptional (co)activator for DNA damage  
7280\_at 237.2 P  
weak similarity to T.brucei mitochondrion hypothetical protein 6  
7281\_at 335.2 P  
questionable ORF  
7282\_at 8695.6 P  
weak similarity to S.pombe hypothetical protein SPBC3B9.01  
7238\_at 270.3 P  
hypothetical protein  
7239\_at 1689.5 P  
weak similarity to human U3 snoRNP associated 55 kDa protein  
7240\_at 3019.9 P  
mitochondrial carrier protein  
7241\_at 1703.1 P  
involved in fructose-1,6-bisphosphatase degradation  
7242\_at 16004.1 P  
May be a membrane protein involved in inorganic phosphate transport and regulation of Pho81p function  
7243\_at 526.0 P  
weak similarity to N.crassa chitin synthase

7244_at	431.3	P
Probable transcription factor		
7245_at	8045.9	P
Calmodulin		
7246_at	2673.8	P
beta-1,4-mannosyltransferase		
7247_at	10449.4	P
Homolog to serendipity protein (D. melanogaster)		
7248_at	3139.5	P
Transcription regulatory protein		
7249_at	446.8	A
questionable ORF		
7250_at	459.5	P
Radiation repair protein, putative DNA helicase		
7251_at	8470.6	P
alpha aminoadipate reductase		
7252_at	573.5	P
questionable ORF		
7253_g_at	688.3	P
questionable ORF		
7254_at	91.6	A
transketolase, homologous to tk11		
7255_at	1776.0	P
U1 snRNP A protein		
7256_at	1105.1	P
Translational activator of COB mRNA		
7257_at	11909.8	P
Glycyl-tRNA synthase		
7258_at	2543.0	P
Mitochondrial ribosomal protein MRPL36 (YmL36)		
7259_at	2370.3	P
transcription factor tau (TFIIIC) subunit 95		
7215_at	-164.8	A
questionable ORF		
7216_at	1399.9	P
Probable phosphoprotein phosphatase (EC 3.1.3.16)		
7217_at	5451.2	P
56 kD synthase subunit of trehalose-6-phosphate synthase\phosphatase complex		
7218_at	11370.6	P
H+-transporting ATPase, vacuolar (EC 3.6.1.35)		
7219_at	66.6	A
required for autophagy		
7220_at	819.0	P
imparts Far- phenotype		
7221_at	4721.8	P
cytoplasmic protein involved in mother-specific HO expression		
7222_at	1194.9	P
Calcium Caffeine Zinc sensitivity		
7223_at	290.9	A
Amino acid permease		
7224_at	2347.6	P
Negative regulator of swe1 kinase (which regulates cdc28)		
7225_at	23.8	M
questionable ORF		
7226_at	4362.7	P
subunit of the Cdc28 protein kinase		

7227\_at 1265.7 P  
 similar to phosphatidylinositol(PI)3-kinases required for DNA damage induced checkpoint responses in G1, SVM, intra S, and G2VM in mitosis

7228\_at 2518.5 P  
 hypothetical protein

7229\_at 82.8 P  
 Unknown

7230\_at 3375.2 P  
 Probable serine-type carboxypeptidase (EC 3.4.16.1)

7231\_at 1766.8 P  
 GTPase activating protein

7232\_at 1977.2 P  
 hypothetical protein

7233\_at 3187.1 P  
 Probable pre-mRNA splicing RNA-helicase

7234\_at 9387.9 P  
 Ominipotent suppressor protein of nonsense codons

7235\_at 159.2 P  
 hypothetical protein

7236\_at 3497.7 P  
 alcohol dehydrogenase isoenzyme V

7237\_at 2839.4 P  
 Probable mitochondrial ribosomal protein S9

7193\_at 645.8 P  
 strong similarity to hypothetical protein YOL092w

7194\_at 85.3 P  
 Spore-specific protein

7195\_at 3996.2 P  
 D-arabinose dehydrogenase

7196\_at 1155.1 P  
 Probable Zn-finger protein

7197\_at 3455.3 P  
 weak similarity to potato sucrose cleavage protein

7198\_at 125.5 P  
 U4VU6.U5-associated snRNP protein\; contains a PEST proteolysis motif

7199\_at 3344.5 P  
 Riboflavin biosynthesis protein

7200\_at 8288.9 P  
 25-kDa RNA polymerase subunit (common to polymerases I, II and III)

7201\_at 2779.0 P  
 Stress-inducible riboflavin biosynthetic protein homolog

7202\_at 687.8 P  
 weak similarity to myosins

7203\_at 400.3 P  
 hypothetical protein

7204\_at 8374.2 P  
 hypothetical protein

7205\_at 7501.4 P  
 similarity to human 17-beta-hydroxysteroid dehydrogenase

7206\_at 5630.0 P  
 protein kinase catalytic subunit

7207\_at 688.7 P  
 Homolog to suppressor of reduced viability of starvation (SUR1, *S. cerevisiae*)

7208\_at 10344.3 P  
 similarity to hypothetical protein YJL171c

7209\_at 5105.6 P

Protein that participates in secretory pathway  
7210\_at 2248.3 P  
hypothetical protein  
7211\_at 6202.1 P  
ADP-ribosylation factor-like protein 1  
7212\_at 1398.2 P  
General positive regulator of CDC34\; Suppress some cdc34 mutations when over-expressed  
7213\_at 3103.9 P  
Prephenate dehydrogenase (NADP+)  
7214\_at 1123.0 P  
Pop7 protein, an integral subunit of RNase P and apparent subunit of RNase MRP  
7170\_at -46.0 P  
weak similarity to hypothetical protein YLR324w  
7171\_at 1498.9 P  
HSP70 family member, highly homologous to Sse1p  
7172\_at 1866.7 P  
Suppressor of SEC63 (S.cerevisiae), novel ER translocation component  
7173\_at 6706.6 P  
glycoprotein complexed with Sec62p and Sec63p in the Sec63 complex, an integral endoplasmic  
reticulum membrane protein complex required for translocation of presecretory proteins  
7174\_at 1640.6 P  
Kinesin-related protein suppressing myosin defects (MYO2)  
7175\_at 1357.9 P  
20S proteasome maturation factor  
7176\_at 11.1 A  
questionable ORF  
7177\_at 3040.1 P  
Probable GTP-binding protein  
7178\_at 2541.9 P  
Alpha-Ketoisovalerate Hydroxymethyltransferase  
7179\_at 6864.8 P  
Probable membrane receptor  
7180\_at -1.3 A  
questionable ORF  
7181\_at 1324.0 P  
homolog of Drosophila melanogaster fuzzy onions gene\; integral protein of the mitochondrial outer  
membrane which can be isolated as part of a high molecular weight complex  
7182\_at 54.1 A  
Probable resistance protein  
7183\_at 409.5 P  
Probable DNA-binding transcription factor, Homolog to SRFVSL-2  
7184\_at 4824.5 P  
strong similarity to hypothetical protein YPL087w  
7185\_at 216.8 P  
alpha-galactosidase  
7186\_at 1393.0 P  
respiratory chain assembly protein  
7187\_at 18.3 A  
Putative ATPase  
7188\_at 9432.1 P  
probable membrane protein  
7189\_at 1059.1 P  
splicing factor  
7190\_i\_at 11782.5 P  
Ribosomal protein S9B (S13) (rp21) (YS11)  
7191\_f\_at 10417.4 P

Ribosomal protein S9B (S13) (rp21) (YS11)  
 7192\_at 253.7 P  
 questionable ORF  
 7147\_at 4803.1 P  
 Ribosomal protein L21A  
 7148\_at 2067.8 P  
 Probable carrier protein, mitochondrial  
 7149\_at 293.0 P  
 Stoichiometric member of mediator complex  
 7150\_at 1621.9 P  
 hypothetical protein  
 7151\_at 2603.4 P  
 p50 subunit of the yeast omatin Assembly Factor-I (CAF-I) negative regulator of ras-mediated cAMP  
 induction; homologous to beta subunit of GTP-binding proteins  
 7152\_at 12695.2 P  
 Glucose-6-phosphate isomerase  
 7153\_at 749.5 P  
 weak similarity to hypothetical protein YPL077c  
 7154\_at 4556.9 P  
 Probable transcription-associated factor protein, probable -transducin type  
 7155\_at 4423.4 P  
 Putative alpha-1,2-mannosyltransferase  
 7156\_at 497.2 P  
 contains two SH3 domains  
 7157\_at 2944.2 P  
 MCM3 protein homolog (*S. cerevisiae*)  
 7158\_at 172.1 P  
 hypothetical protein  
 7159\_at 2117.3 P  
 Probable serine-active lipase, peroxisomal (EX 3.1.1.-)  
 7160\_at 5550.4 P  
 Putative alpha-1,2-mannosyltransferase  
 7161\_g\_at 6831.1 P  
 Putative alpha-1,2-mannosyltransferase  
 7162\_at 3617.9 P  
 questionable ORF  
 7163\_at 3577.9 P  
 probable membrane protein  
 7164\_at 1268.4 P  
 Urea amidolyase (contains urea carboxylase and allophanate hydrolase)  
 7165\_at -56.0 A  
 hypothetical protein  
 7166\_at 3577.4 P  
 strong similarity to *D.melanogaster* cornichon protein  
 7167\_at 397.3 P  
 regulator of microtubule stability  
 7168\_at 2310.0 P  
 negative growth regulatory protein  
 7169\_at 2820.9 P  
 Effector in the expression of PAPS reductase and sulfite reductase  
 7124\_at 1608.5 P  
 strong similarity to hypothetical protein YGL056c  
 7125\_at 1069.8 P  
 highly charged, basic protein  
 7126\_at 718.9 P  
 strong similarity to hypothetical protein YGL060w

7127\_at 604.3 P  
 autophagy  
 7128\_at 10356.8 P  
 pyruvate carboxylase  
 7129\_at 2031.0 P  
 similarity to human acetyl-coenzyme A transporter  
 7130\_g\_at 2356.2 P  
 similarity to human acetyl-coenzyme A transporter  
 7131\_at 9133.6 P  
 beta subunit of pyruvate dehydrogenase (E1 beta)  
 7132\_at 5257.4 P  
 Probable AMP-binding protein  
 7133\_at 1725.7 P  
 hypothetical protein  
 7134\_at 508.1 P  
 questionable ORF  
 7135\_at 1338.2 P  
 hypothetical protein  
 7136\_at 221.6 A  
 questionable ORF  
 7137\_at 1866.4 P  
 Homolog to ATP-binding protein clpX (E.coli)  
 7138\_at 712.9 P  
 similarity to hypothetical A.thaliana protein  
 7139\_at 2270.3 P  
 Homolog to 1,4-a-glucosidase (S.cerevisiae) (EC 3.2.1.3) 3  
 7140\_at 3619.3 P  
 hypothetical protein  
 7141\_at 704.2 P  
 similarity to human p97 homologous protein  
 7142\_at 242.7 A  
 questionable ORF  
 7143\_at 944.3 P  
 Homolog to human hnRNP complex K protein  
 7144\_at 6281.7 P  
 similarity to human Arp2/3 protein complex subunit p41-Arc and to human Sop2p-like protein  
 7145\_at 1185.2 P  
 similarity to bumetanide-sensitive Na-K-Cl cotransport protein  
 7146\_at 3980.6 P  
 RNA (guanine-7-)methyltransferase (cap methyltransferase)  
 7102\_at 662.9 P  
 RNA helicase homolog  
 7103\_at 1770.5 P  
 strong similarity to general chromatin factor Spt16p  
 7104\_at 1488.6 P  
 Probable Zn-finger protein  
 7105\_at 353.7 P  
 Probable Zn-finger protein  
 7106\_at 4116.7 P  
 Probable sugar transport protein  
 7107\_at 2218.6 P  
 Probable ATPVGTP-binding protein  
 7108\_at 5985.8 P  
 UDP-N-acetyl-glucosamine-1-P transferase (GPT)  
 7109\_at 1252.3 P  
 Probable glutathione peroxidase (EC 1.11.1.9)



7110\_at 3270.0 P  
 Homolog to SNF2VSWI2 DNA-binding regulatory protein  
 7111\_at 5314.3 P  
 hypothetical protein  
 7112\_at 7955.8 P  
 Putative 57 kDa protein with an apparent MW of 70 kDa by SDS-PAGE  
 7113\_at 7417.8 P  
 glutamine amidotransferase:cyclase  
 7114\_at 9905.5 P  
 3-deoxy-D-arabino-heptulosonate 7-phosphate (DAHP) synthase isoenzyme  
 7115\_at 44.9 M  
 hypothetical protein  
 7116\_at 1593.3 P  
 Probable mitochondrial ribosomal protein S5  
 7117\_at 10774.1 P  
 dUTP pyrophosphatase (dUTPase)  
 7118\_at 303.2 P  
 transcription factor, part of SrbVMediator complex  
 7119\_at 2043.7 P  
 probable membrane protein  
 7120\_at 287.5 P  
 hypothetical protein  
 7121\_at 768.3 P  
 Riboflavin synthase alpha-chain  
 7122\_at 1068.8 P  
 Required for normal 5.8S rRNA processing and for tRNA processing\; associated with RNase MRP and RNase P  
 7123\_at 627.8 P  
 hypothetical protein  
 7079\_at 584.4 P  
 hypothetical protein  
 7080\_at 2526.3 P  
 similarity to C.elegans GTPase-activating protein  
 7081\_at 7430.3 P  
 similarity to hypothetical S. pombe protein  
 7082\_at 3816.9 P  
 questionable ORF  
 7083\_at 10928.2 P  
 Serine hydroxymethyltransferase, mitochondrial  
 7084\_at 2261.5 P  
 Probable small GTP-binding protein  
 7085\_at 8026.1 P  
 probable membrane protein  
 7086\_at 2990.2 P  
 Probable mitochondrial protein L37  
 7087\_at 1597.2 P  
 hypothetical protein  
 7088\_at 298.2 P  
 Probable ATPVGTP-binding protein  
 7089\_at 1986.6 P  
 weak similarity to S.pombe uvi22 protein and hypothetical protein YNL024c  
 7090\_at 835.9 P  
 Hsm3p may be a member of the yeast MutS homolog family  
 7091\_at 2776.9 P  
 similarity to hypothetical protein YJL048c  
 7092\_at 1158.3 P

Probable protein kinase (growth factor & cytokine receptor family)  
 7093\_at 592.1 A  
 RAP1-interacting factor, involved in establishment of repressed chromatin  
 7094\_at 3379.0 P  
 dual specificity protein phosphatase  
 7095\_at 109.9 P  
 questionable ORF  
 7096\_at 1251.2 P C  
 and C subunits of DNA polymerase II  
 7097\_at 2269.2 P  
 RNA polymerase II-associated, nuclear protein that may serve as both a positive and negative regulator  
 of a subset of genes, perhaps operating in parallel with Gal11p  
 7098\_at 1678.4 P  
 hypothetical protein  
 7099\_at 1491.2 P  
 Probable G-protein, -transducin type  
 7100\_at 3737.2 P  
 Mitochondrial ribosomal protein MRPL27 (YmL27)  
 7101\_at 8455.8 P  
 Probable SEC61 protein homolog  
 7057\_at 207.3 P  
 similarity to AMP deaminase  
 7058\_at 55.5 A  
 hypothetical protein  
 7059\_at 14505.5 P  
 Aminopeptidase yscIII  
 7060\_at 5798.2 P  
 similarity to hypothetical S. pombe protein  
 7061\_at 2291.3 P  
 clathrin associated protein medium chain  
 7062\_at 1798.8 P  
 transcriptional activator  
 7063\_at 1678.2 P  
 metal homeostasis protein\; putative membrane protein  
 7064\_at 7006.2 P  
 citrate transporter in mitochondrial inner membrane  
 7065\_at 1099.1 P  
 hypothetical protein  
 7066\_at 1456.4 P  
 Probable multidrug resistance protein  
 7067\_at 144.4 A  
 Probable sulfate transport protein  
 7068\_at 828.8 P  
 Putative P-type Cu(2+)-transporting ATPase  
 7069\_at 1915.2 P  
 Homolog to phosphate-repressible phosphate permease  
 7070\_at 523.6 P  
 Maltose fermentation regulatory protein  
 7071\_s\_at 515.2 P  
 maltose permease  
 7072\_s\_at 89.1 A  
 Maltase (EC 3.2.1.20)  
 7073\_at 288.1 P  
 strong similarity to hypothetical protein YGR293c  
 7074\_f\_at 1664.0 P  
 YKL224 c homolog

7075\_at -11.6 A  
 hypothetical membrane protein  
 7076\_at 1118.2 P  
 identified by SAGE  
 7077\_at 5258.9 P  
 identified by SAGE  
 7078\_at 1254.7 P  
 hypothetical protein  
 7033\_at 257.1 P  
 questionable ORF - upstream ORF of ALG1  
 7034\_i\_at 8200.0 P  
 identified by SAGE  
 7035\_s\_at 11458.7 P  
 identified by SAGE  
 7036\_s\_at 2245.6 P  
 Protein involved in targeting of plasma membrane [H<sup>+</sup>]ATPase  
 7037\_s\_at 675.9 P  
 Probable aldehyde dehydrogenase (EC 1.2.1.-)  
 7038\_s\_at 1986.9 P  
 Degradation in the Endoplasmic Reticulum  
 7039\_at 102.1 A  
 probable membrane protein  
 7040\_g\_at 201.5 P  
 probable membrane protein  
 7041\_s\_at 3650.2 P  
 Probable Zn-finger protein (C2H2 type)  
 7042\_at 928.0 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 46929 and 47189 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7043\_at 2077.7 P  
 non-annotated SAGE orf Found reverse in NC\_001134 between 164451 and 164735 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7044\_at 116.5 A  
 non-annotated SAGE orf Found reverse in NC\_001134 between 164788 and 164997 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7045\_i\_at 5008.7 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 490774 and 490932 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7046\_s\_at 8476.2 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 490774 and 490932 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7047\_at 3405.1 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 680321 and 680521 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7048\_i\_at 743.8 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 680595 and 680834 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7049\_s\_at 725.9 P  
 non-annotated SAGE orf Found forward in NC\_001134 between 680595 and 680834 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7050\_at 4148.0 P  
 non-annotated SAGE orf Found reverse in NC\_001134 between 680739 and 680900 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 7051\_at 26.3 A  
 non-annotated SAGE orf Found forward in NC\_001134 between 36284 and 36424 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7052\_at 211.4 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 101483 and 101674 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7053\_at -31.4 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 196846 and 196992 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7054\_i\_at -769.0 A  
non-annotated SAGE orf Found forward in NC\_001134 between 592971 and 593117 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7055\_f\_at -193.4 A  
non-annotated SAGE orf Found forward in NC\_001134 between 592971 and 593117 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7056\_at -76.6 A  
non-annotated SAGE orf Found forward in NC\_001134 between 767702 and 767938 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7010\_at 399.8 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 88277 and 88447 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7011\_g\_at 2702.0 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 88277 and 88447 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7012\_at 8145.5 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 88345 and 88512 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7013\_at -203.1 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 101183 and 101410 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7014\_at 2247.0 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 115345 and 115482 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7015\_at 585.8 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 143662 and 143892 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7016\_at 911.7 P  
non-annotated SAGE orf Found forward in NC\_001134 between 172044 and 172202 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7017\_at 1282.2 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 241413 and 241568 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7018\_at 4430.2 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 256812 and 256976 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7019\_at 1416.4 P  
non-annotated SAGE orf Found forward in NC\_001134 between 270737 and 270898 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7020\_at 4722.0 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 305964 and 306119 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7021\_at 9733.8 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 373567 and 373737 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7022\_at -201.4 A  
non-annotated SAGE orf Found forward in NC\_001134 between 391411 and 391557 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

7023\_at 1758.7 P  
non-annotated SAGE orf Found forward in NC\_001134 between 407263 and 407424 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7024\_at -68.0 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 480941 and 481075 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7025\_at 145.9 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 553502 and 553690 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7026\_at 2115.3 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 553777 and 553935 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7027\_at 6318.7 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 562982 and 563116 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7028\_at 40.5 A  
non-annotated SAGE orf Found forward in NC\_001134 between 592774 and 592914 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7029\_g\_at -363.7 A  
non-annotated SAGE orf Found forward in NC\_001134 between 592774 and 592914 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7030\_at -193.5 A  
non-annotated SAGE orf Found forward in NC\_001134 between 592832 and 593005 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7031\_at 550.1 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 615895 and 616062 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7032\_at 2282.6 P  
non-annotated SAGE orf Found forward in NC\_001134 between 649944 and 650114 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6985\_at -12.8 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 741739 and 741900 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6986\_i\_at 35.7 A  
non-annotated SAGE orf Found forward in NC\_001134 between 35606 and 35800 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6987\_at 230.8 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 66854 and 67036 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6988\_at -107.2 A  
non-annotated SAGE orf Found forward in NC\_001134 between 181316 and 181477 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6989\_at 21.6 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 593218 and 593355 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6990\_at 796.9 M  
non-annotated SAGE orf Found forward in NC\_001134 between 622942 and 623106 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6991\_i\_at 803.0 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 694564 and 694710 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6992\_r\_at -24.5 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 694564 and 694710 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6993\_f\_at 5283.9 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 694564 and 694710 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6994\_at 1499.1 P

non-annotated SAGE orf Found reverse in NC\_001134 between 747849 and 748010 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6995\_at 1427.4 P

non-annotated SAGE orf Found forward in NC\_001134 between 143356 and 143535 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6996\_at 322.6 A

non-annotated SAGE orf Found reverse in NC\_001134 between 159883 and 160056 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6997\_at 298.4 P

non-annotated SAGE orf Found forward in NC\_001134 between 164491 and 164637 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6998\_at 47.6 A

non-annotated SAGE orf Found forward in NC\_001134 between 165623 and 165823 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6999\_at 1004.1 P

non-annotated SAGE orf Found forward in NC\_001134 between 165783 and 165998 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7000\_i\_at 6.9 A

non-annotated SAGE orf Found reverse in NC\_001134 between 197442 and 197720 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7001\_r\_at 95.8 A

non-annotated SAGE orf Found reverse in NC\_001134 between 197442 and 197720 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7002\_at 620.5 P

non-annotated SAGE orf Found reverse in NC\_001134 between 235796 and 235936 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7003\_at -45.3 A

non-annotated SAGE orf Found reverse in NC\_001134 between 351253 and 351459 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7004\_at 123.7 A

non-annotated SAGE orf Found reverse in NC\_001134 between 363544 and 363771 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7005\_at 115.0 P

non-annotated SAGE orf Found forward in NC\_001134 between 419296 and 419436 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7006\_at -140.2 A

non-annotated SAGE orf Found forward in NC\_001134 between 477095 and 477283 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7007\_at -302.9 A

non-annotated SAGE orf Found forward in NC\_001134 between 480969 and 481103 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7008\_at 961.4 P

non-annotated SAGE orf Found reverse in NC\_001134 between 554862 and 555011 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
7009\_g\_at 825.7 P

non-annotated SAGE orf Found reverse in NC\_001134 between 554862 and 555011 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6962\_at 56.7 A

non-annotated SAGE orf Found reverse in NC\_001134 between 554921 and 555088 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6963\_at 1033.5 P

non-annotated SAGE orf Found forward in NC\_001134 between 555545 and 555691 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6964\_s\_at 2195.9 P

non-annotated SAGE orf Found forward in NC\_001134 between 555685 and 555879 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6965\_i\_at 23.8 A  
non-annotated SAGE orf Found forward in NC\_001134 between 555695 and 555919 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6966\_r\_at 79.2 P  
non-annotated SAGE orf Found forward in NC\_001134 between 555695 and 555919 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6967\_at 1287.7 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 624453 and 624656 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6968\_at 931.3 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 681184 and 681420 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6969\_at 3966.8 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 681366 and 681578 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6970\_at 142.4 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 681785 and 681940 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6971\_at 573.4 P  
non-annotated SAGE orf Found forward in NC\_001134 between 697768 and 697947 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6972\_at 57.9 P  
non-annotated SAGE orf Found forward in NC\_001134 between 744626 and 744784 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6973\_at -120.4 A  
non-annotated SAGE orf Found forward in NC\_001134 between 9384 and 9605 with 100% identity. See  
citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6974\_at -100.6 A  
non-annotated SAGE orf Found forward in NC\_001134 between 9785 and 9922 with 100% identity. See  
citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6975\_at 1852.2 P  
non-annotated SAGE orf Found forward in NC\_001134 between 133720 and 133872 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6976\_at 8491.0 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 167284 and 167427 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6977\_at 1904.2 P  
non-annotated SAGE orf Found forward in NC\_001134 between 283360 and 283566 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6978\_at 252.3 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 308633 and 308923 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6979\_at 2456.4 P  
non-annotated SAGE orf Found forward in NC\_001134 between 333970 and 334104 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6980\_at -56.3 A  
non-annotated SAGE orf Found reverse in NC\_001134 between 376102 and 376293 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6981\_at 2436.7 P  
non-annotated SAGE orf Found reverse in NC\_001134 between 398333 and 398488 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6982\_at 77.7 A  
non-annotated SAGE orf Found forward in NC\_001134 between 479146 and 479289 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6983\_at 283.8 A  
non-annotated SAGE orf Found forward in NC\_001134 between 741104 and 741241 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6984\_at 147.8 P  
non-annotated SAGE orf Found forward in NC\_001134 between 741803 and 741964 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6938\_at 1907.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 1 and 1000 with 100% identity.  
6939\_g\_at 1449.3 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 1 and 1000 with 100% identity.  
6940\_s\_at 62.5 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 1001 and 2000 with 100% identity.  
6941\_s\_at 401.1 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 2001 and 3000 with 100% identity.  
6942\_at 375.0 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 3001 and 4000 with 100% identity.  
6943\_g\_at 635.1 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 3001 and 4000 with 100% identity.  
6944\_at 78.1 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 4001 and 5000 with 100% identity.  
6945\_g\_at 1730.9 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 4001 and 5000 with 100% identity.  
6946\_at 2619.0 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 5001 and 6000 with 100% identity.  
6947\_g\_at 4030.8 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 5001 and 6000 with 100% identity.  
6948\_i\_at 112.0 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 6001 and 6215 with 100% identity.  
6949\_f\_at 372.1 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 6001 and 6215 with 100% identity.  
6950\_at 3732.8 P  
snRNA  
6951\_at 6421.7 P  
telomerase RNA component  
6952\_at 5007.2 P  
telomerase RNA component  
6953\_at 43.2 M  
snRNA  
6954\_at 158.3 P  
snRNA  
6955\_s\_at 89.5 A  
putative pseudo-TY5  
6956\_s\_at 305.8 P  
Reverse transcriptase  
6957\_s\_at 847.7 P  
Bud site selection



6958\_s\_at 2850.3 P  
Mating type protein alpha-2  
6959\_s\_at 4897.5 P  
transcripton factor involved in the regulation of the alpha-specific genes  
6960\_at -66.7 A  
questionable ORF  
6961\_g\_at 7517.7 P  
questionable ORF  
6915\_at 3066.8 P  
catabolic serine (threonine) dehydratase  
6916\_at 2636.1 P  
weak similarity to yeast translation regulator Gcd6p  
6917\_at 736.4 P  
similarity to myosin heavy chain form b from Chicken and Xenopus  
6918\_at 4571.6 P  
strong similarity to human Rev interacting protein Rip-1  
6919\_at 820.6 A  
hypothetical protein  
6920\_at 3804.6 P  
Saccharolysin (oligopeptidase yscD)  
6921\_at 5470.4 P  
hypothetical protein  
6922\_at 1991.6 P  
May assist Ste12p in pheromone-dependent expression of KAR3 and CIK1  
6923\_at 2241.8 P  
Methyltransferase  
6924\_at 2504.9 P  
Protease B Non-derepressible  
6925\_at 1562.7 P  
involved in laminarinase resistance  
6926\_at 6975.3 P  
diadenosine 5',5'-P1,P4-tetraphosphate phosphorylase I  
6927\_at 4009.5 P  
hypothetical protein  
6928\_at -93.9 A  
strong similarity to sporulation-specific protein Sps2p  
6929\_at 1060.9 P  
hypothetical protein  
6930\_at 2821.1 P  
weak similarity to human ORF  
6931\_at 79.0 A  
questionable ORF  
6932\_at 1928.0 P  
hypothetical protein  
6933\_at 11798.6 P  
protein disulfide isomerase  
6934\_at 384.9 P  
questionable ORF  
6935\_at 1101.3 P  
questionable ORF  
6936\_g\_at 5254.2 P  
questionable ORF  
6937\_at 8083.1 P  
Glucokinase  
6893\_at 886.1 P  
regulatory protein

6894\_at 1196.8 P  
Membrane transporter  
6895\_at 8116.1 P  
SRO9 may overlap in function with tropomyosin and may be involved in organization of actin filaments  
6896\_at 6830.6 P  
similarity to hypothetical protein YDR514c  
6897\_at 7388.4 P  
Glutaredoxin (thiol-transferase)  
6898\_at 4969.1 P  
similarity to hypothetical S.pombe protein  
6899\_at 2512.4 P  
Transcription regulator  
6900\_at 343.5 P  
possesses a SAM (sterile alpha motif)\; interacts with G protein and Ste11p  
6901\_at 1906.0 P  
involved in pre-rRNA processing and ribosome assembly  
6902\_at 11568.2 P  
histidinol dehydrogenase  
6903\_at 475.3 P  
Microtubule-binding protein  
6904\_at 6711.8 P  
weak similarity to glutenins, high molecular weight chain  
6905\_at 3207.0 P  
serine/threonine-rich membrane protein  
6906\_at 762.5 P  
Protein involved in the integration of lipid signaling pathways with cellular homeostatis  
6907\_at 2711.0 P  
Amino acid permease  
6908\_at 195.6 P  
questionable ORF  
6909\_at 8683.6 P  
beta-IPM (isopropylmalate) dehydrogenase  
6910\_at 7500.5 P  
NifS-like protein  
6911\_at 903.8 P  
hypothetical protein  
6912\_at 891.8 P  
Cell cycle regulated protein required for axial bud formation\; co-assembles with Bud4p at bud sites  
6913\_at 1456.2 P  
part of budding protein Bud3p due to frameshift in DNA sequence  
6914\_at 6352.5 P  
Protein with RNA recognition motifs  
6870\_at 781.8 P  
strong similarity to Saccharomyces pastorianus hypothetical protein LgYCL010c  
6871\_at 9773.0 P  
Small regulatory subunit of Acetolactate synthase  
6872\_at 267.5 P  
Calcofluor White Hypersensitivity  
6873\_at 335.7 P  
questionable ORF  
6874\_at 1800.7 P  
strong similarity to Saccharomyces pastorianus hypothetical protein LgYCL005w  
6875\_at 266.3 P  
17-kDa phosphatidylserine synthase  
6876\_at 2222.3 P  
strong similarity to Saccharomyces pastorianus hypothetical protein LgYCL002c

6877_at	4800.1	P	Protein involved in retention of membrane proteins, including Sec12p, in the ER\; localized to Golgi, where it may function in returning membrane proteins to the ER
6878_at	-22.6	A	similarity to Dom34p
6879_at	121.7	A	hypothetical protein
6880_at	6054.1	P	conserved potential GTP-ginding protein
6881_at	2993.3	P	Mitochondrial ribosomal protein MRPL32 (YmL32)
6882_at	8771.3	P	FMN-binding protein
6883_at	8017.1	P	non-mitochondrial citrate synthase
6884_at	111.5	M	hypothetical protein
6885_at	6180.1	P	SerVThr protein kinase
6886_at	7293.8	P	Reduced viability on starvation protein RVS161
6887_at	349.2	P	strong similarity to Y.lipolytica GPR1 protein and Fun34p
6888_at	4225.7	P	Active transport ATPase
6889_at	2.9	A	weak similarity to M.leprae B1496_F1_41 protein
6890_at	5868.1	P	3-phosphoglycerate kinase
6891_at	341.3	P	DNA polymerase IV
6892_at	878.8	P	hypothetical protein
6848_at	1354.2	P	hypothetical protein
6849_at	5295.8	P	similarity to hypothetical S.pombe protein
6850_at	2126.1	P	Transcription regulator
6851_at	1293.1	P	MAK32 sugar kinase
6852_at	424.5	A	Transcription regulator
6853_at	4871.1	P	MAK31 snRNP
6854_at	287.5	P	Protein induced by heat shock, ethanol treatment, and entry into stationary phase\; located in plasma membrane
6855_at	309.8	A	hypothetical protein
6856_at	2022.1	P	Membrane transporter
6857_at	778.2	P	Asn-tRNA synthetase
6858_f_at	11990.2	P	Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)

6859\_at -36.8 A  
hypothetical protein  
6860\_at 405.5 P  
Membrane phospho-diesterase  
6861\_at 409.0 P  
GTPase (RAS-related)  
6862\_at 1707.1 P  
Amino acid permease  
6863\_at 7458.9 P  
required for mitochondrial DNA replication  
6864\_at 8470.5 P  
required for mitochondrial DNA replication  
6865\_at 1478.8 P  
weak similarity to S.pombe hypothetical protein SPBC4C3.06  
6866\_at 11960.0 P  
Ribosomal protein S14A (rp59A)  
6867\_at 947.9 P  
Beige Protein Homologue 1  
6868\_at 2963.4 P  
similarity to mouse nuclear receptor co-repressor N-Cor  
6869\_at 9216.9 P  
Probable subunit of 1,3-beta-glucan synthase\; homolog of ELO1  
6825\_at 2662.5 P  
Component of the exosome 3->5 exoribonuclease complex with Rrp4p, Rrp41p, Rrp42p and Dis3p (Rrp44p).  
6826\_at 3270.6 P  
ribokinase  
6827\_at 2578.0 P  
May collaborate with Pho86p and Pho84p in inorganic phosphate uptake\; protein contains 12 predicted transmembrane domains  
6828\_at 496.7 P  
GTP/GDP exchange factor for Rsr1 protein  
6829\_at 18.4 A  
questionable ORF  
6830\_at 666.2 P  
TATA binding protein-associated factor (TAF)  
6831\_at 2384.2 P  
hypothetical protein  
6832\_at 3130.2 P  
involved in manganese homeostasis  
6833\_at -147.0 A  
Protease  
6834\_at 4286.3 P  
required for respiration and maintenance of mitochondrial genome  
6835\_at 3403.0 P  
Protein carboxyl methylase  
6836\_at 85.3 A  
questionable ORF  
6837\_at 7010.3 P  
Acyl-CoA cholesterol acyltransferase (sterol-ester synthetase)  
6838\_at -5.3 A  
questionable ORF  
6839\_at 2865.8 P  
weak similarity to ankyrins  
6840\_at 2466.9 P  
a subunit of RSC, a fifteen-protein chromatin remodeling complex and related to the Swi/snf Complex.

6841_at	8187.7	P	threonine synthase
6842_at	573.7	P	CTR86 shares a terminator region with THR4. CTR86 contains aGCN4 responsive site suggesting it may also be involved in amino acid biosynthesis.
6843_at	1866.9	P	regulatory protein
6844_at	5047.5	P	weak similarity to hypothetical protein YDL177c
6845_at	3782.1	P	regulatory protein
6846_at	2872.5	P	hypothetical protein
6847_g_at	4051.8	P	hypothetical protein
6803_at	1864.3	P	similarity to Ytp1p protein
6804_at	-12.0	A	questionable ORF
6805_at	1249.5	P	G10-like protein
6806_at	3499.7	P	Transcription factor (fork head domain)
6807_at	314.7	P	Zn finger protein, putative ATPase
6808_at	4198.1	P	Intracellular transport protein
6809_at	899.1	P	similarity to hypothetical S.pombe protein
6810_g_at	678.0	P	similarity to hypothetical S.pombe protein
6811_at	5297.3	P	cyclophilin homolog
6812_at	1442.3	P	(required for) Integrity of Mitochondrial Genome 2
6813_at	6414.9	P	regulatory protein
6814_at	715.7	P	protein kinase
6815_at	7312.8	P	shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains; homologous to Sol1p and Sol3p
6816_at	1902.5	P	ERS1 protein, ER defect supressor
6817_at	1832.8	P	hypothetical protein
6818_at	4968.3	P	Necessary for accurate chromosome transmission during cell division
6819_at	719.5	P	weak similarity to A.thaliana protein phosphatase 2C
6820_at	1191.7	P	activation mediator subcomplex of RNA polymerase I holoenzyme
6821_at	5441.1	P	weak similarity to Rbk1p
6822_at	1828.1	P	Thioredoxin type II

6823_at	6619.6	P	glucose repression regulatory protein, exhibits similarity to beta subunits of G proteins
6824_at	228.6	P	hypothetical protein
6780_at	1858.2	P	hypothetical protein
6781_at	1168.3	P	questionable ORF
6782_at	2933.9	P	nucleic acid-binding protein
6783_at	3704.8	P	Actin binding protein
6784_at	2333.9	P	predicted GPI-anchored cell wall protein
6785_at	3438.0	P	hypothetical protein
6786_at	23.4	A	Putative serine/threonine protein kinase most similar to cyclic nucleotide-dependent protein kinase subfamily and the protein kinase C subfamily
6787_at	328.5	P	mutS homolog, forms a complex with Msh2p to repair insertion-deletion mispairs\; redundant with Pms3/Msh6p in repair of insertion-deletion mispairs
6788_at	1836.1	P	nuclear protein that negatively regulates basal transcription
6789_at	2959.3	P	Cell Division Cycle mutant
6790_at	403.6	P	hypothetical protein
6791_s_at	-23.1	A	Homeobox-domain containing protein which, together with alpha2, represses transcription of haploid-specific genes in diploid cells
6792_s_at	-47.1	A	Homeobox-domain containing protein which, together with alpha2, represses transcription of haploid-specific genes in diploid cells
6793_at	254.3	P	permease involved in the uptake of glycerophosphoinositol (GroPIns)
6794_at	284.9	A	strong similarity to Pep1p
6795_at	959.6	P	strong similarity to Pep1p
6796_at	1.6	A	strong similarity to Pep1p
6797_at	1950.2	P	Alcohol dehydrogenase
6798_f_at	1232.0	P	member of the seripauperin protein\gene family (see Gene_class PAU)
6799_at	497.1	P	Alcohol dehydrogenase
6800_at	665.8	P	Transcription regulator
6801_at	14.7	A	hypothetical protein
6802_at	367.5	P	hypothetical protein
6755_i_at	30.7	P	hypothetical protein

6756\_at 217.3 P  
high-temperature lethal  
6757\_i\_at -46.2 A  
Homeobox-domain containing protein which, together with alpha2, represses transcription of  
haploid-specific genes in diploid cells  
6758\_at 91.3 P  
hypothetical protein identified by SAGE  
6759\_at 6487.8 P  
identified by SAGE  
6760\_g\_at 12495.2 P  
identified by SAGE  
6761\_at 458.8 A  
similarity to starvation induced pSI-7 protein of *C. fluvum*  
6762\_s\_at 650.5 P  
Ser/Thr protein kinase  
6763\_at 2184.1 P  
homologous to mouse and human Tsg101 tumor susceptibility genes  
6764\_g\_at 1024.2 P  
homologous to mouse and human Tsg101 tumor susceptibility genes  
6765\_at -377.1 A  
non-annotated SAGE orf Found forward in NC\_001135 between 41465 and 41704 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6766\_at 119.6 A  
non-annotated SAGE orf Found forward in NC\_001135 between 157511 and 157669 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6767\_at 1075.2 P  
non-annotated SAGE orf Found forward in NC\_001135 between 171344 and 171496 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6768\_at 1776.1 P  
non-annotated SAGE orf Found reverse in NC\_001135 between 175695 and 175841 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6769\_at 62.8 P  
non-annotated SAGE orf Found forward in NC\_001135 between 289916 and 290113 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6770\_i\_at 763.2 P  
non-annotated SAGE orf Found forward in NC\_001135 between 127315 and 127521 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6771\_s\_at 137.2 P  
non-annotated SAGE orf Found forward in NC\_001135 between 127315 and 127521 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6772\_at -181.6 A  
non-annotated SAGE orf Found forward in NC\_001135 between 127457 and 127678 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6773\_at 487.5 P  
non-annotated SAGE orf Found forward in NC\_001135 between 18548 and 18736 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6774\_at 910.8 P  
non-annotated SAGE orf Found forward in NC\_001135 between 109969 and 110139 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6775\_at 8680.2 P  
non-annotated SAGE orf Found reverse in NC\_001135 between 130174 and 130308 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6776\_at 695.4 P  
non-annotated SAGE orf Found reverse in NC\_001135 between 171326 and 171487 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6777\_at 1556.9 P

non-annotated SAGE orf Found reverse in NC\_001135 between 172336 and 172488 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6778\_i\_at 5524.4 A

non-annotated SAGE orf Found reverse in NC\_001135 between 204772 and 204939 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6779\_r\_at 60.9 P

non-annotated SAGE orf Found reverse in NC\_001135 between 204772 and 204939 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6731\_at 163.5 P

non-annotated SAGE orf Found reverse in NC\_001135 between 286677 and 286817 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6732\_at 8849.3 P

non-annotated SAGE orf Found reverse in NC\_001135 between 162144 and 162278 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6733\_at 11654.4 P

non-annotated SAGE orf Found reverse in NC\_001135 between 162307 and 162573 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6734\_at 8.8 A

non-annotated SAGE orf Found reverse in NC\_001135 between 205411 and 205581 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6735\_i\_at 150.2 P

non-annotated SAGE orf Found forward in NC\_001135 between 258696 and 258884 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6736\_r\_at 9.4 A

non-annotated SAGE orf Found forward in NC\_001135 between 258696 and 258884 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6737\_at -65.3 A

non-annotated SAGE orf Found reverse in NC\_001135 between 8959 and 9150 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6738\_at 518.9 A

non-annotated SAGE orf Found reverse in NC\_001135 between 9263 and 9469 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6739\_at 74.5 A

non-annotated SAGE orf Found forward in NC\_001135 between 15484 and 15642 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6740\_at 294.8 P

non-annotated SAGE orf Found forward in NC\_001135 between 24097 and 24348 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6741\_at -162.8 A

non-annotated SAGE orf Found reverse in NC\_001135 between 41458 and 41649 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6742\_at 1772.2 A

non-annotated SAGE orf Found reverse in NC\_001135 between 41640 and 41792 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6743\_at 185.8 P

non-annotated SAGE orf Found reverse in NC\_001135 between 123477 and 123677 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6744\_at -4.5 A

non-annotated SAGE orf Found forward in NC\_001135 between 125368 and 125520 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6745\_at 1193.5 P

non-annotated SAGE orf Found reverse in NC\_001135 between 168999 and 169175 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
6746\_at 1955.8 P

non-annotated SAGE orf Found forward in NC\_001135 between 288361 and 288519 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251



6747\_at 5579.9 P  
non-annotated SAGE orf Found reverse in NC\_001135 between 209220 and 209360 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6748\_at 43.5 A  
non-annotated SAGE orf Found reverse in NC\_001135 between 213543 and 213719 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6749\_at -13.0 P  
non-annotated SAGE orf Found forward in NC\_001135 between 265724 and 265873 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

6750\_i\_at 400.0 P  
TY5-1

6751\_at 593.3 P  
snRNA

6752\_i\_at -147.3 A  
Centromere

6753\_at 3442.7 P  
snRNA

6754\_at -12.4 A  
snRNA

6708\_at 564.9 P  
snRNA

6709\_i\_at 181.1 A  
strong similarity to sugar transport proteins

6710\_at 1372.2 P  
Hypothetical aryl-alcohol dehydrogenase

6711\_at -2.3 A  
strong similarity to hypothetical protein YPR079w

6712\_at 1012.2 P  
hypothetical protein

6713\_at 1120.6 P  
Protein similar to LIM-domain proteins and to rho/vrac GTPase-activating family of proteins

6714\_at 265.4 P  
hypothetical protein

6715\_at 294.4 P  
similarity to E.coli hypothetical protein and to chlorohydrolases

6716\_at 3938.8 P  
hypothetical protein

6717\_at 9512.7 P  
p-nitrophenyl phosphatase

6718\_at 2467.1 P  
Two-component phosphorelay intermediate

6719\_at 792.6 P  
protein of unknown function

6720\_at 467.8 P  
hypothetical protein

6721\_at 9508.4 P  
3.6-kDa protein, probably membrane-located

6722\_at 863.7 P  
hypothetical protein

6723\_at 2960.6 P  
phosphotyrosine-specific protein phosphatase

6724\_at 275.8 P  
similarity to A.klebsiana glutamate dehydrogenase

6725\_at 5903.8 P  
Homothallic switching endonuclease

6726\_at 3794.3 P

ADP-ribosylation factor GTPase-activating protein (ARF GAP)  
6727\_at 3026.7 P  
similarity to Cdc11p, Cdc3p and human CDC10 protein  
6728\_at 2591.2 P  
Possible RNA binding protein. Homolog of Whi3.  
6729\_at 733.1 P  
weak similarity to mucin  
6730\_at 402.3 P  
strong similarity to hypothetical protein YNL194c and similarity to YML052w  
6686\_at -102.9 A  
questionable ORF  
6687\_at 1316.3 P  
binds to single-stranded TG1-3 telomere G-tails  
6688\_at 4151.2 P  
strong similarity to *S.equisimilis* hypothetical protein  
6689\_at 4901.3 P  
strong similarity to *S.equisimilis* hypothetical protein  
6690\_at 118.9 P  
weak similarity to hypothetical protein YNR061c  
6691\_at 3352.4 P  
Mitochondrial inner membrane protein involved in import of proteins of the ADPVATP carrier (AAC) family  
6692\_at 275.8 P  
similarity to Jun activation domain binding protein homologue of *A. thaliana*  
6693\_at 1660.3 P  
NAD-dependent glutamate dehydrogenase  
6694\_at -147.8 A  
strong similarity to putative protein kinase NPR1  
6695\_at 2692.1 P  
has an RNA recognition domain in the N-terminal region  
6696\_at 10640.5 P  
Integral membrane component of the endoplasmic reticulum  
6697\_at 147.9 P  
similarity to hypothetical protein YNL176c  
6698\_at -60.9 A  
GABA-specific transport protein  
6699\_at 1352.6 P  
similarity to hypothetical *S. pombe* protein  
6700\_at 12102.5 P  
HMG-like nuclear protein  
6701\_at 906.0 P  
Nuclear-export-signal (NES)-containing protein  
6702\_at 399.9 P  
weak similarity to transporter proteins  
6703\_at 112.3 A  
phorphobilinogen deaminase (uroporphyrinogen synthase), the third step in heme biosynthesis  
6704\_at 131.7 P  
similarity to hypothetical protein YDR233c  
6705\_at 320.0 P  
similarity to Skt5p  
6706\_at 961.3 P  
Mitochondrial ribosomal protein MRPL11 (YmL11)  
6707\_at 4203.5 P  
strong similarity to human D1075-like protein  
6663\_at 626.0 A  
6-O-methylguanine-DNA methylase  
6664\_at 191.1 P

similarity to sugar transporter proteins  
 6665\_at 5965.0 P  
 high copy suppressor of abf2 lacking the HMG1-like mitochondrial HM protein\; putative mitochondrial carrier protein  
 6666\_at 1540.2 P  
 Anti-silencing protein that causes depression of silent loci when overexpressed  
 6667\_at 241.9 A  
 hypothetical protein  
 6668\_at 11068.6 P  
 involved in protein transport from endoplasmic reticulum to Golgi  
 6669\_at 234.7 P  
 glucose transporter  
 6670\_at 1778.0 P  
 similarity to N.crassa hypothetical 32 kDa protein  
 6671\_at 3359.4 A  
 ADP-ribosylation factor  
 6672\_s\_at 8632.5 P  
 Ribosomal protein L35A  
 6673\_at 3517.2 P  
 ubiquitin fusion degradation protein  
 6674\_at 520.6 P  
 hypothetical protein  
 6675\_at 800.4 P  
 hypothetical protein  
 6676\_at 3434.5 P  
 serine-threonine protein phosphatase 2A  
 6677\_at 210.6 P  
 questionable ORF  
 6678\_at 116.0 A  
 hypothetical protein  
 6679\_at 10391.8 P  
 encodes a protein with three regions (ABC) that is spliced to yield the extein AC and the intein B\; AC is a 69K vacuolar (H<sup>+</sup>)-ATPase, and B is a 50K site-specific endonuclease named VDE (PI-SceI) that is homologous to HO. Cleavage is meiosis-specific and induces gene conversion at the TFP1 locus.  
 6680\_s\_at 5180.1 P  
 Ribosomal protein L41A (YL41) (L47A)  
 6681\_at 354.2 P  
 weak similarity to S.pombe hypothetical protein SPAC23H3  
 6682\_at 13986.7 P  
 homocitrate synthase, highly homologous to YDL131W  
 6683\_g\_at 14955.4 P  
 homocitrate synthase, highly homologous to YDL131W  
 6684\_at 1538.7 P  
 ATPase inhibitor  
 6685\_at 1861.8 P  
 hypothetical protein  
 6641\_at 1277.6 P  
 PHO85 cyclin  
 6642\_at 4776.5 P  
 D-Lactate Dehydrogenase (Cytochrome)  
 6643\_at 401.7 P  
 similarity to hypothetical protein YCR059c  
 6644\_at 151.4 P  
 hypothetical protein  
 6645\_at 833.0 P  
 strong similarity to hypothetical protein YIL079c and weak similarity to cellular nucleic acid binding

proteins  
 6646\_at 8853.5 P  
 mitochondrial enzyme D-lactate ferricytochrome c oxidoreductase  
 6647\_at 3361.5 P  
 hypothetical protein  
 6648\_at 657.2 A  
 questionable ORF  
 6649\_at 7474.1 P  
 Glutamate synthase (NADPH)  
 6650\_at 471.0 P  
 zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
 6651\_at 234.3 P  
 protein of unknown function  
 6652\_at 3364.7 P  
 Long-chain alcohol dehydrogenase (glutathione-dependent formaldehyde dehydrogenase)  
 6653\_at 2348.4 P  
 Asparagine-rich protein  
 6654\_at 4697.8 P  
 weak similarity to Pyrococcus horikoshii hypothetical protein PHBJ019  
 6655\_at 4334.3 P  
 nuclear protein that negatively regulates basal transcription  
 6656\_at 1987.1 P  
 DNA ligase  
 6657\_at -186.0 A  
 questionable ORF  
 6658\_at -49.6 A  
 hypothetical protein  
 6659\_at 1262.8 P  
 strong similarity to hypothetical protein YLR206w and to human KIAA0171 protein  
 6660\_at 1695.8 P  
 Putative RNA helicase of DEAD box family, required for Rap1p localization to telomeres  
 6661\_at 1327.6 P  
 MEK homolog  
 6662\_at 1541.0 P  
 questionable ORF  
 6618\_at 7718.0 P  
 hypothetical protein  
 6619\_at 156.0 A  
 weak similarity to Pas7p  
 6620\_at 2565.7 P  
 G(sub)2-specific B-type cyclin  
 6621\_at 459.9 P  
 MutS homolog involved in chromosome exchange  
 6622\_at 6678.2 P  
 Something About Silencing 10  
 6623\_at 254.6 P  
 questionable ORF  
 6624\_at 126.9 A  
 questionable ORF  
 6625\_at 2771.9 P  
 RNA polymerase III (C) subunit, homologous to human BN51 protein  
 6626\_at 214.2 A  
 hypothetical protein  
 6627\_at 2796.9 P  
 similarity to human mRNA clone RES4-25  
 6628\_at 6559.2 P

Subunit of the regulatory particle of the proteasome  
6629\_at 301.5 P  
weak similarity to Orc3p  
6630\_at 11311.1 P  
alpha subunit of the coatamer complex\; gamma-alpha-COP  
6631\_at 3622.0 P  
hypothetical protein  
6632\_at 6991.6 P  
Cytoplasmic chaperonin subunit required for actin cytoskeleton assembly or function  
6633\_at 1231.3 P  
Cardiolipin synthase  
6634\_at 1714.2 P  
Biotin:apoprotein ligase  
6635\_at 10234.0 P  
RNA polymerase II large subunit  
6636\_at 368.7 P  
hypothetical protein  
6637\_at 668.6 P  
suppressor of snf3 mutant  
6638\_at 13815.9 P  
ADP-ribosylation factor 2  
6639\_at 6815.4 P  
Rho GDP dissociation inhibitor with activity toward Rho1p  
6640\_at 703.8 P  
serine-threonine protein phosphatase 2A  
6595\_at 2185.9 P  
hypothetical protein  
6596\_at 2357.9 P  
Acts together with Cdc4p and Cdc34p to control the G1-S phase transition, assists in mediating the proteolysis of the Cdk inhibitor Sic1p in late G1  
6597\_at 11666.9 P  
homocitrate synthase, highly homologous to YDL182W  
6598\_at 4558.8 P  
ATPase stabilizing factor  
6599\_at 11018.0 P  
Ribosomal protein P1B (L44 ) (YP1beta) (Ax)  
6600\_at 4835.6 P  
Ribosomal protein P1B (L44 ) (YP1beta) (Ax)  
6601\_at 1345.8 P  
hypothetical protein  
6602\_at 7250.6 P  
vacuolar H+VCa2+ exchanger  
6603\_at 1922.9 P  
G1 cyclin  
6604\_at 10697.4 P  
Microsomal protein of CDC48VPAS1VSEC18 family of ATPases\; full length homology to mammalian protein VCP\; involved in secretion, peroxisome formation and gene expression  
6605\_at 10234.1 P  
Yeast member of the Histidine Triad protein family (HIT)  
6606\_at 522.6 A  
Yeast member of the Histidine Triad protein family (HIT)  
6607\_at 2824.6 P  
similarity to aldose reductases  
6608\_at 1859.7 P  
similarity to hypothetical protein YJL151c  
6609\_at 5505.1 P

Ubiquitin-specific protease  
6610\_at 1723.6 P  
hypothetical protein  
6611\_at 2300.9 P  
Mitochondrial protein that regulates mitochondrial iron accumulation iron accumulation  
6612\_at 1707.2 P  
similarity to bovine Graves disease carrier protein  
6613\_at -45.9 A  
questionable ORF  
6614\_at 3980.9 P  
similarity to hypothetical *S. pombe* protein  
6615\_at 5013.1 P  
Protein with homology to mammalian Nup107p  
6616\_at 483.5 P  
hypothetical protein  
6617\_at -141.1 A  
weak similarity to *Rhizobium* nodulation protein nodG  
6573\_at 341.5 P  
similarity to hypothetical protein YDR425w  
6574\_at 2961.2 P  
similarity to C-terminus of human TRP-185 protein  
6575\_at 3924.4 P  
Component of the exosome 3->5 exoribonuclease complex with Rrp4p, Rrp41p, Rrp43p and Dis3p (Rrp44p).  
6576\_at 1381.4 P  
hypothetical protein  
6577\_at 445.3 P  
strong similarity to thiamine-repressed protein Thi4p  
6578\_at 1257.2 P  
serine-threonine kinase, subunit of transcription factor TFIIK, a subcomplex of TFIIH  
6579\_at 257.8 P  
cox1 pre-mRNA splicing factor  
6580\_at 168.8 A  
Homeobox-domain containing protein which is a positive regulator of PHO5 and other genes  
6581\_at 261.9 P  
protein of unknown function  
6582\_at 79.2 P  
similarity to *H.influenzae* sialoglycoprotease (gcp)  
6583\_at 2701.0 P  
UDP-N-acetylglucosamine pyrophosphorylase  
6584\_at 988.7 P  
largest and catalytic subunit of DNA polymerase III (delta)  
6585\_at 964.8 P  
protein kinase  
6586\_at 6728.6 P  
similarity to *E.coli* arsenical pump-driving ATPase  
6587\_at 4299.1 P  
weak similarity to myosin heavy chain proteins  
6588\_at 1314.9 P  
hypothetical protein  
6589\_at 8082.7 P  
Subunit of the regulatory particle of the proteasome  
6590\_at 332.9 P  
questionable ORF  
6591\_at 9811.5 P  
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase

6592\_at 83.2 P  
questionable ORF  
6593\_at 1794.3 P  
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase  
6594\_at 5168.1 P  
Signal recognition particle subunit  
6550\_at 377.3 P  
weak similarity to mouse FAF1 protein  
6551\_at 2668.4 P  
beta subunit of farnesyltransferase  
6552\_at 1846.8 P  
hypothetical protein  
6553\_at 1981.9 P  
Suppressor of thermosensitive mutations in the DNA polymerase delta gene  
6554\_at 756.5 P  
Living Under Cap-binding complex expression  
6555\_at 11451.9 P  
similarity to hypothetical Synechocystis protein  
6556\_at -250.1 A  
strong similarity to NADH dehydrogenase (ubiquinone)  
6557\_at 9521.0 P  
suppressor of the cold-sensitive snRNP biogenesis mutant brr1-1  
6558\_i\_at 12404.9 P  
Ribosomal protein S16B (rp61R)  
6559\_f\_at 10974.7 P  
Ribosomal protein S16B (rp61R)  
6560\_at 14732.0 P  
Ribosomal protein L13A  
6561\_at 6810.6 P  
Acidic ribosomal protein P1A (YP1alpha) (A1)  
6562\_at 1452.4 P  
positive regulatory factor with thiamin pyrophosphate-binding motif for thiamin metabolism  
6563\_at 489.3 P  
MDS1 related protein kinase  
6564\_at 71.8 A  
MDS1 related protein kinase  
6565\_at 5019.6 P  
malate dehydrogenase  
6566\_at 1255.3 P  
Required for the vacuolar morphogenesis in yeast  
6567\_at 1618.3 P  
hypothetical protein  
6568\_f\_at 16874.7 P  
Ribosomal protein L31A (L34A) (YL28)  
6569\_at 8304.9 P  
Ribosomal protein L31A (L34A) (YL28)  
6570\_at 2037.2 P  
weak similarity to spindle pole body protein NUF1  
6571\_at 1196.3 P  
weak similarity to Cyprinus carpio calcium channel protein  
6572\_at 5106.2 P  
weak similarity to hypothetical protein YMR040w  
6527\_at 2254.3 P  
questionable ORF  
6528\_at 5483.6 P  
Bromodomain protein, homolog of Bdf1

6529_at	975.1	P	translational activator of cytochrome b
6530_at	122.7	P	questionable ORF
6531_at	7696.3	P	Subunit VIIa of cytochrome c oxidase
6532_at	8469.2	P	Mitochondrial form of NADP-specific isocitrate dehydrogenase
6533_at	1032.6	P	40 kDa farnesylated protein associated with peroxisomes
6534_at	5921.5	P	ubiquitin-conjugating enzyme
6535_at	3900.7	P	weak similarity to human estrogen-responsive finger protein
6536_at	152.4	P	questionable ORF
6537_f_at	11320.7	P	Ribosomal protein S29B (S36B) (YS29)
6538_at	9023.1	P	similarity to C.elegans hypothetical protein
6539_at	208.9	P	A mutation in this gene results in RADIation sensitivity and recombination defects, which are general properties of the RAD52 epistasis group mutants. rad59 is epistatic to rad52 for its repair and recombination defects. The RAD59 gene product has homology to the Rad52 protein.
6540_at	1497.9	P	Integrin analogue gene
6541_at	978.0	P	hypothetical protein
6542_at	859.8	P	transcription factor
6543_at	13798.4	P	mannose-1-phosphate guanyltransferase, GDP-mannose pyrophosphorylase
6544_at	1909.6	P	hypothetical protein
6545_at	4237.4	P	hypothetical protein
6546_at	6794.2	P	putative 1-acyl-sn-glycerol-3-phosphate acyl transferase
6547_at	4744.0	P	Protein homologous to human La (SS-B) autoantigen
6548_at	758.2	P	questionable ORF
6549_at	438.8	P	KRE9 homolog
6504_at	2297.1	P	SIT4 suppress mutations in DBF2
6505_at	8396.9	P	hypothetical protein
6506_at	3589.3	P	homologous to Yml37p, component of the 37 S subunit of mitochondrial ribosomes
6507_at	1070.8	P	FAD synthetase
6508_at	1225.2	P	Necessary for the stability and/or processing of some large mitochondrial transcripts
6509_at	969.5	P	snRNA-associated protein



6510_at	1694.8	P	regulator of silent mating loci
6511_at	656.0	P	questionable ORF
6512_at	4478.9	P	N-terminal acetyltransferase
6513_at	7473.1	P	questionable ORF
6514_at	3760.2	P	similarity to mucin proteins
6515_at	3839.3	P	strong similarity to glucan 1,4-alpha-glucosidase
6516_at	3060.8	P	strong similarity to RIB2 protein
6517_at	1511.6	P	G-protein coupled receptor
6518_at	106.9	A	questionable ORF
6519_at	1953.4	P	similarity to H.influenzae hypothetical protein HI0174
6520_at	702.9	P	questionable ORF
6521_at	4808.0	P	DEAD box protein 10
6522_at	1045.7	P	RNA splicing factor
6523_at	7318.6	P	actin-related protein
6524_at	594.9	P	serine/threonine/tyrosine protein kinase (dual specificity), able to autophosphorylate itself as well as Mad1p. A mutation predicted to abolish kinase function not only eliminates in vitro protein kinase activity, but also behaves like a null mutation in vivo, suggesting that kinase activity contributes to the essential function of the protein.
6525_at	401.4	P	hypothetical protein
6526_at	139.2	A	questionable ORF
6482_at	1164.8	P	ser/thr protein kinase of the DEAD/DEAH box family
6483_at	846.6	P	strong similarity to acid phosphatase
6484_at	-124.4	A	questionable ORF
6485_at	3393.3	P	glycerol-3-phosphate dehydrogenase
6486_at	191.1	P	Similar to GPM1 (phosphoglycerate mutase)
6487_at	2155.2	P	involved in ubiquitin degradation pathway
6488_at	3893.6	P	similarity to Osh1p
6489_at	829.7	P	p24 protein involved in membrane trafficking
6490_at	1402.1	P	serine/threonine protein kinase
6491_at	-154.1	A	

questionable ORF  
6492\_at 8005.1 P  
similarity to rat synaptic glycoprotein SC2  
6493\_at 10629.7 P  
nucleolar protein, homologous to mammalian fibrillarin  
6494\_at 3019.2 P  
Protein involved in hexose metabolism  
6495\_at 6894.1 P  
strong similarity to hypothetical protein YBR016w and YDR210w  
6496\_at 354.4 P  
questionable ORF  
6497\_at 1232.6 P  
similarity to hypothetical protein YBR014c and glutaredoxins  
6498\_at 709.6 P  
questionable ORF  
6499\_at 2593.1 P  
subunit of the anaphase promoting complex (APC)  
6500\_at 4589.0 P  
Probable 26S protease subunit and member of CDC48VPAS1VSEC18 family of ATPases  
6501\_at 399.9 P  
serine-threonine protein phosphatase  
6502\_at 572.6 P  
Stoichiometric member of mediator complex  
6503\_at 7628.0 P  
ATP synthase delta subunit  
6459\_at 1460.2 P  
Mitotic omosome Determinant\; similar to S. pombe RAD21\; may function in chromosome morphogenesis from S phase through mitosis  
6460\_at 1353.4 P  
HMG1-box containing protein  
6461\_at 815.8 P  
similarity to hypothetical protein YFR048w, YDR282c and S.pombe hypothetical protein SPAC12G12.14  
6462\_at 1761.4 P  
neutral trehalase (alpha,alpha-trehalase)  
6463\_at 11492.8 P  
Yeast Ran Binder #1\; suppressor of FUS1\; homolog of mouse HTF9a and human RanBP1  
6464\_at 767.8 P  
strong similarity to hypothetical protein YBR005w  
6465\_at 1829.2 P  
RecA homolog (similar to DMC1, RAD51, and RAD55), interacts with Rad 55p by two-hybrid analysis  
6466\_at 1612.8 P  
required for sorting of Mod5p  
6467\_at 1445.0 P  
gene dosage suppressors of the conditional growth defect of several temperature-sensitive A kinase mutants  
6468\_at 2033.4 P  
n-(5 -phosphoribosyl)-anthranilate isomerase  
6469\_at 125.9 P  
questionable ORF  
6470\_at 405.5 P  
galactokinase  
6471\_at 125.1 A  
hypothetical protein  
6472\_at 4732.6 P  
ABC transporter  
6473\_i\_at 17905.0 P

Ribosomal protein L4B (L2B) (rp2) (YL2)  
6474\_at 779.6 P  
similarity to human hypothetical KIAA0186 protein  
6475\_at 214.1 P  
weak similarity to chicken neurofilament triplet M protein  
6476\_at 117.2 P  
hypothetical protein  
6477\_at 2136.5 P  
hypothetical protein  
6478\_at 3141.7 P  
Shows homology to basic leucine zipper family of transcription factors  
6479\_at 69.3 A  
strong similarity to hypothetical protein YBR042c  
6480\_at 1574.3 P  
glycine cleavage T protein (T subunit of glycine decarboxylase complex  
6481\_at 78.9 M  
weak similarity to uridine kinases and phosphoribulokinases  
6436\_at 1438.4 P  
DEAD-box protein, putative RNA helicase  
6437\_at 649.1 P  
cik1 suppressor  
6438\_at 10414.4 P  
seryl-tRNA synthetase  
6439\_at 76.4 P  
hypothetical protein  
6440\_at 1860.1 P  
strong similarity to DNA-binding protein Reb1p  
6441\_at 2329.4 P  
Loss Upsets Vacuole  
6442\_at 1174.4 P  
regulatory subunit for protein phosphatase Glc7p  
6443\_at 497.6 P  
hypothetical protein  
6444\_at 333.9 P  
Protein involved in the same pathway as Rad26p, has beta-transducin (WD-40) repeats  
6445\_at 1843.5 P  
hypothetical protein  
6446\_at 10228.9 P  
strong similarity to S.pombe obr1  
6447\_at 9624.4 P  
strong similarity to putative heat shock protein YRO2  
6448\_at 833.1 P  
Transcriptional activator of lysine pathway genes with 2-aminoadipate semialdehyde as co-inducer\;  
saccharopine reductase synthesis  
6449\_at 1310.0 P  
identified by SAGE expression analysis  
6450\_at 10190.3 P  
DAHP synthase\; a.k.a. phospho-2-dehydro-3-deoxyheptonate aldolase, phenylalanine-inhibited\;  
phospho-2-keto-3-deoxyheptonate aldolase\; 2-dehydro-3-deoxyphosphoheptonate aldolase\;  
3-deoxy-D-arabine-heptulosonate-7-phosphate synthase  
6451\_at 3728.4 P  
similarity to enoyl CoA hydratase  
6452\_at 14642.8 P  
lysyl-tRNA synthetase  
6453\_at 3169.5 P  
P-type ATPase involved in Na<sup>+</sup> efflux

6454\_g\_at 5525.2 P  
P-type ATPase involved in Na<sup>+</sup> efflux  
6455\_s\_at 4525.7 P  
plasma membrane protein\; putative Na<sup>+</sup> pump\; P-type ATPase  
6456\_at 2583.2 P  
weak similarity to bacterial ribosomal S10 proteins  
6457\_at 121.6 P  
hypothetical protein  
6458\_at 490.6 P  
Suppressor of SNf  
6413\_at 5131.3 P  
Coproporphyrinogen III oxidase  
6414\_at 6052.5 P  
strong similarity to *S.acidocaldarius* transcription elongation factor tfs  
6415\_at 6414.0 P  
Valine transporter  
6416\_at 5151.3 P  
uroporphyrinogen decarboxylase  
6417\_at -17.5 A  
questionable ORF  
6418\_at 572.8 P  
similarity to *C.elegans* K06H7.3 protein  
6419\_at 8466.1 P  
triosephosphate isomerase  
6420\_at 3963.8 P  
similarity to hypothetical *A. thaliana* protein BAC F7G19  
6421\_at 96.7 P  
cyclin-like kinase required for late nuclear division  
6422\_at -151.2 A  
questionable ORF  
6423\_at 1282.6 P  
ubiquitin-conjugating enzyme, E2  
6424\_at 4407.2 P  
strong similarity to SPS2 protein  
6425\_at 3212.5 P  
hypothetical protein  
6426\_at 363.4 P  
weak similarity to *L.lactis* mleR protein  
6427\_at 576.0 P  
TriGlyceride Lipase  
6428\_at 1033.5 P  
ubiquitin-conjugating enzyme  
6429\_at 3086.1 P  
similarity to mouse putative CCAAT binding factor CBF1 and CBF2  
6430\_at 2290.1 P  
similarity to *E.coli* modF and photorepair protein phrA  
6431\_at 9888.7 P  
Probable component of serine palmitoyltransferase, which catalyzes the first step in biosynthesis of long-chain sphingolipids  
6432\_at 3670.5 P  
weak similarity to glia maturation factor beta  
6433\_at 10710.4 P  
Ribosomal protein S13 (S27a) (YS15)  
6434\_at 303.0 P  
hypothetical protein  
6435\_at 344.6 P

similarity to hypothetical protein YER139c  
 6391\_at 871.8 P  
 similarity to YNL099c  
 6392\_at 2411.4 P  
 involved in genome stability  
 6393\_at 990.7 P  
 ubiquitin isopeptidase  
 6394\_at 298.7 P  
 hypothetical protein  
 6395\_at 7309.1 P  
 similarity to *O.aries* arylalkylamine N-acetyltransferase  
 6396\_at 2904.3 P  
 inositolphosphotransferase 1  
 6397\_at 1059.9 P  
 component of SWIVSNF global transcription activator complex  
 6398\_at 3690.4 P  
 Trehalose-6-phosphate phosphatase  
 6399\_at 1361.3 P  
 protein phosphatase type 2A  
 6400\_at 171.6 A  
 RecA homolog (related to DMC1, RAD51, RAD57), interacts with Rad51p and Rad57p by two-hybrid analysis  
 6401\_at 9857.8 P  
 putative cell surface glycoprotein  
 6402\_at 938.4 P  
 Preferential Use of Neither donor locus during mating type switching.  
 6403\_at 2742.0 P  
 cytochrome c oxidase-specific assembly factor  
 6404\_at 386.1 P  
 vacuolar protein sorting  
 6405\_at 3133.5 P  
 Asparagine and serine-rich protein  
 6406\_at 598.1 P  
 Involved in telomere length regulation, may be functional in telomere metabolism during late S phase  
 6407\_at 5741.4 P  
 similarity to hypothetical *S.pombe* protein  
 6408\_at 4112.4 P  
 similarity to hypothetical *C.elegans* protein  
 6409\_at 923.2 P  
 coordinates regulation of alpha-factor receptor signalling and induction of morphogenesis during conjugation  
 6410\_at 8056.6 P  
 endoplasmic reticulum protein that is part of the Sec61 trimeric complex and the Ssh1 trimeric complex  
 6411\_at 2433.6 P  
 involved in processing rRNA precursor species to mature rRNAs  
 6412\_at 747.1 P  
 involved in 3 splice site choices and 2nd step of splicing  
 6368\_at 1604.0 P  
 weak similarity to *Streptococcus* transposase  
 6369\_at 2408.9 P  
 weak similarity to YRO2 protein  
 6370\_at 9663.7 P  
 strong similarity to human RNase L inhibitor and *M.jannaschii* ABC transporter protein  
 6371\_at 9540.4 P  
 ubiquitin-conjugating enzyme  
 6372\_at 2336.8 P

similarity to P.falciparum ATPase 2  
 6373\_g\_at 6594.8 P  
 similarity to P.falciparum ATPase 2  
 6374\_at 1016.7 P  
 questionable ORF  
 6375\_at 490.0 P  
 hypothetical protein  
 6376\_at 834.8 P  
 putative zinc finger protein  
 6377\_at 2702.2 P  
 Homolog of the human GTBP protein, forms a complex with Msh2p to repair both single-base and insertion-deletion mispairs, redundant with Msh3p in repair of insertion-deletion mispairs  
 6378\_at 4756.6 P  
 similarity to Legionella glutaredoxin-like protein  
 6379\_at 8135.8 P  
 Homolog of mammalian 14-3-3 proteins  
 6380\_at 5998.9 P  
 similarity to Dictyostelium development-specific membrane protein  
 6381\_at 7004.0 P  
 weak similarity to proliferation-associated protein  
 6382\_at 109.3 A  
 hypothetical protein  
 6383\_at 1951.6 P  
 Protein of the pheromone pathway  
 6384\_at 545.1 P  
 hypothetical protein  
 6385\_at 2469.7 P  
 similarity to mouse hypothetical protein  
 6386\_at 595.7 P  
 Actin-related protein  
 6387\_at 1012.1 P  
 strong similarity to Emp70 protein  
 6388\_at 385.6 P  
 Probably has role late in meiosis following DNA replication  
 6389\_at 582.7 P  
 similarity to Mpa43p  
 6390\_at 401.7 P  
 DNA replication fork blocking protein  
 6346\_at 569.1 P  
 strong similarity to alanine transaminase  
 6347\_at 4.8 A  
 questionable ORF  
 6348\_at 296.7 P  
 42-kDa nuclear protein  
 6349\_at 112.4 A  
 questionable ORF  
 6350\_at 4527.7 P  
 similarity to bacterial ribosomal L34 proteins  
 6351\_at 2065.5 P  
 similarity to bacterial ribosomal L1 proteins  
 6352\_at 2358.4 P  
 similarity to mouse ligatin, a trafficking receptor for phosphoglycoproteins  
 6353\_at 426.1 P  
 subunit of the anaphase promoting complex (APC)  
 6354\_at 4182.8 P  
 similarity to B.subtilis tetracyclin resistance

6355\_at 4120.4 P  
N2,N2-dimethylguanosine-specific tRNA methyltransferase  
6356\_at 1825.5 P  
weak similarity to YNC2beta protein  
6357\_at 1178.8 P  
Serine/threonine protein kinase  
6358\_at 837.3 P  
helix-loop-helix protein  
6359\_at 28.7 A  
hypothetical protein  
6360\_at -58.1 A  
ExtraCellular Mutant  
6361\_at 1215.8 P  
similarity to hypothetical protein YLR246w and YOL003c  
6362\_at 10265.9 P  
pentafunctional arom polypeptide (contains: 3-dehydroquinase synthase, 3-dehydroquinase dehydratase (3-dehydroquinase), shikimate 5-dehydrogenase, shikimate kinase, and epsp synthase)  
6363\_at 2553.5 P  
weak similarity to Sec27p, YMR131c and human retinoblastoma-binding protein  
6364\_at 6426.0 P  
fibrin homolog (actin-filament bundling protein)  
6365\_at 765.7 P  
weak similarity to sea urchin myosin heavy chain  
6366\_at 293.5 P  
similarity to hypothetical protein YJL149w  
6367\_at 398.9 P  
strong similarity to hypothetical protein YLR108c  
6323\_at 10144.3 P  
questionable ORF  
6324\_g\_at 12319.7 P  
questionable ORF  
6325\_at 3108.8 P  
Metal resistance protein with similarity to human cystic fibrosis protein CFTR and multidrug resistance proteins  
6326\_at 176.2 P  
questionable ORF  
6327\_at 2368.1 P  
Reduced growth phenotype  
6328\_at 405.0 P  
Hyperrecombination protein that suppresses intrachromosomal excision recombination  
6329\_at 6449.6 P  
ubiquitin-like protein  
6330\_at 6042.7 P  
ubiquitin-like protein  
6331\_at 3047.4 P  
weak similarity H.influenzae protoporphyrinogen oxidase (hemK) homolog  
6332\_at 1366.9 P  
hypothetical protein  
6333\_at 406.0 P  
Member of beta-transducin-related (WD-40) protein family  
6334\_at 2738.1 P  
mating-type regulation protein  
6335\_at 6954.4 P  
aspartyl protease related to Yap3p  
6336\_at 1155.4 P  
TFIID subunit

6337_at	1720.9	P	transcriptional activator
6338_at	468.6	P	Ethanolamine Kinase
6339_at	6462.9	P	dihydrolipoyl transsuccinylase component of alpha-ketoglutarate dehydrogenase complex in mitochondria
6340_at	-18.6	A	questionable ORF
6341_at	2014.5	P	Protein with variable number of tandem repeats of a 64 amino-acid polypeptide, potential Ca <sup>2+</sup> -binding site, and pleckstrin homology domain
6342_at	724.2	P	member of the CCCH zinc finger protein family that has two or more repeats of a novel zinc finger motif consisting of Cys and His residues in the form Cx8Cx5Cx3H [where x is a variable amino acid (aa)]
6343_at	2524.2	P	weak similarity to C.elegans hypothetical protein CET26E3
6344_at	2799.9	P	hypothetical protein
6345_at	6852.2	P	questionable ORF
6300_g_at	10270.0	P	questionable ORF
6301_at	10023.4	P	cyclophilin peptidyl-prolyl cis-trans isomerase
6302_at	10554.0	P	RNA polymerase I subunit A14
6303_at	2325.3	P	questionable ORF
6304_at	8144.0	P	aspartic beta semi-aldehyde dehydrogenase
6305_at	2251.1	P	Leucine permease transcriptional regulator
6306_at	597.2	P	Ssy1p controls expression of several transporter genes, including BAP2, TAT1, PTR2 and YDR046c
6307_at	2393.4	P	protein phosphatase Two C-Interacting protein
6308_at	487.5	P	Nap1p-binding protein
6309_at	918.7	P	weak similarity to S.pombe hypothetical protein
6310_at	945.1	P	Hydrophilic protein involved at the late stage of secretion
6311_at	2544.1	P	weak similarity to hypothetical C.elegans protein
6312_at	2297.9	P	107 kDa component of the Exocyst complex; required for exocytosis.
6313_at	3910.2	P	TFIID subunit
6314_at	6139.5	P	Cell cycle protein necessary for passage through START
6315_at	539.7	P	Binds Sin3p in two-hybrid assay
6316_at	9332.3	P	Guanine nucleotide exchange protein for ARF
6317_at	2398.2	P	Similar to HSP26; expression is regulated by stress conditions



6318\_at 6907.8 P  
putative translation factor  
6319\_at 618.6 P  
Regulator of arginine-responsive genes with ARG80 and ARG81  
6320\_at 7232.0 P  
Non-histone protein  
6321\_at 2159.4 P  
similarity to S.pombe hypothetical protein SPAC2F7.15  
6322\_at 894.9 P  
transcription factor; genetic and mutant analyses suggest that Ngg1p (Ada3p) is part of two  
transcriptional adaptor/VHAT (histone acetyltransferase complexes, the 0.8 MD ADA complex and the 1.8  
MD SAGA complex  
6278\_at 7983.6 P  
ubiquitin-conjugating enzyme  
6279\_at 5978.1 P  
succinate dehydrogenase membrane anchor subunit  
6280\_at 130.6 P  
hypothetical protein  
6281\_at 277.3 P  
hypothetical protein  
6282\_at 1659.8 P  
Sister chromatid cohesion protein  
6283\_at 791.3 P  
Involved in silencing at telomeres, HML and HMR  
6284\_at 3057.7 P  
Protein that affects bud emergence, intrachromosomal recombination, and nuclear division  
6285\_at 887.3 P  
weak similarity to thioredoxin  
6286\_at 2987.9 P  
Aip Three Complex; interacts with AIP3, localized to the nucleus  
6287\_at 377.1 P  
strong similarity to Msf1p  
6288\_at 450.4 P  
hypothetical protein  
6289\_at 113.4 A  
questionable ORF  
6290\_at 7946.0 P  
Cytoplasmic chaperonin of the Cct ring complex (previously called TCP1 or TRiC), distantly related to  
Tcp1p and to Hsp60  
6291\_at 1393.1 P  
Hydrophilic suppressor of ypt1 involved in vesicle trafficking between ER and Golgi  
6292\_at 7714.9 P  
strong similarity to TATA-binding protein-interacting protein 49 - rat  
6293\_at 713.9 P  
Homolog of SIR2  
6294\_at 979.1 P  
nucleoporin  
6295\_at 148.9 A  
questionable ORF  
6296\_at 6879.6 P  
Mitochondrial RNA helicase of the DEAD box family  
6297\_at 1444.7 P  
RNA-binding protein involved in cleavage step of mRNA 3'-end formation, prior to polyadenylation  
6298\_at 1418.2 P  
similarity to C.elegans hypothetical protein T05G5.5  
6299\_at 802.3 P

cytochrome b translational activator  
6255\_at 1208.1 P  
hypothetical protein  
6256\_at 188.4 A  
questionable ORF  
6257\_at 420.2 P  
similarity to hypothetical protein YLR238w  
6258\_at 1808.5 P  
component of spindle pole  
6259\_at 1022.8 P  
hypothetical protein  
6260\_at 51.9 A  
questionable ORF  
6261\_at 3395.4 P  
Involved in ubiquinone biosynthesis  
6262\_at 848.1 P  
similarity to A.eutrophus cation efflux system membrane protein czcD, rat zinc transport protein ZnT-1 and Cot1p  
6263\_at 1498.2 P  
EST1-like bcy1 Suppressor  
6264\_at 1851.0 P  
Ume6p is a C6 zinc finger URS1-binding protein that is a key regulator required for both repression and induction of early meiotic genes, and for sporulation; Ume6p requires Ume4 for mitotic repression and interacts with and requires Ime1p and Rim11p for induction of meiosis-specific transcription  
6265\_at 2836.9 P  
Phosphatidylinositol 4-phosphate kinase  
6266\_at 1032.4 P  
questionable ORF  
6267\_at 10029.2 P  
strong similarity to hypothetical protein YBR016w  
6268\_at 5308.4 P  
Translation initiation factor eIF-2B epsilon subunit  
6269\_at 8544.5 P  
chaperonin subunit alpha  
6270\_at 293.8 P  
regulatory protein involved in control of sterol uptake  
6271\_at 7144.8 P  
similarity to hypothetical protein YNL281w  
6272\_at 343.4 A  
hypothetical protein  
6273\_at 676.6 P  
positive transcriptional regulator of ADH2 and peroxisomal protein genes  
6274\_at 649.6 P  
cell cycle arrest protein  
6275\_at 111.1 P  
Septin-related protein expressed during sporulation  
6276\_at 284.1 P  
hypothetical protein  
6277\_at 877.6 P  
questionable ORF  
6232\_at 692.7 P  
weak similarity to the beta subunit of an ER luminal alpha-glucosidase from mouse  
6233\_at 3089.7 P  
strong similarity to hypothetical protein YLR225c  
6234\_at 57.8 P  
similarity to Ifh1p

6235\_at 11383.6 P  
Histone H2B (HTB1 and HTB2 code for nearly identical proteins)  
6236\_i\_at 18587.4 P  
Histone H2A (HTA1 and HTA2 code for nearly identical proteins)  
6237\_at 10372.9 P  
cytosolic adenylate kinase  
6238\_at 400.1 P  
regulator of silent mating loci  
6239\_at 772.7 P  
Component of pre-mRNA cleavage and polyadenylation factor I, interacts with Rna14p and Rna15p  
6240\_at 624.7 P  
hypothetical protein  
6241\_at 305.1 P  
questionable ORF  
6242\_at 1859.6 P  
hypothetical protein  
6243\_at 5253.5 P  
5-aminolevulinic acid synthase  
6244\_at 11330.9 P  
similarity to hypothetical protein YDL204w  
6245\_at 7890.6 P  
homoaconitase  
6246\_at 1368.6 P  
U1 snRNP protein that shares 50% sequence similarity with Prp39p U1 snRNP protein and has multiple copies of the crn-like TPR motif  
6247\_at 1286.8 P  
similarity to hypothetical A. thaliana protein  
6248\_at 785.8 P  
Mitochondrial ribosomal protein MRPL7 (YmL7)  
6249\_at 10410.0 P  
encodes a subunit of yeast coatomer  
6250\_at 2162.0 P  
hypothetical protein  
6251\_at 738.5 P  
Snurp = Small nuclear ribonucleoprotein particle of MW 56 kDa. Associated with the U1 snRNP; no counterpart in mammalian U1 snRNP. Serine-rich.  
6252\_at 2.6 A  
questionable ORF  
6253\_at 510.7 P  
putative amidase  
6254\_at 838.9 P  
Required for the first step of splicing in vitro  
6209\_at 517.4 P  
69-kDa protein containing tetratricopeptide repeat (TPR)  
6210\_at 5159.1 P  
galactosyltransferase  
6211\_at 3577.9 P  
involved in targeting and fusion of ER to golgi transport vesicles  
6212\_at 439.9 P  
strong similarity to Sks1p  
6213\_at 1864.8 P  
strong similarity to E.coli thermoresistant gluconokinase  
6214\_at 1652.9 P  
weak similarity to cytochrome b  
6215\_at 168.0 P  
hypothetical protein

6216_at	2077.6	P	coiled-coil protein multicopy suppressor of loss of PP2A
6217_at	993.1	P	Negative effect on expression of several genes transcribed by RNA polymerase II; BTF3 homolog
6218_at	180.0	A	zinc finger DNA binding factor, transcriptional regulator of sulfur amino acid metabolism, highly homologous to Met31p
6219_at	143.2	P	Protein necessary for stability of ARS-CEN plasmids\; suggested to be required for kinetochore function
6220_at	824.5	P	weak similarity to hypothetical S.pombe hypothetical protein SPBC29A3
6221_at	339.6	P	catalase A
6222_at	1318.2	P	Transcription regulator
6223_at	2050.0	P	Mitochondrial heat shock protein 78 kDa
6224_at	203.0	A	bZIP protein
6225_at	1420.7	P	hypothetical protein
6226_at	2070.5	P	Exo-1,3-b-glucanase
6227_at	2848.1	P	hypothetical protein
6228_at	563.0	P	DNA-damage inducible gene
6229_at	2279.6	P	Ankyrin repeat-containing protein
6230_at	658.2	P	C3HC4 zinc-binding integral peroxisomal membrane protein
6231_at	2523.8	P	similarity to hypothetical C.elegans protein
6187_at	2126.0	P	weak similarity to human TAFII100 and other WD-40 repeat containing proteins
6188_at	1089.1	P	mitochondrial tryptophanyl-tRNA synthetase
6189_at	99.1	A	questionable ORF
6190_at	3071.4	P	Copper-transporting P-type ATPase with similarity to human Menkes and Wilsons genes
6191_at	138.6	A	questionable ORF
6192_at	1605.4	P	Cytoplasmic glyoxylase-II
6193_at	186.7	P	weak similarity to YOR042w
6194_at	466.9	A	hypothetical protein
6195_at	1676.4	P	weak similarity to YOR042w
6196_at	11295.4	P	strong similarity to Hordeum vulgare blt101 protein
6197_at	593.2	P	Protein is 61\% identical to Msn3p
6198_at	68.0	A	

hypothetical protein  
 6199\_at 878.1 P  
 hypothetical protein  
 6200\_at 4450.3 P  
 Putative 3 ->5 exoribonuclease\; component of exosome complex of 3 ->5 exonucleases  
 6201\_at 1634.1 P  
 hypothetical protein  
 6202\_at 887.4 P  
 similarity to hypothetical protein YDL001w, YFR048w and S.pombe hypothetical protein SPAC12G12.14  
 6203\_at 1028.6 P  
 eukaryotic initiation factor 2 alpha (eIF2-alpha) kinase  
 6204\_at 3521.1 P  
 Diacylglycerol Pyrophosphate Phosphatase  
 6205\_at 245.4 P  
 Synaptonemal complex protein, component of the central element  
 6206\_at 1427.6 P  
 hypothetical protein  
 6207\_at 1473.4 P  
 similarity to inositolmonophosphatases  
 6208\_at 308.8 P  
 hypothetical protein  
 6163\_at 364.5 P  
 hypothetical protein  
 6164\_at -22.0 A  
 questionable ORF  
 6165\_at 1753.9 P  
 similarity to B.subtilis helicases  
 6166\_at 3163.0 P  
 signal recognition particle receptor - alpha subunit  
 6167\_at 3687.8 P  
 putative protein phosphatase  
 6168\_at 8290.1 P  
 dihydrosphingosine phosphate lyase (also known as sphingosine phosphate lyase)  
 6169\_at 430.5 A  
 weak similarity to Uso1p, YPR179c and fruit fly tropomyosin  
 6170\_at 3538.3 P  
 hypothetical protein  
 6171\_at 6087.1 P  
 Syringomycin response protein 2  
 6172\_at 5265.0 P  
 ATP synthase subunit 5\; oligomycin sensitivity-conferring protein  
 6173\_at 3157.0 P  
 involved in protein transport step at the Brefeldin A blocks  
 6174\_at 4568.5 P  
 gamma-glutamyl kinase  
 6175\_at 3030.2 P  
 Component of pre-mRNA cleavage factor II (CFII)\; 150-kDa protein associated with polyadenylation factor 1 (PF I)  
 6176\_at 5357.5 P  
 weak similarity to human GPI-anchor biosynthesis protein  
 6177\_at 854.1 P  
 similarity to transcriptional regulator proteins  
 6178\_at 9574.1 P  
 Cyclophilin D, Peptidyl-prolyl cis-trans isomerase D  
 6179\_at 2993.2 P  
 Yeast member of the Histidine Triad protein family (HIT)

6180\_i\_at 140.4 P  
Yeast member of the Histidine Triad protein family (HIT)  
6181\_r\_at 34.5 A  
Yeast member of the Histidine Triad protein family (HIT)  
6182\_f\_at 195.5 P  
Yeast member of the Histidine Triad protein family (HIT)  
6183\_at 1815.5 P  
weak similarity to S.pombe hypothetical protein SPAC6F6  
6184\_at 2653.0 P  
similarity to Pmt1p, Pmt2p, Pmt3p and Pmt5p  
6185\_at 2030.3 P  
RNA polymerase II holoenzyme component  
6186\_at 7195.0 P  
GTPase-interacting component 2  
6140\_at 4493.5 P  
Suppressor of mar1-1 (sir2) mutation  
6141\_at 1039.1 P  
Component of transcription initiation factor IIb, 75 kDa subunit  
6142\_i\_at 218.4 P  
high copy suppressor of G beta subunit temperature sensitive mutation  
6143\_f\_at 1206.1 P  
high copy suppressor of G beta subunit temperature sensitive mutation  
6144\_at 835.4 P  
Phosphatidylinositol(3)-phosphate binding  
6145\_at 73.5 A  
weak similarity to hypothetical S.pombe protein  
6146\_at 287.1 A  
hypothetical protein  
6147\_at 1776.3 P  
hypothetical protein  
6148\_at 109.8 A  
hypothetical protein  
6149\_at 888.1 P  
Involved in minichromosome maintenance  
6150\_at 1942.7 P  
hypothetical protein  
6151\_at 289.8 P  
similarity to hypothetical S. pombe protein and weak similarity to bovine auxilin  
6152\_at 9358.4 P  
Asparaginase I, intracellular isozyme  
6153\_at 1546.1 P  
Mitochondrial ribosomal protein MRPL35 (YmL35)  
6154\_at 10082.6 P  
subunit e of mitochondrial F1F0-ATPase  
6155\_at 116.5 A  
cytosolic and peripheral membrane protein with three zinc fingers\; cysteine rich regions of amino acids  
are essential for function  
6156\_at 4093.0 P  
weak similarity to beta transducin from S. pombe and other WD-40 repeat containing proteins  
6157\_at 678.9 P  
weak similarity to S.pombe hypothetical protein SPAC1B9  
6158\_at 770.9 P  
strong similarity to YHR080c, similarity to YFL042c and YLR072w  
6159\_at 487.1 P  
questionable ORF  
6160\_at 7041.6 P

Skp1p encodes Cbf3d, a 29 Kd kinetochore protein subunit of CBF3, a multiprotein complex which binds to the CDE III element of centromeres. In addition, Skp1p is a subunit of the ScuCdc4 (also termed SCFCdc4p) complex, which also contains the ubiquitin ligase Cdc34p, the cullin Cdc53p, and Cdc4p. ScuCdc4 complexes transfer ubiquitin to phosphorylated Sic1p, and substrate recognition is thought to involve the Cdc4p and Skp1p subunits. Following the ScuCdc4-mediated monoubiquitination of Sic1p, a polyubiquitin chain is added, and ubiquitinated Sic1p is then degraded by the 26S proteasome.

6161\_at 1088.0 P

48-kDa peroxisomal integral membrane protein

6162\_at 1201.6 P

similarity to hypothetical *S. pombe* protein

6117\_at 2643.7 P

Protein involved in the attachment of glycosylphosphatidylinositol (GPI) anchors to proteins

6118\_at 408.5 P

similarity to *E. coli* hypothetical protein and weak similarity to RNA helicase MSS116 / YDR194c

6119\_at 1817.9 P

similarity to hypothetical *S. pombe* protein

6120\_at 1273.3 P

similarity to nuclear Sth1p, Snf2p and related proteins

6121\_at 4903.6 P

Multicopy suppressor of snf1 mutation

6122\_at 1613.6 P

weak similarity to *B. subtilis* hypothetical protein X

6123\_at 2382.4 P

Mitochondrial ribosomal protein MRPS28 (*E. coli* S15)

6124\_at 1571.9 P

similarity to Erc1p

6125\_at 6977.0 P

weak similarity to hypothetical protein YOR004w

6126\_at 44.5 A

questionable ORF

6127\_at 13025.0 P

strong similarity to arginine-tRNA ligase

6128\_f\_at 10321.2 P

Hexose transporter

6129\_f\_at 9812.9 P

Hexose transporter

6130\_at 139.6 A

hypothetical protein

6131\_at 13690.3 P

High-affinity glucose transporter

6132\_at 3156.4 P

similarity to hypothetical *S. pombe* protein

6133\_at 2597.4 P

37 kDa mitochondrial ribosomal protein

6134\_at 1501.6 P

similarity to hypothetical protein YHR097c

6135\_at 4109.0 P

GPI-anchored aspartic protease

6136\_at 774.1 P

protein of unknown function

6137\_at 2629.3 P

required for bud growth

6138\_at 1262.6 P

weak similarity to hypothetical proteins YOL092w, YBR147w and YMR010w

6139\_at 7986.9 P

Thioredoxin reductase

6095\_at 3398.7 P  
anthranilate phosphoribosyl transferase  
6096\_at -32.2 A  
questionable ORF  
6097\_at 633.8 P  
component of the spindle pole body that interacts with Spc42p, calmodulin, and a 35 kDa protein  
6098\_at 1329.3 P  
hypothetical protein  
6099\_at 900.6 P  
strong similarity to hypothetical protein YHR108w and weak similarity to signal transducing adaptor from mouse and man  
6100\_at 937.0 P  
hypothetical protein  
6101\_at -234.9 A  
questionable ORF  
6102\_at 2476.9 P  
hypothetical protein  
6103\_at 1106.4 P  
91 kDa tau91 subunit of transcription factor IIIC (TFIIIC)  
6104\_at 1362.2 P  
Establishes Silent omatin  
6105\_at 4629.4 P  
Homolog of DSS1\; similar to hypothetical protein from *S. pombe*  
6106\_at 1978.7 P  
Member of the beta transducin family  
6107\_at 1908.1 P  
weak similarity to Streptococcus M protein  
6108\_at 166.3 A  
similarity to YOL106w and YER181c  
6109\_at 2187.7 P  
hypothetical protein  
6110\_at 5091.7 P  
homologous to the aldo-keto reductase protein family  
6111\_at 293.8 A  
DNA repair protein  
6112\_at 2017.1 P  
hypothetical protein  
6113\_at 78.4 P  
similarity to chitinases  
6114\_at 2788.9 P  
similarity to hypothetical *S. pombe* protein  
6115\_at 4452.5 P  
strong similarity to human BDR-1 protein and other calcium binding proteins  
6116\_at 75.9 A  
similarity to hypothetical *A. thaliana* protein BAC F21M12  
6072\_at 1115.2 P  
Mitochondrial protein of the CDC48VPAS1VSEC18 ATPase family, required for expression of functional Rieske iron-sulfur protein  
6073\_at 1718.1 P  
adrenodoxin oxidoreductase homolog  
6074\_at 5246.4 P  
ATP synthase subunit f  
6075\_at 4073.6 P  
Sm-like protein  
6076\_at 255.9 P  
Contains a Rho-GAP domain and two LIM domains. Has strong similarity to Rga1p. Has some similarity



to all known Rho-GAPs.

6077\_at 8106.2 P  
similarity to Pdc6p, Thi3p and to pyruvate decarboxylases

6078\_at 9192.3 P  
Nuclear RNA-binding RNA annealing protein

6079\_at 7846.7 P  
Nuclear RNA-binding RNA annealing protein

6080\_at 6721.0 P  
Ribosomal protein P2B (YP2beta) (L45)

6081\_at 4.0 A  
weak similarity to *S.pombe* paramyosin

6082\_at 6796.4 P  
strong similarity to *Y.lipolytica* GPR1 gene

6083\_at 281.6 P  
MMS and UV Sensitive; Mus81p and Rad54p are found together in a complex from whole-cell extracts

6084\_at 502.8 P  
similarity to Itr1p and Itr2p and *E.coli* araE

6085\_at 9919.8 P  
involved in endocytosis

6086\_at 1209.2 P  
GTPase activating protein (GAP) for RHO1

6087\_at 1066.3 P  
Protein with homology to mammalian ubiquitin activating (E1) enzyme

6088\_at 1127.8 P  
strong similarity to hypothetical protein YOR013w

6089\_at 883.7 P  
transcription factor, member of the histone acetyltransferase SAGA complex

6090\_at 325.5 P  
mRNA (identified by a library screen) that causes growth arrest when overexpressed

6091\_at 3785.6 P  
probable 26S protease subunit and member of the CDC48VPAS1VSEC18 family of ATPases

6092\_at 4432.7 P  
Sxm1p

6093\_at 373.1 P  
hypothetical protein

6094\_at 2109.8 P  
repressor of class II transcription

6049\_at 6887.9 P  
similarity to human KIAA0007 gene

6050\_at 5708.1 P  
Hypoxanthine Phosphoribosyltransferase

6051\_at 6801.3 P  
similarity to *C. fasciculata* inosine-uridine preferring nucleoside hydrolase (EC 3.2.2.1)

6052\_at -104.1 A  
Cytochrome P450 56, Dit2p catalyzes oxidation of N-formyl tyrosine to N,N-bisformyl dityrosine in vitro

6053\_at -107.5 A  
questionable ORF

6054\_at 140.4 A  
first enzyme in dityrosine synthesis in the outer layer of the spore wall pathway converting L-tyrosine to N-formyl-L-tyrosine, expressed late (10-16 hr) in sporulation

6055\_at 5916.2 P  
dissociable subunit of RNA polymerase II

6056\_at 916.2 P  
263-amino acid mitochondrial ribosomal large subunit protein; similar to L23 family of ribosomal proteins

6057\_at 791.0 P  
probable multidrug resistance transporter

6058\_at 1910.7 P  
weak similarity to Myo1p  
6059\_at 5743.3 P  
glycinamide ribotide transformylase  
6060\_at 426.4 P  
similarity to Nfi1p  
6061\_at 5495.3 P  
farnesyl cysteine-carboxyl methyltransferase  
6062\_at 2743.3 P  
weak similarity to Der1p  
6063\_at 344.7 P  
weak similarity to NADH dehydrogenase  
6064\_at 1441.0 P  
questionable ORF  
6065\_at 1223.3 P  
Protein required for retention of luminal ER proteins  
6066\_at 2527.0 P  
strong similarity to bacterial leucyl aminopeptidase  
6067\_at 1258.2 P  
SYnthetic lethal with cdcForty  
6068\_at 370.9 P  
questionable ORF  
6069\_i\_at 15936.0 P  
Ribosomal protein L12B (L15B) (YL23)  
6070\_s\_at 12061.3 P  
Ribosomal protein L12B (L15B) (YL23)  
6071\_at 275.8 P  
similar to E. coli DinB and S. cerevisiae REV1  
6026\_at 2177.4 P  
Type 1 membrane protein with EF hand motif  
6027\_at 247.7 P  
hypothetical protein  
6028\_at 1600.3 P  
SNF1 protein kinase substrate  
6029\_at 2744.0 P  
Transcriptional activator involved in resistance to 1,10-phenanthroline\; member of yeast Jun-family of transcription factors related to mammalian c-jun  
6030\_at 7647.2 P  
putative light chain of dynein  
6031\_at 391.5 P  
similarity to hypothetical protein YDL113c  
6032\_at 122.9 A  
questionable ORF  
6033\_at 6226.1 P  
Subunit of the regulatory particle of the proteasome  
6034\_at 2035.8 P  
hypothetical protein  
6035\_at 9020.1 P  
Translation initiation factor 3 p33 subunit  
6036\_at 2066.8 P  
similarity to C.perfringens hypothetical hypA protein  
6037\_at 55.0 A  
questionable ORF  
6038\_at 7982.6 P  
nuclear shuttling protein with an RNA recognition motif  
6039\_g\_at 14916.3 P

nuclear shuttling protein with an RNA recognition motif  
6040\_i\_at 18958.6 P  
questionable ORF  
6041\_at 2331.6 P  
similarity to S.pombe hypothetical protein  
6042\_at 1192.1 P  
similarity to YOL141w and hypothetical C.elegans protein  
6043\_at 631.4 A  
serine-threonine phosphatase Z  
6044\_at -80.8 A  
hypothetical protein  
6045\_at 525.9 P  
strong similarity to hypothetical protein YML018c  
6046\_at 439.6 P  
Loss of rDNA silencing  
6047\_at 923.4 P  
Pachytene CHeckpoint  
6048\_at 2245.3 P  
Adenine phosphoribosyltransferase  
6003\_at -49.3 A  
questionable ORF  
6004\_at 2393.1 P  
RNA polymerase II holoenzyme component  
6005\_at 642.2 P  
similarity to hypothetical protein YGL144c and YDL109c  
6006\_at 31.0 A  
questionable ORF  
6007\_at 56.3 A  
ExtraCellular Mutant  
6008\_at 1412.6 P  
transcription factor, member of ADA and SAGA, two transcriptional adaptorVHAT (histone acetyltransferase)complexes  
6009\_at 1985.2 P  
hypothetical protein  
6010\_at 1173.1 P  
strong similarity to Yox1p  
6011\_at 4453.6 P  
similarity to human sphingomyelin phosphodiesterase  
6012\_at 882.5 P  
strong similarity to thiol-specific antioxidant proteins  
6013\_at 11104.3 P  
guanylate kinase  
6014\_at 13.2 A  
questionable ORF  
6015\_at 2094.0 P  
Na+VH+ exchanger  
6016\_at 5509.3 P  
hect-domain-containing protein, required for G2VM transition\; similar to RSP5\; contains motifs typical of protein kinases  
6017\_at 523.9 P  
similarity to hypothetical protein YML034w and YML033w  
6018\_at 1186.6 P  
weak similarity to YNL326c  
6019\_at 1074.5 P  
TFIIH subunit Tfb3 , contains ring finger motif\; similar to mammalian CAK subunit  
6020\_r\_at 645.8 M

a-factor mating pheromone precursor  
6021\_f\_at 119.7 A  
a-factor mating pheromone precursor  
6022\_at 2720.7 P  
Mitochondrial ribosomal protein MRPL28 (YmL28)  
6023\_at 1822.1 P  
Nuclear-localized protein containing zinc finger motifs  
6024\_at 900.5 P  
negative regulator of prp genes  
6025\_at 6155.1 P  
Protein arginine methyltransferase  
5980\_at 1914.1 P  
similarity to ser/thr protein kinase  
5981\_at 245.9 A  
questionable ORF  
5982\_at 995.6 P  
tSNARE that affects a Late Golgi compartment  
5983\_at 661.3 P  
hypothetical protein  
5984\_at 365.7 P  
similarity to chromosome segregation protein Cse1p  
5985\_at 14859.8 P  
Ribosomal protein L27B  
5986\_at 2311.9 P  
similarity to P.falciparum 41-2 protein antigen  
5987\_at 812.7 P  
essential splicing factor  
5988\_at 1123.5 P  
similarity to C-terminal region of YOR019w  
5989\_at 198.2 A  
hypothetical protein  
5990\_at 6964.9 P  
hypothetical protein  
5991\_at 2705.0 P  
protein serine/threonine kinase  
5992\_at 1992.4 P  
RNase MRP protein component  
5993\_at 621.5 P  
weak similarity to YHR150w  
5994\_at 458.3 A  
MAP kinase-associated protein  
5995\_at 2889.9 P  
repressible alkaline phosphatase  
5996\_at 225.1 P  
hypothetical protein  
5997\_at 7214.0 P  
alpha-1,2-mannosyltransferase  
5998\_at 525.6 P  
May interact with actin as a component or controller of the assembly or stability of the actin cytoskeleton  
5999\_at 2443.4 P  
similarity to trichohyalin  
6000\_at 1673.1 P  
weak similarity to Snf7p  
6001\_at 8239.7 P  
3,4-dihydroxy-2-butanone 4-phosphate synthase  
6002\_at 1655.3 P

Protein required in the absence of Cin8p

5958_at	515.8	P
hypothetical protein		
5959_at	1230.5	P
Ser/Thr protein kinase		
5960_at	126.0	A
questionable ORF		
5961_at	8942.3	P
strong similarity to hypothetical protein YOL002c		
5962_at	1142.6	P
hypothetical protein		
5963_at	2784.6	P
hypothetical protein		
5964_at	154.9	P
Vacuolar sorting protein		
5965_at	5771.8	P
similarity to hypothetical human and C.elegans proteins		
5966_at	11427.6	P
myo-inositol transporter		
5967_at	2510.4	P
membrane glycoprotein, sorted by HDEL retrieval system		
5968_at	752.2	P
weak similarity to hypothetical C.elegans protein, M.genitalium peptide chain release factor 1 and YJL149w		
5969_at	13170.2	P
60S ribosomal protein L37B (L43) (YL35)		
5970_at	96.4	M
similarity to hypothetical protein YLR183c		
5971_at	8058.8	P
S-adenosylmethionine synthetase		
5972_at	1442.5	P
Lipid phosphate phosphatase		
5973_at	3961.1	P
similarity to hypothetical T.brucei protein		
5974_at	1744.9	P
high copy suppressor of ts mutations in DNA polymerase alpha		
5975_at	2220.1	P
similarity to FET3, YFL041w and F.floriforme diphenol oxidase		
5976_at	3044.5	P
putative serine/threonine kinase		
5977_at	8905.3	P
high-affinity glutamine permease		
5978_at	328.4	P
questionable ORF		
5979_at	5307.3	P
may be involved in function and/or structure of the eukaryotic kinetochore		
5935_at	3582.7	P
weak similarity to C. elegans protein F25H9.7 and to the human complement 3 precursor		
5936_at	2561.5	P
questionable ORF		
5937_at	7440.5	P
Glutaredoxin (thioltransferase) (glutathione reductase)		
5938_at	2550.9	P
strong similarity to hypothetical protein YCL036w		
5939_at	618.4	P
regulates the copper-dependent mineralization of copper sulfide complexes on the cell surface in cells		

cultured in medium containing copper salts  
 5940\_at 2428.9 P  
 strong similarity to glucokinase  
 5941\_at 1514.5 P  
 weak similarity to hypothetical S.pombe protein  
 5942\_at 1856.8 P  
 Protein disulfide isomerase homolog  
 5943\_at 6014.6 P  
 FKBP (FK506 binding protein) 13\; peptidylprolyl cis-trans isomerase activity  
 5944\_at 948.1 P  
 weak similarity to transcription factors of the zinc finger class  
 5945\_at -26.4 A  
 questionable ORF  
 5946\_at -249.9 A  
 Middle/late gene of meiosis  
 5947\_at 311.4 P  
 serine\threonine kinase homologous to Ste20p\; expressed in middle/late meiosis  
 5948\_at 646.8 P  
 similarity to hypothetical human protein and YIL044c  
 5949\_at 29.4 A  
 hypothetical protein  
 5950\_at 408.1 P  
 questionable ORF  
 5951\_at 2786.2 P  
 weak similarity to Plasmodium yoelii rhoptry protein  
 5952\_at 536.5 P  
 similarity to Lre1p  
 5953\_at 8609.2 P  
 ubiquinol-cytochrome c oxidoreductase subunit 7 (14 kDa)  
 5954\_at 1434.0 P  
 5 ,5 -P-1,P-4-tetraphosphate phosphorylase II  
 5955\_at 2976.4 P  
 similarity to hypothetical A. thaliana and C. elegans proteins  
 5956\_at 115.9 P  
 weak similarity Plasmodium repeat organellar protein  
 5957\_at 9286.1 P  
 strong similarity to hypothetical proteins YPL280w, YOR391c and YMR322c  
 5913\_at 580.4 P  
 similarity to YOR383c,Sta1p and pig mucin  
 5914\_at 256.1 P  
 hypothetical protein  
 5915\_at -150.2 A  
 sugar transporter-like protein  
 5916\_at 522.3 P  
 questionable ORF  
 5917\_at 3534.2 P  
 Phenylacrylic acid decarboxylase  
 5918\_at 4622.9 P  
 similarity to E.coli hypothetical 55.3 kDa protein in rfah-rfe intergenic region  
 5919\_at 187.7 A  
 hypothetical protein  
 5920\_at 758.0 P  
 similarity to dihydroflavonol-4-reductases  
 5921\_at 9169.0 P  
 hypothetical protein identified by SAGE  
 5922\_s\_at 4955.2 P

homing endonuclease with protein splicing activity

5923\_at 2085.0 P

identified by SAGE

5924\_at 331.1 P

identified by SAGE

5925\_at 5051.0 A

identified by SAGE

5926\_g\_at 0.0 A

identified by SAGE

5927\_at 2596.0 P

Involved in pre-tRNA splicing and in uptake of branched-chain amino acids

5928\_at 334.3 P

non-annotated SAGE orf Found forward in NC\_001136 between 169497 and 169697 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5929\_at 1802.4 P

non-annotated SAGE orf Found reverse in NC\_001136 between 340810 and 340977 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5930\_at 804.6 P

non-annotated SAGE orf Found reverse in NC\_001136 between 372033 and 372221 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5931\_at 2397.8 P

non-annotated SAGE orf Found forward in NC\_001136 between 578355 and 578501 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5932\_at 3130.0 P

non-annotated SAGE orf Found reverse in NC\_001136 between 603587 and 603805 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5933\_at -47.2 P

non-annotated SAGE orf Found forward in NC\_001136 between 691007 and 691207 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5934\_at 1328.0 P

non-annotated SAGE orf Found reverse in NC\_001136 between 1108272 and 1108490 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5887\_i\_at 5261.5 P

non-annotated SAGE orf Found reverse in NC\_001136 between 1489561 and 1489731 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5888\_at -6.0 A

non-annotated SAGE orf Found reverse in NC\_001136 between 169634 and 169786 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5889\_at 152.7 A

non-annotated SAGE orf Found reverse in NC\_001136 between 436971 and 437174 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5890\_i\_at -211.9 A

non-annotated SAGE orf Found forward in NC\_001136 between 437405 and 437677 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5891\_f\_at -16.0 A

non-annotated SAGE orf Found forward in NC\_001136 between 437405 and 437677 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5892\_at 342.1 A

non-annotated SAGE orf Found reverse in NC\_001136 between 512499 and 512651 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5893\_at -20.4 A

non-annotated SAGE orf Found forward in NC\_001136 between 629245 and 629457 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5894\_at 59.2 A

non-annotated SAGE orf Found reverse in NC\_001136 between 1301069 and 1301203 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5895\_at 810.5 P  
non-annotated SAGE orf Found forward in NC\_001136 between 31938 and 32096 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5896\_at 453.9 P  
non-annotated SAGE orf Found forward in NC\_001136 between 54150 and 54302 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5897\_at 417.8 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 76964 and 77110 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5898\_at 786.1 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 104660 and 104806 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5899\_i\_at -39.2 A  
non-annotated SAGE orf Found forward in NC\_001136 between 130177 and 130317 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5900\_at -160.7 A  
non-annotated SAGE orf Found forward in NC\_001136 between 130499 and 130633 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5901\_at 4567.3 P  
non-annotated SAGE orf Found forward in NC\_001136 between 192383 and 192544 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5902\_at -59.1 A  
non-annotated SAGE orf Found forward in NC\_001136 between 217255 and 217434 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5903\_at -176.8 A  
non-annotated SAGE orf Found forward in NC\_001136 between 241211 and 241405 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5904\_at 6123.9 P  
non-annotated SAGE orf Found forward in NC\_001136 between 370713 and 370868 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5905\_i\_at 264.5 P  
non-annotated SAGE orf Found forward in NC\_001136 between 370892 and 371032 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5906\_r\_at 2138.6 P  
non-annotated SAGE orf Found forward in NC\_001136 between 370892 and 371032 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5907\_at 13.7 A  
non-annotated SAGE orf Found forward in NC\_001136 between 473863 and 474021 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5908\_at 6749.7 P  
non-annotated SAGE orf Found forward in NC\_001136 between 509189 and 509365 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5909\_at 37.5 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 542450 and 542596 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5910\_at 6274.3 P  
non-annotated SAGE orf Found forward in NC\_001136 between 654446 and 654610 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5911\_at 986.7 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 683771 and 683923 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5912\_at 682.5 A  
non-annotated SAGE orf Found forward in NC\_001136 between 886950 and 887105 with 100% identity.



See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5864\_at 384.7 P  
non-annotated SAGE orf Found forward in NC\_001136 between 930871 and 931032 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5865\_at 14.0 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 971521 and 971670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5866\_at 432.6 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 971619 and 971783 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5867\_at 609.8 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 1014227 and 1014367 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5868\_at 573.2 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1021700 and 1021852 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5869\_at 159.4 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1078478 and 1078672 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5870\_at 35.4 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1149727 and 1149861 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5871\_at -33.1 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1162667 and 1162810 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5872\_at 877.1 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1224746 and 1225015 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5873\_at 414.4 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 1276382 and 1276564 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5874\_at 919.2 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1385570 and 1385815 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5875\_s\_at -19.1 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1385623 and 1385760 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5876\_at 5822.9 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 1410191 and 1410346 with 100%  
identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell  
8:243-251  
5877\_i\_at 713.0 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 34050 and 34184 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5878\_r\_at 2859.5 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 34050 and 34184 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5879\_at 2566.2 P  
non-annotated SAGE orf Found forward in NC\_001136 between 160791 and 160925 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5880\_at 1740.0 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 217125 and 217325 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5881\_at 276.8 A  
non-annotated SAGE orf Found forward in NC\_001136 between 309589 and 309750 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5882\_at 1345.0 P  
non-annotated SAGE orf Found forward in NC\_001136 between 681671 and 681811 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5883\_i\_at 65.1 P  
non-annotated SAGE orf Found forward in NC\_001136 between 871688 and 871912 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5884\_r\_at -68.4 A  
non-annotated SAGE orf Found forward in NC\_001136 between 871688 and 871912 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5885\_at 3970.1 P  
non-annotated SAGE orf Found forward in NC\_001136 between 937524 and 937712 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5886\_at 545.5 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1022638 and 1022775 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5841\_at 607.5 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1022913 and 1023059 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5842\_at 21.8 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1045240 and 1045398 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5843\_at -11.7 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1095473 and 1095631 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5844\_at 10.9 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1164717 and 1164953 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5845\_at 444.8 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1204280 and 1204438 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5846\_at 568.1 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1480287 and 1480421 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5847\_at 21.4 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 48402 and 48554 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5848\_at -5.5 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 48561 and 48719 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5849\_at 1699.1 P

non-annotated SAGE orf Found reverse in NC\_001136 between 169367 and 169609 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5850\_at 126.2 P

non-annotated SAGE orf Found forward in NC\_001136 between 362352 and 362528 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5851\_at 65.2 A

non-annotated SAGE orf Found reverse in NC\_001136 between 366186 and 366452 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5852\_at 286.8 A

non-annotated SAGE orf Found reverse in NC\_001136 between 369351 and 369551 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5853\_at 301.2 A

non-annotated SAGE orf Found reverse in NC\_001136 between 386539 and 386772 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5854\_at 1118.1 P

non-annotated SAGE orf Found reverse in NC\_001136 between 471227 and 471388 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5855\_at -197.7 A

non-annotated SAGE orf Found forward in NC\_001136 between 542286 and 542432 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5856\_at 185.2 P

non-annotated SAGE orf Found reverse in NC\_001136 between 545720 and 545920 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5857\_g\_at 16.8 A

non-annotated SAGE orf Found reverse in NC\_001136 between 545720 and 545920 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5858\_at 101.5 A

non-annotated SAGE orf Found reverse in NC\_001136 between 545791 and 545997 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5859\_at -750.7 A

non-annotated SAGE orf Found reverse in NC\_001136 between 721872 and 722042 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5860\_g\_at 130.6 A

non-annotated SAGE orf Found reverse in NC\_001136 between 721872 and 722042 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5861\_at 205.7 A

non-annotated SAGE orf Found reverse in NC\_001136 between 721952 and 722089 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5862\_at 554.0 P

non-annotated SAGE orf Found reverse in NC\_001136 between 909885 and 910028 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5863\_at 340.7 P

non-annotated SAGE orf Found reverse in NC\_001136 between 1182750 and 1182914 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5817\_at 574.1 P

non-annotated SAGE orf Found reverse in NC\_001136 between 1251950 and 1252093 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5818\_at -3.3 A

non-annotated SAGE orf Found reverse in NC\_001136 between 1258336 and 1258488 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5819\_at 3349.4 P

non-annotated SAGE orf Found reverse in NC\_001136 between 1353218 and 1353430 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell

8:243-251  
5820\_at 787.3 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 1385513 and 1385758 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5821\_at -85.8 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1394780 and 1394965 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5822\_at -11.6 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1518910 and 1519074 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5823\_at -5.7 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 1519095 and 1519325 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5824\_i\_at 212.9 A  
non-annotated SAGE orf Found forward in NC\_001136 between 174671 and 174826 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5825\_r\_at -5.4 A  
non-annotated SAGE orf Found forward in NC\_001136 between 174671 and 174826 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5826\_at 850.1 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 235889 and 236071 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5827\_at -527.2 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 286761 and 286994 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5828\_at 3671.9 P  
non-annotated SAGE orf Found forward in NC\_001136 between 371892 and 372080 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5829\_at 401.8 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 423540 and 423701 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5830\_at 82.6 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 428438 and 428608 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5831\_at 252.8 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 463178 and 463426 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5832\_i\_at 113.1 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 541225 and 541422 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5833\_r\_at 85.3 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 541225 and 541422 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5834\_s\_at 371.2 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 541225 and 541422 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5835\_i\_at 106.1 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 541283 and 541441 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5836\_at -28.5 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 558081 and 558245 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5837\_at -301.7 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 664944 and 665141 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5838\_at 1725.3 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 678003 and 678185 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5839\_at 2277.4 P  
non-annotated SAGE orf Found forward in NC\_001136 between 733117 and 733251 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5840\_at 2674.1 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 792041 and 792292 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5792\_at 1736.7 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 812871 and 813017 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5793\_at 471.3 A  
non-annotated SAGE orf Found forward in NC\_001136 between 909701 and 909844 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5794\_i\_at 6112.7 P  
non-annotated SAGE orf Found forward in NC\_001136 between 945505 and 945678 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5795\_at 52.9 A  
non-annotated SAGE orf Found reverse in NC\_001136 between 976132 and 976302 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5796\_at 118.0 A  
non-annotated SAGE orf Found forward in NC\_001136 between 979658 and 979807 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5797\_at 9.3 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1013666 and 1013818 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5798\_at 761.3 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1013978 and 1014130 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5799\_at 1566.5 P  
non-annotated SAGE orf Found forward in NC\_001136 between 1108476 and 1108613 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5800\_at 3921.3 P  
non-annotated SAGE orf Found reverse in NC\_001136 between 1233267 and 1233506 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5801\_at -281.9 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1359610 and 1359834 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5802\_at 9.9 A  
non-annotated SAGE orf Found forward in NC\_001136 between 1362215 and 1362352 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5803\_at 6.3 M  
non-annotated SAGE orf Found reverse in NC\_001136 between 1500930 and 1501154 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5804\_at 2772.6 P

snRNA		
5805_i_at	-70.3	A
Centromere		
5806_i_at	661.3	P
snRNA		
5807_at	9631.7	P
snRNA		
5808_i_at	-32.6	A
questionable ORF		
5809_i_at	425.4	P
similarity to subtelomeric encoded proteins		
5810_s_at	2563.6	P
similarity to subtelomeric encoded proteins		
5811_at	133.2	P
similarity to YJR108w		
5812_at	98.8	A
hypothetical protein		
5813_at	6036.8	P
strong similarity to Aip2p		
5814_at	374.0	P
hypothetical protein		
5815_at	-54.2	A
weak similarity to YKL083w		
5816_at	5132.9	P
Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs		
5769_at	1002.9	P
probably multidrug resistance protein		
5770_at	476.0	P
similarity to YBL089w		
5771_at	5376.5	P
arginine permease		
5772_at	310.5	P
Non-membrane-embedded, PEST sequence-containing protein		
5773_at	761.9	P
Kinesin-related protein involved in establishment and maintenance of mitotic spindle		
5774_at	4240.6	P
vacuolar protease B		
5775_at	3120.9	P
high copy suppressor of imp1 mutation, may be required for the function of the Imp1 peptidase and/or the protein sorting machinery		
5776_at	900.7	P
hypothetical protein		
5777_at	9830.5	P
Phosphoacetylglucosamine Mutase		
5778_at	46.9	A
hypothetical protein		
5779_at	4814.4	P
subunit of a cytoplasmic histone acetyltransferase		
5780_at	3448.0	P
DNA polymerase V that has motifs typical of DNA polymerase family		
5781_i_at	11403.6	P
Ribosomal protein L12A (L15A) (YL23)		
5782_at	1556.4	P
glucose-repressible protein		
5783_at	3640.1	P
ATPase family gene		

5784\_at 6560.2 P  
Vacuolar H-ATPase D subunit of the V1 catalytic sector  
5785\_at 4194.5 P  
Mitochondrial ribosomal protein L2 of the large subunit  
5786\_f\_at 383.7 A  
member of the seripauperin protein\gene family (see Gene\_class PAU)  
5787\_at 106.0 P  
hypothetical protein  
5788\_at 7922.9 P  
strong similarity to Osm1p  
5789\_at 8553.8 P  
Threonine Aldolase  
5790\_at 275.6 P  
weak similarity to cytochrome c oxidase III of T.brucei kinetoplast  
5791\_at 2503.8 P  
hypothetical protein  
5747\_at 4892.7 P  
weak similarity to Mad1p  
5748\_at 9246.8 P  
Guanosine diphosphatase of Golgi membrane  
5749\_at 166.6 A  
strong similarity to Utr1p  
5750\_at 12446.8 P  
weak similarity to Bacillus 1,3-1,4-beta-glucanase  
5751\_at 581.1 P  
iso-2-cytochrome c  
5752\_at 4275.3 P  
similarity to K.oxytoca enolase-phosphatase E-1  
5753\_at 8039.9 P  
ubiquitin-like protein  
5754\_at 6046.1 P  
Mannan 8\; Protein of the endoplasmic reticulum with a role in retention of glycosyltransferases in the Golgi, also involved in osmotic sensitivity and resistance to aminonitrophenyl propanediol  
5755\_at -155.9 A  
protein of unknown function  
5756\_at 8748.2 P  
Translation initiation factor eIF-5A  
5757\_at 3570.4 P  
weak similarity to Sauroleishmania mitochondrial hypothetical ORF-5 protein  
5758\_at 4726.5 P  
Member of complex that acts at ARS s to initiate replication  
5759\_at 8954.4 P  
P-type ATPase  
5760\_at 270.6 A  
ExtraCellular Mutant  
5761\_at 1508.2 P  
similarity to hypothetical protein YNR027w  
5762\_at 224.0 P  
hypothetical protein  
5763\_at 10868.3 P  
Vacuolar ATP synthase 17-kDa proteolipid C subunit of VO sector\; dicyclohexylcarbodiimide binding subunit  
5764\_at 14581.9 P  
strong similarity to high mobility group-like protein Nhp2p  
5765\_at 784.5 P  
hypothetical protein

5766\_at 11195.3 P  
 Rieske iron-sulfur protein of the mitochondrial cytochrome bc1 complex  
 5767\_at 285.7 P  
 hypothetical protein  
 5768\_at 1603.8 P  
 ARF GTPVGD exchange factor  
 5724\_at 311.1 P  
 orotidine-5 -phosphate decarboxylase  
 5725\_at 1209.6 P  
 similarity to O.formigenes oxalyl-CoA decarboxylase  
 5726\_at 118.2 P  
 Protein involved in DNA repair  
 5727\_at 2138.4 P  
 weak similarity to Rad50p  
 5728\_i\_at 15813.8 P  
 Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)  
 5729\_f\_at 11753.4 P  
 Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)  
 5730\_at 6240.6 P  
 hypothetical protein  
 5731\_at 647.2 P  
 similarity to human nucleotide pyrophosphatase  
 5732\_at 3131.6 P  
 weak similarity to Spa2p  
 5733\_at 467.7 P  
 hypothetical protein  
 5734\_at 2577.4 P  
 An armadillo repeat-containing protein localized on the vacuolar membrane  
 5735\_at 402.8 P  
 1,4-glucan-6-(1,4-glucano)-transferase  
 5736\_at -144.6 A  
 hypothetical protein  
 5737\_at 10249.5 P  
 transcriptional activator of amino acid biosynthetic genes  
 5738\_at 41.9 A  
 hypothetical protein  
 5739\_at 4282.5 P  
 similarity to S.pombe pac2 protein  
 5740\_at 2448.4 P  
 similarity to peroxisomal membrane and mitochondrial carrier proteins  
 5741\_at 532.7 P  
 hypothetical protein  
 5742\_at 730.5 P  
 Shows sequence similarity to GOG5, a gene involved in vanadate resistance  
 5743\_at 3636.9 P  
 Putative homolog of subunit 2 of bovine prefoldin, a chaperone comprised of six subunits  
 5744\_at 11501.2 P  
 oligosaccharyl transferase glycoprotein complex, beta subunit  
 5745\_at 11807.6 P  
 hypothetical protein  
 5746\_at 7845.4 P  
 Alpha-1,3-mannosyltransferase  
 5701\_at 3294.4 P  
 weak similarity to chicken microfibril-associated protein  
 5702\_at 10220.6 P  
 mannose-6-phosphate isomerase



5703\_at 8502.0 P  
similarity to hypothetical E.coli and C.elegans proteins  
5704\_at 1265.2 P  
similarity to Gda1p  
5705\_at 7689.6 P  
similarity to P.polycephalum myosin-related protein mlpA  
5706\_at 1168.4 P  
Required for viability in the absence of the kinesin-related mitotic motor Cin8p; required for normal microtubule stability  
5707\_at 9544.5 P  
putative ORF identified by SAGE  
5708\_at 3486.7 P  
SEC3 encodes the 144 kD and 91 kD components of the Exocyst complex; the 91 kD component is a C-terminal proteolytic breakdown product of full length Sec3p  
5709\_at 9801.0 P  
May coordinate the Ran-dependent (GSP1\VGSP2) association and disassociation reactions of nuclear import; human homologue complements yeast mutants  
5710\_at 3625.8 P  
similarity to L.pneumophila dlpA protein  
5711\_at 2665.7 P  
Cold-shock induced protein of the Srp1p\VTip1p family of serine-alanine-rich proteins  
5712\_at 7956.4 P  
22.6 kDa proteasome subunit  
5713\_at 1236.9 P  
helicase-like protein  
5714\_at 1621.4 P  
protoporphyrinogen oxidase  
5715\_at 116.3 P  
Acyl-CoA synthetase (fatty acid activator 2)  
5716\_at 525.7 P  
Binding to Microtubules  
5717\_at 6245.0 P  
ATP-dependent metalloprotease  
5718\_at 1460.6 P  
component of spindle pole  
5719\_at 4567.1 P  
putative neutral sphingomyelinase  
5720\_at 9430.1 P  
homologous to Sbh1p  
5721\_at 3618.2 P  
nucleotide binding regulatory protein  
5722\_at 3213.3 P  
component of the regulatory module of the 26S proteasome, homologous to human p58 subunit  
5723\_at 647.8 P  
subunit of RNA polymerase II holoenzyme\mediator complex  
5678\_at 9731.7 P  
delta 1-pyrroline-5-carboxylate reductase  
5679\_at 644.7 P  
similarity to carnitine O-acetyltransferase Yat1p  
5680\_at 11259.9 P  
gamma subunit of translational initiation factor eIF-2  
5681\_at 7524.9 P  
phosphatidylserine synthase  
5682\_at 2588.9 P  
glucose repression protein  
5683\_at 852.5 P

similarity to Mig1p  
 5684\_at 3574.8 P  
 Associated with U1 snRNP as part of the Sm-core that is common to all spliceosomal snRNPs  
 5685\_at 4655.4 P  
 similarity to mouse nucleolin  
 5686\_at 4602.0 P  
 ras-like GTPase, highly homologous to YPT32  
 5687\_at 1004.9 P  
 Putative participant in 3 mRNA processing  
 5688\_at 932.9 P  
 weak similarity to Nmd2p, Kex1p and hamster nucleolin  
 5689\_at 906.7 P  
 hypothetical protein  
 5690\_at 1800.7 P  
 hypothetical protein  
 5691\_at 11910.9 P  
 strong similarity to members of the ABC transporter family  
 5692\_at 183.4 P  
 strong similarity to hypothetical protein YGL224c  
 5693\_at 166.3 P  
 hypothetical protein  
 5694\_at 523.8 P  
 Homologous to VRG4  
 5695\_at 935.2 P  
 positive nitrogen regulatory protein  
 5696\_at 1025.8 P  
 weak similarity to DNA repair protein Rad2p and Dsh1p  
 5697\_at 1744.8 P  
 responsible for the reduction of methionine sulfoxide  
 5698\_at 9110.1 P  
 putative S-adenosyl-L-homocysteine hydrolase  
 5699\_at 8896.6 P  
 hypothetical protein  
 5700\_at 180.6 M  
 Required for full sporulation. Dispensable for axial cores but required for full chromosome pairing seen by in situ hybridization, heteroduplex DNA, synaptonemal complexes, meiotic intra- and interchromosomal gene conversion, reciprocal recombination and viable spores. *mei4* has near wild-type chromosome condensation, executes both divisions with a delay in meiosis II, is rescued by *spo13* and is epistatic to *rad52*, and is classified as an early recombination function. mRNA is meiosis-specific and has 88 bp intron at 5' end spliced independently of MER1.  
 5655\_n\_at -9.0 A  
 Required for full sporulation. Dispensable for axial cores but required for full chromosome pairing seen by in situ hybridization, heteroduplex DNA, synaptonemal complexes, meiotic intra- and interchromosomal gene conversion, reciprocal recombination and viable spores. *mei4* has near wild-type chromosome condensation, executes both divisions with a delay in meiosis II, is rescued by *spo13* and is epistatic to *rad52*, and is classified as an early recombination function. mRNA is meiosis-specific and has 88 bp intron at 5' end spliced independently of MER1.  
 5656\_at 914.3 P  
 weak similarity to transcription factor Sko1p  
 5657\_at 736.3 P  
 hypothetical protein  
 5658\_at 938.2 P  
 member of the AAA ATPase family of proteins  
 5659\_at 6646.5 P  
 Homologous to *E. coli* DnaJ; contains leucine zipper-like motif  
 5660\_at 1914.7 P

putative ORF identified by SAGE

5661\_at 5329.2 P

strong similarity to hypothetical S.pombe protein YER049W

5662\_at 2781.9 P

hypothetical protein

5663\_at 230.5 P

similarity to C.elegans hypothetical protein

5664\_at 6711.8 P

Aspartate kinase (L-aspartate 4-P-transferase) (EC 2.7.2.4)

5665\_at 2094.9 P

strong similarity to mitochondrial phosphate carrier protein

5666\_at 119.2 P

Glc7-interacting protein\; shares homology with PIG2\; contains conserved 25 residue motif, called the GVNK motif, also found in GAC1, PIG1, PIG2, and RGI, the mammalian type 1 phosphatase targeting subunit.

5667\_at 11476.7 P

ATP phosphoribosyltransferase

5668\_at 8768.7 P

purine-cytosine permease

5669\_g\_at 9176.2 P

purine-cytosine permease

5670\_i\_at 11864.1 P

Ribosomal protein L34A

5671\_s\_at 8711.8 P

Ribosomal protein L34A

5672\_at 11210.5 P

Inhibitor of cell Growth\; heat shock inducible

5673\_at 2923.8 P

cytochrome c oxidase assembly factor

5674\_at 1075.3 P

PHO85 cyclin

5675\_at 2623.7 P

purine-cytosine permease

5676\_at 519.8 P

purine-cytosine permease

5677\_at 1234.6 P

Protein homologous to beta-keto-acyl synthase

5633\_at 2700.8 P

DL-glycerol-3-phosphatase

5634\_at 5551.1 P

Suppressor of the Transcriptional (T) defect of Hpr1 (H) by Overexpression (O)

5635\_at 6460.0 P

similarity to hypothetical protein YIL056w

5636\_at 544.9 P

isocitrate lyase

5637\_at 395.2 P

strong similarity to cell division control protein Cdc4p

5638\_g\_at 1919.0 P

strong similarity to cell division control protein Cdc4p

5639\_at 761.3 P

hypothetical protein

5640\_at 745.2 P

strong similarity to hypothetical protein YIL057c

5641\_at 686.2 P

putative zinc finger protein

5642\_at 6121.3 P

N-acetyl-gamma-glutamyl-phosphate reductase and acetylglutamate kinase

5643_at	8965.8	P	
			ribonucleotide reductase
5644_at	926.5	P	
			hypothetical protein
5645_at	14193.2	P	
			Homolog of <i>S. pombe</i> Nrf1 (97% identical in predicted amino acid sequence), which was identified in a genetic screen by its ability to reverse the Cdc42p suppression of a <i>cdc24-4ts</i> mutant
5646_at	8806.8	P	
			aldehyde dehydrogenase (NAD <sup>+</sup> )
5647_s_at	13412.8	P	
			40S ribosomal protein S24A
5648_at	1224.6	P	
			Protein tyrosine phosphatase
5649_at	944.8	P	
			similarity to killer toxin Khr1p
5650_at	310.0	P	
			hypothetical protein
5651_at	1465.4	P	
			similarity to <i>E.coli</i> X-Pro aminopeptidase II
5652_at	3311.5	P	
			hypothetical protein
5653_at	3081.1	P	
			hypothetical protein
5654_at	624.9	P	
			strong similarity to phosphoglycerate dehydrogenases
5610_at	1353.1	P	
			similarity to <i>M.sexata</i> steroid regulated MNG10 protein
5611_at	10169.2	P	
			hypothetical protein
5612_at	1445.2	P	
			questionable ORF
5613_at	45.7	A	
			weak similarity to myosins
5614_at	9192.0	P	
			threonine deaminase
5615_at	1189.8	P	
			similarity to <i>E.coli</i> prolyl-tRNA synthetase
5616_at	6884.4	P	
			homologous to Sbh2p
5617_at	3464.1	P	
			Derepression Of Telomeric silencing
5618_at	6243.7	P	
			Protein phosphatase type 2C
5619_at	7994.2	P	
			anthranilate synthase Component I
5620_at	10846.3	P	
			vitamin B12-(cobalamin)-independent isozyme of methionine synthase (also called N5-methyltetrahydrofolate homocysteine methyltransferase or 5-methyltetrahydropteroyl triglutamate homocysteine methyltransferase)
5621_at	2555.1	P	
			hypothetical protein
5622_at	1018.6	P	
			weak similarity to <i>S.epidermidis</i> PepB protein
5623_at	1299.7	P	
			similarity to hypothetical protein YBL059w
5624_at	1535.3	P	

similarity to hypothetical protein YBL059w  
 5625\_at 8056.7 P  
 20S proteasome subunit (beta3)  
 5626\_at 4818.3 P  
 RecA homolog\; Rad51p colocalizes to ~65 spots with Dmc1p prior to synapsis (independently of ZIP1 and DMC1), and interacts with Rad52p and Rad55p by two-hybrid analysis\; human Rad51p homolog interacts with Brca2 protein which has been implicated in causing breast cancer  
 5627\_at 256.6 P  
 sporulation-specific homolog of csd4  
 5628\_at -3.9 A  
 weak similarity to ribosomal S3 proteins  
 5629\_at 243.6 P  
 ubiquitin carboxyl-terminal hydrolase  
 5630\_at 2172.7 P  
 ribose-phosphate pyrophosphokinase 2  
 5631\_at 1972.5 P  
 ubiquitin-conjugating enzyme  
 5632\_at 1211.3 P  
 Protein involved in targeting of plasma membrane [H+]ATPase  
 5588\_at 1324.5 P  
 member of 70 kDa heat shock protein family  
 5589\_at 458.4 P  
 hypothetical protein  
 5590\_at 5774.4 P  
 Nucleoporin similar to Nup157p and to mammalian Nup155p  
 5591\_at 182.1 P  
 hypothetical protein  
 5592\_at 3729.3 P  
 homologous to *S. pombe* RAE1 gene\; 2-hybrid analysis demonstrates an interaction with Srp1p and Rip1p\; copurifies with Nup116p  
 5593\_at 716.9 P  
 putative transcriptional activator of FLO1  
 5594\_at 202.6 P  
 putative transcriptional activator of FLO1  
 5595\_at 7674.7 P  
 Karyopherin beta 4  
 5596\_at 254.8 P  
 transcription factor  
 5597\_at 2921.5 P  
 U6 snRNA associated protein  
 5598\_at 1971.4 P  
 similarity to Emp70p  
 5599\_at 3188.0 P  
 Protein which binds Bem1p and contains a proline-rich sequence, an SH3 domain, and a pleckstrin homology domain  
 5600\_at 2812.3 P  
 sporulation-specific protein  
 5601\_at 83.1 A  
 zinc-finger protein  
 5602\_at 1540.0 P  
 Transmembrane osmosensor  
 5603\_at 1033.1 P  
 weak similarity to *E.herbicola* tyrosine permease  
 5604\_at -44.7 A  
 questionable ORF  
 5605\_at 11391.7 P

Likely to be involved in regulating INO1 expression, suppressor of a dominant nuclear mutation that is inositol-dependent in the presence of choline

5606\_at 202.8 A

hypothetical protein

5607\_at 2937.8 P

Zinc-finger-containing protein with similarity to Gcs1p and Sps18p

5608\_at 484.5 P

plasma membrane-bound casein kinase I homolog

5609\_at 996.5 P

weak similarity to Dictyostelium WD40 repeat protein 2

5565\_at 5593.4 P

Rsp5p encodes a hect (homologous to E6-AP C terminus) and encodes a ubiquitin-protein ligase (E3 enzyme)

5566\_at 9102.9 P

weak similarity to E.coli colicin N

5567\_at 1801.1 P

Lethal with conditional pap1 allele

5568\_at 944.8 P

hypothetical protein

5569\_at 613.1 P

DNA polymerase alpha suppressing protein kinase

5570\_at 1037.6 P

similarity to Msn2p and weak similarity to Msn4p

5571\_at 6856.7 P

Ribosomal protein S26B

5572\_at 1931.9 P

Paralog of MDS3

5573\_at 1264.2 P

protein phosphatase type I

5574\_at 7425.7 P

protein phosphatase type I

5575\_at 1366.8 P

weak similarity to S.pombe SPBC13G1 and C.elegans F26F2.d hypothetical proteins

5576\_at -145.4 A

hypothetical protein

5577\_at 7448.9 P

GDP dissociation inhibitor

5578\_at 733.9 P

weak similarity to Mycoplasma hominis P120 protein

5579\_at 392.2 P

similarity to hypothetical protein YDR066c

5580\_at 876.6 P

hypothetical protein

5581\_at 11018.8 P

cytochrome oxidase assembly factor

5582\_at 512.9 P

3-methyladenine DNA glycosylase

5583\_at 2133.7 P

DNA Damage Inducible

5584\_at 1758.2 P

Putative Ubiquitin-specific protease

5585\_at 6494.4 P

Iron permease

5586\_at 6992.7 P

Sm-like protein

5587\_at 1260.1 P

weak similarity to mouse NAD(P)H dehydrogenase (quinone)  
 5542\_at 9074.5 P  
 TATA-binding protein (tfl1d)  
 5543\_at 876.9 P  
 Protein with coiled-coil domain  
 5544\_at 890.3 P  
 strong similarity to putative cell surface glycoprotein Sed1p  
 5545\_at 1216.2 P  
 Ubiquitin-specific protease  
 5546\_at 6055.1 P  
 weak similarity to E.coli hypothetical protein f470  
 5547\_at 0.1 A  
 translational activator of cytochrome c oxidase subunit III  
 5548\_at 7463.2 P  
 Required for correct assembly of the cytochrome c oxidase and the ATP synthase complex  
 5549\_at 4537.1 P  
 Rho-type GTPase activating protein (GAP)  
 5550\_at 7548.5 P  
 similarity to hypothetical C. elegans protein C27H6.5  
 5551\_at 612.3 P  
 hypothetical protein  
 5552\_at 1090.7 P  
 weak similarity to Afr1p  
 5553\_at 2814.2 P  
 Transcriptional regulator which functions in modulating the activity of the general transcription machinery  
 in vivo  
 5554\_at 1010.4 P  
 non-specific DNA binding protein (sin1)  
 5555\_at 361.1 P  
 Nucleotide excision repair protein  
 5556\_at 2277.5 P  
 weak similarity to E.coli cation transport protein  
 5557\_at 1692.0 P  
 transcriptional regulator  
 5558\_at 9735.0 P  
 Poly(A) binding protein, cytoplasmic and nuclear  
 5559\_at 5074.0 P  
 similarity to ATPase P.falciparum ATPase 2  
 5560\_at 842.5 P  
 Serine/threonine protein kinase  
 5561\_at 864.1 P  
 tRNA nucleotidyltransferase (tRNA CCA-pyrophosphorylase)  
 5562\_at 1359.2 P  
 Repressor of PHR1 transcription\; binds to PHR1 URS  
 5563\_at 644.0 P  
 Adenylate kinase (mitochondrial GTP:AMP phosphotransferase)  
 5564\_at 1558.8 P  
 DNA repair helicase component of transcription factor b  
 5520\_at 1512.1 P  
 putative ATP-dependent RNA helicase  
 5521\_at 491.4 P  
 checkpoint protein  
 5522\_at 2296.1 P  
 similarity to Legionella glutaredoxin-like protein  
 5523\_at 295.2 A  
 similarity to hypothetical protein YHR209w

5524_at	3285.3	P	DNA Helicase I
5525_at	12716.7	P	Ribosomal protein L23B (L17aB) (YL32)
5526_at	9590.4	P	alpha subunit of pyruvate dehydrogenase (E1 alpha)
5527_at	60.4	A	meiosis-specific protein related to RecA and Rad51p. Dmc1p colocalizes with Rad51p to discrete subnuclear sites in nuclear spreads during mid prophase, briefly colocalizes with Zip1p, and then disappears by pachytene
5528_at	158.6	P	meiosis-specific protein related to RecA and Rad51p. Dmc1p colocalizes with Rad51p to discrete subnuclear sites in nuclear spreads during mid prophase, briefly colocalizes with Zip1p, and then disappears by pachytene
5529_at	871.6	P	Meiosis-specific protein required for spore formation
5530_at	98.5	P	questionable ORF
5531_at	1004.3	P	hypothetical protein
5532_at	4477.0	P	similarity to human 5,10-methenyltetrahydrofolate synthetase
5533_at	512.3	A	similarity to multidrug resistance proteins Pdr3p and Pdr1p
5534_at	228.5	P	strong similarity to Rtm1p
5535_at	2591.2	P	weak similarity to hypothetical protein YMR316w
5536_at	324.8	P	similarity to killer toxin KHS precursor
5537_at	310.7	P	hypothetical protein
5538_at	4176.8	P	Translocase in inner membrane of mitochondria involved in mitochondrial protein import
5539_at	156.5	A	hypothetical protein
5540_at	-277.4	A	hypothetical protein identified by SAGE
5541_at	1202.7	M	questionable ORF
5497_at	329.0	P	questionable ORF
5498_at	75.3	A	questionable ORF
5499_at	414.8	A	questionable ORF
5500_at	197.4	P	questionable ORF
5501_at	24.9	A	questionable ORF
5502_at	561.6	P	questionable ORF
5503_at	8.4	A	questionable ORF
5504_at	158.2	P	questionable ORF



5505\_at 9.8 A  
hypothetical protein  
5506\_s\_at 850.8 P  
ubiquitin-conjugating enzyme\; ubiquitin-protein ligase  
5507\_at 602.0 P  
non-annotated SAGE orf Found forward in NC\_001137 between 67199 and 67363 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5508\_at -744.1 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 159380 and 159517 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5509\_at 636.2 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 187315 and 187524 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5510\_at 372.0 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 251194 and 251418 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5511\_at 2366.8 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 288425 and 288625 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5512\_at 878.4 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 550562 and 550699 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5513\_at 14.1 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 90086 and 90226 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5514\_at 5878.2 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 31419 and 31562 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5515\_at 845.9 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 64206 and 64373 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5516\_at 9613.3 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 67364 and 67504 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5517\_at 10781.3 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 122338 and 122532 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5518\_at 372.5 P  
non-annotated SAGE orf Found forward in NC\_001137 between 251443 and 251697 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5519\_at 119.4 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 258517 and 258651 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5473\_at 1122.4 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 308191 and 308394 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5474\_at 128.6 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 314164 and 314310 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5475\_at 1136.7 P  
non-annotated SAGE orf Found forward in NC\_001137 between 401911 and 402066 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5476\_at 5984.4 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 407032 and 407214 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5477\_at 7573.4 P

non-annotated SAGE orf Found reverse in NC\_001137 between 499172 and 499306 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5478\_i\_at 1445.7 P

non-annotated SAGE orf Found reverse in NC\_001137 between 561482 and 561634 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5479\_r\_at 937.9 P

non-annotated SAGE orf Found reverse in NC\_001137 between 561482 and 561634 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5480\_f\_at 13.1 M

non-annotated SAGE orf Found reverse in NC\_001137 between 561482 and 561634 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5481\_at 507.0 A

non-annotated SAGE orf Found reverse in NC\_001137 between 84843 and 84983 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5482\_at 2354.9 P

non-annotated SAGE orf Found reverse in NC\_001137 between 118455 and 118607 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5483\_at 4861.1 P

non-annotated SAGE orf Found forward in NC\_001137 between 251078 and 251278 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5484\_at 27.2 A

non-annotated SAGE orf Found forward in NC\_001137 between 303311 and 303496 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5485\_at -1749.1 A

non-annotated SAGE orf Found reverse in NC\_001137 between 545280 and 545498 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5486\_at 309.2 P

non-annotated SAGE orf Found reverse in NC\_001137 between 15653 and 15832 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5487\_at 868.9 A

non-annotated SAGE orf Found reverse in NC\_001137 between 46025 and 46180 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5488\_at -25.5 A

non-annotated SAGE orf Found reverse in NC\_001137 between 117014 and 117220 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5489\_at 240.0 P

non-annotated SAGE orf Found reverse in NC\_001137 between 117183 and 117380 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5490\_at -22.0 A

non-annotated SAGE orf Found reverse in NC\_001137 between 135405 and 135575 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5491\_at -27.4 A

non-annotated SAGE orf Found reverse in NC\_001137 between 137782 and 137961 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5492\_at 41.0 A

non-annotated SAGE orf Found reverse in NC\_001137 between 144048 and 144257 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5493\_at 57.7 A

non-annotated SAGE orf Found forward in NC\_001137 between 167407 and 167559 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5494\_at 197.5 P

non-annotated SAGE orf Found reverse in NC\_001137 between 177402 and 177560 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5495\_at 127.7 A

non-annotated SAGE orf Found forward in NC\_001137 between 194842 and 194988 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5496\_g\_at 397.8 M  
non-annotated SAGE orf Found forward in NC\_001137 between 194842 and 194988 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5449\_at 60.1 M  
non-annotated SAGE orf Found reverse in NC\_001137 between 225472 and 225738 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5450\_g\_at 170.7 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 225472 and 225738 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5451\_at -44.9 A  
non-annotated SAGE orf Found forward in NC\_001137 between 249314 and 249451 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5452\_at -49.4 A  
non-annotated SAGE orf Found forward in NC\_001137 between 284319 and 284474 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5453\_at 99.0 A  
non-annotated SAGE orf Found forward in NC\_001137 between 284585 and 284719 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5454\_at 591.7 P  
non-annotated SAGE orf Found forward in NC\_001137 between 289637 and 289906 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5455\_at 873.9 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 311731 and 311907 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5456\_at -79.7 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 312162 and 312425 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5457\_at 1259.7 P  
non-annotated SAGE orf Found forward in NC\_001137 between 382263 and 382427 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5458\_at -15.3 A  
non-annotated SAGE orf Found forward in NC\_001137 between 434581 and 434727 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5459\_at 149.2 A  
non-annotated SAGE orf Found forward in NC\_001137 between 434925 and 435077 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5460\_at 1139.8 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 467935 and 468081 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5461\_at 47.8 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 504589 and 504738 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5462\_at 244.9 P  
non-annotated SAGE orf Found forward in NC\_001137 between 564706 and 564843 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5463\_r\_at 2096.6 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 52351 and 52515 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5464\_i\_at 5615.5 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 52351 and 52515 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5465\_f\_at 5466.9 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 52351 and 52515 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5466\_i\_at 99.5 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 52391 and 52549 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5467\_f\_at 9738.5 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 52391 and 52549 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5468\_at 66.9 M  
non-annotated SAGE orf Found forward in NC\_001137 between 77473 and 77622 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5469\_at 114.4 P  
non-annotated SAGE orf Found forward in NC\_001137 between 84901 and 85035 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5470\_at 982.5 P  
non-annotated SAGE orf Found forward in NC\_001137 between 89863 and 90009 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5471\_at 2015.9 P  
non-annotated SAGE orf Found forward in NC\_001137 between 122467 and 122670 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5472\_at 43.1 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 212096 and 212341 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5436\_i\_at -25.4 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 212169 and 212351 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5437\_s\_at 12.3 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 212169 and 212351 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5438\_at 114.5 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 250626 and 250775 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5439\_at -61.0 A  
non-annotated SAGE orf Found forward in NC\_001137 between 272216 and 272383 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5440\_at 632.9 P  
non-annotated SAGE orf Found forward in NC\_001137 between 367587 and 367721 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5441\_at 2168.8 P  
non-annotated SAGE orf Found forward in NC\_001137 between 412758 and 412901 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5442\_at 442.6 A  
non-annotated SAGE orf Found forward in NC\_001137 between 422493 and 422669 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5443\_g\_at -267.5 A  
non-annotated SAGE orf Found forward in NC\_001137 between 422493 and 422669 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5444\_at 498.1 A  
non-annotated SAGE orf Found forward in NC\_001137 between 422560 and 422781 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5445\_i\_at 2275.1 P  
non-annotated SAGE orf Found reverse in NC\_001137 between 441063 and 441299 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5446\_r\_at 235.0 A  
non-annotated SAGE orf Found reverse in NC\_001137 between 441063 and 441299 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5447\_at 4286.0 P  
non-annotated SAGE orf Found forward in NC\_001137 between 546517 and 546675 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5448\_at 3409.1 P

snRNA		
5412_at	187.2	P
snRNA		
5413_at	2822.9	P
RNase P RNA		
5414_i_at	-43.4	A
Centromere		
5415_r_at	-3.3	A
Centromere		
5416_at	1090.2	P
snRNA R14		
5417_at	5545.1	P
snRNA U4		
5418_at	324.1	P
snRNA		
5419_at	3408.9	P
small cytoplasmic RNA		
5420_s_at	485.3	P
weak similarity to hypothetical E.coli protein		
5421_i_at	-37.4	A
similarity to mouse period clock protein		
5422_s_at	1424.5	A
similarity to mouse period clock protein		
5423_s_at	1141.6	P
strong similarity to aryl-alcohol dehydrogenases		
5424_at	28.3	A
Hypothetical aryl-alcohol dehydrogenase (AAD)		
5425_at	181.7	A
Amino acid permease		
5426_at	668.2	P
similarity to channel proteins		
5427_at	494.6	A
dihydroxyacetone kinase		
5428_at	47.8	A
strong similarity to Mal63p, YPR196w and Mal13p		
5429_at	215.6	A
putative pseudogene		
5430_at	157.6	P
ALuminium Resistance 2		
5431_at	835.2	P
weak similarity to Npl6p		
5432_at	2459.2	P
47 kDa type I transmembrane protein localized to the Golgi		
5433_at	2539.0	P
similarity to S.pombe hypothetical protein SPAC2F7.18c		
5434_at	1034.9	P
weak similarity to middle part of C.elegans myosin heavy chain A		
5435_at	11466.7	P
phosphomannomutase		
5389_at	2661.9	P
weak similarity to human dystrophin		
5390_at	2429.7	P
multicopper oxidase, type 1 integral membrane protein		
5391_at	-103.9	A
similarity to yeast glucose transport proteins		
5392_at	8065.3	P

Actin  
5393\_at 12039.1 P  
Ras-like GTP-binding protein\; most similar to mammalian Rab1A protein  
5394\_at 10390.2 P  
beta-tubulin  
5395\_at 3085.3 P  
mitochondrial RNA polymerase II  
5396\_at 7755.4 P  
Ribosomal protein L22B (L1c) (rp4) (YL31)  
5397\_at 292.2 P  
similarity to hypothetical *S. pombe* protein and to *C.elegans* F35D11 protein  
5398\_at 1305.0 P  
Trehalose-associated protein kinase related to *S. pombe* cek1+  
5399\_at -46.8 A  
questionable ORF  
5400\_at 436.4 P  
similarity to several transaminases  
5401\_at 1681.0 P  
Cyclin-dependent kinase-activating kinase  
5402\_at 1487.0 P  
ABC ATPase  
5403\_at 1312.7 P  
weak similarity to *P.falciparum* Pfmdr2 protein  
5404\_at 101.4 A  
alpha-factor pheromone receptor\; seven-transmembrane domain protein  
5405\_at 2353.7 P  
Negatively regulates COPII vesicle formation  
5406\_at 489.8 P  
Probable chromatin protein because of homology to *Drosophila* Enhancer of Polycomb  
5407\_at 1755.2 P  
similarity to repeat structures in a *Plasmodium falciparum* protein (MESA) that binds human erythrocyte protein 4.1.  
5408\_at 9807.3 P  
Phenylalanyl-tRNA synthetase, beta subunit, cytoplasmic  
5409\_at 363.7 P  
transcriptional activator with GATA-1-type Zn finger DNA-binding motif  
5410\_f\_at 793.0 P  
member of the seripauperin protein\gene family (see Gene\_class PAU)  
5411\_at 1.0 A  
hypothetical protein  
5367\_at 12651.4 P  
dihydrolipoamide dehydrogenase precursor (mature protein is the E3 component of alpha-ketoacid dehydrogenase complexes)  
5368\_at 2419.3 P  
snRNP G protein (the homologue of the human Sm-G)  
5369\_at 2392.3 P  
similarity to hypothetical *S. pombe* protein and to hypothetical *C.elegans* B0024.12 protein  
5370\_at 2621.1 P  
DnaJ homolog involved in mitochondrial biogenesis and protein folding  
5371\_at 344.2 A  
weak similarity to YDR504c  
5372\_at 1610.8 P  
12 kDa heat shock protein  
5373\_at 669.9 P  
weak similarity to *Dictyostelium* protein kinase  
5374\_at -42.9 A

questionable ORF  
 5375\_at 59.4 A  
 hypothetical protein  
 5376\_at 50.1 A  
 High-affinity hexose transporter  
 5377\_at 414.1 P  
 Involved in ammonia regulation of GAP1 activity  
 5378\_at 7797.7 P  
 questionable ORF  
 5379\_at 995.2 P  
 beta subunit of large (heterotrimeric) G-proteins (beta-transducin)  
 5380\_at 2244.8 P  
 oosome segregation protein  
 5381\_at 5989.1 P  
 weak similarity to Mms19p  
 5382\_at 2980.2 P  
 hypothetical protein  
 5383\_at 6978.2 P  
 Ras-like small GTP-binding protein  
 5384\_at 7524.0 P  
 strong similarity to hypothetical protein YPL019c  
 5385\_at 283.7 P  
 meiosis specific protein, E.coli MutS protein, localizes to discrete sites on meiotic chromosomes  
 5386\_at 3122.0 P  
 ATP-dependent RNA helicase  
 5387\_at 1687.0 P  
 Depressed growth-rate protein  
 5388\_at 6076.1 P  
 weak similarity to rabbit triadin Spp41p  
 5344\_at 2477.9 P  
 96 kDa nucleoporin-interacting component  
 5345\_at 2051.9 P  
 hypothetical protein  
 5346\_at 4906.8 P  
 Similar to *S. pombe* PAD1 gene product  
 5347\_at 1357.4 P  
 similarity to hypothetical *A. thaliana* proteins  
 5348\_at 4884.5 P  
 similarity to X-Pro dipeptidases  
 5349\_at 898.2 P  
 weak similarity to YER176w  
 5350\_at 167.9 P  
 weak similarity to human centromere protein E  
 5351\_at 8525.1 P  
 Member of ATP-binding cassette (ABC) family of proteins  
 5352\_at 7821.5 P  
 encodes putative deubiquitinating enzyme  
 5353\_at 1551.8 P  
 ochre suppressor tyr-tRNA  
 5354\_at 348.1 P  
 similarity to hypothetical protein YOL019w  
 5355\_at 850.4 P  
 similarity to YOL017w  
 5356\_at 262.9 P  
 Calmodulin-dependent protein kinase  
 5357\_at 426.9 P

Glycogen synthase (UDP-glucose--starch glucosyltransferase)  
5358\_at 1730.0 P  
similarity to mammalian neurofilament proteins and to Dictyostelium protein kinase

5359\_at 324.3 P  
hypothetical protein

5360\_at 5811.2 P  
similarity to human glutaminyl-peptide cyclotransferase

5361\_at 3207.9 P  
type II PI(4)P5-kinase (PIP4,5 kinase) similar to human PIP5K-II

5362\_at 2233.5 P  
hypothetical protein

5363\_at 1764.3 P  
similarity to hypothetical protein YPL100w

5364\_at 157.5 A  
similarity to Rod1p

5365\_at -4.9 A  
poly(A) binding protein); related to PES4 protein homolog YHR015w

5366\_s\_at 3231.4 P  
similarity to Acanthamoeba myosin heavy chain IC and weak similarity to other myosin class I heavy chains

5322\_at 771.0 P  
Histidinolphosphatase

5323\_at 232.2 P  
hypothetical protein

5324\_at 339.6 P  
hypothetical protein

5325\_at 1805.0 P  
soluble tyrosine-specific protein phosphatase

5326\_at 526.3 P  
Regulator of expression of the PTR2, GAP1, and BAP2 genes); involved in the the control of peptide transport

5327\_at 937.4 P  
subunit of assimilatory sulfite reductase

5328\_at 1844.9 P  
nuclear protein related to ScII (chicken), XCAPE (xenopus), and cut14 (S. pombe)); involved in chromosome segregation and condensation, interacts with Smc1p and Trf4p

5329\_s\_at 4215.7 A  
Ribosomal protein L2A (L5A) (rp8) (YL6)

5330\_at 1256.9 P  
weak similarity to S.pombe polyadenylate-binding protein, YPR112c and Sbp1p

5331\_at 9718.2 P  
Ribosomal protein L29 (YL43)

5332\_at 10058.1 P  
ubiquinol-cytochrome c oxidoreductase subunit 6 (17 kDa)

5333\_at 1400.2 P  
myc-type helix-loop-helix transcription factor

5334\_at 299.0 P  
hypothetical protein

5335\_at 1490.4 P  
cell division control protein

5336\_at 3089.7 P  
Rsc8 is the eighth largest subunit of RSC, a fifteen-protein chromatin remodeling complex and related to the SwiVsnf Complex.

5337\_at 858.0 P  
strong similarity to mouse lymphocyte specific helicase

5338\_at 1435.3 P



similarity to hypothetical protein YGL228w  
 5339\_at 1254.7 P  
 155 kDa SIT4 protein phosphatase-associated protein  
 5340\_at 971.2 P  
 weak similarity to dnaJ-like heat shock proteins  
 5341\_at 2246.5 P  
 hypothetical protein  
 5342\_at 900.7 P  
 hypothetical protein  
 5343\_at 14850.0 P  
 similarity to hypothetical protein YBR281c  
 5299\_at 700.7 P  
 similarity to mitochondrial citrate transport proteins  
 5300\_at 1140.6 P  
 hypothetical protein  
 5301\_at 6193.5 P  
 strong similarity to human quinolinate phosphoribosyltransferase  
 5302\_at 868.1 P  
 similarity to hypothetical S.pombe protein SPAC12G12.14 and to YDL001w and YDR282c  
 5303\_at 4494.6 P  
 mitochondrial ribosomal protein (precursor)  
 5304\_at 10868.5 P  
 proteasome subunit necessary for peptidyl glutamyl peptide hydrolyzing activity  
 5305\_at 8406.2 P  
 Coatomer (COPI) complex delta subunit  
 5306\_at 3706.9 P  
 cytoplasmic 32 - 34 kDa protein  
 5307\_at 1405.1 P  
 Hexokinase I (PI) (also called Hexokinase A)  
 5308\_at 46.4 A  
 hypothetical protein  
 5309\_at -69.7 A  
 questionable ORF  
 5310\_at 4841.6 P  
 strong similarity to beta-cystathionases  
 5311\_at 110.3 A  
 weak similarity to Cha4p  
 5312\_s\_at 584.6 P  
 hypothetical protein  
 5313\_s\_at 2818.2 P  
 Mob1p-like protein  
 5314\_at -342.4 A  
 hypothetical protein  
 5315\_at 212.6 A  
 questionable ORF  
 5316\_at 772.7 P  
 questionable ORF  
 5317\_s\_at 546.2 P  
 similarity to hypothetical protein YLR072w  
 5318\_s\_at 7434.8 P  
 bZIP (basic-leucine zipper) protein  
 5319\_at 2865.1 P  
 non-annotated SAGE orf Found reverse in NC\_001138 between 76336 and 76470 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 5320\_at 52.6 P  
 non-annotated SAGE orf Found forward in NC\_001138 between 101436 and 101573 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5321\_at 1283.3 P  
non-annotated SAGE orf Found forward in NC\_001138 between 234229 and 234471 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5274\_at 1533.3 P  
non-annotated SAGE orf Found reverse in NC\_001138 between 44407 and 44547 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5275\_i\_at 71.5 A  
non-annotated SAGE orf Found reverse in NC\_001138 between 101326 and 101529 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5276\_r\_at 6.8 A  
non-annotated SAGE orf Found reverse in NC\_001138 between 101326 and 101529 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5277\_at 9154.3 P  
non-annotated SAGE orf Found reverse in NC\_001138 between 224760 and 224996 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5278\_at 657.1 P  
non-annotated SAGE orf Found forward in NC\_001138 between 226566 and 226700 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5279\_at -95.6 A  
non-annotated SAGE orf Found reverse in NC\_001138 between 184330 and 184470 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5280\_i\_at -31.6 A  
non-annotated SAGE orf Found reverse in NC\_001138 between 5806 and 6033 with 100% identity. See  
citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5281\_f\_at 93.9 A  
non-annotated SAGE orf Found reverse in NC\_001138 between 5806 and 6033 with 100% identity. See  
citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5282\_at 704.6 P  
non-annotated SAGE orf Found reverse in NC\_001138 between 48096 and 48248 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5283\_at 104.5 P  
non-annotated SAGE orf Found forward in NC\_001138 between 48548 and 48715 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5284\_at 1093.8 P  
non-annotated SAGE orf Found forward in NC\_001138 between 48735 and 48926 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5285\_at 1081.4 P  
non-annotated SAGE orf Found reverse in NC\_001138 between 111442 and 111588 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5286\_at 545.5 A  
non-annotated SAGE orf Found forward in NC\_001138 between 119115 and 119252 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5287\_at 311.2 P  
non-annotated SAGE orf Found forward in NC\_001138 between 184290 and 184454 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5288\_at -440.0 A  
non-annotated SAGE orf Found forward in NC\_001138 between 265809 and 265952 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5289\_at 185.6 A  
non-annotated SAGE orf Found forward in NC\_001138 between 27951 and 28130 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5290\_at 9.8 A  
non-annotated SAGE orf Found forward in NC\_001138 between 97531 and 97710 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
5291\_at 365.8 P

non-annotated SAGE orf Found forward in NC\_001138 between 161226 and 161405 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5292\_at 553.1 P

non-annotated SAGE orf Found reverse in NC\_001138 between 181991 and 182221 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5293\_g\_at -137.8 A

non-annotated SAGE orf Found reverse in NC\_001138 between 181991 and 182221 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

5294\_at 113.5 P

ARS605 Found forward in NC\_001138 between 135973 and 136029 with 100% identity.

5295\_f\_at -35.2 A

ARS607 Found forward in NC\_001138 between 199390 and 199446 with 100% identity.

5296\_i\_at -41.4 A

ARS608 Found forward in NC\_001138 between 216458 and 216508 with 100% identity.

5297\_at -51.0 A

Protein with strong similarity to subtelomerically-encoded proteins including Cos2p, Cos4p, Cos8p, YIR040c, Cos5p, Cos9p, and Cos6p

5298\_at -42.5 A

similarity to hypothetical protein YER187w

5251\_f\_at 1796.6 P

strong similarity to members of the Srp1/Tip1 family

5252\_at 168.3 M

GPI-anchored aspartic protease

5253\_g\_at 343.3 P

GPI-anchored aspartic protease

5254\_i\_at -1.5 A

strong similarity to hypothetical protein YOR387c

5255\_s\_at 127.5 A

strong similarity to hypothetical protein YOR387c

5256\_at 2719.8 P

similarity to Mnn1p

5257\_at 5558.2 P

alcohol dehydrogenase isoenzyme IV

5258\_at 3781.9 P

high-affinity zinc transport protein

5259\_at 2075.6 P

putative transcription factor, has five zinc fingers

5260\_at 11847.3 P

Hexokinase II (Pll) (also called Hexokinase B)

5261\_at 2397.5 P

Protein involved in interorganelle communication between mitochondria, peroxisomes, and nucleus

5262\_at 345.8 P

C4 zinc finger DNA-binding protein of low sequence specificity in vitro; Probable 119 kD DNA/RNA helicase family member

5263\_at 146.2 P

hypothetical protein

5264\_at 23.6 A

Required for ZIPpering up meiotic chromosomes during chromosome synapsis

5265\_at 2153.4 P

3',5'-Cyclic-nucleotide phosphodiesterase, low affinity

5266\_at 2178.8 P

similarity to hypothetical protein YHR036w

5267\_at 966.1 P

weak similarity to C.elegans dom-3 protein

5268\_at 11011.4 P

strong similarity to glutamine--tRNA ligase

5269\_at 893.5 P  
 Nuclear protein  
 5270\_at 860.0 P  
 tRNA-specific adenosine deaminase 1 (TAD1); Tad1pVscADAT1  
 5271\_at 4300.1 P  
 weak similarity to Drosophila ANK protein  
 5272\_at 1606.5 P  
 similarity to Cse1p  
 5273\_at 166.6 A  
 Doc1p and Cdc26p are associated with the anaphase-promoting complex and are involved in the degradation of Clb2p  
 5229\_at 136.4 A  
 questionable ORF  
 5230\_at 5202.5 P  
 Protein required for accurate mitotic chromosome segregation  
 5231\_at 372.7 P  
 transcriptional activator protein of CYC1  
 5232\_at 1505.7 P  
 strong similarity to gidA E.coli protein  
 5233\_at -865.9 A  
 questionable ORF  
 5234\_at 8694.6 P  
 glycinamide ribotide synthetase and aminoimidazole ribotide synthetase  
 5235\_at 891.7 P  
 113kD component of the Exocyst complex, which contains the gene products encoded by SEC3, SEC5, SEC6, SEC8, SEC10, SEC15 and EXO70.  
 5236\_n\_at 523.5 P  
 weak similarity to P.falciparum dihydropteroate synthase  
 5237\_at 1021.1 P  
 weak similarity to P.falciparum dihydropteroate synthase  
 5238\_at 4545.7 P  
 hypothetical protein  
 5239\_at 34.2 A  
 hypothetical protein  
 5240\_at 633.0 P  
 SAP4 is related to SAP155, SAP185, and SAP190, all of which associate with the SIT4 protein phosphatase  
 5241\_at 6264.7 P  
 mRNA (identified by a library screen) that causes growth arrest when overexpressed  
 5242\_at 645.3 P  
 TOR inhibitor  
 5243\_at 7915.5 P  
 9.5-kDa zeta subunit of oligosaccharyltransferase complex  
 5244\_at 1207.2 P  
 similarity to N.crassa cytochrome-c oxidase chain V  
 5245\_at 9949.1 P  
 May regulate Golgi function and glycosylation in Golgi  
 5246\_at 2071.8 P  
 strong similarity to hypothetical protein YER037w  
 5247\_at 1770.4 P  
 weak similarity to Clostridium regulatory protein  
 5248\_at -178.2 A  
 hypothetical protein  
 5249\_at 1078.2 P  
 Ngg1p-interacting factor 3  
 5250\_at 6659.7 P

weak similarity to V.alginolyticus bolA protein  
 5206\_at 751.0 P  
 hypothetical protein  
 5207\_at 57.2 A  
 questionable ORF  
 5208\_at 217.0 A  
 questionable ORF  
 5209\_at 1099.9 P  
 Kinesin-related protein  
 5210\_at 2211.9 P  
 Cyclin-like protein that interacts with Pho85p in affinity chromatography  
 5211\_at -62.7 A  
 questionable ORF  
 5212\_at 2503.7 P  
 antiviral protein, mRNA is induced early in meiosis  
 5213\_at 396.1 P  
 hydrophilic protein, heptad repeat motif  
 5214\_at 2283.4 P  
 similarity to M.jannaschii hypothetical proteins MJ1157 and MJ1478  
 5215\_at 2988.4 P  
 ras-like GTPase, highly homologous to YPT31  
 5216\_at 3736.2 P  
 Protein containing zinc fingers very similar to zinc fingers in Mig1p  
 5217\_at 470.7 P  
 Member of a family of proteins, including Sip1p and Gal83p, that interact with Snf1p and Snf4p and are involved in the response to glucose starvation  
 5218\_at 7209.6 P  
 transcription factor  
 5219\_at 6867.6 P  
 presumed vesicle coat protein  
 5220\_at 3.4 A  
 fatty-acyl coenzyme A oxidase  
 5221\_at 3444.2 P  
 questionable ORF  
 5222\_at 854.5 P  
 carboxypeptidase B-like processing protease  
 5223\_at 11040.6 P  
 aromatic amino acid aminotransferase  
 5224\_at 444.0 P  
 Member of the MCMVP1 family of proteins involved in DNA replication  
 5225\_at 12887.3 P  
 type I transmembrane protein, component of COPII-coated, ER-derived transport vesicles  
 5226\_at 186.9 P  
 questionable ORF  
 5227\_at 6443.1 P  
 weak similarity to Yip1p  
 5228\_at 1879.5 P  
 Mck1 Dosage Suppressor 3; negative regulator of early meiotic gene expression  
 5183\_at 4025.2 P  
 hypothetical protein  
 5184\_at 5331.5 P  
 translational activator of GCN4 through activation of GCN2 in response to starvation  
 5185\_at 199.2 P  
 Protein with similarity to Hda1p, Rpd3p, Hos1p, and Hos3p  
 5186\_at 1137.0 P  
 questionable ORF

5187_at	27.4	A	IME4 appears to activate IME1 in response to cell-type and nutritional signals and thereby regulate meiosis
5188_at	6464.2	P	subunit VIa of cytochrome c oxidase, may specifically interact with ATP
5189_at	1240.6	P	Protein phosphatase 2A regulatory subunit B
5190_i_at	1029.3	A	Ribosomal protein S26A
5191_f_at	10080.3	P	Ribosomal protein S26A
5192_at	191.9	P	hypothetical protein
5193_at	6660.0	P	subunit IV of cytochrome c oxidase
5194_at	3905.9	P	similarity to hypothetical protein Fcy21p and weak similarity to FCY2 protein
5195_at	2780.8	P	weak similarity to dehydrogenases
5196_at	462.1	P	strong similarity to Emericella nidulans cystathionine beta-lyase
5197_at	-83.4	A	hypothetical protein
5198_at	136.2	A	questionable ORF
5199_at	972.4	P	Glycine-threonine-serine repeat protein
5200_at	521.2	P	Protein kinase
5201_at	566.2	P	ser/thr protein kinase
5202_at	840.2	P	questionable ORF
5203_at	7406.9	P	multicopy suppressor of POP2
5204_at	1173.0	P	weak similarity to Oryctolagus calcium channel BIII
5205_at	65.7	A	involved in meiotic recombination and chromosome metabolism
5161_at	833.0	P	weak similarity to C.elegans hypothetical protein R08D7.1
5162_at	6998.9	P	DNA strand-transfer protein exoribonuclease I; catalyzes the formation of hybrid DNA in vitro; has 5'-to-3' exonuclease activity on DNA and RNA; binds to G4 tetraplex DNA and cuts in a single-stranded region 5' to the G4 structure; protein increases several-fold in meiotic cells
5163_at	4730.2	P	nuclear pore complex protein with GLFG repetitive sequence motif
5164_at	6263.3	P	Contains domains found in the DEAD protein family of ATP-dependent RNA helicases; high-copy suppressor of kem1 null mutant
5165_at	66.1	A	hypothetical protein
5166_at	848.6	P	Protein involved in translation initiation
5167_at	386.6	A	questionable ORF

5168\_at 3046.4 P  
 Ca<sup>+++</sup>-Pump, ATPase  
 5169\_at 1736.6 P  
 Activator of transcription  
 5170\_at 510.7 P  
 questionable ORF  
 5171\_at 1364.4 P  
 similarity to *S.pombe* hypothetical protein SPAC31A2.10  
 5172\_at 1104.1 P  
 Required for X-ray damage repair, mitotic recombination, and full meiotic recombination. mRNA increases in meiosis.  
 5173\_at 1625.9 P  
 Involved in sterol uptake  
 5174\_at 4577.0 P  
 hypothetical protein  
 5175\_at 446.6 P  
 similarity to hypothetical protein YLR047c and Fre2p  
 5176\_at 2306.5 P  
 hypothetical protein  
 5177\_at -49.2 A  
 Serine/threonine protein kinase  
 5178\_at 3277.6 P  
 similarity to *V.vinifera* dihydroflavonol 4-reductase  
 5179\_at 299.6 P  
 vacuolar alpha mannosidase  
 5180\_at 1625.8 P  
 polypeptide subunit of a yeast type 1 protein geranylgeranyltransferase  
 5181\_at 2481.0 P  
 aminoadipate-semialdehyde dehydrogenase small subunit (alpha-aminoadipate reductase)  
 5182\_at 248.2 A  
 questionable ORF  
 5137\_at 1773.3 P  
 Peroxisomal peripheral membrane protein (peroxin) involved in import of peroxisomal matrix proteins  
 5138\_at 678.6 P  
 negative regulator of URS2 of the HO promoter  
 5139\_at 2932.0 P  
 Shows similarity to the Snf2p family of DNA-dependent ATPases  
 5140\_at 308.3 M  
 questionable ORF  
 5141\_at 9843.9 P  
 Chorismate synthase  
 5142\_i\_at 5668.7 P  
 Ribosomal protein L9A (L8A) (rp24) (YL11)  
 5143\_at 163.5 P  
 hypothetical protein  
 5144\_at 558.3 P  
 transport protein that interacts with Sec20p; required for protein transport from the endoplasmic reticulum to the golgi apparatus  
 5145\_at 505.0 P  
 strong similarity to hypothetical protein YDL109c  
 5146\_at 841.2 P  
 Mitochondrial polypeptide chain release factor  
 5147\_at 929.7 P  
 Most likely an alpha 1,2 mannosyltransferase utilized for the addition of the third mannose onto the GPI core structure.  
 5148\_at 2564.1 P  
 similarity to human human E6-associated protein

5149\_at 2345.2 P  
 weak similarity to Lactobacillus putative histidine protein kinase SppK  
 5150\_at 1217.3 P  
 strong similarity to hypothetical protein YPL221w  
 5151\_at -36.2 A  
 hypothetical protein  
 5152\_at 7136.5 P  
 encodes beta -subunit of yeast coatomer  
 5153\_at 770.1 P  
 weak similarity to E.coli ftsJ protein  
 5154\_at 678.1 P  
 PHO85 cyclin  
 5155\_at 763.3 P  
 similarity to hypothetical protein YPL216w  
 5156\_at 43.6 A  
 questionable ORF  
 5157\_at 780.7 P  
 weak similarity to S.pombe hypothetical protein C3H1.12C  
 5158\_at 1912.6 P  
 mRNA guanylyltransferase (mRNA capping enzyme), alpha subunit  
 5159\_at 527.4 P  
 hypothetical protein  
 5160\_at 917.6 P  
 weak similarity to rat cysteine string protein  
 5115\_at 1377.3 P  
 SOH1 encodes a novel 14-kD protein with limited sequence similarity to RNA polymerases. The Soh1 protein interacts with a DNA repair protein, Rad5p, in a two-hybrid system assay.  
 5116\_at 6424.3 P  
 required for inositol prototrophy  
 5117\_at 2297.7 P  
 putative methylenetetrahydrofolate reductase (mthfr)  
 5118\_at 585.8 P  
 similarity to S.pombe hypothetical protein  
 5119\_at 9001.8 P  
 Ribosomal protein S2 (S4) (rp12) (YS5)  
 5120\_at 7662.6 P  
 nuclear polyadenylated RNA binding protein  
 5121\_at 454.8 P  
 hypothetical protein  
 5122\_at 9637.7 P  
 pre-mRNA processing factor involved in disassembly of spliceosomes after the release of mature mRNA  
 5123\_at 1289.3 P  
 multicopy suppressor of a cytochrome b mRNA translation defect, essential for the electron transfer in the bc1 complex  
 5124\_at 84.3 P  
 questionable ORF  
 5125\_at 731.2 P  
 hypothetical protein  
 5126\_at 1569.9 P  
 beta-transducin homolog  
 5127\_at 2212.3 P  
 associates with Snf1p  
 5128\_at 2315.0 P  
 weak similarity to H.influenzae permease  
 5129\_at 1583.7 P  
 weak similarity to YOR165w



5130\_at 3320.0 P  
TATA-binding protein-associated-factor  
5131\_at 5095.2 P  
hypothetical protein  
5132\_at 943.6 P  
hypothetical protein  
5133\_at -450.6 A  
questionable ORF  
5134\_at 1411.8 P  
weak similarity to hypothetical S.pombe protein  
5135\_at 2824.8 P  
strong similarity to hypothetical protein YBR238c  
5136\_at 9212.1 P  
light chain for myosin Myo2p  
5092\_at 10377.7 P  
Associated with tRNA and amino acyl-tRNA synthetases\; has affinity for quadruplex nucleic acids  
5093\_at 230.7 P  
similarity to glucose transport proteins  
5094\_at 14244.0 P  
Ribosomal protein L28 (L29) (rp44) (YL24)  
5095\_at 876.9 P  
questionable ORF  
5096\_at 2324.2 P  
strong similarity to hypothetical protein YBR242w  
5097\_at 3593.1 P  
nuclear pore protein, homologous to sec13  
5098\_at 4218.4 P  
similarity to putative human GTP-binding protein MMR1  
5099\_at 821.1 P  
hypothetical protein  
5100\_at 7217.4 P  
pheromone response pathway suppressor  
5101\_at 638.5 P  
similarity to copper homeostasis protein Cup9p  
5102\_at 595.5 P  
cytosolic and peripheral membrane protein  
5103\_at 890.8 P  
135-kDa protein that is subunit of poly(A) ribonuclease  
5104\_at 2396.1 P  
component of spindle pole  
5105\_at 3288.8 P  
Nuclear pore complex protein with GLFG motif  
5106\_at 1289.8 P  
35 kDa nucleotide binding protein  
5107\_at 196.2 P  
Ligase Interacting Factor 1\; physically interacts with DNA ligase 4 protein (Lig4p)  
5108\_at 11365.9 P  
alpha mating factor  
5109\_at 4200.6 P  
questionable ORF  
5110\_at 3722.3 P  
Similar to ubiquitin conjugating protein family  
5111\_at 824.7 P  
Coiled-coil protein involved in spindle-assembly checkpoint  
5112\_at 880.1 P  
weak similarity to Staphylococcus aureus nuclease (SNase)

5113\_at 3022.2 P  
strong similarity to hypothetical protein YPL189w  
5114\_at 1399.9 P  
suppressor of GTPase mutant  
5069\_at 5382.8 P  
strong similarity to hypothetical protein YPL191c  
5070\_at 344.3 M  
hypothetical protein  
5071\_at 3941.2 P  
strong similarity to C.elegans R07E5.13 protein  
5072\_at 1486.4 P  
hypothetical protein  
5073\_at 7920.5 P  
ATP-dependent RNA helicase CA3 of the DEAD/DEAH box family  
5074\_at 7646.3 P  
Transporter (permease) for choline and nitrogen mustard\; share homology with UGA4  
5075\_i\_at 10362.3 P  
Ribosomal protein L7A (L6A) (rp11) (YL8)  
5076\_f\_at 9464.3 P  
Ribosomal protein L7A (L6A) (rp11) (YL8)  
5077\_at 275.6 P  
Mitotic Membrane Component  
5078\_at 22.9 A  
questionable ORF  
5079\_at 1917.3 P  
heat shock transcription factor  
5080\_at 739.2 P  
questionable ORF  
5081\_at 1624.3 P  
Putative transcription factor that binds the consensus site PyPuCACCCPu  
5082\_at 6671.4 P  
RNA polymerase II subunit  
5083\_at -230.3 A  
questionable ORF  
5084\_at 3473.3 P  
probable ribosomal protein L12  
5085\_at 3721.0 P  
weak similarity to H.influenzae hypothetical protein  
5086\_at 1630.9 P  
hypothetical protein  
5087\_at 2481.0 P  
glycosyltransferase  
5088\_at 1005.8 P  
similarity to YLR276c and YKR024c  
5089\_at 609.6 P  
pseudouridine synthase 2  
5090\_at 7784.7 P  
pyruvate carboxylase  
5091\_at -466.9 A  
Death Upon Overexpression  
5047\_at 2023.5 P  
strong similarity to hypothetical protein YBR216c  
5048\_at 85.6 A  
similarity to rat branched-chain alpha-ketoacid dehydrogenase kinase  
5049\_at 3377.1 P  
ubiquitin conjugating (E2) enzyme, separate domains of Rad6p interact with Ubr1 (an E3 ubiquitin ligase)

needed for multiubiquitination), and Rad18p (a single-stranded DNA-binding protein). The C-terminal 23 residues are critical for sporulation and histone polyubiquitinating activity, but not UV repair or induced mutagenesis.

5050_at	689.5	P
hypothetical protein		
5051_at	2360.9	P
homologue of pombe SDS23\; localizes to spindle pole body		
5052_at	11609.0	P
delta-9-fatty acid desaturase		
5053_at	4254.2	P
strong similarity to D.melagonaster cni protein		
5054_at	1843.5	P
strong similarity to hypothetical proteins YAR031w, YGL051w, YAR028w, YAR033w and YCR007c		
5055_at	187.0	P
questionable ORF		
5056_at	637.1	P
strong similarity to YAR033w protein		
5057_at	1452.9	P
hypothetical protein		
5058_at	942.9	P
mRNA cap-binding protein (eIF-4F), 130K subunit		
5059_at	11248.5	P
ATPase		
5060_at	859.0	P
similarity to hypothetical S. pombe protein		
5061_at	273.5	P
hypothetical protein		
5062_at	491.4	P
hypothetical protein		
5063_at	1685.6	P
component of the cleavage and polyadenylation factor CF I involved in pre-mRNA 3 -end processing		
5064_at	1494.1	P
RNA polymerase II elongation factor		
5065_at	908.4	P
questionable ORF		
5066_at	183.5	A
weak similarity to YJL109c		
5067_at	7376.7	P
delta-aminolevulinatase (porphobilinogen synthase)		
5068_at	3370.5	P
similarity to V. vinifera dihydroflavonol reductase		
5024_at	1897.2	P
membrane-bound mannosyltransferase		
5025_at	5078.4	P
similarity to E.coli hypothetical 23K protein		
5026_at	1415.5	P
Mtf1 Two Hybrid Clone 2		
5027_at	845.1	P
C2H2 zinc finger protein which resembles the mammalian Egr and Wilms tumour proteins		
5028_at	73.1	A
questionable ORF		
5029_at	63.2	A
Meiosis-specific gene required for the pairing of homologous chromosomes		
5030_at	59.4	A
adhesion subunit of a-agglutinin		
5031_at	11380.2	P

Ribosomal protein L24A (rp29) (YL21) (L30A)  
 5032\_at 13316.4 P  
 Large ribosomal subunit protein L30 (L32) (rp73) (YL38)  
 5033\_at 4969.1 P  
 weak similarity to human chromatin assembly factor I p150 chain  
 5034\_at 6225.1 P  
 glucanase gene family member  
 5035\_at 3718.5 P  
 glucosidase I  
 5036\_at 13288.0 P  
 tryptophan synthetase  
 5037\_at 780.9 P  
 Probable transcription factor, polyglutamine domain protein  
 5038\_at 594.6 A  
 questionable ORF  
 5039\_at 4138.1 P  
 weak similarity to Vsp27p  
 5040\_at 8869.2 P  
 required for protein glycosylation  
 5041\_at 818.0 P  
 DNA damage-responsive protein  
 5042\_at 6369.4 P  
 hypothetical protein  
 5043\_at 5001.9 P  
 beta (38kDa) subunit of casein kinase II (CKII)  
 5044\_at 655.2 P  
 Homolog of E. coli Hsc20 co-chaperone protein  
 5045\_at 844.4 P  
 arginyl-tRNA-protein transferase  
 5046\_at 1938.0 P  
 pleiotropic drug resistance regulatory protein  
 5002\_at 264.5 P  
 hypothetical protein  
 5003\_at 3006.7 P  
 similarity to Drosophila pumilio protein and Mpt5p protein  
 5004\_at 2772.5 P  
 zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type  
 5005\_at 11059.4 P  
 Sterol C-24 reductase  
 5006\_at 7374.1 P  
 Proteasome subunit YC7alphaVY8 (protease yscE subunit 7)  
 5007\_at 1178.3 P  
 similarity to hypothetical S. pombe protein  
 5008\_at 9084.7 P  
 isopropylmalate isomerase  
 5009\_at 8737.2 P  
 plasma membrane H<sup>+</sup>-ATPase  
 5010\_at 122.7 A  
 questionable ORF  
 5011\_at 2760.2 P  
 putative vacuolar Ca<sup>2+</sup> ATPase  
 5012\_at 374.5 P  
 weak similarity to Xenopus kinesin-related protein Eg5  
 5013\_at 1313.9 P  
 weak similarity to Tup1p  
 5014\_at 794.4 P

protein required for Clb2 and Ase1 degradation  
 5015\_at 1894.6 P  
 p24 protein involved in membrane trafficking  
 5016\_at 9178.7 P  
 putative 3-beta-hydroxysteroid dehydrogenase  
 5017\_at 1656.9 P  
 similarity to C.elegans hypothetical M142.5 protein  
 5018\_at 2130.2 P  
 similarity to C.elegans hypothetical M142.5 protein  
 5019\_at 1291.9 P  
 similarity to hypothetical S. pombe protein  
 5020\_at 891.4 P  
 similarity to D.melanogaster lin19 protein  
 5021\_at 1263.1 P  
 strong similarity to hypothetical protein YLR324w  
 5022\_at 1515.6 P  
 transcription initiation factor TFIIIF middle subunit  
 5023\_at 293.5 P  
 RNA splicing factor associated with U5 snRNP  
 4979\_at 5967.2 P  
 choline phosphate cytidyltransferase (also called phosphoethanolamine cytidyltransferase or  
 phosphocholine cytidyltransferase)  
 4980\_at 2701.6 P  
 ATPase stabilizing factor  
 4981\_at 2307.5 P  
 Putative t-SNARE of the plasma membrane  
 4982\_at 890.0 P  
 strong similarity to hypothetical protein YLR328w  
 4983\_g\_at 1504.5 P  
 strong similarity to hypothetical protein YLR328w  
 4984\_at 1663.7 P  
 questionable ORF  
 4985\_at 1407.8 P  
 similarity to E.nidulans cysteine synthase  
 4986\_at 1248.9 P  
 Associated with U1 snRNP (no counterpart in mammalian U1 snRNP. Contains few SR-, RE- and  
 RD-dipeptides.  
 4987\_at 6207.4 P  
 putative integral membrane protein  
 4988\_at 405.0 P  
 similarity to hypothetical protein YGR031w  
 4989\_at 425.6 P  
 weak similarity to M.jannaschii hypothetical protein MJ1317  
 4990\_at 1322.5 P  
 hypothetical protein  
 4991\_at 358.4 P  
 questionable ORF  
 4992\_at 2415.2 P  
 gamma-aminobutyrate (GABA) transaminase (4-aminobutyrate aminotransferase)  
 4993\_at 8933.4 P  
 Vacuolar H-ATPase 14 kDa subunit (subunit F) of the catalytic (V1) sector  
 4994\_at 976.2 P  
 similarity to M.leprae yfcA protein  
 4995\_at 220.0 A  
 questionable ORF  
 4996\_at 318.8 P

acts in concert with Mid2p to transduce cell wall stress signals  
4997\_at 3661.4 P  
weak similarity to Methanobacterium thermoautotrophicum hypothetical protein MTH972  
4998\_at 486.2 P  
questionable ORF  
4999\_at 4490.3 P  
hypothetical protein  
5000\_i\_at 7958.0 P  
Ribosomal protein S25A (S31A) (rp45) (YS23)  
5001\_f\_at 8155.6 P  
Ribosomal protein S25A (S31A) (rp45) (YS23)  
4956\_at 4105.5 P  
40 kDa putative membrane-spanning ATPase  
4957\_at 2078.2 P  
integral subunit of RNase P and apparent subunit of RNase MRP  
4958\_at 2497.9 P  
similarity to hypothetical protein YGR015c and weak similarity H.influenzae dihydrolipoamide acetyltransferase  
4959\_at 2548.9 P  
catalytic component of 1,3-beta-D-glucan synthase  
4960\_at 2977.8 P  
hypothetical protein  
4961\_at 94.2 M  
hypothetical protein  
4962\_at 455.1 P  
Cwh8p contains 3 short stretches of amino acids that are characteristic for a wide variety of phosphatases, including lipid phosphatases and a protein phosphatase.  
4963\_at 15839.0 P  
Acyl-CoA-binding protein (ACBP)\Diazepam binding inhibitor (DBI)\Vendozepine (EP)  
4964\_at 6597.4 P  
strong similarity to hypothetical protein YLR350w  
4965\_at 225.6 P  
questionable ORF  
4966\_at 424.2 P  
MAP protein kinase homolog involved in pheromone signal transduction  
4967\_at 2264.9 P  
Among a group of genes whose products are necessary for bud-site selection\; likely involvement in positioning the proximal pole signal  
4968\_at 543.9 P  
hypothetical protein  
4969\_at 327.5 P  
strong similarity to transaldolase  
4970\_at 1912.2 P  
zinc finger protein\; negative regulator of meiosis\; directly repressed by a1-a2 regulator  
4971\_at 268.4 P  
questionable ORF  
4972\_at 334.6 P  
hypothetical protein  
4973\_at 2282.7 P  
transcription factor tau (TFIIIC) subunit 131  
4974\_at 1676.2 P  
ubiquitin fusion degradation protein  
4975\_at 7730.0 P  
Protein that suppresses ts allele of CDC4 when overexpressed  
4976\_at 1435.2 P  
questionable ORF

4977_at	154.2	A	
questionable ORF			
4978_at	147.6	A	
similarity to ser/thr protein kinases			
4934_at	42.1	A	
hypothetical protein			
4935_at	5552.0	P	
similarity to C.elegans E04D5.1 protein			
4936_at	7469.5	P	
high affinity methionine permease			
4937_at	2389.5	P	
Member of RSC complex			
4938_at	801.1	P	
Required for amino acid permease transport from the Golgi to the cell surface			
4939_at	733.8	P	
similarity to mouse calcium-binding protein			
4940_at	167.9	P	a
sporulation-specific homologue of the yeast CDC3V10V11V12 family of bud neck microfilament genes and is regulated by ABFI			
4941_at	12835.5	P	
C-4 sterol methyl oxidase			
4942_at	9633.7	P	5
-phosphoribosylformyl glycinamide synthetase			
4943_at	3178.5	P	
Cytochrome OXidase gene 18			
4944_at	5459.7	P	
Zn-finger protein, transcriptional regulator			
4945_at	652.3	P	
questionable ORF			
4946_at	2445.1	P	
similarity to P.putida phthalate transporter			
4947_at	59.7	P	
similarity to hypothetical protein YBR105c			
4948_at	617.1	A	
weak similarity to transcription factors			
4949_at	1273.9	P	
weak similarity to Rod1p			
4950_at	-46.7	A	
questionable ORF			
4951_at	688.8	P	
GDP-GTP Exchange Protein (GEP) for the Rho1p Small GTP-binding Protein			
4952_at	527.6	P	
similarity to hypothetical protein YLR373c			
4953_at	650.1	P	
factor stimulating decay of mRNAs containing premature stop codons\; acts with Nmd2p and Nam7p			
4954_at	620.5	P	
questionable ORF			
4955_at	1003.6	P	
Homolog of human core snRNP protein D1, involved in snRNA maturation			
4911_at	702.3	P	
RNA splicing factor			
4912_at	2534.8	P	
Mitochondrial ribosomal protein MRPL25 (YmL25)			
4913_at	4790.7	P	
peroxisome associated protein containing a PTS1 signal			
4914_at	4350.7	P	

Polypeptide 3 of a Yeast Non-native Actin Binding Complex, homolog of a component of the bovine NABC complex

4915\_at 4913.3 P

hypothetical protein

4916\_at 3640.3 P

Twinfilin A, an actin monomer sequestering protein

4917\_at 1781.0 P

weak similarity to mammalian myosin heavy chain

4918\_at 8048.4 P

20 kDa mitochondrial outer membrane protein import receptor

4919\_at 1770.8 P

translation initiation factor eIF2B, 71 kDa (delta) subunit; translational repressor of GCN4 protein

4920\_at 2007.1 P

35 kDa mitochondrial ribosomal small subunit protein

4921\_i\_at 14625.4 P

60S ribosomal protein L11B (L16B) (rp39B) (YL22)

4922\_at 8369.8 P

strong similarity to hypothetical protein YPL004c

4923\_at 34.7 A

Third, minor isozyme of pyruvate decarboxylase

4924\_at 164.3 A

cytoplasmic catalase T

4925\_at 371.7 P

weak similarity to rat tropomyosin

4926\_at 5501.7 P

hypothetical protein

4927\_at 871.2 P

pre-mRNA splicing protein

4928\_at 1425.9 P

Serine/threonine protein kinase

4929\_at 2468.7 P

similarity to hypothetical S.pombe protein

4930\_at 11871.2 P

mitochondrial and cytoplasmic valyl-tRNA synthetase

4931\_at 6993.8 P

Putative 3'→5' exoribonuclease; component of exosome complex of 3'→5' exonucleases

4932\_at 407.7 P

similarity to bovine Graves disease carrier protein

4933\_at 4580.1 P

transcriptional activator of the SKN7 mediated two-component regulatory system

4888\_at 1591.1 P

Esp1 promotes sister chromatid separation by mediating dissociation from the chromatin of the cohesin Scc1. The anaphase-promoting complex promotes anaphase by mediating destruction of Pds1 which binds to Esp1 and inhibits its activity

4889\_at 1449.8 P

involved in controlling telomere length

4890\_at 842.5 P

Mac1-dependent regulator

4891\_at 1929.8 P

weak similarity to B.subtilis YqgP

4892\_at 1092.2 P

hypothetical protein

4893\_at 5005.9 P

similarity to zebrafish essential for embryonic development gene pescadillo

4894\_at 708.2 P

subunit of RNA polymerase II holoenzyme/mediator complex



4895_at	3968.9	P	Protein involved in vacuolar H-ATPase assembly or function
4896_at	10499.2	P	hypothetical protein
4897_at	17.4	A	questionable ORF
4898_at	1875.9	P	G(sub)2-specific B-type cyclin
4899_at	562.2	P	B-type cyclin
4900_at	238.9	P	weak similarity to YLR099c and YDR125c
4901_at	987.9	P	weak similarity to mosquito carboxylesterase
4902_at	627.6	P	mitochondrial protein with homology to the mammalian SURF-1 gene
4903_at	621.1	P	Duo1 And Mps1 interacting
4904_at	164.0	A	questionable ORF
4905_g_at	1677.7	P	questionable ORF
4906_at	67.5	A	questionable ORF
4907_at	1252.8	P	transcriptional regulator, interacts with histones, primarily histone H3, possesses nucleosome assembly activity
4908_at	2535.5	P	hypothetical protein
4909_f_at	17375.6	P	Ribosomal protein S23A (S28A) (rp37) (YS14)
4910_at	1101.6	P	Contains GLFG repeats in N-terminal half and heptad repeats in C-terminal half
4865_at	1020.0	P	required for ER to golgi vesicle docking
4866_at	1075.8	P	ammonia permease
4867_at	911.0	P	hypothetical protein
4868_at	2102.8	P	serine/threonine phosphatase
4869_at	11956.5	P	asparagine synthetase
4870_at	3011.0	P	similarity to S.pombe hypothetical protein SPAC24H6.11c
4871_at	76.6	A	weak similarity to hypothetical protein YPR156c
4872_at	910.6	P	weak similarity to mouse T10 protein
4873_at	4068.0	P	hypothetical protein
4874_at	530.4	P	SYnthetic lethal with cdcForty
4875_at	622.5	P	weak similarity to myosin heavy chain proteins
4876_at	289.6	P	

strong similarity to Nce2p  
 4877\_at 3571.6 P  
 mitochondrial protein, prohibitin homolog; similar to *S. cerevisiae* Phb2p  
 4878\_at 199.0 A  
 Member of ubiquitin-conjugating protein family  
 4879\_at 1676.4 P  
 hypothetical protein  
 4880\_at 6935.2 P  
 proteasome component Y13  
 4881\_at 7111.2 P  
 weak similarity to chicken growth factor receptor-binding protein GRB2 homolog  
 4882\_g\_at 3480.4 P  
 weak similarity to chicken growth factor receptor-binding protein GRB2 homolog  
 4883\_at 801.2 P  
 questionable ORF  
 4884\_i\_at 8541.8 P  
 similarity to multidrug resistance proteins  
 4885\_at 59.7 A  
 questionable ORF  
 4886\_at 718.2 P  
 110 kDa subunit of the centromere binding factor CBF3  
 4887\_at 826.3 P  
 strong similarity to hypothetical protein YPR157w  
 4842\_at 2062.1 P  
 similarity to hypothetical protein YPR158w  
 4843\_at 3652.2 P  
 encodes a predicted type II membrane protein highly homologous to Kre6p  
 4844\_at 684.7 P  
 component of the biosynthetic pathway producing the thiazole precursor of thiamine  
 4845\_at 4554.5 P  
 similarity to *C.elegans* hypothetical protein  
 4846\_at 3652.7 P  
 hypothetical protein  
 4847\_at 1672.7 P  
 alpha-acetyltransferase that acts on methionine termini  
 4848\_at 8047.3 P  
 Ribosomal protein L24B (rp29) (YL21) (L30B)  
 4849\_at 1757.4 P  
 hypothetical protein  
 4850\_at 440.3 P  
 hypothetical protein  
 4851\_i\_at 7775.9 P  
 questionable ORF  
 4852\_s\_at 2805.1 P  
 questionable ORF  
 4853\_at 876.7 P  
 GTP-binding protein of the ras superfamily involved in bud site selection  
 4854\_at 315.6 A  
 hypothetical protein  
 4855\_at 270.1 P  
 strong similarity to hypothetical proteins YKR076w and YMR251w  
 4856\_at 12969.2 P  
 Cystathionine beta-synthase  
 4857\_at 1060.2 P  
 hypothetical protein  
 4858\_at 6132.2 P

N

Phosphatidyl-ethanolamine N-methyltransferase  
4859\_at 1458.7 P  
involved in mRNA transport  
4860\_at 11108.8 P  
nuclear localization sequence binding protein  
4861\_at 385.1 P  
questionable ORF  
4862\_at 636.9 P  
hypothetical protein  
4863\_at 3474.3 P  
mRNA cap-binding protein (eIF-4F), 150K subunit , highly homologous to Tif4632p, homologs of mammalian p220  
4864\_at 1117.6 P  
GTP-binding protein  
4819\_at -37.4 A  
questionable ORF  
4820\_at 2115.9 P  
hypothetical protein  
4821\_at 1440.7 P  
Involved in biosynthetic pathway for cell wall beta-glucans  
4822\_at 4702.8 P  
Clathrin light chain  
4823\_at 670.9 P  
hypothetical protein  
4824\_at 2722.4 P  
similarity to Rib2p  
4825\_at 1355.6 P  
phosphatidylserine decarboxylase located in vacuole or Golgi  
4826\_at 1901.9 P  
mitochondrial methionyl-tRNA synthetase  
4827\_at 4134.8 P  
Golgi membrane protein  
4828\_at 5719.3 P  
strong similarity to human GTP-binding protein  
4829\_at 685.2 P  
Essential for the expression and activity of ubiquinol-cytochrome c reductase  
4830\_at 7008.1 P  
Squalene monooxygenase  
4831\_at -22.5 A  
questionable ORF  
4832\_at 2639.5 P  
Alcohol acetyltransferase  
4833\_at 7258.5 P  
Poly(A)-binding protein binding protein  
4834\_at 825.4 P  
hypothetical protein  
4835\_at 11759.8 P  
Ribonucleotide Reductase  
4836\_at 7185.9 P  
similarity to YHR004c-a  
4837\_at 5411.8 P  
questionable ORF  
4838\_at 7571.8 P  
7.3 kDa subunit 9 of the ubiquinol cytochrome c oxidoreductase complex  
4839\_at 2512.0 P  
Ubiquitin-protein ligase

4840\_at 8727.7 P  
tyrosyl-tRNA synthetase, cytoplasmic  
4841\_at 3430.4 P  
Transcription factor TFIIIF large subunit  
4797\_at 6733.3 P  
HMG1V2 homolog  
4798\_at 172.5 P  
Serine/threonine protein kinase required for cell cycle arrest in response to loss of microtubule function  
4799\_at 8883.7 P  
similarity to *Aspergillus fumigatus* rAsp  
4800\_at 80.7 A  
questionable ORF  
4801\_at 4638.9 P  
histidine permease  
4802\_i\_at 115.9 A  
Glyceraldehyde-3-phosphate dehydrogenase 3  
4803\_at 1678.3 P  
Protein X component of mitochondrial pyruvate dehydrogenase complex  
4804\_at 699.9 P  
xylulokinase  
4805\_at 5487.0 P  
homolog of RNase PH  
4806\_at 972.5 P  
weak similarity to *Tetrahymena* acidic repetitive protein arp1  
4807\_at 2234.0 P  
involved in nitrosoguanidine resistance  
4808\_at 3950.4 P  
hypothetical protein  
4809\_at 3313.5 P  
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase  
4810\_at 2809.3 P  
weak similarity to rape guanine nucleotide regulatory protein  
4811\_at 759.8 P  
strong similarity to translation elongation factor eEF1 alpha chain Cam1p  
4812\_at 1418.5 P  
phosphorylcholine transferase; or cholinephosphate cytidyltransferase  
4813\_at 2919.4 P  
weak similarity to *X.laevis* protein-tyrosin-phosphatase cdc homolog 2 and to hypothetical protein YPR200c  
4814\_at 11953.4 P  
encodes the cytoplasmic trifunctional enzyme C1-tetrahydrofolate synthase  
4815\_at 155.5 P  
similarity to *S.pombe* hypothetical protein D89234  
4816\_at 1369.5 P  
similarity to *Xenopus* transcription factor Oct-1.17  
4817\_at 560.4 P  
electron-transferring flavoprotein, beta chain  
4818\_at 4013.4 P  
phosphoserine phosphatase  
4774\_at 9033.3 P  
thioredoxin  
4775\_at 5306.0 P  
similarity to *M.jannaschii* GTP-binding protein and to *M.capricolum* hypothetical protein SGC3  
4776\_at 5967.6 P  
zinc finger protein  
4777\_at 188.3 P

weak similarity to *S.pombe* hypothetical protein SPAC18B11.03c  
 4778\_at 263.7 P  
 involved in 7-aminocholesterol resistance  
 4779\_f\_at 13512.3 P  
 Ribosomal protein S0A  
 4780\_at 12259.1 P  
 Ribosomal protein S0A  
 4781\_at 1315.8 P  
 strong similarity to hypothetical *S. pombe* protein  
 4782\_at 1462.6 P  
 Participates in synthesis of N-acetylglucomanylphosphatidylinositol, the first intermediate in synthesis of glycosylphosphatidylinositol (GPI) anchors  
 4783\_at 1431.3 P  
 putative calcium channel  
 4784\_at 890.6 P  
 oosome region maintenance protein  
 4785\_at 299.2 P  
 questionable ORF  
 4786\_at 4595.1 P  
 Mitochondrial ribosomal protein MRPL9 (YmL9) (*E. coli* L3) (human MRL3)  
 4787\_at 586.8 P  
 similarity to hypothetical protein YHR149c  
 4788\_at 3493.0 P  
 translational activator of cytochrome c oxidase subunit III  
 4789\_at 1192.3 P  
 weak similarity to hypothetical protein YFR021w  
 4790\_at 581.1 P  
 strong similarity to drug resistance protein SGE1  
 4791\_at 103.2 A  
 weak similarity to human p55CDC and Cdc20p  
 4792\_at -40.8 A  
 hypothetical protein  
 4793\_at 2846.2 P  
 De-repression of ITR1 Expression  
 4794\_at 1300.5 P  
 questionable ORF  
 4795\_at 3001.1 P  
 57 kDa nuclear protein  
 4796\_at 369.4 P  
 questionable ORF  
 4751\_at 7837.1 P  
 mitochondrial protein, prohibitin homolog; homolog of mammalian BAP37 and *S. cerevisiae* Phb1p  
 4752\_at 3856.5 P  
 possible homolog of human 26S proteasome regulatory subunit p28  
 4753\_at 5448.5 P  
 Positive regulatory protein of phosphate pathway  
 4754\_at 10502.6 P  
 Flavohemoglobin  
 4755\_at 3757.5 P  
 hypothetical protein  
 4756\_at 111.0 A  
 questionable ORF  
 4757\_at 1208.5 P  
 weak similarity to YOR019w  
 4758\_at 1003.8 P  
 protein containing kelch repeats, similar to YHR158c and YPL263c

4759\_at 517.1 P  
 weak similarity to hypothetical protein YHR160c  
 4760\_at 9116.3 P  
 phosphofructokinase alpha subunit  
 4761\_at 2003.9 P  
 Yeast Assembly Polypeptide, member of AP180 protein family, binds Pan1p and clathrin  
 4762\_at -96.7 A  
 questionable ORF  
 4763\_at 148.5 A  
 strong similarity to hypothetical protein YHR162w  
 4764\_at 5610.9 P  
 Succinate-CoA Ligase (ADP-Forming)  
 4765\_at 4657.9 P  
 similarity to hypothetical S.pombe protein  
 4766\_at 2344.5 P  
 RNA polymerase III transcription factor with homology to TFIIIB  
 4767\_at 298.0 M  
 hypothetical protein  
 4768\_at 500.7 P  
 similar to SOL3  
 4769\_at 238.0 P  
 Mga1p shows similarity to heat shock transcription factor  
 4770\_at 537.4 P  
 weak similarity to human cleavage stimulation factor 64K chain  
 4771\_at 2863.2 P  
 hypothetical protein  
 4772\_at 1306.4 P  
 histone acetyltransferase  
 4773\_at 8547.5 P  
 Proteasome subunit  
 4729\_i\_at 10107.7 P  
 enolase I  
 4730\_s\_at 7410.1 P  
 enolase I  
 4731\_at 4425.1 P  
 COQ6 monooxygenase  
 4732\_at 227.1 A  
 6-phosphogluconate dehydrogenase  
 4733\_at 3215.7 P  
 similarity to C.elegans C16C10.1  
 4734\_at 1289.8 P  
 homolog of xeroderma pigmentosum group G (XPG) protein, copurifies with transcription factor, TFIIH,  
 mRNA is cell cycle regulated and induced by DNA damage and by meiosis (different cis-sites utilized in  
 damage and meiotic induction  
 4735\_at 397.7 P  
 questionable ORF  
 4736\_at 10223.0 P  
 similarity to allantoate transport protein  
 4737\_at 2703.0 P  
 putative beta adaptin component of the membrane-associate clathrin assembly complex  
 4738\_at 3110.9 P  
 ser/thr protein kinase  
 4739\_at 1223.9 P  
 weak similarity to E.coli lipase like enzyme  
 4740\_at 9921.0 P  
 methionyl tRNA synthetase

4741_at	-6.8	A
questionable ORF		
4742_at	2638.1	P
hypothetical protein		
4743_at	3759.5	P
GTP-cyclohydrolase I		
4744_at	2428.0	P
weak similarity to S.pombe hypothetical protein SPAC17A5		
4745_at	121.6	P
questionable ORF		
4746_at	2584.2	P
Member of CDC48VPAS1VSEC18 family of ATPases		
4747_at	572.5	P
strong similarity to S.pombe RNA helicase		
4748_at	3324.2	P
similarity to hypothetical S.pombe protein SPAC12G12.02		
4749_at	-79.0	A
similarity to hypothetical protein YMR295c		
4750_at	3180.4	P
Component of the TAFII complex required for activated transcription		
4705_at	2456.6	P
hypothetical protein		
4706_at	3125.5	P
ribonuclease H		
4707_at	3092.1	P
similarity to hypothetical S.pombe protein		
4708_at	353.1	P
similarity to C.elegans LET-858		
4709_at	11314.2	P
glucanase gene family member		
4710_at	9509.9	P
weak similarity to Cbf5p		
4711_at	2911.8	P
ABC transporter		
4712_at	13265.6	P
Cell wall endo-beta-1,3-glucanase		
4713_at	2902.3	P
similarity to hypothetical protein YMR310c		
4714_at	5549.3	P
similarity to mouse Surf-4 protein		
4715_at	11408.3	P
Zuotin, putative Z-DNA binding protein		
4716_at	4486.8	P
Biotin synthase		
4717_at	112.2	P
strong similarity to maltase		
4718_at	444.3	P
maltose pathway regulatory protein		
4719_at	223.5	P
alpha-glucoside transporter		
4720_at	350.1	A
hypothetical protein		
4721_at	-259.4	A
hypothetical protein		
4722_s_at	167.4	P
strong similarity to hypothetical protein YBR300c		

4723\_f\_at 1124.7 P  
 strong similarity to members of the Srp1p/Tip1p family  
 4724\_i\_at 4884.8 P  
 hypothetical protein  
 4725\_f\_at 374.4 P  
 hypothetical protein  
 4726\_at 118.4 A  
 identified by SAGE  
 4727\_s\_at 4165.9 P  
 Protein essential for mitochondrial biogenesis and cell viability  
 4728\_at 196.4 A  
 non-annotated SAGE orf Found reverse in NC\_001139 between 110655 and 110840 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4681\_at 3251.2 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 323513 and 323677 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4682\_at 6513.6 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 836149 and 836340 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4683\_at 3057.9 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 836381 and 836659 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4684\_at 622.0 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 904806 and 904952 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4685\_at 3121.1 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 905006 and 905158 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4686\_s\_at 3324.1 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 939417 and 939581 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4687\_at 799.1 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 225922 and 226092 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4688\_at -37.8 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 323656 and 323817 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4689\_at 423.5 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 324866 and 325024 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4690\_at 337.3 P  
 non-annotated SAGE orf Found forward in NC\_001139 between 363944 and 364078 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4691\_at -16.9 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 437993 and 438127 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4692\_f\_at 206.0 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 536199 and 536372 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4693\_i\_at 42.6 A  
 non-annotated SAGE orf Found reverse in NC\_001139 between 931768 and 932025 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4694\_at 177.6 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 974228 and 974395 with 100% identity.  
 See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
 4695\_at 541.5 A



non-annotated SAGE orf Found forward in NC\_001139 between 299797 and 299946 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4696\_at 9400.4 P

non-annotated SAGE orf Found forward in NC\_001139 between 312929 and 313105 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4697\_at 782.8 P

non-annotated SAGE orf Found forward in NC\_001139 between 326361 and 326609 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4698\_at 2092.1 P

non-annotated SAGE orf Found reverse in NC\_001139 between 366397 and 366531 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4699\_at 505.4 P

non-annotated SAGE orf Found forward in NC\_001139 between 393563 and 393697 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4700\_at 360.6 P

non-annotated SAGE orf Found forward in NC\_001139 between 400350 and 400547 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4701\_at 7104.5 P

non-annotated SAGE orf Found reverse in NC\_001139 between 554044 and 554199 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4702\_at 3575.7 P

non-annotated SAGE orf Found forward in NC\_001139 between 669960 and 670145 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4703\_at 129.4 P

non-annotated SAGE orf Found forward in NC\_001139 between 670145 and 670321 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4704\_at 211.7 P

non-annotated SAGE orf Found reverse in NC\_001139 between 736379 and 736513 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4658\_at 1190.4 P

non-annotated SAGE orf Found forward in NC\_001139 between 772010 and 772228 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4659\_at 853.6 P

non-annotated SAGE orf Found forward in NC\_001139 between 777630 and 777860 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4660\_i\_at 381.0 A

non-annotated SAGE orf Found forward in NC\_001139 between 783944 and 784078 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4661\_r\_at -2.2 A

non-annotated SAGE orf Found forward in NC\_001139 between 783944 and 784078 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4662\_at 10509.9 P

non-annotated SAGE orf Found forward in NC\_001139 between 827159 and 827320 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4663\_at 1970.8 P

non-annotated SAGE orf Found forward in NC\_001139 between 836328 and 836597 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4664\_at 304.6 P

non-annotated SAGE orf Found reverse in NC\_001139 between 853388 and 853528 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4665\_at -18.2 A

non-annotated SAGE orf Found reverse in NC\_001139 between 949043 and 949216 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4666\_r\_at 2841.8 P

non-annotated SAGE orf Found reverse in NC\_001139 between 970567 and 970722 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4667\_at 104.3 P  
non-annotated SAGE orf Found forward in NC\_001139 between 973737 and 973922 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4668\_at 221.5 A  
non-annotated SAGE orf Found forward in NC\_001139 between 974544 and 974699 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4669\_i\_at -13.3 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 1037741 and 1037887 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4670\_f\_at 8399.8 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 1037741 and 1037887 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4671\_at 967.0 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 1037796 and 1037987 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4672\_at 8.8 A  
non-annotated SAGE orf Found forward in NC\_001139 between 110756 and 110950 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4673\_at 269.6 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 255333 and 255473 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4674\_at 324.9 P  
non-annotated SAGE orf Found forward in NC\_001139 between 255355 and 255549 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4675\_at 1013.6 P  
non-annotated SAGE orf Found forward in NC\_001139 between 384772 and 384945 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4676\_at 17.3 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 394718 and 394915 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4677\_at 0.5 A  
non-annotated SAGE orf Found forward in NC\_001139 between 773986 and 774189 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4678\_at -105.7 A  
non-annotated SAGE orf Found forward in NC\_001139 between 1069513 and 1069650 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4679\_at 74.9 P  
non-annotated SAGE orf Found forward in NC\_001139 between 1083045 and 1083293 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4680\_at -69.3 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 10114 and 10350 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4631\_at -88.4 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 74536 and 74757 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4632\_g\_at 176.8 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 74536 and 74757 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4633\_at 422.1 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 74628 and 74810 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4634\_at 192.1 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 93374 and 93667 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4635\_g\_at 19.0 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 93374 and 93667 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4636\_i\_at 152.6 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 93459 and 93722 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4637\_r\_at 78.4 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 93459 and 93722 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4638\_i\_at 5.9 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 148828 and 148968 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4639\_f\_at 122.7 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 148828 and 148968 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4640\_at 138.7 P  
non-annotated SAGE orf Found forward in NC\_001139 between 319819 and 320073 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4641\_s\_at 2542.4 A  
non-annotated SAGE orf Found forward in NC\_001139 between 319845 and 319982 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4642\_i\_at 5.8 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 401513 and 401656 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4643\_f\_at -95.6 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 401513 and 401656 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4644\_i\_at -3.1 M  
non-annotated SAGE orf Found forward in NC\_001139 between 405114 and 405266 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4645\_at 67.4 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 544488 and 544628 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4646\_at 111.6 A  
non-annotated SAGE orf Found forward in NC\_001139 between 619977 and 620162 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4647\_at 190.7 A  
non-annotated SAGE orf Found forward in NC\_001139 between 700362 and 700583 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4648\_i\_at -8.5 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 701262 and 701477 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4649\_r\_at 307.5 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 701262 and 701477 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4650\_f\_at 64.2 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 701262 and 701477 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4651\_at 1153.3 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 707583 and 707720 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4652\_at 1435.8 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 707915 and 708058 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4653\_at 769.5 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 708217 and 708372 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4654\_at 111.6 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 711888 and 712022 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4655\_at -125.1 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 801856 and 801993 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4656\_f\_at -141.0 A  
non-annotated SAGE orf Found forward in NC\_001139 between 818376 and 818591 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4657\_at 137.2 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 823398 and 823550 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4608\_g\_at 212.4 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 823398 and 823550 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4609\_at 189.2 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 919562 and 919735 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4610\_at -108.1 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 994368 and 994517 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4611\_at 11.6 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 994531 and 994671 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4612\_at -16.9 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 994842 and 994976 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4613\_at 384.7 P  
non-annotated SAGE orf Found forward in NC\_001139 between 23385 and 23675 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4614\_at 1262.2 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 52581 and 52715 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4615\_at 3928.9 P  
non-annotated SAGE orf Found forward in NC\_001139 between 94489 and 94638 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4616\_at 507.1 P  
non-annotated SAGE orf Found forward in NC\_001139 between 129257 and 129394 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4617\_at 1636.0 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 139723 and 139965 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4618\_at 3828.6 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 163077 and 163232 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4619\_at 600.6 P  
non-annotated SAGE orf Found reverse in NC\_001139 between 199054 and 199209 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4620\_at 276.9 A  
non-annotated SAGE orf Found reverse in NC\_001139 between 249627 and 249773 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4621\_at 568.9 P

non-annotated SAGE orf Found forward in NC\_001139 between 274428 and 274583 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4622\_at 1734.6 P

non-annotated SAGE orf Found forward in NC\_001139 between 318551 and 318691 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4623\_at 6241.9 P

non-annotated SAGE orf Found reverse in NC\_001139 between 474298 and 474432 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4624\_at 253.3 P

non-annotated SAGE orf Found forward in NC\_001139 between 512819 and 513070 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4625\_at 9756.8 P

non-annotated SAGE orf Found reverse in NC\_001139 between 533928 and 534068 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4626\_at 3698.2 P

non-annotated SAGE orf Found forward in NC\_001139 between 576609 and 576782 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4627\_at 1405.6 P

non-annotated SAGE orf Found reverse in NC\_001139 between 604571 and 604726 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4628\_at 331.7 P

non-annotated SAGE orf Found forward in NC\_001139 between 682320 and 682556 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4629\_at 154.3 P

non-annotated SAGE orf Found reverse in NC\_001139 between 727849 and 728022 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4630\_at 2113.7 P

non-annotated SAGE orf Found forward in NC\_001139 between 733406 and 733621 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4585\_at 1068.5 P

non-annotated SAGE orf Found forward in NC\_001139 between 757467 and 757625 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4586\_at 147.1 A

non-annotated SAGE orf Found forward in NC\_001139 between 787843 and 788070 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4587\_at 733.3 A

non-annotated SAGE orf Found forward in NC\_001139 between 788087 and 788224 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4588\_at 224.4 P

non-annotated SAGE orf Found forward in NC\_001139 between 810111 and 810293 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4589\_g\_at 282.7 P

non-annotated SAGE orf Found forward in NC\_001139 between 810111 and 810293 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4590\_at 1320.5 P

non-annotated SAGE orf Found forward in NC\_001139 between 810221 and 810499 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4591\_at 1167.6 P

non-annotated SAGE orf Found forward in NC\_001139 between 810507 and 810659 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4592\_at -182.4 A

non-annotated SAGE orf Found forward in NC\_001139 between 867541 and 867681 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4593\_at -11.3 A

non-annotated SAGE orf Found reverse in NC\_001139 between 878323 and 878487 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4594\_at 39.4 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 965707 and 965874 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4595\_at 325.1 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 974572 and 974772 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4596\_at -11.8 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 1007443 and 1007601 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4597\_at 251.6 P  
 non-annotated SAGE orf Found forward in NC\_001139 between 1011451 and 1011660 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4598\_g\_at 96.3 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 1011451 and 1011660 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4599\_i\_at 271.4 P  
 non-annotated SAGE orf Found forward in NC\_001139 between 1011506 and 1011688 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4600\_at 2018.9 P  
 non-annotated SAGE orf Found forward in NC\_001139 between 1012179 and 1012379 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4601\_at 1112.4 A  
 non-annotated SAGE orf Found forward in NC\_001139 between 1057363 and 1057593 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4602\_at 2471.1 P  
 non-annotated SAGE orf Found reverse in NC\_001139 between 1058818 and 1058976 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4603\_at 1789.7 P  
 snRNA

4604\_i\_at 763.4 P  
 snRNA

4605\_s\_at 1639.0 P  
 snRNA

4606\_at 1725.3 P  
 snRNA

4607\_at 1202.2 P  
 snRNA

4561\_s\_at 1049.0 P  
 snRNA

4562\_at 141.6 A  
 similarity to C.carbonum toxin pump

4563\_f\_at 2220.8 P  
 strong similarity to members of the Srp1p/Tip1p family

4564\_at 121.3 P  
 similarity to subtelomeric encoded proteins

4565\_at 129.5 P  
 ExtraCellular Mutant

4566\_at -67.4 A  
 similarity to subtelomeric encoded proteins

4567\_at 257.5 A  
 weak similarity to Drosophila hypothetical protein 6  
 4568\_at 1216.0 P  
 similarity to C.carbonum toxin pump  
 4569\_at 3099.0 P  
 weak similarity to YPL208w  
 4570\_at 242.5 P  
 Cytochrome B pre-mRNA processing protein  
 4571\_at 372.2 A  
 hypothetical protein  
 4572\_at 692.5 P  
 very low affinity methionine permease  
 4573\_at 684.4 P  
 ABC transporter  
 4574\_at 8309.8 P  
 Single-strand nucleic acid binding protein  
 4575\_i\_at 16163.7 P  
 Ribosomal protein L8A (rp6) (YL5) (L4A)  
 4576\_at 731.7 P  
 glycerol kinase (converts glycerol to glycerol-3-phosphate)  
 4577\_at 5276.9 P  
 SNARE protein with a C-terminal membrane anchor  
 4578\_at 2018.3 P  
 ExtraCellular Mutant  
 4579\_at 3242.7 P  
 hypothetical protein  
 4580\_at 1398.2 P  
 Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC2 and WSC3  
 4581\_at 8435.0 P  
 Meiotic regulatory protein\); Cys-His zinc fingers  
 4582\_at 1968.3 P  
 hypothetical protein  
 4583\_at 3297.5 P  
 transcriptional regulator  
 4584\_at 246.3 P  
 RNA binding domain (N-term) with asparagine rich region?  
 4539\_at 802.8 P  
 hypothetical protein  
 4540\_at -97.1 A  
 Encodes one of the earliest meiosis-specific recombination functions.  
 4541\_at 1003.3 P  
 weak similarity to Pseudomonas gamma-butyrobetaine hydroxylase  
 4542\_at 5454.1 P  
 negative regulator of phospholipid biosynthesis  
 4543\_at 604.4 P  
 Similiar to clathrin coat proteins  
 4544\_at 92.4 P  
 Dimerization cofactor of homeodomain protein NF1-alpha  
 4545\_at 1149.8 P  
 Probable transmembrane protein PTM1  
 4546\_at 482.3 P  
 Urea transporter  
 4547\_at 12818.4 P  
 Ribosomal protein S20  
 4548\_at 268.2 P

GTP-binding protein and glycogen phosphorylase (weak)  
 4549\_at 3894.8 P  
 similarity to C.elegans hypothetical protein F21D5.2  
 4550\_at -51.2 A  
 UDP Glucose pyrophosphorylase  
 4551\_at 7829.6 P  
 ribose-phosphate pyrophosphokinase 3  
 4552\_at 191.9 P  
 similarity to C.elegans hypothetical protein  
 4553\_at 350.5 P  
 bZip DNA binding proteins  
 4554\_at 3494.1 P  
 Potential formate transporter nirC  
 4555\_at 2141.8 P  
 serine/threonine protein kinase  
 4556\_at 697.6 P  
 hypothetical protein  
 4557\_at -36.7 A  
 hypothetical protein  
 4558\_at 1337.6 P  
 mitochondrial ribosomal protein, homologous to E. coli ribosomal protein S2, component of the 37 S  
 subunit of mitochondrial ribosomes  
 4559\_at 2487.8 P  
 YKL008c  
 4560\_at 1767.7 P  
 SH3 domain  
 4515\_i\_at 11511.8 P  
 Ribosomal protein L14B  
 4516\_f\_at 10479.3 P  
 Ribosomal protein L14B  
 4517\_at 3398.5 P  
 60kD chaperonin (weak)  
 4518\_at 6302.5 P  
 8.5 kDa subunit of the ubiquinol-cytochrome c oxidoreductase complex  
 4519\_at 710.7 P  
 Mitochondrial carrier protein/Grave s disease carrier protein  
 4520\_at 2044.4 P  
 thiF, moeB, ubiquitin activating enzyme (all weak)  
 4521\_at 611.9 P  
 similarity to YLL010c, YLR019w  
 4522\_at 2306.6 P  
 alpha subunit of G protein coupled to mating factor receptors  
 4523\_at 8001.9 P  
 May act cooperatively with Mrs5p in mitochondrial protein import or other related essential mitochondrial  
 processes  
 4524\_at 1108.1 P  
 Zinc finger (Cys(2)-His(2))  
 4525\_at 17525.8 P  
 cytochrome P450 lanosterol 14a-demethylase  
 4526\_at 4469.5 P  
 Manganese-containing superoxide dismutase  
 4527\_at 5605.2 P  
 similarity to S.pombe hypothetical protein  
 4528\_i\_at 7949.8 P  
 Ribosomal protein L27A  
 4529\_f\_at 8841.8 P



Ribosomal protein L27A  
 4530\_at 635.7 P  
 Seryl-tRNA synthetase  
 4531\_at 2678.8 P  
 Vacuolar protein sorting  
 4532\_at 3051.7 P  
 subunit of the major N alpha-acetyltransferase, complexes with the catalytic subunit of  
 N-a-acetyltransferase (Nat1)  
 4533\_at 93.5 A  
 Encodes a 33.4 kDa basic protein that localizes to the nucleus. Thought to be a meiosis-specific negative  
 regulator of M-phase during meiosis I, coordinating sister-chromatid/centromere cohesion with nuclear  
 division. Spo13p has transcriptional activation activity in one-hybrid analysis.  
 4534\_at 261.4 P  
 PolyA-binding protein  
 4535\_at 1140.8 P  
 SH3 domain in C-terminus  
 4536\_at 1099.6 P  
 strong similarity to *S.douglasii* YSD83  
 4537\_at 5749.8 P  
 argininosuccinate lyase  
 4538\_at 11547.9 P  
 Asparaginyl-tRNA synthetase  
 4493\_at 10634.9 P  
 Aminoacyl tRNA-synthetase  
 4494\_at 11228.0 P  
 40S Ribosomal protein S27B (rp61) (YS20)  
 4495\_at 11.4 A  
 ExtraCellular Mutant  
 4496\_at 73.8 P  
 RAS-related protein  
 4497\_at 523.3 P  
 Class II Myosin  
 4498\_at 1613.6 P  
 53 kDa subunit of the mitochondrial processing protease  
 4499\_at 13064.4 P  
 homoserine kinase  
 4500\_at 9733.6 P  
 proteolipid protein of the proton ATPase  
 4501\_at 8299.1 P  
 Subunit of 26S Proteasome (PA700 subunit)  
 4502\_at 3098.3 P  
 Dipeptidyl aminopeptidase B (DPAP B)  
 4503\_at 1630.8 P  
 Thymidylate synthase (putative); weak  
 4504\_at 4261.8 P  
 putative protein kinase  
 4505\_at 1581.3 P  
 Pif1p, mitochondrial DNA repair and recombination protein  
 4506\_at 3771.7 P  
 ethionine resistance protein  
 4507\_at 1119.3 P  
 Pro1p (Gamma-glutamyl kinase)  
 4508\_at 812.2 P  
 hypothetical protein  
 4509\_at 274.2 A  
 Sec23p (weak)

4510\_at 416.8 P  
 similarity to hypothetical protein YGL247w  
 4511\_at 2919.0 P  
 delta-1-pyrroline-5-carboxylate dehydrogenase  
 4512\_at 591.9 A  
 Killed in Mutagen, sensitive to Diepoxybutane and Vor Mitomycin C  
 4513\_at 6797.0 P  
 Aldehyde dehydrogenases  
 4514\_at 14111.4 P  
 13-kDa vacuolar H-ATPase subunit  
 4469\_at 1532.6 P  
 weak similarity to Hit1p  
 4470\_at 4738.3 P  
 RNA polymerase II holoenzyme mediator subunit  
 4471\_at 9810.1 P  
 NADP-cytochrome P450 reductase  
 4472\_s\_at 2860.8 P  
 2-deoxyglucose-6-phosphate phosphatase  
 4473\_i\_at 2.3 A  
 2-deoxyglucose-6-phosphate phosphatase  
 4474\_at 3632.9 P  
 hypothetical protein  
 4475\_at 2642.7 P  
 Inositol monophosphatase  
 4476\_at 7207.7 P  
 arginine/alanine aminopeptidase  
 4477\_at 480.4 P  
 similarity to multidrug resistance proteins  
 4478\_at 6350.3 P  
 similarity to S.pombe dihydrofolate reductase and YOR280c  
 4479\_at 380.5 P  
 questionable ORF  
 4480\_at 2570.8 P  
 localized to mitochondrial membrane  
 4481\_at 8283.0 P  
 subunit VI of cytochrome c oxidase  
 4482\_at 3951.6 P  
 weak similarity to P.yoelii rho prty protein  
 4483\_s\_at 10034.3 P  
 copper-binding metallothionein  
 4484\_s\_at 4813.4 P  
 weak similarity to YOR262w  
 4485\_at 3949.8 P  
 Peptidylprolyl isomerase (cyclophilin) ER or secreted  
 4486\_at 1239.8 P  
 RNA polymerase II transcriptional regulation mediator  
 4487\_at 658.6 P  
 weak similarity to Ustilago hordei B east mating protein 2  
 4488\_at 1945.6 P  
 required for V-ATPase activity  
 4489\_at 1944.7 P  
 GTPase-interacting component 1  
 4490\_at 2658.3 P  
 Protein subunit of nuclear ribonuclease P (RNase P)  
 4491\_at 4525.5 P  
 weak similarity to translational activator CBS2

4492\_at 12418.1 P  
 Hsp70 Protein

4446\_at 3849.0 P  
 RRP3 is a DEAD box gene homologous to eIF-4a which encodes an RNA-dependent ATPase possessing helicase activity which is not specific for RNA

4447\_at 1309.1 P  
 homologous to Ssf2p

4448\_at 872.3 P  
 hypothetical protein

4449\_at 11230.9 P  
 Deoxyhypusine synthase

4450\_at 2338.4 P  
 3->5 exoribonuclease\; Component of the exosome 3->5 exonuclease complex with Rrp41p, Rrp42p, Rrp43p and Dis3p (Rrp44p).

4451\_at 4008.6 P  
 strong similarity to N.crassa met-10+ protein

4452\_at 3493.0 P  
 G1VS cyclin (weak)

4453\_at 6790.4 P  
 2,3-oxidosqualene-lanosterol cyclase

4454\_at 416.7 P  
 Oxysterol-binding protein

4455\_at 1999.7 P  
 weak similarity to B.subtilis spore outgrowth factor B

4456\_at 454.8 P  
 ribosomal protein of the small subunit, mitochondrial

4457\_at 1746.4 P  
 weak similarity to C.elegans hypothetical protein CEW09D10

4458\_at 2450.2 P  
 hypothetical protein

4459\_at 784.6 P  
 Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities

4460\_i\_at 6.7 A  
 Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities

4461\_r\_at 13.4 A  
 Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities

4462\_at 1469.4 P  
 similarity to hypothetical protein YDR326c, YFL042c and YLR072w

4463\_at 1227.5 P  
 weak similarity to human C1D protein

4464\_at 3440.6 P  
 SerVThr protein kinase

4465\_at 2682.2 P  
 hypothetical protein

4466\_at 3177.9 P  
 Transcription factor

4467\_at 3064.9 P  
 weak similarity to fruit fly brahma transcriptional activator

4468\_at 2503.4 P  
 putative RNA binding protein, involved in meiosis-specific splicing of the REC107 transcripts in cooperation with the Mer1 protein

4423\_at 665.3 P  
 hypothetical protein

4424\_at 2980.0 P  
 similarity to hypothetical protein YNL075w

4425\_at 10690.0 P

small nucleolar RNP proteins  
 4426\_at 1934.6 P  
 NuBbiN  
 4427\_at 2602.8 P  
 Arginyl-tRNA synthetase  
 4428\_at 5504.5 P  
 High-affinity glucose transporter  
 4429\_at 668.9 P  
 the AHT1 DNA sequence is upstream of HXT4 and contains an HXT4 regulatory element which is a  
 multicopy suppressor of glucose transport defects); probable non-functional ORF  
 4430\_at 9354.6 P  
 High-affinity hexose (glucose) transporter  
 4431\_at 110.8 A  
 hypothetical protein  
 4432\_at 339.1 A  
 hexose transporter  
 4433\_at 2089.8 P  
 strong similarity to hypothetical protein YDR348c  
 4434\_at 984.0 P  
 strong similarity to hypothetical protein YDR348c  
 4435\_at 5535.5 P  
 binds to Sed5p and Sec23p by distinct domains  
 4436\_at 3598.6 P  
 ATM/Mec1/TOR1+2-related  
 4437\_at 2275.1 P  
 hypothetical protein  
 4438\_at 2058.5 P  
 Bad in glucose or big cells  
 4439\_at 626.0 P  
 Bad in glucose or big cells  
 4440\_at 991.6 P  
 Ser/Thr protein kinase  
 4441\_at 2275.7 P  
 functionally redundant and similar in structure to SBE2  
 4442\_at 2768.0 P  
 Aldo-keto reductase  
 4443\_at 101.4 P  
 weak similarity to Mvp1p  
 4444\_at 1433.7 P  
 Thioredoxin reductase  
 4445\_at 1887.3 P  
 Component of 10 nm filaments of mother-bud neck (septin)  
 4401\_at 8043.7 P  
 strong similarity to hypothetical protein YDR358w  
 4402\_at 246.9 P  
 hypothetical protein  
 4403\_at 3363.4 P  
 p24 protein involved in membrane trafficking  
 4404\_at 1514.3 P  
 moeB, thiF, UBA1  
 4405\_at 2912.8 P  
 Cystathionine gamma-synthase  
 4406\_at 3725.8 P  
 Vacuolar aminopeptidase  
 4407\_at 1209.4 P  
 SH3 domain

4408_at	2709.6	P	
			strong similarity to hypothetical protein YNL116w
4409_at	651.0	P	
			hypothetical protein
4410_at	1741.3	P	
			71-kDa component of the protein translocase of the outer membrane of mitochondria
4411_at	130.0	P	
			50-kDa subunit of ORC
4412_at	1783.4	P	
			trithorax
4413_at	1169.9	P	
			mutS homolog involved in mitochondrial DNA repair
4414_at	2596.1	P	
			weak similarity to C.elegans hypothetical protein
4415_at	2215.2	P	
			similarity to hypothetical C. elegans protein F45G2.a
4416_at	2355.7	P	
			sn-1,2-diacylglycerol ethanolamine- and cholinephosphotranferase
4417_at	4323.9	P	
			sn-1,2-diacylglycerol ethanolamine- and cholinephosphotranferase
4418_at	227.2	P	
			meiosis-specific gene, mRNA is sporulation-specific
4419_at	12.9	A	
			questionable ORF
4420_at	96.8	A	
			hypothetical protein
4421_at	2898.0	P	
			(H)igh copy (S)uppressor of (N) <sup>34</sup> dominant negative allele of SEC4. Suppression is very specific to this allele. It has no affect on the analogous YPT1 allele. No homology or known function.
4422_at	11669.9	P	
			UPRTase
4378_at	300.2	P	
			Centractin
4379_at	901.3	P	
			weak similarity to T.brucei H <sup>+</sup> -transporting ATP synthase
4380_at	971.7	P	
			Highly acidic C-terminus
4381_at	5661.4	P	
			Carboxypeptidase
4382_at	11845.9	P	
			similarity to hypothetical protein YNL156c
4383_at	274.6	P	
			hypothetical protein
4384_at	3767.8	P	
			membrane-bound casein kinase I homolog
4385_at	7867.9	P	
			17 kDa protein
4386_at	10536.8	P	
			aromatic amino acid aminotransferase II
4387_at	1609.4	P	
			hypothetical protein
4388_at	72.8	A	
			sporulation-specific wall maturation protein
4389_at	40.8	A	
			hypothetical protein
4390_at	93.4	M	

hypothetical protein  
 4391\_at 6393.8 P  
 weak similarity to cytochrome-c oxidases  
 4392\_at 9794.4 P  
 Ser-Thr rich protein  
 4393\_at 5666.8 P  
 subunit of RNA polymerase II  
 4394\_at 3643.5 P  
 dCMP deaminase  
 4395\_at -1.3 A  
 questionable ORF  
 4396\_at 2411.5 P  
 similarity to pheromone-response G-protein Mdg1p  
 4397\_at 2202.1 P  
 Mitochondrial ribosomal protein MRPL6 (YmL6)  
 4398\_at 4319.0 P  
 ribosomal protein (weak similarity)  
 4399\_at 994.9 P  
 similarity to hypothetical protein YGR221c  
 4400\_at 362.9 P  
 weak similarity to YDR479c  
 4356\_at 2865.2 P  
 hypothetical protein  
 4357\_at 2903.3 P  
 20 kDa protein with negatively charged C-terminus required for function\; thought to be a positive  
 regulator of exit from M-phase in mitosis and meiosis. Spo12p interacts with Dbf2p and Dbf20p protein  
 kinases.  
 4358\_at 100.4 P  
 sporulation protein  
 4359\_at 1353.5 P  
 Establishes Silent omatin  
 4360\_at 1178.7 P  
 Snf1-interacting protein Sip3p  
 4361\_at 311.1 A  
 weak similarity to mouse kinesin KIF3B  
 4362\_at 227.6 A  
 mRNA is induced early in meiosis  
 4363\_at 1399.7 P  
 protein containing kelch repeats, similar to YGR238c  
 4364\_at 25.8 A  
 hypothetical protein  
 4365\_at 90.9 A  
 weak similarity to hypothetical protein YGR239c  
 4366\_at 1382.1 P  
 Yeast Assembly Polypeptide, member of AP180 protein family, binds Pan1p and clathrin  
 4367\_at 9280.4 P  
 strong similarity to hypothetical protein YGR243w  
 4368\_at 7476.1 P  
 shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains\; homologous to Sol2p  
 and Sol1p  
 4369\_at 901.1 P  
 DNA replication helicase  
 4370\_at 3262.9 P  
 RNA splicing factor  
 4371\_at -9.6 A  
 Cell division cycle protein

4372_at	822.4	P
hypothetical protein		
4373_at	671.8	P
GTP-binding protein		
4374_at	4469.5	P
DEAD-box protein		
4375_at	7370.8	P
putative Upf1p-interacting protein		
4376_at	520.5	P
autophagy		
4377_at	1285.7	P
spindle pole body component, associates in a complex with Spc98p and Tub4p perhaps as part of the microtubule attachment site of the SBP		
4333_at	11.6	A
hypothetical protein		
4334_i_at	9114.2	P
enolase		
4335_at	7717.1	P
Putative low-affinity copper transport protein		
4336_at	1119.7	P
Dimethylaniline monooxygenase		
4337_at	599.2	P
weak similarity to Spombe pac2 protein		
4338_at	799.4	P
Zinc finger (6-Cys)		
4339_at	11745.3	P
NAPDH dehydrogenase (old yellow enzyme), isoform 2		
4340_at	420.1	P
hypothetical protein		
4341_at	5841.5	P
similarity to mouse TEG-261 protein		
4342_at	940.0	P
hypothetical protein		
4343_at	13956.9	P
Phosphogluconate Dehydrogenase (Decarboxylating)		
4344_at	646.0	P
Involved in the control of meiotic nuclear divisions and spore formation		
4345_at	81.1	P
hypothetical protein		
4346_at	2503.3	P
similarity to C.elegans hypothetical protein C10C5.6		
4347_at	400.0	P
confers sensitivity to killer toxin		
4348_at	4945.3	P
similarity to hypothetical C. elegans proteins F17c11.7		
4349_at	713.0	A
similarity to peptidyl-tRNA hydrolases		
4350_at	9071.8	P
squalene synthetase		
4351_at	1329.5	P
protein of unknown function		
4352_at	1786.3	P
hypothetical protein		
4353_at	9823.9	P
GAL4 enhancer protein, homolog of human alpha NAC subunit of the nascent-polypeptide-associated complex		

4354_at	1905.4	P	
			similarity to hypothetical protein YOR147w
4355_at	2234.3	P	
			hypothetical protein
4310_at	3067.1	P	
			hypothetical protein
4311_at	7048.5	P	
			hypothetical protein
4312_at	740.1	P	
			strong similarity to hypothetical protein YHR199c
4313_at	3839.3	P	
			strong similarity to hypothetical protein YHR198c
4314_at	8651.9	P	
			homolog of the mammalian S5a protein, component of 26S proteasome
4315_at	3290.5	P	
			Cytosolic exopolyphosphatase
4316_at	1132.8	P	
			similarity to S.pombe hypothetical protein SPAC17G6
4317_at	4028.3	P	
			similarity to alpha-mannosidases
4318_at	2282.2	P	
			cAMP-dependent protein kinase homolog, suppressor of cdc25ts
4319_at	3066.8	P	
			Protein with similarity to DNA-binding region of heat shock transcription factors
4320_at	1497.6	P	
			weak similarity to YPL165c
4321_at	11647.7	P	
			branched-chain amino acid transaminase, highly similar to mammalian ECA39, which is regulated by the oncogene myc
4322_at	684.7	P	
			UDP-glucose-4-epimerase (GAL10, galE)
4323_f_at	9250.0	P	
			IMP dehydrogenase\; probable PUR5 gene
4324_s_at	4533.8	P	
			gene in Y repeat region
4325_at	18.3	A	
			questionable ORF
4326_at	723.6	P	
			questionable ORF
4327_at	120.4	A	
			questionable ORF
4328_at	469.7	A	
			questionable ORF
4329_at	-330.5	A	
			questionable ORF
4330_at	628.4	P	
			questionable ORF
4331_at	14.6	A	
			questionable ORF
4332_at	-125.0	A	
			questionable ORF
4286_s_at	1621.1	P	
			Highly acidic C-terminus
4287_s_at	225.2	P	
			similarity to hypothetical protein YER175c
4288_at	2743.5	P	



non-annotated SAGE orf Found reverse in NC\_001140 between 34593 and 34790 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4289\_at -32.0 A

non-annotated SAGE orf Found reverse in NC\_001140 between 518765 and 518938 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4290\_at 214.2 A

non-annotated SAGE orf Found reverse in NC\_001140 between 519037 and 519228 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4291\_i\_at -232.4 A

non-annotated SAGE orf Found reverse in NC\_001140 between 91713 and 91919 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4292\_at 423.6 P

non-annotated SAGE orf Found reverse in NC\_001140 between 146614 and 146772 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4293\_at 1968.8 P

non-annotated SAGE orf Found forward in NC\_001140 between 370055 and 370342 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4294\_at 274.6 A

non-annotated SAGE orf Found forward in NC\_001140 between 56060 and 56263 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4295\_at 191.0 P

non-annotated SAGE orf Found forward in NC\_001140 between 80439 and 80615 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4296\_at 553.2 A

non-annotated SAGE orf Found reverse in NC\_001140 between 122543 and 122758 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4297\_at 8.6 A

non-annotated SAGE orf Found forward in NC\_001140 between 146159 and 146308 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4298\_at 70.0 A

non-annotated SAGE orf Found reverse in NC\_001140 between 167438 and 167620 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4299\_at 497.7 P

non-annotated SAGE orf Found reverse in NC\_001140 between 225199 and 225351 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4300\_at 732.1 P

non-annotated SAGE orf Found reverse in NC\_001140 between 374400 and 374564 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4301\_at 40.9 A

non-annotated SAGE orf Found forward in NC\_001140 between 508759 and 508923 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4302\_at 1130.1 P

non-annotated SAGE orf Found forward in NC\_001140 between 209467 and 209637 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4303\_at 4736.2 P

non-annotated SAGE orf Found forward in NC\_001140 between 467972 and 468148 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4304\_f\_at 453.0 P

non-annotated SAGE orf Found forward in NC\_001140 between 528967 and 529113 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4305\_at 1241.2 P

non-annotated SAGE orf Found reverse in NC\_001140 between 5662 and 5796 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4306\_i\_at -505.0 A

non-annotated SAGE orf Found reverse in NC\_001140 between 5778 and 5924 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4307\_f\_at -28.9 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 5778 and 5924 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4308\_at 127.9 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 202505 and 202657 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4309\_i\_at 55.9 A  
non-annotated SAGE orf Found forward in NC\_001140 between 203161 and 203328 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4261\_s\_at -44.2 A  
non-annotated SAGE orf Found forward in NC\_001140 between 203161 and 203328 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4262\_i\_at 11.2 A  
non-annotated SAGE orf Found forward in NC\_001140 between 203174 and 203335 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4263\_at -81.9 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 204089 and 204277 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4264\_at 289.5 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 422491 and 422676 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4265\_s\_at 273.6 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 422739 and 422921 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4266\_at 1890.2 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 422746 and 422961 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4267\_at 124.2 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 458162 and 458326 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4268\_at -7.5 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 522720 and 522872 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4269\_f\_at 2221.9 P  
non-annotated SAGE orf Found forward in NC\_001140 between 530130 and 530267 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4270\_f\_at 201.4 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 530754 and 530897 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4271\_at -3.8 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 531037 and 531177 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4272\_at 6270.5 P  
non-annotated SAGE orf Found reverse in NC\_001140 between 111584 and 111718 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4273\_at 516.5 M  
non-annotated SAGE orf Found forward in NC\_001140 between 157505 and 157675 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4274\_at 3401.7 P  
non-annotated SAGE orf Found forward in NC\_001140 between 175186 and 175365 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4275\_at 62.8 A  
non-annotated SAGE orf Found forward in NC\_001140 between 198428 and 198592 with 100% identity. See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4276\_at 113.5 A  
non-annotated SAGE orf Found reverse in NC\_001140 between 410821 and 411015 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

4277_f_at	9.5	A
Centromere		
4278_at	1083.9	P
snRNA		
4279_at	1078.7	P
snRNA		
4280_f_at	1492.1	P
strong similarity to members of the Srp1p/Tip1p family		
4281_i_at	1885.7	P
High-affinity hexose transporter		
4282_f_at	102.0	A
High-affinity hexose transporter		
4283_at	71.0	A
L-serine dehydratase		
4284_at	-9.8	A
serine dehydratase		
4285_at	617.0	P
similarity to allantoate permease Dal5p		
4237_at	829.3	P
putative pseudogene		
4238_at	1141.3	P
Nit1 nitrilase		
4239_at	-16.7	A
questionable ORF		
4240_at	2014.7	P
hypothetical protein		
4241_at	184.5	P
peroxisomal 3-oxoacyl CoA thiolase		
4242_at	197.5	P
Bni1p-related protein, helps regulate reorganization of the actin cytoskeleton, potential target of Rho4p		
4243_at	2605.1	P
similarity to hypothetical protein YKR100c		
4244_at	4624.3	P
hypothetical protein		
4245_at	417.1	P
Ubiquitin-specific protease		
4246_at	2094.6	P
glycerol-3-phosphate dehydrogenase, mitochondrial		
4247_at	2852.9	P
transcription factor		
4248_at	2837.6	P
Resistant to Rapamycin Deletion		
4249_at	1128.1	P
hypothetical protein		
4250_at	665.4	P
similarity to mitochondrial aldehyde dehydrogenase Ald1p		
4251_at	370.6	P
Protein required for S-phase (DNA synthesis) initiation or completion		
4252_at	1261.6	P
similarity to Mlp1p and myosin heavy chains		
4253_i_at	13471.5	P
Ribosomal protein L40A		
4254_at	3873.7	P
histidine kinase osmosensor that regulates an osmosensing MAP kinase cascade and is similar to bacterial two-component regulators		

4255\_at 465.5 P  
 ExtraCellular Mutant  
 4256\_at 1619.2 P  
 similarity to E.coli pantothenate synthetase  
 4257\_at 144.2 P  
 Dmc1p interacting protein  
 4258\_at 1455.2 P  
 DNA helicase homolog; homolog of human XPBC, ERCC3  
 4259\_at 9145.8 P  
 molecular chaperone  
 4260\_at 1041.6 P  
 questionable ORF  
 4215\_g\_at 2200.0 P  
 questionable ORF  
 4216\_at 1099.0 P  
 localizes to the plasma membrane  
 4217\_at 211.8 P  
 subunit of DNA polymerase-zeta (Pol-zeta), an enzyme whose sole function appears to be translesion synthesis  
 4218\_at 2278.1 P  
 Tropomyosin isoform 2  
 4219\_at 1948.1 P  
 similarity to M.musculus aminopeptidase  
 4220\_at -87.3 A  
 45-kDa mitochondrial outer membrane protein  
 4221\_at 1186.9 P  
 similarity to Ymk1p  
 4222\_at 1198.8 P  
 mitochondrial inner membrane carrier protein for FAD  
 4223\_at 10277.8 P  
 Ribosomal protein L16A (L21A) (rp22) (YL15)  
 4224\_at 385.4 P  
 hypothetical protein  
 4225\_at 2030.0 P  
 similarity to Drosophila fork head protein  
 4226\_at 1527.7 P  
 similarity to Put3p and to hypothetical protein YJL206c  
 4227\_at 5079.5 P  
 similarity to hypothetical human protein  
 4228\_at 1230.6 P  
 Involved in nucleotide excision repair and regulation of TFIIH  
 4229\_at 2148.2 P  
 weak similarity to Smy2p  
 4230\_at 3375.8 P  
 helicase related protein, snf2 homolog  
 4231\_at 6501.9 P  
 alpha-ketoglutarate dehydrogenase  
 4232\_at 5579.6 P  
 similarity to C.perfringens nanH protein  
 4233\_at 9558.9 P  
 involved in cell cycle regulation and aging  
 4234\_at 330.7 P  
 hypothetical protein  
 4235\_at 706.6 P  
 similarity to antibiotic resistance proteins  
 4236\_at 354.6 P

similarity to antibiotic resistance proteins  
 4192\_at 913.5 P  
 inhibitor of ras  
 4193\_at 2981.4 P  
 ras homolog--GTP binding protein  
 4194\_at 1729.2 P  
 hydrophobic transmembrane domain  
 4195\_at 3896.0 P  
 histidinol-phosphate aminotransferase  
 4196\_at 3600.2 P  
 159-kDa nucleoporin with coiled-coil domain and repeated motifs typical of nucleoporins  
 4197\_at 2297.1 P  
 voltage dependent anion channel (YVDAC2)  
 4198\_at 38.3 A  
 strong similarity to dual-specificity phosphatase Msg5p  
 4199\_at 350.4 P  
 similarity to ankyrin and coiled-coil proteins  
 4200\_at 93.0 A  
 Cytochrome-c oxidase chain Vb  
 4201\_at 1806.9 P  
 weak similarity to hypothetical C.elegans protein  
 4202\_at 6132.8 P  
 The Sec23p-Sec24p complex is one of three cytoplasmic COPII factors involved in ER to Golgi transport  
 4203\_at 1925.0 P  
 similarity to hypothetical S. pombe protein  
  
 4204\_at 105.7 P  
 6-Phosphofructose-2-kinase  
 4205\_at 898.7 P  
 weak similarity to probable transcription factor Ask10p  
 4206\_at 1007.6 P  
 similarity to hypothetical S. pombe protein  
 4207\_at 3741.5 P  
 weak similarity to Dph2 protein  
 4208\_at -58.1 A  
 strong similarity to YIL014c-a  
 4209\_at -247.8 A  
 DNA-binding transcriptional repressor  
 4210\_at -66.5 A  
 similarity to mouse Gcap1 protein and fruit fly Bkm-like sex-determining region hypothetical protein CS314  
 4211\_at 789.6 P  
 intracellular glucoamylase  
 4212\_g\_at -79.9 A  
 intracellular glucoamylase  
 4213\_at 1106.8 P  
 Formation of Mitochondrial Cytochromes 1  
 4214\_at 404.9 P  
 hypothetical protein  
 4170\_at 3652.5 P  
 hypothetical protein  
 4171\_at 49.4 A  
 probable serine/threonine-protein kinase  
 4172\_at 7896.1 P  
 Homo-isocitrate dehydrogenase  
 4173\_at 462.9 P

weak similarity to *S.pombe* hypothetical protein SPBC16A3  
 4174\_at 420.1 P  
 hypothetical protein  
 4175\_at 2552.3 P  
 weak similarity to spt5p  
 4176\_at 3322.0 P  
 similarity to hypothetical *S. pombe* protein  
 4177\_at 960.2 P  
 similarity to hypothetical protein YLR036c  
 4178\_at 3483.6 P  
 weak similarity to *A.thaliana* aminoacid permease AAP4  
 4179\_at 2759.2 P  
 hypothetical protein  
 4180\_at 94.2 A  
 hypothetical protein  
 4181\_at 939.0 P  
 Putative mannosyltransferase of the KRE2 family  
 4182\_at 218.1 P  
 Functions are similar to those of SIN3 and RPD3  
 4183\_at 4184.1 P  
 hypothetical protein  
 4184\_s\_at 2487.4 P  
 Ty3-2 orf C fragment  
 4185\_at 1225.2 P  
 strong similarity to hypothetical protein YDL175c  
 4186\_at 10128.0 P  
 Threonyl-tRNA synthetase, cytoplasmic  
 4187\_at 455.6 P  
 hypothetical protein  
 4188\_at 6060.9 P  
 epsilon-COP coatomer subunit Sec28p  
 4189\_at 7478.7 P  
 RPN2p is a component of the 26S proteasome  
 4190\_at 3504.4 P  
 strong similarity to *E.coli* phosphoglycerate dehydrogenase  
 4191\_at 57.4 A  
 weak similarity to mouse polycystic kidney disease-related protein  
 4147\_at 14.2 A  
 Meiosis-specific protein involved in homologous chromosome synapsis and chiasmata formation  
 4148\_at 203.7 P  
 hypothetical protein  
 4149\_at 7488.5 P  
 mitochondrial acidic matrix protein  
 4150\_at 3152.5 P  
 88 kD component of the Exocyst complex, which contains the gene products encoded by SEC3, SEC5,  
 SEC6, SEC8, SEC10, SEC15 and EXO70  
 4151\_at 2459.0 P  
 hypothetical protein  
 4152\_at 2705.8 P  
 similarity to *C.elegans* hypothetical protein  
 4153\_at 1626.3 P  
 weak similarity to fowlpox virus major core protein  
 4154\_at 1536.1 P  
 nuclear protein, interacts with Gsp1p and Crm1p  
 4155\_at 8647.1 P  
 Arp Complex Subunit

4156_at	255.6	P	
			U1snRNP 70K protein homolog
4157_at	243.3	P	
			questionable ORF
4158_at	520.7	P	
			hypothetical protein
4159_at	295.7	A	
			hypothetical protein
4160_at	161.3	A	
			strong similarity to YER067w
4161_at	2001.1	P	
			similarity to YER064c
4162_at	301.3	P	
			hypothetical protein
4163_at	232.5	P	
			weak similarity to fruit fly NADH dehydrogenase
4164_at	7832.6	P	
			DL-glycerol-3-phosphatase
4165_i_at	15406.6	P	
			Ribosomal protein L34B
4166_at	10237.0	P	
			Maintenance of Mitochondrial DNA 1
4167_at	2943.9	P	
			PHO85 cyclin
4168_at	4138.2	P	
			Protein required for filamentous growth, cell polarity, and cellular elongation
4169_at	3160.3	P	
			ATPase that leads to neomycin-resistant protein when overexpressed
4124_at	7858.7	P	
			plasma membrane protein
4125_at	1492.6	P	
			Met30p contains five copies of WD40 motif and interacts with and regulates Met4p
4126_at	175.8	P	
			Protein with 30%% identity to protein corresponding to YER054
4127_at	1770.8	P	
			weak similarity to zinc finger protein Gcs1p
4128_at	8847.8	P	
			cytochrome b reductase
4129_at	1290.2	P	
			similarity to rat branched-chain alpha-ketoacid dehydrogenase kinase
4130_at	9660.2	P	
			similarity to S.pombe hypothetical protein
4131_at	2954.9	P	
			weak similarity to T.brucei NADH dehydrogenase
4132_at	7494.7	P	
			hypothetical protein
4133_at	1820.3	P	
			General negative regulator of transcription\; may inhibit RNA polymerase II transcription machinery
4134_at	-18.2	A	
			hypothetical protein
4135_at	1268.4	P	
			weak similarity to human cAMP response element-binding protein
4136_at	3048.0	P	
			alpha subunit of casein kinase II
4137_at	3044.9	P	
			beta subunit of capping protein

4138_at	7540.5	P	regulatory subunit of cAMP-dependent protein kinase
4139_at	753.1	A	hypothetical protein
4140_at	786.2	P	Suppressor of Mif Two
4141_at	4076.8	P	integral nuclear membrane protein
4142_at	63.6	P	strong similarity to hypothetical protein YPR071w
4143_at	232.3	A	putative pseudogene
4144_at	7215.4	P	hypothetical protein
4145_at	422.1	P	Irregular
4146_at	18.2	A	weak similarity to E.gracilis RNA polymerase subunit
4101_at	428.5	P	hypothetical protein
4102_at	3616.3	P	similarity to mouse MHC H-2K/t-w5-linked ORF precursor
4103_at	6130.1	P	48.8 kDa protein involved in mitochondrial protein import
4104_at	2964.4	P	45 kDa subunit of RNA polymerase II
4105_at	1585.1	P	phosphoribosyl-5-amino-1-phosphoribosyl-4-imidazolecarboxiamide isomerase
4106_at	1096.4	P	weak similarity to S.pombe hypothetical protein SPAC3F10
4107_at	463.5	P	hypothetical protein
4108_at	1386.3	P	18.3 kD integral membrane protein
4109_at	-31.9	A	encodes a-cell barrier activity on alpha factor
4110_at	-80.5	A	strong similarity to hypothetical protein YIL102c
4111_at	1478.3	P	similarity to Mnn1p
4112_at	434.8	P	Putative member of the ABC family of membrane transporters
4113_at	172.5	A	hypothetical protein
4114_at	4956.3	P	strong similarity to members of the Srp1p/Tip1p family
4115_at	4868.4	P	Derepression Of Telomeric silencing
4116_at	2196.2	P	181aa protein - 20.5 kD
4117_at	1310.3	P	181aa protein - 20.5 kD
4118_at	4755.3	P	Acyl CoA synthase
4119_at	3971.2	P	hypothetical protein



4120\_at 587.0 P  
 similarity to C.elegans hypothetical protein  
 4121\_at 945.1 P  
 similarity to Flx1p  
 4122\_at 3612.8 P  
 similarity to protein disulfide isomerases  
 4123\_at 1475.8 P  
 Synaptobrevin (t-SNARE) homolog present on ER vesicles recycling from Golgi  
 4079\_at 2832.3 P  
 strong similarity to Nbp35p and human nucleotide-binding protein  
 4080\_at 1153.2 P  
 phosphatidylinositol 4,5-bisphosphate 5-phosphatase  
 4081\_at 891.7 P  
 similarity to S.pombe hypothetical protein, weak similarity to human ankyrin  
 4082\_at 948.1 P  
 similarity to D.melanogaster RNA binding protein  
 4083\_at 1138.0 P  
 weak similarity to ATP-dependent RNA helicases  
 4084\_at 3108.5 P  
 weak similarity to mammalian neurofilament triplet H proteins  
 4085\_at 2668.2 P  
 DnaJ-like protein required for Peroxisome biogenesis\; Djp1p is located in the cytosol  
 4086\_at 590.5 P  
 similarity to RNA-binding proteins  
 4087\_at 9063.1 P  
 polyA-specific ribonuclease  
 4088\_at 368.2 P  
 hypothetical protein  
 4089\_at 2164.9 P  
 p48 polypeptide of DNA primase  
 4090\_at 772.3 P  
 encodes YU2B, a component of yeast U2 snRNP  
 4091\_at 1345.2 P  
 hypothetical protein  
 4092\_at 3539.9 P  
 restores protein transport when overexpressed and rRNA stability to a sec23 mutation  
 4093\_at 8624.7 P  
 contains multiple WD repeats and interacts with Qsr1p in two hybrid  
 4094\_at 153.1 A  
 strong similarity to YLR013w, similarity to YMR136w  
 4095\_at 539.3 P  
 hypothetical protein  
 4096\_at 164.1 M  
 an integral subunit of RNase P but not RNase MRP  
 4097\_at 1901.3 P  
 weak similarity to YOL036w  
 4098\_at 527.2 P  
 Transcriptional activator of sulfur amino acid metabolism  
 4099\_at 398.3 P  
 bZIP protein\; transcription factor  
 4100\_at 3671.3 P  
 cell surface flocculin with structure similar to serine\threonine-rich GPI-anchored cell wall proteins  
 4056\_at 566.3 P  
 hypothetical protein  
 4057\_at 2633.8 P  
 mitochondrial RNA splicing

4058_at	3542.8	P
signal peptidase subunit		
4059_at	1156.4	P
Transcriptional activator for allantoin and GABA catabolic genes, contains a Zn[2]-Cys[6] fungal-type binuclear cluster domain in the N-terminal region		
4060_at	807.8	P
G1 Factor needed for normal G1 phase		
4061_at	337.1	P
hypothetical protein		
4062_at	3137.5	P
nitrogen starvation-induced protein phosphatase		
4063_at	84.2	A
allantoinase		
4064_at	148.8	P
allantoin permease		
4065_at	-129.9	A
allantoicase		
4066_at	826.9	P
involved in nitrogen-catabolite metabolism		
4067_at	402.3	P
Malate synthase 2		
4068_at	-100.6	A
ureidoglycolate hydrolase		
4069_at	805.9	P
may be involved in the remodeling chromatin structure		
4070_at	1957.8	P
saccharopine dehydrogenase		
4071_at	5420.3	P
similarity to human corticosteroid 11-beta-dehydrogenase		
4072_at	3202.9	P
similarity to E.coli fabD		
4073_at	9273.6	P
putative glutathione-peroxidase		
4074_at	1608.7	P
Glutathione transferase		
4075_at	260.4	P
GPI-anchored aspartic protease		
4076_f_at	136.1	P
similarity to members of the Srp1p/Tip1p family		
4077_at	640.2	P
weak similarity to B.licheniformi hypothetical protein P20		
4078_i_at	131.7	P
putative pseudogene		
4032_f_at	64.9	A
putative pseudogene		
4033_f_at	7900.1	P
putative pseudogene		
4034_at	26.8	A
hypothetical protein		
4035_at	134.7	A
questionable ORF		
4036_at	-16.6	A
questionable ORF		
4037_at	16.7	A
questionable ORF		
4038_at	532.1	P

questionable ORF  
4039\_at 29.7 A

questionable ORF  
4040\_at 39.8 A

questionable ORF  
4041\_at 94.1 M

hypothetical protein  
4042\_at 494.2 P

questionable ORF  
4043\_s\_at 238.1 A

invertase (sucrose hydrolyzing enzyme)  
4044\_s\_at 1882.8 P

Mps One Binder  
4045\_s\_at 91.3 A

Ribonucleotide reductase (ribonucleoside-diphosphate reductase) large subunit  
4046\_at -20.0 A

non-annotated SAGE orf Found forward in NC\_001141 between 197558 and 197818 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4047\_at 300.8 P

non-annotated SAGE orf Found forward in NC\_001141 between 268308 and 268472 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4048\_at -20.4 A

non-annotated SAGE orf Found forward in NC\_001141 between 414832 and 414975 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4049\_at 1162.8 P

non-annotated SAGE orf Found forward in NC\_001141 between 438483 and 438695 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4050\_at 884.7 P

non-annotated SAGE orf Found forward in NC\_001141 between 144104 and 144268 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4051\_at 145.5 A

non-annotated SAGE orf Found forward in NC\_001141 between 173167 and 173406 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4052\_i\_at -31.0 A

non-annotated SAGE orf Found forward in NC\_001141 between 324288 and 324437 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4053\_s\_at 4341.8 P

non-annotated SAGE orf Found forward in NC\_001141 between 324288 and 324437 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4054\_at 4768.7 P

non-annotated SAGE orf Found forward in NC\_001141 between 350298 and 350507 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4055\_at -183.4 A

non-annotated SAGE orf Found forward in NC\_001141 between 398511 and 398723 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4009\_at 7220.2 P

non-annotated SAGE orf Found forward in NC\_001141 between 26990 and 27169 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4010\_at -4.1 A

non-annotated SAGE orf Found reverse in NC\_001141 between 139370 and 139600 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4011\_at 1570.1 P

non-annotated SAGE orf Found reverse in NC\_001141 between 139503 and 139682 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4012\_at 405.7 A

non-annotated SAGE orf Found forward in NC\_001141 between 169709 and 169858 with 100% identity.

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4013\_i\_at -35.9 A  
non-annotated SAGE orf Found reverse in NC\_001141 between 210545 and 210736 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4014\_at 563.6 P  
non-annotated SAGE orf Found forward in NC\_001141 between 230002 and 230175 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4015\_at 535.8 P  
non-annotated SAGE orf Found forward in NC\_001141 between 258363 and 258509 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4016\_at 553.5 A  
non-annotated SAGE orf Found forward in NC\_001141 between 258506 and 258640 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4017\_at 241.9 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 324125 and 324358 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4018\_at 165.9 A  
non-annotated SAGE orf Found reverse in NC\_001141 between 385561 and 385698 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4019\_at 1103.0 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 385816 and 385959 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4020\_at 1101.2 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 386017 and 386157 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4021\_at 73.7 P  
non-annotated SAGE orf Found forward in NC\_001141 between 387799 and 388053 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4022\_at 137.3 P  
non-annotated SAGE orf Found forward in NC\_001141 between 425520 and 425678 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4023\_s\_at 112.8 P  
non-annotated SAGE orf Found forward in NC\_001141 between 21392 and 21526 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4024\_at 335.6 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 30695 and 30898 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4025\_i\_at 1011.6 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 51611 and 51751 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4026\_at 468.1 A  
non-annotated SAGE orf Found forward in NC\_001141 between 122286 and 122549 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4027\_at 1021.2 P  
non-annotated SAGE orf Found forward in NC\_001141 between 154868 and 155122 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4028\_at 625.4 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 231169 and 231306 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4029\_at 1435.6 P  
non-annotated SAGE orf Found reverse in NC\_001141 between 355843 and 356004 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4030\_at 931.6 P  
non-annotated SAGE orf Found forward in NC\_001141 between 385618 and 385767 with 100% identity.  
See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251  
4031\_at 1498.5 P

snRNA

3983\_at 57.6 A  
cytochrome-c oxidase subunit II  
3984\_r\_at 24.5 A  
questionable ORF Found forward in NC\_001224 between 74495 and 74804 with 99.677419% identity.  
3985\_i\_at 44.8 P  
questionable ORF Found forward in NC\_001224 between 74495 and 74804 with 99.677419% identity.  
3986\_f\_at 154.2 P  
questionable ORF Found forward in NC\_001224 between 74495 and 74804 with 99.677419% identity.  
3987\_at 16.1 A  
similarity to Podospora cytb intron 1a and coll intron protein 2 Found forward in NC\_001224 between 74755 and 75949 with 97.154812% identity.  
3988\_at 70.7 A  
cytochrome-c oxidase chain III  
3989\_at 0.3 A  
strong similarity to maturase-related hypothetical protein RF2  
3990\_i\_at -10.0 A  
similarity to hypothetical protein Sgc2p Found forward in NC\_001224 between 75041 and 75472 with 64.392324% identity.  
3991\_r\_at -108.5 A  
similarity to hypothetical protein Sgc2p Found forward in NC\_001224 between 75041 and 75472 with 64.392324% identity.  
3992\_f\_at -107.2 A  
similarity to hypothetical protein Sgc2p Found forward in NC\_001224 between 75041 and 75472 with 64.392324% identity.  
3993\_at -11.9 A  
strong similarity to Yeast (*S.uvarum*) mitochondria RF2 gene and maturase-related hypothetical protein RF2  
3994\_at 749.1 P  
similarity to Sauroleishmania NADH dehydrogenase (ubiquinone) chain 5 Found forward in NC\_001224 between 3940 and 4167 with 99.122807% identity.  
3995\_i\_at 67.8 A  
RF2 protein Found forward in NC\_001224 between 8526 and 8736 with 84.489796% identity.  
3996\_s\_at 2050.1 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 13818 and 13988 with 100% identity.  
3997\_at 2914.8 P  
questionable ORF Found reverse in NC\_001224 between 13748 and 14122 with 100% identity.  
3998\_at 362.9 P  
COX1 intron 1 protein Found forward in NC\_001224 between 13818 and 16322 with 99.92016% identity.  
3999\_at 1378.6 P  
COX1 intron 2 protein Found forward in NC\_001224 between 16473 and 18830 with 99.872774% identity.  
4000\_at 1146.2 A  
COX1 intron 3 protein Found forward in NC\_001224 between 18992 and 19996 with 98.308458% identity.  
4001\_at 7622.9 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 20508 and 20984 with 99.790356% identity.  
4002\_at 133.3 P  
DNA endonuclease I-Scell Found forward in NC\_001224 between 20985 and 21935 with 99.684543% identity.  
4003\_s\_at 1769.1 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 21995 and 22246 with 97.222222% identity.  
4004\_at 1287.9 P

probable mRNA maturase al5-alpha Found forward in NC\_001224 between 21995 and 23167 with 99.40324% identity.

4005\_at 10005.0 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 23612 and 23746 with 100% identity.

4006\_at 108.1 P  
COX1 intron protein al5-beta Found forward in NC\_001224 between 24120 and 25151 with 96.317829% identity.

4007\_at 932.7 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 26228 and 26530 with 99.339934% identity.

4008\_at 271.2 P  
cytochrome-c oxidase subunit I Found forward in NC\_001224 between 26627 and 26701 with 100% identity.

3956\_i\_at 1552.2 P  
F1F0-ATPase complex, F0 subunit 8 Found forward in NC\_001224 between 27666 and 27812 with 99.319728% identity.

3957\_r\_at 802.6 P  
F1F0-ATPase complex, F0 subunit 8 Found forward in NC\_001224 between 27666 and 27812 with 99.319728% identity.

3958\_r\_at 163.9 A  
similarity to mouse Gcap1 Found forward in NC\_001224 between 28122 and 28444 with 88.588589% identity.

3959\_at 264.7 P  
F1F0-ATPase complex, FO A subunit Found forward in NC\_001224 between 28487 and 29266 with 97.564103% identity.

3960\_at -45.8 A  
endonuclease SCEI, small subunit Found forward in NC\_001224 between 46046 and 46361 with 69.393939% identity.

3961\_i\_at -50.6 A  
endonuclease SCEI, small subunit Found forward in NC\_001224 between 8238 and 8509 with 72.463768% identity.

3962\_f\_at 301.4 P  
endonuclease SCEI, small subunit Found forward in NC\_001224 between 8238 and 8509 with 72.463768% identity.

3963\_at -18.1 A  
endonuclease SCEI, small subunit Found forward in NC\_001224 between 11057 and 11551 with 65.530303% identity.

3964\_at -34.7 A  
endonuclease SCEI, small subunit Found forward in NC\_001224 between 77067 and 77606 with 61.663653% identity.

3965\_i\_at -153.6 A  
ORF5 Found forward in NC\_001224 between 30874 and 31014 with 100% identity.

3966\_i\_at -72.3 A  
similarity to T.brucei mitochondrion protein SGC6 Found reverse in NC\_001224 between 34032 and 34430 with 88.279302% identity.

3967\_r\_at -30.2 A  
similarity to T.brucei mitochondrion protein SGC6 Found reverse in NC\_001224 between 34032 and 34430 with 88.279302% identity.

3968\_s\_at 726.2 P  
ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC\_001224 between 36540 and 36954 with 100% identity.

3969\_at 46.5 A  
mRNA maturase bl2 Found forward in NC\_001224 between 37723 and 38579 with 99.883314% identity.

3970\_s\_at 719.2 P  
ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC\_001224 between 39141

and 39217 with 100% identity.

3971\_at -24.5 A  
mRNA maturase bl3 Found forward in NC\_001224 between 39141 and 40265 with 98.577778% identity.

3972\_s\_at 745.2 P  
ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC\_001224 between 40841 and 41093 with 100% identity.

3973\_at 68.5 P  
mRNA maturase bl4 Found forward in NC\_001224 between 40815 and 42251 with 99.860821% identity.

3974\_at 489.6 P  
ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC\_001224 between 42508 and 42561 with 100% identity.

3975\_at 1685.7 P  
ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC\_001224 between 43297 and 43647 with 100% identity.

3976\_at 11865.5 P  
F1F0-ATPase complex, F0 subunit 9 Found forward in NC\_001224 between 46723 and 46953 with 100% identity.

3977\_i\_at 353.7 A  
similarity to honeybee mitochondrion NADH dehydrogenase chain 6 (SGC4) Found reverse in NC\_001224 between 48858 and 49169 with 99.679487% identity.

3978\_r\_at -62.5 A  
similarity to honeybee mitochondrion NADH dehydrogenase chain 6 (SGC4) Found reverse in NC\_001224 between 48858 and 49169 with 99.679487% identity.

3979\_i\_at 438.8 P  
mitochondrial ribosomal protein Found forward in NC\_001224 between 48901 and 50097 with 98.436214% identity.

3980\_r\_at 23.5 A  
mitochondrial ribosomal protein Found forward in NC\_001224 between 48901 and 50097 with 98.436214% identity.

3981\_at 22.4 A  
probable mRNA maturase in 21S rRNA intron Found forward in NC\_001224 between 61193 and 61729 with 100% identity.

3982\_at -49.5 A  
kanamycin resistance cassette

3932\_at -67.6 A  
MAL-activator 23 (MAL23) gene

3933\_s\_at 1168.0 P  
Required for the catabolism of melibiose and regulated by several GAL genes

3934\_at 1201.4 P  
Protein that confers resistance to molasses

3935\_at -152.0 A  
Tropomyosin-related protein with transmembrane domain and basic C-terminal

3936\_at 464.0 P  
invertase (sucrose hydrolyzing enzyme)

3937\_g\_at 2051.0 P  
invertase (sucrose hydrolyzing enzyme)

3938\_at 2297.5 P  
Protein involved in targeting of plasma membrane [H<sup>+</sup>]ATPase

3939\_at 386.0 P  
Probable aldehyde dehydrogenase (EC 1.2.1.-)

3940\_at 409.1 P  
Degradation in the Endoplasmic Reticulum

3941\_at 815.4 P  
SerVThr protein kinase

3942\_at 5076.3 P  
bZIP (basic-leucine zipper) protein

3943_i_at	9943.8	P	
bZIP (basic-leucine zipper) protein			
3944_f_at	4690.4	P	
bZIP (basic-leucine zipper) protein			
3945_at	1089.8	P	
Protein essential for mitochondrial biogenesis and cell viability			
3946_at	1939.5	P	
Protein essential for mitochondrial biogenesis and cell viability			
3947_at	7556.0	P	
strong similarity to holacid-halidohydrolase			
3948_s_at	1122.5	P	
probable serine/threonine-specific protein kinase (EC 2.7.1.-)			
3949_i_at	3024.3	P	
protein of unknown function			
3950_at	2110.6	P	
Rho family GTPase			
3951_at	3267.8	P	2
micron plasmid recombinase			
3952_at	5332.3	P	2
micron plasmid rep1 protein			
3953_at	6278.3	P	2
micron plasmid D protein			
3954_at	6342.6	P	2
micron plasmid rep2 protein			
3955_at	418.7	P	2
micron plasmid recombinase			
3907_f_at	1420.5	P	
strong similarity to subtelomeric encoded proteins			
3908_i_at	14.8	A	
Ty1 LTR			
3909_f_at	72.8	A	
Ty1 LTR			
3910_at	42.7	A	
Ty1 LTR			
3911_at	-13.5	A	
Ty1 LTR			
3912_f_at	9937.0	P	
Ty1 LTR			
3913_s_at	5824.5	A	
Full length Ty1			
3914_s_at	15116.6	P	
Full length Ty1			
3915_s_at	11748.3	P	
Full length Ty1			
3916_s_at	13614.1	P	
Full length Ty1			
3917_f_at	9381.3	P	
Full length Ty1			
3918_f_at	12836.9	P	
Full length Ty1			
3919_f_at	10983.5	P	
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in NC_001133 between 160593 and 164183 with 100% identity.			
3920_f_at	12545.8	P	
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in NC_001133 between 160593 and 164183 with 100% identity.			



3921\_s\_at 12273.2 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in NC\_001133 between 164540 and 165862 with 100% identity.

3922\_f\_at 9581.2 P  
 Ty1 LTR

3923\_f\_at 2590.1 P  
 tRNA-Ala

3924\_f\_at 3516.2 P  
 tRNA-Ser

3925\_f\_at 8445.0 P  
 Ty3 LTR Found forward in NC\_001133 between 182610 and 182949 with 100% identity.

3926\_f\_at 3922.1 P  
 Ty1 LTR

3927\_f\_at 3689.5 P  
 Ty2 LTR

3928\_f\_at 37.2 A  
 Ty1 LTR

3929\_s\_at 757.3 P  
 tRNA-Thr

3930\_i\_at 90.1 P  
 Ty1 LTR

3931\_f\_at 726.8 P  
 Ty1 LTR

3884\_f\_at 2927.4 P  
 tRNA-Glu

3885\_f\_at 4826.9 P  
 tRNA-Ala

3886\_f\_at 158.6 P  
 Ty3 LTR

3887\_f\_at 1128.4 P  
 Ty4 LTR

3888\_s\_at 58.3 M  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 197614 and 198699 with 100% identity.

3889\_s\_at 364.3 P  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 197614 and 198699 with 100% identity.

3890\_s\_at -916.9 A  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 197614 and 198858 with 100% identity.

3891\_s\_at -11.9 A  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 198701 and 203026 with 100% identity.

3892\_s\_at 157.5 A  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 198701 and 203026 with 100% identity.

3893\_s\_at -95.8 A  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 198701 and 203026 with 100% identity.

3894\_s\_at -7.9 A  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 198701 and 203026 with 100% identity.

3895\_s\_at 426.5 P  
 Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 198701 and 203026 with 100% identity.

3896\_s\_at -71.5 A

Full length Ty4		
3897_s_at	36.2	A
Full length Ty4		
3898_s_at	-7.1	A
Full length Ty4		
3899_s_at	117.2	P
Full length Ty4		
3900_f_at	2068.8	P
Full length Ty4		
3901_f_at	1307.7	P
Ty4 LTR		
3902_f_at	4177.3	P
Ty1 LTR		
3903_i_at	9.7	A
Ty1 LTR		
3904_f_at	1589.2	P
Ty1 LTR		
3905_s_at	2223.0	P
tRNA-Asp		
3906_f_at	3480.5	P
tRNA-Arg		
3859_i_at	-95.5	A
Ty1 LTR		
3860_f_at	7414.7	P
Ty1 LTR		
3861_f_at	7346.4	P
Ty1 LTR		
3862_f_at	1346.1	P
tRNA-Arg		
3863_f_at	1427.5	P
tRNA-Arg		
3864_i_at	187.3	A
Ty1 LTR		
3865_f_at	-8.5	A
Ty1 LTR		
3866_at	9.0	A
Ty1 LTR		
3867_s_at	6827.4	P
tRNA-Val		
3868_s_at	201.2	P
tRNA-Met		
3869_f_at	-580.4	P
tRNA-Gly		
3870_s_at	2608.6	P
tRNA-Lys		
3871_at	-32.5	A
Ty4 LTR		
3872_i_at	17.7	A
Ty1 LTR		
3873_f_at	-22.1	A
Ty1 LTR		
3874_i_at	-12.7	A
Ty1 LTR		
3875_f_at	12.0	A
Ty1 LTR		
3876_at	826.7	P

Ty4 LTR		
3877_at	636.7	P
Ty1 LTR		
3878_s_at	4731.0	P
tRNA-Leu		
3879_f_at	9104.2	P
Ty1 LTR		
3880_f_at	10303.9	P
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 473751 and 477716 with 100% identity.		
3881_f_at	10700.3	P
Full length Ty1		
3882_f_at	10873.4	P
Full length Ty1		
3883_f_at	6069.3	P
Ty1 LTR		
3835_s_at	17851.7	P
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 479334 and 483300 with 100% identity.		
3836_f_at	8385.9	P
Full length Ty1		
3837_f_at	10697.7	P
Ty1 LTR		
3838_s_at	724.6	P
tRNA-Met		
3839_at	-36.7	A
Ty1 LTR		
3840_f_at	3771.2	P
tRNA-Ser		
3841_at	459.5	P
Ty1 LTR		
3842_f_at	820.3	P
tRNA-Gly		
3843_at	330.0	P
Ty1 LTR		
3844_f_at	9188.1	P
Ty1 LTR		
3845_i_at	-217.6	A
tRNA-Arg		
3846_f_at	24.5	A
tRNA-Arg		
3847_i_at	-390.5	A
Ty1 LTR		
3848_f_at	4484.6	P
Ty1 LTR		
3849_f_at	118.8	A
Ty1 LTR		
3850_at	858.5	P
Ty1 LTR		
3851_s_at	8579.2	P
Protein with similarity to members of the Ybr302pVYcr007pVCos8pVCos9p family, coded from subtelomeric region		
3852_f_at	3703.3	P
Protein with similarity to members of the Ybr302pVYcr007pVCos8pVCos9p family, coded from subtelomeric region		
3853_f_at	361.3	A

strong similarity to subtelomeric encoded proteins

3854\_f\_at 74.2 A

strong similarity to Gin11p, YKL225w and other subtelomeric encoded proteins

3855\_s\_at -2.0 A

strong similarity to subtelomeric encoded proteins

3856\_at -52.8 A

tRNA-Thr

3857\_at -54.9 A

Ty1 LTR

3858\_s\_at 411.6 P

tRNA-Asn

3812\_at 45.8 A

Ty1 LTR

3813\_f\_at 2842.7 P

tRNA-Glu

3814\_f\_at 1362.8 P

tRNA-Arg

3815\_i\_at -91.8 A

Ty1 LTR

3816\_f\_at 31.8 A

Ty1 LTR

3817\_f\_at 8071.9 P

Ty3 LTR

3818\_at 314.9 A

Ty1 LTR

3819\_f\_at 4257.9 P

tRNA-Ala

3820\_f\_at 1140.5 P

Ty1 LTR

3821\_f\_at 1887.7 P

tRNA-His

3822\_f\_at 2998.2 P

Ty1 LTR

3823\_f\_at 3130.2 P

Ty1 LTR

3824\_f\_at 9468.6 P

Ty1 LTR

3825\_at -60.2 A

Ty1 LTR

3826\_at -93.3 A

Ty1 LTR

3827\_f\_at 4725.3 P

tRNA-Arg

3828\_f\_at 1165.2 A

Ty1 LTR

3829\_f\_at 12043.4 P

Ty1 LTR

3830\_f\_at 5779.5 P

tRNA-Ala

3831\_s\_at 90.1 A

strong similarity to subtelomeric encoded proteins

3832\_s\_at 30.5 A

strong similarity to subtelomeric encoded proteins

3833\_f\_at -72.8 A

Ty5 LTR

3834\_s\_at 6666.5 P

strong similarity to subtelomeric encoded proteins

3789\_s\_at 8067.4 P

strong similarity to subtelomeric encoded proteins

3790\_s\_at 7638.9 P

strong similarity to subtelomeric encoded proteins

3791\_s\_at 874.7 P

strong similarity to subtelomeric encoded proteins

3792\_s\_at 9246.1 P

strong similarity to subtelomeric encoded proteins

3793\_f\_at 1082.2 P

Ty1 LTR

3794\_f\_at 3301.7 P

tRNA-Ser

3795\_at -86.8 A

Ty3 LTR

3796\_f\_at 1971.9 P

tRNA-Ala

3797\_f\_at 8863.7 P

Ty1 LTR

3798\_s\_at 15212.0 P

*Saccharomyces cerevisiae* chromosome XII, complete chromosome sequence. Found reverse in NC\_001144 between 215441 and 219403 with 100% identity.

3799\_f\_at 8095.1 P

Ty1 LTR

3800\_at 36.7 A

Ty1 LTR

3801\_f\_at 703.4 P

Ty1 LTR

3802\_f\_at 3930.2 P

Ty3 LTR

3803\_f\_at 4401.2 P

tRNA-Arg

3804\_f\_at 6013.1 P

tRNA-Gln

3805\_f\_at 4458.4 P

Ty1 LTR

3806\_s\_at 8935.8 P

35S ribosomal RNA

3807\_s\_at 3504.6 P

35S ribosomal RNA

3808\_s\_at 10531.9 P

35S ribosomal RNA

3809\_s\_at 10664.9 P

35S ribosomal RNA

3810\_s\_at 1255.6 P

35S ribosomal RNA

3811\_s\_at 2259.7 P

35S ribosomal RNA

3764\_s\_at 1929.7 P

35S ribosomal RNA

3765\_s\_at 2499.9 P

25S ribosomal RNA

3766\_s\_at 10957.5 P

25S ribosomal RNA

3767\_s\_at 1050.6 P

18S ribosomal RNA

3768_i_at	1873.8	P
5S ribosomal RNA		
3769_s_at	1680.2	P
5S ribosomal RNA		
3770_i_at	1818.5	P
5S ribosomal RNA		
3771_f_at	10610.3	P
Ty1 LTR		
3772_f_at	9408.7	P
Full length Ty1		
3773_f_at	12632.1	P
Full length Ty1		
3774_f_at	10323.1	P
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found reverse in NC_001144 between 476334 and 480296 with 100% identity.		
3775_f_at	9919.9	P
Ty1 LTR		
3776_i_at	-140.8	A
Ty1 LTR		
3777_f_at	448.7	A
Ty1 LTR		
3778_f_at	7386.3	P
Ty1 LTR		
3779_f_at	10127.0	P
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 594749 and 598706 with 100% identity.		
3780_f_at	7604.3	P
Full length Ty1		
3781_f_at	10687.8	P
Full length Ty1		
3782_f_at	8061.0	P
Ty1 LTR		
3783_at	178.7	A
Ty1 LTR		
3784_at	-15.7	A
Ty4 LTR		
3785_f_at	8565.8	P
Ty1 LTR		
3786_s_at	13605.6	P
TY1B protein Found forward in NC_001144 between 652918 and 653385 with 100% identity.		
3787_f_at	9560.1	P
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 654177 and 656387 with 100% identity.		
3788_f_at	14081.5	P
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 654177 and 656387 with 100% identity.		
3740_f_at	7741.9	P
Full length Ty1		
3741_f_at	9729.3	P
Full length Ty1		
3742_f_at	6702.6	P
Ty1 LTR		
3743_f_at	5233.6	P
tRNA-Ala		
3744_i_at	3226.7	P
Ty3 LTR		

3745_f_at	1867.4	P
Ty3 LTR		
3746_at	404.7	P
Ty1 LTR		
3747_at	-52.2	A
Ty1 LTR		
3748_i_at	1.0	A
Ty1 LTR		
3749_r_at	16.0	A
Ty1 LTR		
3750_f_at	178.6	P
Ty1 LTR		
3751_f_at	7704.2	P
Ty2 LTR		
3752_f_at	1587.9	P
Ty1 LTR		
3753_s_at	645.0	P
tRNA-Ile		
3754_s_at	2478.2	P
tRNA-Ser		
3755_f_at	244.4	M
Ty3 LTR		
3756_i_at	-17.3	A
Ty1 LTR		
3757_f_at	5941.6	P
Ty1 LTR		
3758_f_at	3508.9	P
tRNA-Glu		
3759_f_at	3348.5	P
Ty1 LTR		
3760_at	892.1	P
tRNA-Arg		
3761_f_at	8764.7	P
Ty2 LTR		
3762_s_at	7772.0	P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 941478 and 942778 with 100% identity.

3763_s_at	3637.4	P
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Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 941478 and 942778 with 100% identity.

3717_s_at	12251.6	P
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Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 942777 and 946791 with 100% identity.

3718_s_at	15314.5	P
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Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 942777 and 946791 with 100% identity.

3719_s_at	9185.0	P
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Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 942777 and 946791 with 100% identity.

3720_f_at	12727.2	P
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Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 942777 and 946791 with 100% identity.

3721_s_at	9659.1	P
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Full length Ty2

3722_s_at	10969.1	P
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Full length Ty2

3723_f_at	11688.1	P
Full length Ty2		
3724_f_at	7795.1	P
Ty2 LTR		
3725_at	1209.4	P
Ty1 LTR		
3726_f_at	5599.0	P
Ty2 LTR		
3727_f_at	5348.6	P
Full length Ty2		
3728_f_at	8988.2	P
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found reverse in NC_001144 between 976606 and 980109 with 100% identity.		
3729_f_at	4374.5	P
Ty2 LTR		
3730_at	739.8	P
Ty1 LTR		
3731_s_at	1024.4	P
strong similarity to subtelomeric encoded proteins		
3732_s_at	642.6	P
strong similarity to subtelomeric encoded proteins		
3733_s_at	1562.8	P
strong similarity to subtelomeric encoded proteins		
3734_s_at	3223.9	P
strong similarity to subtelomeric encoded proteins		
3735_f_at	10353.2	P
strong similarity to subtelomeric encoded proteins		
3736_s_at	1836.2	P
strong similarity to subtelomeric encoded proteins		
3737_s_at	1527.7	P
strong similarity to subtelomeric encoded proteins		
3738_s_at	10033.7	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p (COS3 and YBR302C code for identical proteins)		
3739_f_at	9531.5	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p (COS3 and YBR302C code for identical proteins)		
3695_f_at	1578.8	P
tRNA-Arg		
3696_at	63.1	P
Ty1 LTR		
3697_f_at	7801.6	P
Ty2 LTR		
3698_f_at	747.6	P
tRNA-Gly		
3699_f_at	11471.1	P
Ty1 LTR		
3700_f_at	7504.1	P
Full length Ty1		
3701_f_at	11282.7	P
Ty1 LTR		
3702_f_at	9901.5	P
Ty1 LTR		
3703_f_at	10450.8	P
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 197939 and 201896 with 100% identity.		



3704_f_at	9596.2	P
Full length Ty1		
3705_f_at	10349.4	P
Full length Ty1		
3706_f_at	8364.3	P
Ty1 LTR		
3707_f_at	3481.3	P
tRNA-Ser		
3708_at	-68.3	A
Ty4 LTR		
3709_f_at	2813.4	P
tRNA-Glu		
3710_f_at	4210.9	P
tRNA-Ala		
3711_f_at	8054.9	P
Ty1 LTR		
3712_s_at	7906.3	P
Full length Ty1		
3713_s_at	8947.2	P
Full length Ty1		
3714_f_at	8279.8	P
Full length Ty1		
3715_f_at	9585.0	P
Ty1 LTR		
3716_f_at	1815.9	P
tRNA-His		
3671_f_at	9072.2	P
Ty1 LTR		
3672_f_at	8743.8	P
Full length Ty1		
3673_f_at	9206.0	P
Ty1 LTR		
3674_i_at	638.8	A
Ty1 LTR		
3675_r_at	111.9	A
Ty1 LTR		
3676_f_at	164.7	A
Ty1 LTR		
3677_f_at	199.7	P
Ty1 LTR		
3678_at	-24.0	A
Ty1 LTR		
3679_at	69.6	A
Ty1 LTR		
3680_i_at	-37.1	A
Ty1 LTR		
3681_s_at	7.9	A
Ty1 LTR		
3682_i_at	-27.4	A
Ty1 LTR		
3683_f_at	170.3	P
Ty1 LTR		
3684_f_at	1250.0	P
Ty4 LTR		
3685_f_at	2743.5	P
Ty1 LTR		

3686_f_at	137.1	P
Ty1 LTR		
3687_f_at	1587.4	P
tRNA-Arg		
3688_f_at	5367.6	P
tRNA-Ala		
3689_f_at	6315.2	P
Ty2 LTR		
3690_f_at	2246.5	P
tRNA-Gln		
3691_f_at	1651.2	P
Ty4 LTR		
3692_at	37.6	A
Ty1 LTR		
3693_f_at	171.1	P
Ty1 LTR		
3694_at	52.9	A
strong similarity to subtelomeric encoded proteins		
3646_s_at	324.0	P
strong similarity to subtelomeric encoded proteins		
3647_f_at	847.5	P
strong similarity to subtelomeric encoded proteins		
3648_f_at	9806.6	P
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3649_f_at	361.5	A
tRNA-Gly		
3650_f_at	2061.5	P
Ty4 LTR		
3651_f_at	9727.2	P
Ty1 LTR		
3652_f_at	8918.3	P
Full length Ty1		
3653_f_at	10013.2	P
Ty1 LTR		
3654_i_at	42.4	A
Ty3 LTR		
3655_f_at	-7.6	A
Ty3 LTR		
3656_f_at	6645.0	P
Ty1 LTR		
3657_f_at	9013.8	P
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 520758 and 524702 with 100% identity.		
3658_f_at	8619.2	P
Full length Ty1		
3659_f_at	7659.0	P
Full length Ty1		
3660_f_at	6562.7	P
Ty1 LTR		
3661_at	2997.9	P
Ty3 LTR		
3662_f_at	7875.5	P
Ty3 LTR		
3663_f_at	1256.1	P
Ty4 LTR		

3664_f_at	7903.5	P
Ty2 LTR		
3665_f_at	9039.0	P
Full length Ty2		
3666_f_at	8793.4	P
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found reverse in NC_001146 between 562383 and 566402 with 100% identity.		
3667_f_at	8466.7	P
Ty2 LTR		
3668_f_at	5144.4	P
tRNA-Pro		
3669_f_at	5446.1	P
Ty1 LTR		
3670_f_at	773.1	P
Ty4 LTR		
3621_i_at	-37.1	A
Ty3 LTR		
3622_f_at	8951.4	P
Ty3 LTR		
3623_f_at	7678.0	P
Ty1 LTR		
3624_at	1384.5	P
Ty1 LTR		
3625_at	588.0	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3626_i_at	988.9	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3627_r_at	753.7	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3628_f_at	80.4	A
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3629_f_at	410.4	A
strong similarity to subtelomeric encoded proteins		
3630_at	17.1	A
Ty1 LTR		
3631_s_at	1256.3	P
Ty4 LTR		
3632_at	-34.5	A
Ty1 LTR		
3633_f_at	248.7	M
tRNA-Gly		
3634_f_at	520.4	P
Ty1 LTR		
3635_f_at	10017.7	P
Ty1 LTR		
3636_f_at	10695.2	P
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 119305 and 123267 with 100% identity.		
3637_f_at	9078.4	P
Full length Ty1		
3638_f_at	10354.5	P
Full length Ty1		

3639_f_at	11639.9	P
Ty1 LTR		
3640_f_at	557.5	P
tRNA-Gly		
3641_f_at	50.5	A
Ty3 LTR		
3642_at	-78.7	A
Ty1 LTR		
3643_i_at	-851.2	A
Ty1 LTR		
3644_f_at	1103.2	P
Ty1 LTR		
3645_f_at	290.4	P
tRNA-Gly		
3597_at	-17.6	A
Ty1 LTR		
3598_f_at	4421.7	P
tRNA-Arg		
3599_at	-92.6	A
Ty1 LTR		
3600_i_at	-261.5	A
Ty3 LTR		
3601_f_at	61.6	A
Ty3 LTR		
3602_at	163.8	A
Ty1 LTR		
3603_at	194.3	P
Ty1 LTR		
3604_f_at	173.6	A
tRNA-Gly		
3605_f_at	62.5	P
Ty1 LTR		
3606_f_at	8613.6	P
Ty1 LTR		
3607_f_at	6299.1	P
Full length Ty1		
3608_f_at	9531.9	P
Ty1 LTR		
3609_i_at	42.0	A
Ty1 LTR		
3610_f_at	132.3	A
Ty1 LTR		
3611_f_at	113.0	A
Ty1 LTR		
3612_f_at	8338.3	P
Ty2 LTR		
3613_i_at	165.8	A
Ty1 LTR		
3614_f_at	121.0	A
Ty1 LTR		
3615_i_at	-36.6	A
Ty1 LTR		
3616_f_at	188.3	P
Ty1 LTR		
3617_f_at	1433.8	P
Ty4 LTR		

3618_f_at	6889.7	P
Ty2 LTR		
3619_f_at	9171.8	P
Full length Ty2		
3620_f_at	11433.0	P
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found reverse in NC_001147 between 704417 and 708436 with 100% identity.		
3572_f_at	6652.0	P
Ty2 LTR		
3573_f_at	1340.0	P
Ty4 LTR		
3574_f_at	2391.0	P
tRNA-Ala		
3575_f_at	6027.3	P
Ty3 LTR		
3576_f_at	1223.3	A
Ty3 LTR		
3577_at	143.3	P
Ty1 LTR		
3578_f_at	5596.5	P
Ty2 LTR		
3579_f_at	10784.4	P
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 971863 and 975882 with 100% identity.		
3580_f_at	10731.4	P
Full length Ty2		
3581_f_at	5600.8	P
Ty2 LTR		
3582_f_at	7062.3	P
Ty1 LTR		
3583_i_at	382.2	P
Ty1 LTR		
3584_f_at	88.5	P
Ty1 LTR		
3585_f_at	-5.7	A
Ty3 LTR		
3586_f_at	8766.1	P
Ty1 LTR		
3587_f_at	9770.2	P
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 58054 and 62016 with 100% identity.		
3588_f_at	9409.6	P
Full length Ty1		
3589_f_at	11363.2	P
Full length Ty1		
3590_f_at	9021.3	P
Ty1 LTR		
3591_f_at	5201.7	P
Ty2 LTR		
3592_i_at	-1031.3	A
Ty1 LTR		
3593_f_at	2073.8	P
Ty1 LTR		
3594_f_at	3295.6	P
tRNA-Glu		
3595_at	-20.1	A

Ty1 LTR		
3596_f_at	5901.1	P
Ty2 LTR		
3548_s_at	1728.9	P
tRNA-Cys		
3549_f_at	44.2	A
Ty1 LTR		
3550_i_at	-58.9	A
Ty1 LTR		
3551_f_at	1119.1	A
Ty1 LTR		
3552_f_at	-26.7	A
Ty1 LTR		
3553_f_at	1423.6	P
Ty4 LTR		
3554_f_at	1875.9	P
Full length Ty4		
3555_s_at	287.3	P
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 437328 and 439490 with 100% identity.		
3556_s_at	244.5	A
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 437328 and 439490 with 100% identity.		
3557_s_at	19.9	A
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 439423 and 442737 with 100% identity.		
3558_f_at	1245.8	P
Ty4 LTR		
3559_f_at	10391.7	P
Ty1 LTR		
3560_at	244.0	P
Ty1 LTR		
3561_f_at	-157.8	P
tRNA-Gly		
3562_f_at	2726.1	P
tRNA-Ser		
3563_s_at	438.5	P
tRNA-Thr		
3564_f_at	9704.1	P
Ty3 LTR		
3565_at	187.5	A
Ty1 LTR		
3566_i_at	50.7	A
Ty1 LTR		
3567_r_at	13.5	A
Ty1 LTR		
3568_f_at	1317.6	P
Ty1 LTR		
3569_at	296.0	P
Ty1 LTR		
3570_f_at	1039.5	P
Ty1 LTR		
3571_f_at	6471.6	P
Ty1 LTR		
3524_f_at	6454.7	P
Full length Ty1		

3525\_f\_at 10461.3 P  
 Full length Ty1  
 3526\_f\_at 10111.0 P  
 Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in  
 NC\_001148 between 804996 and 808958 with 100% identity.  
 3527\_f\_at 7065.2 P  
 Ty1 LTR  
 3528\_f\_at 9140.7 P  
 Ty1 LTR  
 3529\_f\_at 10110.6 P  
 Full length Ty3  
 3530\_f\_at 9668.8 P  
 Ty1 LTR  
 3531\_at 263.2 P  
 Ty1 LTR  
 3532\_f\_at 12466.7 P  
 Ty1 LTR  
 3533\_f\_at 10519.2 P  
 Full length Ty1  
 3534\_f\_at 10767.4 P  
 Ty1 LTR  
 3535\_i\_at 98.0 P  
 Ty3 LTR  
 3536\_f\_at 7229.8 P  
 Ty3 LTR  
 3537\_f\_at 6001.0 P  
 tRNA-Ala  
 3538\_f\_at 876.4 P  
 tRNA-Gly  
 3539\_f\_at 3186.5 P  
 Ty3 LTR  
 3540\_at 62.7 P  
 Ty4 LTR  
 3541\_at 418.0 A  
 Ty4 LTR  
 3542\_f\_at 7847.3 P  
 strong similarity to subtelomeric encoded proteins  
 3543\_s\_at 9480.8 P  
 strong similarity to subtelomeric encoded proteins  
 3544\_at 41.3 A  
 strong similarity to subtelomeric encoded proteins  
 3545\_i\_at 73.1 P  
 Ty1 LTR  
 3546\_f\_at -51.5 A  
 Ty1 LTR  
 3547\_f\_at 3594.4 P  
 Ty2 LTR  
 3500\_f\_at -89.5 A  
 Ty1 LTR  
 3501\_f\_at 3855.3 P  
 Ty2 LTR  
 3502\_f\_at 10525.5 P  
 Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
 NC\_001134 between 31221 and 35240 with 100% identity.  
 3503\_f\_at 4950.5 P  
 Full length Ty2

3504_f_at	3945.1	P
Ty2 LTR		
3505_s_at	1146.5	A
Ty1 LTR		
3506_s_at	1396.8	P
Ty4 LTR		
3507_at	53.0	A
Ty1 LTR		
3508_f_at	-375.0	P
tRNA-Gly		
3509_f_at	5434.9	P
Ty3 LTR		
3510_s_at	397.6	P
Ty1 LTR		
3511_f_at	8861.6	P
Ty1 LTR		
3512_f_at	8898.7	P
Full length Ty1		
3513_f_at	9844.1	P
Ty1 LTR		
3514_f_at	3543.9	P
tRNA-Ser		
3515_at	522.6	P
Ty1 LTR		
3516_f_at	8032.7	P
Ty1 LTR		
3517_f_at	6829.8	P
Full length Ty1		
3518_f_at	7751.2	P
Ty1 LTR		
3519_f_at	-9.0	A
Ty1 LTR		
3520_s_at	1829.9	P
tRNA-Val		
3521_i_at	7.9	A
Ty1 LTR		
3522_f_at	2039.5	P
Ty1 LTR		
3523_at	357.4	A
Ty1 LTR		
3477_at	-34.9	A
Ty1 LTR		
3478_f_at	8951.2	P
tRNA-Gln		
3479_f_at	1694.0	P
tRNA-Arg		
3480_at	-19.4	A
Ty1 LTR		
3481_at	236.9	P
Ty1 LTR		
3482_f_at	3002.1	P
tRNA-Glu		
3483_f_at	8822.3	P
Protein with similarity to members of the Cos3VCos5VCos1VCos4VCos8VCos6VCos9 family, coded from subtelomeric region		
3484_f_at	39.3	A



Ty5 LTR		
3485_at	-373.5	A
Full length Ty5		
3486_at	75.0	A
Full length Ty5		
3487_g_at	202.4	A
Full length Ty5		
3488_at	68.5	A
Full length Ty5		
3489_f_at	-53.7	A
Full length Ty5		
3490_f_at	-5.4	A
Ty5 LTR		
3491_f_at	2724.6	P
tRNA-Glu		
3492_f_at	1764.6	P
Ty1 LTR		
3493_f_at	3363.0	P
Ty1 LTR		
3494_f_at	6090.2	P
Ty1 LTR		
3495_f_at	1122.0	P
Ty1 LTR		
3496_f_at	7569.7	P
Ty2 LTR		
3497_f_at	10368.4	P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 86005 and 90030 with 100% identity.

3498_f_at	12074.9	P
Full length Ty2		
3499_f_at	7613.4	P
Ty2 LTR		
3451_f_at	4588.8	P
tRNA-Pro		
3452_f_at	7463.6	P
Ty1 LTR		
3453_at	216.1	P
strong similarity to subtelomeric encoded proteins		
3454_s_at	707.6	P
tRNA-Asn		
3455_f_at	390.0	P
tRNA-Gly		
3456_i_at	16.5	A
Ty1 LTR		
3457_f_at	4441.0	P
Ty1 LTR		
3458_f_at	689.9	P
Ty1 LTR		
3459_at	213.4	A
Ty1 LTR		
3460_at	61.7	A
Ty4 LTR		
3461_f_at	8424.3	P
Ty1 LTR		
3462_f_at	7205.3	P
tRNA-Gln		

3463_at	286.7	P
Ty1 LTR		
3464_at	453.5	P
Ty1 LTR		
3465_at	35.6	A
Ty5 LTR		
3466_i_at	24.1	A
Ty1 LTR		
3467_f_at	3912.7	P
Ty1 LTR		
3468_i_at	-72.1	A
Ty1 LTR		
3469_f_at	-11.5	A
Ty1 LTR		
3470_i_at	1922.9	P

Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p

3471_f_at	3673.5	P
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Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p

3472_f_at	444.3	P
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tRNA-Gly

3473_f_at	4625.4	P
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tRNA-Ala

3474_f_at	1665.3	P
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Ty1 LTR

3475_f_at	1403.5	P
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Ty4 LTR

3476_f_at	3282.6	P
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tRNA-Ser

3427_at	131.3	M
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Ty1 LTR

3428_f_at	3455.5	P
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Ty1 LTR

3429_f_at	7561.1	P
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Ty2 LTR

3430_f_at	11873.6	P
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Full length Ty2

3431_f_at	10763.3	P
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*Saccharomyces cerevisiae* chromosome IV, complete chromosome sequence. Found reverse in NC\_001136 between 514037 and 518056 with 100% identity.

3432_f_at	6531.0	P
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Ty2 LTR

3433_i_at	74.3	P
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Ty1 LTR

3434_f_at	299.1	P
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Ty1 LTR

3435_f_at	2562.7	P
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Ty1 LTR

3436_f_at	5976.6	P
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tRNA-Gln

3437_f_at	1393.0	P
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tRNA-Arg

3438_f_at	4402.9	P
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tRNA-Arg

3439_f_at	6360.8	P
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tRNA-Gln		
3440_f_at	7049.4	P
Ty1 LTR		
3441_f_at	8028.9	P
Full length Ty1		
3442_f_at	10281.3	P
Full length Ty1		
3443_f_at	11848.4	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in NC_001136 between 645851 and 649813 with 100% identity.		
3444_f_at	7539.9	P
Ty1 LTR		
3445_f_at	1700.1	P
Ty3 LTR		
3446_i_at	-108.7	A
Ty1 LTR		
3447_f_at	448.8	A
Ty1 LTR		
3448_s_at	2976.4	P
Ty3 LTR		
3449_i_at	183.6	P
Ty1 LTR		
3450_r_at	1.9	A
Ty1 LTR		
3404_f_at	2608.7	P
Ty1 LTR		
3405_f_at	7590.3	P
tRNA-Gln		
3406_f_at	9339.9	P
Ty1 LTR		
3407_at	469.0	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 804494 and 805681 with 100% identity.		
3408_f_at	5926.5	P
Ty1 LTR		
3409_f_at	14410.6	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 873398 and 877417 with 100% identity.		
3410_f_at	4913.9	P
Full length Ty2		
3411_f_at	5294.0	P
Ty1 LTR		
3412_f_at	8605.8	P
Full length Ty1		
3413_f_at	10674.3	P
Full length Ty1		
3414_f_at	10202.5	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in NC_001136 between 878651 and 882613 with 100% identity.		
3415_i_at	18.6	A
Ty1 LTR		
3416_s_at	4654.9	P
Ty1 LTR		
3417_f_at	5245.8	P
Ty3 LTR		
3418_f_at	3370.3	P

tRNA-Ser		
3419_f_at	4915.5	P
Ty1 LTR		
3420_f_at	11823.8	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 982747 and 986766 with 100% identity.		
3421_f_at	8882.5	P
Full length Ty2		
3422_f_at	7409.0	P
Ty1 LTR		
3423_f_at	7107.1	P
Ty1 LTR		
3424_f_at	7558.8	P
Full length Ty1		
3425_f_at	8582.3	P
Full length Ty1		
3426_f_at	7796.1	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in NC_001136 between 987525 and 991034 with 100% identity.		
3379_f_at	6404.8	P
Ty1 LTR		
3380_i_at	111.3	P
Ty3 LTR		
3381_f_at	17.3	A
Ty3 LTR		
3382_f_at	-160.1	P
tRNA-Gly		
3383_f_at	1705.6	P
tRNA-Glu		
3384_f_at	5854.5	P
Ty3 LTR		
3385_s_at	3944.3	P
tRNA-Val		
3386_f_at	10120.9	P
Ty1 LTR		
3387_f_at	6633.6	P
Full length Ty1		
3388_f_at	10789.3	P
Ty1 LTR		
3389_f_at	4182.7	P
Ty1 LTR		
3390_at	157.5	A
Ty3 LTR		
3391_f_at	4260.0	P
Ty1 LTR		
3392_f_at	10365.5	P
Ty1 LTR		
3393_f_at	13480.2	P
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1208292 and 1212254 with 100% identity.		
3394_f_at	7660.6	P
Full length Ty1		
3395_f_at	10741.0	P
Full length Ty1		
3396_f_at	8397.2	P
Ty1 LTR		

3397_f_at	389.9	A
tRNA-Gly		
3398_f_at	1765.4	P
tRNA-Ser		
3399_f_at	5585.2	P
Ty1 LTR		
3400_i_at	52.4	P
Ty1 LTR		
3401_f_at	-20.0	A
Ty1 LTR		
3402_at	3.1	A
Ty1 LTR		
3403_f_at	1555.6	P
strong similarity to subtelomeric encoded proteins		
3356_f_at	672.7	P
strong similarity to subtelomeric encoded proteins		
3357_at	241.8	P
strong similarity to subtelomeric encoded proteins		
3358_f_at	-582.1	P
tRNA-Gly		
3359_f_at	7405.4	P
Ty1 LTR		
3360_at	-42.9	A
Ty1 LTR		
3361_f_at	3164.0	P
tRNA-Ser		
3362_at	-79.9	A
Ty1 LTR		
3363_at	-157.4	A
Ty4 LTR		
3364_f_at	6291.9	P
tRNA-Gln		
3365_f_at	7321.1	P
Ty1 LTR		
3366_at	16.0	A
Ty1 LTR		
3367_f_at	1377.3	P
Ty1 LTR		
3368_f_at	1426.3	P
tRNA-Arg		
3369_i_at	2.1	A
Ty1 LTR		
3370_f_at	475.0	P
Ty1 LTR		
3371_f_at	2983.8	P
tRNA-Glu		
3372_f_at	1968.9	P
tRNA-His		
3373_at	463.4	P
Ty1 LTR		
3374_at	291.0	P
Ty1 LTR		
3375_f_at	7325.5	P
Ty3 LTR		
3376_f_at	7034.3	P
tRNA-Gln		

3377_at	86.8	A
Ty1 LTR		
3378_f_at	3737.5	P
tRNA-Ser		
3332_i_at	-43.8	A
Ty1 LTR		
3333_f_at	4749.8	P
Ty1 LTR		
3334_at	75.0	P
Ty1 LTR		
3335_at	90.6	A
Ty1 LTR		
3336_f_at	1325.5	P
Ty4 LTR		
3337_i_at	539.8	P
Ty3 LTR		
3338_f_at	-50.2	A
Ty3 LTR		
3340_f_at	7677.3	P
Ty1 LTR		
3342_f_at	7330.1	P
Ty3 LTR		
3343_i_at	1368.0	P
Ty1 LTR		
3344_f_at	2066.2	P
Ty1 LTR		
3345_f_at	2360.2	P
Ty1 LTR		
3346_at	300.4	M
Ty4 LTR		
3347_s_at	2173.0	P
Ty1 LTR		
3348_f_at	6241.2	P
Ty1 LTR		
3350_f_at	9958.5	P
Full length Ty1		
3352_s_at	7724.3	P
Ty1 LTR		
3354_s_at	281.3	P
Ty1 LTR		
3355_s_at	651.8	P
Ty1 LTR		
3307_s_at	200.3	P
Ty1 LTR		
3308_s_at	950.4	P
Ty1 LTR		
3309_s_at	-15.8	P
Ty1 LTR		
3310_s_at	827.1	P
Ty1 LTR		
3311_f_at	6791.5	P
Ty1 LTR		
3313_f_at	4088.6	P
Ty1 LTR		
3315_f_at	12073.4	P
Ty3 LTR		

3316_f_at	13770.9	P
Ty3 LTR		
3317_f_at	12823.3	P
Ty1 LTR		
3319_f_at	13295.4	P
Ty1 LTR		
3320_i_at	-109.5	A
Ty1 LTR		
3321_f_at	159.9	A
Ty1 LTR		
3322_at	-16.9	A
Ty1 LTR		
3323_i_at	-292.4	A
Ty5 LTR		
3324_at	140.0	A
Ty5 LTR		
3325_f_at	1413.6	P
strong similarity to subtelomeric encoded proteins		
3326_at	276.3	A
strong similarity to subtelomeric encoded proteins		
3327_f_at	10106.1	P
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3328_at	36.5	A
Ty1 LTR		
3329_f_at	3456.8	P
Ty1 LTR		
3330_f_at	7260.5	P
Ty2 LTR		
3283_f_at	11290.1	P
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 139492 and 143511 with 100% identity.		
3284_f_at	9401.4	P
Full length Ty2		
3285_f_at	5323.3	P
Ty2 LTR		
3286_f_at	2195.3	P
Ty1 LTR		
3287_s_at	192.6	P
Ty4 LTR		
3288_at	9.9	A
Ty1 LTR		
3289_i_at	123.5	P
Ty1 LTR		
3290_f_at	213.9	P
Ty1 LTR		
3291_f_at	2866.8	P
Ty1 LTR		
3294_at	-26.6	A
Ty1 LTR		
3296_at	-18.7	A
Ty1 LTR		
3297_i_at	-113.6	A
Ty5 LTR		
3298_f_at	-89.2	A

Ty5 LTR		
3299_f_at	32.3	A
strong similarity to subtelomeric encoded proteins		
3301_f_at	1133.7	P
Ty4 LTR		
3302_f_at	5746.7	P
Ty1 LTR		
3303_f_at	745.3	P
Ty1 LTR		
3304_f_at	554.6	P
Ty1 LTR		
3305_at	-93.5	A
Ty4 LTR		
3306_i_at	1011.3	P
Ty1 LTR		
3258_f_at	929.5	P
Ty1 LTR		
3259_at	3514.2	P
Ty1 LTR		
3260_f_at	7744.2	P
Ty3 LTR		
3262_at	-18.2	A
Ty4 LTR		
3263_i_at	61.9	P
Ty1 LTR		
3264_f_at	184.2	P
Ty1 LTR		
3267_f_at	3030.6	P
Ty3 LTR		
3268_f_at	10070.6	P
Ty1 LTR		
3269_f_at	1301.1	P
Ty1 LTR		
3270_f_at	6408.6	P
Ty1 LTR		
3271_i_at	131.1	P
Ty3 LTR		
3272_f_at	3985.8	P
Ty3 LTR		
3274_at	107.4	A
Ty1 LTR		
3276_i_at	8.9	A
Ty1 LTR		
3277_f_at	80.6	A
Ty1 LTR		
3279_f_at	6805.0	P
Full length Ty1		
3235_f_at	6680.2	P
Ty1 LTR		
3236_f_at	7932.8	P
Full length Ty1		
3237_f_at	10797.1	P
Full length Ty1		
3239_f_at	9301.8	P
Ty1 LTR		
3240_f_at	7602.4	P



Ty2 LTR		
3241_f_at	7634.1	P
Full length Ty2		
3243_at	1123.6	P
tRNA-Leu		
3244_i_at	52.7	P
Ty1 LTR		
3245_f_at	367.0	P
Ty1 LTR		
3247_s_at	627.8	P
TY3B protein	Found forward in NC_001139 between 707604 and 708461 with 100% identity.	
3248_s_at	1761.0	P
Saccharomyces cerevisiae	chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 708460 and 712248 with 100% identity.	
3249_s_at	3407.2	P
Saccharomyces cerevisiae	chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 708460 and 712248 with 100% identity.	
3250_s_at	1238.4	P
Saccharomyces cerevisiae	chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 708460 and 712248 with 100% identity.	
3251_s_at	266.1	P
Full length Ty3		
3252_s_at	2299.8	P
Full length Ty3		
3253_f_at	9162.0	P
Full length Ty3		
3255_at	838.0	P
Ty1 LTR		
3256_at	7.9	A
Ty1 LTR		
3257_f_at	7014.4	P
Ty3 LTR		
3212_f_at	1126.4	P
Ty1 LTR		
3214_at	207.0	P
Ty1 LTR		
3215_f_at	139.0	P
Ty1 LTR		
3216_at	-100.8	A
Ty1 LTR		
3218_at	-21.0	A
Ty1 LTR		
3222_f_at	9280.1	P
Full length Ty2		
3223_f_at	7518.0	P
Ty2 LTR		
3225_f_at	7932.9	P
Full length Ty1		
3226_f_at	9420.2	P
Ty1 LTR		
3228_at	246.6	P
Ty3 LTR		
3230_f_at	5149.1	P
Ty1 LTR		
3232_f_at	1919.3	P
Ty4 LTR		

3233_f_at	11269.2	P
Ty1 LTR		
3234_at	7182.8	P
Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3187_s_at	4106.0	P
strong similarity to subtelomeric encoded proteins		
3188_at	1071.9	P
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3189_i_at	-399.1	A
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3190_f_at	250.2	P
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos8p, Cos6p, Cos9p		
3191_i_at	39.6	P
Ty5 LTR		
3192_f_at	-66.1	A
Ty5 LTR		
3193_at	1357.4	A
strong similarity to subtelomeric encoded proteins		
3195_f_at	8644.7	P
Ty3 LTR		
3196_f_at	1108.4	P
Ty4 LTR		
3199_f_at	6181.9	P
Ty1 LTR		
3200_i_at	52.0	M
Ty1 LTR		
3201_r_at	3.2	A
Ty1 LTR		
3202_f_at	-24.1	A
Ty1 LTR		
3203_f_at	10111.7	P
Ty1 LTR		
3204_at	375.7	M
Ty1 LTR		
3206_at	-0.2	A
Ty1 LTR		
3207_i_at	109.3	A
Ty1 LTR		
3208_f_at	55.1	A
Ty1 LTR		
3209_f_at	7479.6	P
Ty1 LTR		
3161_f_at	5357.9	P
Ty3 LTR		
3162_at	1022.1	P
Ty4 LTR		
3163_i_at	50.5	A
Ty1 LTR		
3164_f_at	71.4	A
Ty1 LTR		
3165_at	-18.8	A
Ty4 LTR		

3166_i_at	33.3	A
Ty1 LTR		
3167_r_at	65.1	P
Ty1 LTR		
3168_f_at	14.9	A
Ty1 LTR		
3169_f_at	9855.3	P
Ty2 LTR		
3170_i_at	42.2	A
Ty1 LTR		
3171_r_at	23.1	A
Ty1 LTR		
3172_f_at	214.2	A
Ty1 LTR		
3173_i_at	21.6	M
Ty1 LTR		
3174_f_at	36.6	A
Ty1 LTR		
3175_i_at	343.8	P
Ty1 LTR		
3176_f_at	1342.6	P
Ty1 LTR		
3177_f_at	364.1	P
Ty3 LTR		
3178_f_at	63.7	P
Ty1 LTR		
3180_f_at	9190.2	P
Full length Ty1		
3181_f_at	11436.8	P
Ty1 LTR		
3182_i_at	63.7	A
strong similarity to subtelomeric encoded YDR544c		
3183_f_at	10113.7	P
strong similarity to subtelomeric encoded proteins		
3184_s_at	248.8	P
strong similarity to subtelomeric encoded proteins		
3185_s_at	99.8	P
strong similarity to subtelomeric encoded proteins		
3133_f_at	3995.5	P
Ty1 LTR		
3136_s_at	4036.3	P
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 206488 and 210129 with 100% identity.		
3137_s_at	1616.0	P
Full length Ty3		
3139_f_at	159.0	P
Ty2 LTR		
3141_i_at	30.6	A
Ty1 LTR		
3142_f_at	5081.4	P
Ty1 LTR		
3143_f_at	1085.2	P
Ty3 LTR		
3144_f_at	1667.5	P
Ty1 LTR		
3145_at	376.1	P

Ty1 LTR  
 3147\_at -19.6 A  
 Ty1 LTR  
 3148\_s\_at 4903.5 P  
 mating hormone a2  
 3149\_at 923.8 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 13744 and 14743 with 100% identity.  
 3150\_at 1468.0 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 14744 and 15743 with 100% identity.  
 3151\_g\_at 577.5 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 14744 and 15743 with 100% identity.  
 3152\_at 2712.3 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 15744 and 16743 with 100% identity.  
 3153\_at 62.9 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 16744 and 17743 with 100% identity.  
 3154\_at 442.7 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 17744 and 18743 with 100% identity.  
 3155\_at -620.5 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 18744 and 19729 with 100% identity.  
 3156\_at 43.8 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 88357 and 89356 with 100% identity.  
 3157\_at 206.4 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 89357 and 90356 with 100% identity.  
 3158\_at 267.4 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 90357 and 91356 with 100% identity.  
 3159\_at 438.3 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 91357 and 92356 with 100% identity.  
 3088\_at 52.9 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 92357 and 93356 with 100% identity.  
 3089\_g\_at 498.9 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 92357 and 93356 with 100% identity.  
 3090\_s\_at -119.9 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 93357 and 93988 with 100% identity.  
 3091\_at -231.6 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 159789 and 160788 with 100% identity.  
 3092\_f\_at -33.6 A  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 160789 and 161788 with 100% identity.  
 3093\_f\_at -98.9 P  
 Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 161789 and 162788 with 100% identity.

3096\_f\_at 133.5 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 164789 and 165788 with 100% identity.

3097\_at 88.9 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 165789 and 166468 with 100% identity.

3098\_at 434.5 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 208649 and 209648 with 100% identity.

3099\_at 130.3 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 209649 and 210648 with 100% identity.

3100\_s\_at 702.0 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 210649 and 211648 with 100% identity.

3101\_at 199.8 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 211649 and 212648 with 100% identity.

3102\_s\_at 228.4 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 212649 and 213648 with 100% identity.

3103\_at 85.3 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 213649 and 214648 with 100% identity.

3104\_at 69.8 P  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 214649 and 215648 with 100% identity.

3105\_g\_at 205.4 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 214649 and 215648 with 100% identity.

3106\_s\_at 287.2 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 215649 and 216648 with 100% identity.

3107\_s\_at 3417.3 A  
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC\_001133 between 216649 and 217143 with 100% identity.

3108\_at 62.9 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 9138 and 10137 with 100% identity.

3109\_at -442.1 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 10138 and 11137 with 100% identity.

3110\_s\_at -376.2 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 11138 and 12137 with 100% identity.

3111\_s\_at 149.2 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 12138 and 13137 with 100% identity.

3112\_s\_at 14.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 13138 and 14137 with 100% identity.

3113\_s\_at 1345.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 14138 and 15137 with 100% identity.

3114\_s\_at 2356.2 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in

NC\_001142 between 15138 and 15624 with 100% identity.  
3115\_at -12.4 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 41889 and 42888 with 100% identity.  
3116\_at 1618.8 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 42889 and 43888 with 100% identity.  
3117\_at -207.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 43889 and 44888 with 100% identity.  
3118\_at -2193.1 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 44889 and 45888 with 100% identity.  
3119\_at -423.2 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 45889 and 46888 with 100% identity.  
3120\_at 255.8 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 46889 and 47659 with 100% identity.  
3121\_at 1276.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 165921 and 166920 with 100% identity.  
3122\_at 798.8 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 166921 and 167920 with 100% identity.  
3123\_at -855.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 167921 and 168920 with 100% identity.  
3124\_at 254.2 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 168921 and 169920 with 100% identity.  
3125\_at 1168.3 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 169921 and 170920 with 100% identity.  
3126\_at 37.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 170921 and 171920 with 100% identity.  
3127\_at -336.7 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 171921 and 172694 with 100% identity.  
3128\_at 446.3 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 196825 and 197824 with 100% identity.  
3129\_at -428.0 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 203825 and 204824 with 100% identity.  
3130\_at -24.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 204825 and 205824 with 100% identity.  
3131\_g\_at 854.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 204825 and 205824 with 100% identity.  
3045\_s\_at 1040.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 205825 and 206646 with 100% identity.  
3046\_at -422.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 212197 and 213196 with 100% identity.  
3047\_at 581.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 213197 and 214196 with 100% identity.  
3048\_at -87.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 214197 and 215196 with 100% identity.  
3049\_at -74.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 215197 and 216196 with 100% identity.  
3050\_at 439.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 216197 and 217196 with 100% identity.  
3051\_at 212.6 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 217197 and 217402 with 100% identity.  
3052\_at -144.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 254933 and 255932 with 100% identity.  
3053\_at -1147.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 255933 and 256932 with 100% identity.  
3054\_at -559.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 256933 and 257932 with 100% identity.  
3055\_g\_at 312.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 256933 and 257932 with 100% identity.  
3056\_s\_at 276.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 257933 and 258932 with 100% identity.  
3057\_s\_at 2433.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 258933 and 259932 with 100% identity.  
3058\_s\_at 1027.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 259933 and 260143 with 100% identity.  
3059\_at -66.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 368944 and 369943 with 100% identity.  
3060\_at 923.2 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 369944 and 370943 with 100% identity.  
3061\_at -328.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 370944 and 371943 with 100% identity.  
3062\_at 1167.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 371944 and 372943 with 100% identity.  
3063\_at -188.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 372944 and 373943 with 100% identity.  
3064\_at 1465.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 373944 and 374811 with 100% identity.

3065\_g\_at 669.6 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 373944 and 374811 with 100% identity.

3066\_at -13.1 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 424301 and 425300 with 100% identity.

3067\_g\_at -58.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 424301 and 425300 with 100% identity.

3068\_s\_at 784.8 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 425301 and 426300 with 100% identity.

3069\_s\_at -751.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 426301 and 427300 with 100% identity.

3070\_s\_at -1064.3 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 427301 and 428300 with 100% identity.

3071\_s\_at 1487.2 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 428301 and 429300 with 100% identity.

3072\_s\_at 3855.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 429301 and 430300 with 100% identity.

3073\_s\_at 153.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 430301 and 430425 with 100% identity.

3074\_at -10.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 510427 and 511426 with 100% identity.

3075\_at 248.5 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 511427 and 512426 with 100% identity.

3076\_at -71.7 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 512427 and 513426 with 100% identity.

3077\_at 373.8 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 513427 and 514426 with 100% identity.

3078\_g\_at 1392.8 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 513427 and 514426 with 100% identity.

3079\_s\_at 2445.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 514427 and 515426 with 100% identity.

3080\_f\_at 3572.4 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 515427 and 515477 with 100% identity.

3081\_at 1174.8 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 557997 and 558996 with 100% identity.

3082\_at -175.2 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 558997 and 559996 with 100% identity.

3083\_g\_at -151.9 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in



NC\_001142 between 558997 and 559996 with 100% identity.  
3084\_s\_at 306.5 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 559997 and 560996 with 100% identity.  
3085\_s\_at 841.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 560997 and 561996 with 100% identity.  
3086\_s\_at 428.3 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 561997 and 562996 with 100% identity.  
3087\_s\_at -117.4 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 562997 and 563996 with 100% identity.  
3003\_s\_at 1881.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 563997 and 564996 with 100% identity.  
3004\_s\_at 2722.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 564997 and 565996 with 100% identity.  
3005\_at 278.9 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 595249 and 596248 with 100% identity.  
3006\_at 279.5 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 596249 and 597248 with 100% identity.  
3007\_at 441.4 M  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 597249 and 598248 with 100% identity.  
3008\_at 473.9 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 598249 and 599248 with 100% identity.  
3009\_g\_at 1242.7 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 598249 and 599248 with 100% identity.  
3010\_s\_at -116.0 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 599249 and 600248 with 100% identity.  
3011\_s\_at 648.4 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 600249 and 601248 with 100% identity.  
3012\_s\_at 909.4 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 601249 and 602248 with 100% identity.  
3013\_at -317.0 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 629774 and 630773 with 100% identity.  
3014\_at 35.8 A  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 630774 and 631773 with 100% identity.  
3015\_at 415.7 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 631774 and 632773 with 100% identity.  
3016\_at 244.1 P  
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in  
NC\_001142 between 632774 and 633773 with 100% identity.  
3017\_g\_at 622.9 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 632774 and 633773 with 100% identity.  
3018\_s\_at 370.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 633774 and 634773 with 100% identity.  
3019\_at -687.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 690939 and 691938 with 100% identity.  
3020\_at 229.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 691939 and 692938 with 100% identity.  
3021\_at -428.6 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 692939 and 693938 with 100% identity.  
3022\_at -532.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 693939 and 694938 with 100% identity.  
3023\_at -127.8 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 694939 and 695938 with 100% identity.  
3024\_g\_at 1632.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 694939 and 695938 with 100% identity.  
3025\_s\_at 755.5 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 695939 and 696138 with 100% identity.  
3026\_at -152.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 712444 and 713443 with 100% identity.  
3027\_at 22.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 713444 and 714443 with 100% identity.  
3028\_at 260.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 714444 and 715443 with 100% identity.  
3029\_at 32.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 715444 and 716443 with 100% identity.  
3030\_at -1544.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 716444 and 717443 with 100% identity.  
3031\_at -301.5 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 717444 and 718443 with 100% identity.  
3032\_at 191.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 718444 and 719443 with 100% identity.  
3033\_s\_at 1295.5 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC\_001142 between 719444 and 720443 with 100% identity.  
3034\_at 104.0 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 9592 and 10591 with 100% identity.  
3035\_at 521.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 10592 and 11591 with 100% identity.

3036\_at 1014.8 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 11592 and 12591 with 100% identity.

3037\_at -38.1 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 12592 and 13591 with 100% identity.

3038\_at 222.9 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 13592 and 14591 with 100% identity.

3039\_s\_at 3550.2 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 14592 and 15208 with 100% identity.

3040\_at 519.4 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 56435 and 57434 with 100% identity.

3041\_at 122.8 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 57435 and 58434 with 100% identity.

3042\_at 246.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 58435 and 59434 with 100% identity.

3043\_at -80.5 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 59435 and 60434 with 100% identity.

3044\_at 78.8 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 60435 and 61434 with 100% identity.

2960\_at -52.8 M  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 61435 and 62434 with 100% identity.

2961\_at 838.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 62435 and 63434 with 100% identity.

2962\_at 1276.8 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 63435 and 63899 with 100% identity.

2963\_at 303.9 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 99643 and 100642 with 100% identity.

2964\_at 14403.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 100643 and 101642 with 100% identity.

2965\_g\_at 8293.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 100643 and 101642 with 100% identity.

2966\_s\_at 12208.2 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 101643 and 102642 with 100% identity.

2967\_s\_at 8236.3 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 102643 and 103642 with 100% identity.

2968\_s\_at 9688.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 103643 and 104642 with 100% identity.

2969\_s\_at 9218.9 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in

NC\_001143 between 104643 and 105642 with 100% identity.  
2970\_s\_at 15672.6 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 105643 and 106328 with 100% identity.  
2971\_at -1292.2 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 411757 and 412756 with 100% identity.  
2972\_at 149.1 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 412757 and 413756 with 100% identity.  
2973\_at 142.0 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 413757 and 414756 with 100% identity.  
2974\_at -1074.9 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 414757 and 415756 with 100% identity.  
2975\_at 460.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 415757 and 416756 with 100% identity.  
2976\_at 86.2 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 416757 and 417146 with 100% identity.  
2977\_at -36.9 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 535784 and 536783 with 100% identity.  
2978\_at 233.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 536784 and 537783 with 100% identity.  
2979\_at 1739.5 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 537784 and 538783 with 100% identity.  
2980\_at 170.4 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 538784 and 539783 with 100% identity.  
2981\_at 94.5 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 539784 and 540783 with 100% identity.  
2982\_at 75.9 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 540784 and 541783 with 100% identity.  
2983\_at -270.8 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 541784 and 542783 with 100% identity.  
2984\_at 16.7 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 542784 and 543783 with 100% identity.  
2985\_at -153.3 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 543784 and 544783 with 100% identity.  
2986\_at 108.6 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 544784 and 545783 with 100% identity.  
2987\_at 536.1 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in  
NC\_001143 between 545784 and 546783 with 100% identity.  
2988\_at -1896.5 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 546784 and 547783 with 100% identity.  
2989\_at 98.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 547784 and 548228 with 100% identity.  
2990\_g\_at 1222.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 547784 and 548228 with 100% identity.  
2991\_at 431.6 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 619375 and 620374 with 100% identity.  
2992\_g\_at 350.9 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 619375 and 620374 with 100% identity.  
2993\_s\_at 281.9 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 620375 and 621374 with 100% identity.  
2994\_s\_at 402.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 621375 and 622374 with 100% identity.  
2995\_s\_at 674.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 622375 and 623374 with 100% identity.  
2996\_s\_at 539.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 623375 and 624374 with 100% identity.  
2997\_s\_at 1965.1 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 624375 and 624566 with 100% identity.  
2998\_at 314.6 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 642133 and 643132 with 100% identity.  
2999\_at 182.7 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 643133 and 644132 with 100% identity.  
3000\_at -75.8 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 644133 and 645132 with 100% identity.  
3001\_at 521.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 645133 and 646132 with 100% identity.  
3002\_g\_at 176.5 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 645133 and 646132 with 100% identity.  
2917\_s\_at 541.5 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 646133 and 647132 with 100% identity.  
2918\_s\_at 499.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 647133 and 648132 with 100% identity.  
2919\_s\_at 2065.5 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 648133 and 648994 with 100% identity.  
2920\_at 1582.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 649494 and 650493 with 100% identity.

2921\_at 684.4 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 650494 and 651493 with 100% identity.

2922\_at 588.7 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 651494 and 652493 with 100% identity.

2923\_at 858.9 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 652494 and 653493 with 100% identity.

2924\_g\_at -482.8 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 652494 and 653493 with 100% identity.

2925\_s\_at 1043.8 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 653494 and 654493 with 100% identity.

2926\_s\_at 330.3 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 654494 and 655493 with 100% identity.

2927\_s\_at 417.6 P  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 655494 and 655865 with 100% identity.

2928\_at 1110.4 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 662918 and 663917 with 100% identity.

2929\_at 417.2 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 663918 and 664917 with 100% identity.

2930\_at 342.5 M  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 664918 and 665917 with 100% identity.

2931\_at 29.4 A  
Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC\_001143 between 665918 and 666445 with 100% identity.

2932\_at -38.4 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 54710 and 55709 with 100% identity.

2933\_at 694.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 55710 and 56709 with 100% identity.

2934\_at 70.2 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 56710 and 57709 with 100% identity.

2935\_at 2477.1 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 57710 and 58709 with 100% identity.

2936\_at 175.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 58710 and 59709 with 100% identity.

2937\_at -88.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 59710 and 60709 with 100% identity.

2938\_at -65.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 60710 and 61709 with 100% identity.

2939\_at -206.9 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in

NC\_001144 between 61710 and 62709 with 100% identity.  
2940\_at 256.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 62710 and 63709 with 100% identity.  
2941\_at -387.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 63710 and 64061 with 100% identity.  
2942\_at -896.5 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 99543 and 100542 with 100% identity.  
2943\_at 1066.8 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 100543 and 101542 with 100% identity.  
2944\_g\_at 2403.8 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 100543 and 101542 with 100% identity.  
2945\_s\_at 864.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 101543 and 102542 with 100% identity.  
2946\_s\_at 1494.6 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 102543 and 103542 with 100% identity.  
2947\_s\_at 4547.2 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 103543 and 104542 with 100% identity.  
2948\_s\_at 1362.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 104543 and 104846 with 100% identity.  
2949\_at 110.0 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 188164 and 189163 with 100% identity.  
2950\_at 532.8 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 189164 and 190163 with 100% identity.  
2951\_at 521.4 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 190164 and 191163 with 100% identity.  
2952\_at 216.0 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 191164 and 192163 with 100% identity.  
2953\_at 504.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 192164 and 193163 with 100% identity.  
2954\_at -8.4 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 193164 and 194163 with 100% identity.  
2955\_at -697.5 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 194164 and 194675 with 100% identity.  
2956\_g\_at 1754.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 194164 and 194675 with 100% identity.  
2957\_at 331.2 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 307356 and 308355 with 100% identity.  
2958\_at -114.2 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 308356 and 309355 with 100% identity.

2959\_at 197.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 309356 and 310355 with 100% identity.

2875\_at -1125.1 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 310356 and 311355 with 100% identity.

2876\_at -845.6 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 311356 and 312355 with 100% identity.

2877\_at -571.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 312356 and 313355 with 100% identity.

2878\_at 414.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 313356 and 314355 with 100% identity.

2879\_at 400.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 314356 and 315355 with 100% identity.

2880\_at 296.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 315356 and 315877 with 100% identity.

2881\_at 1157.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 330178 and 331177 with 100% identity.

2882\_at 1384.2 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 331178 and 332177 with 100% identity.

2883\_at -842.8 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 332178 and 333177 with 100% identity.

2884\_g\_at 1390.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 332178 and 333177 with 100% identity.

2885\_s\_at 1270.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 333178 and 334177 with 100% identity.

2886\_s\_at 2112.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 334178 and 335177 with 100% identity.

2887\_s\_at 2552.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 335178 and 335534 with 100% identity.

2888\_at 1100.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 349507 and 350506 with 100% identity.

2889\_at 427.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 350507 and 351506 with 100% identity.

2890\_at -103.6 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 351507 and 352506 with 100% identity.

2891\_at 336.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 352507 and 353506 with 100% identity.



2892\_at -1179.7 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 353507 and 354506 with 100% identity.

2893\_at -130.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 354507 and 355506 with 100% identity.

2894\_at -563.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 355507 and 356506 with 100% identity.

2895\_at 6.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 356507 and 357506 with 100% identity.

2896\_at -97.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 357507 and 358506 with 100% identity.

2897\_at -159.9 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 358507 and 359506 with 100% identity.

2898\_at -115.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 359507 and 360506 with 100% identity.

2899\_at 640.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 360507 and 361506 with 100% identity.

2900\_at -118.3 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 361507 and 362506 with 100% identity.

2901\_at 290.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 362507 and 363506 with 100% identity.

2902\_at -60.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 363507 and 364506 with 100% identity.

2903\_g\_at 1937.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 363507 and 364506 with 100% identity.

2904\_s\_at 2136.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 364507 and 364831 with 100% identity.

2905\_at -317.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 629184 and 630183 with 100% identity.

2906\_at 130.9 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 630184 and 631183 with 100% identity.

2907\_at -212.9 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 631184 and 632183 with 100% identity.

2908\_at 48.9 M  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 632184 and 633183 with 100% identity.

2909\_at 45.0 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 633184 and 634183 with 100% identity.

2910\_at 31.4 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in

NC\_001144 between 634184 and 635183 with 100% identity.  
2911\_s\_at 4925.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 635184 and 635584 with 100% identity.  
2912\_at 350.2 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 769817 and 770816 with 100% identity.  
2913\_at 2328.7 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 770817 and 771816 with 100% identity.  
2914\_at -80.4 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 771817 and 772816 with 100% identity.  
2915\_g\_at 200.9 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 771817 and 772816 with 100% identity.  
2916\_s\_at 125.6 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 772817 and 773816 with 100% identity.  
2832\_s\_at 595.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 773817 and 774816 with 100% identity.  
2833\_s\_at 633.2 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 774817 and 775803 with 100% identity.  
2834\_at -79.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 808817 and 809816 with 100% identity.  
2835\_at 2865.9 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 809817 and 810816 with 100% identity.  
2836\_g\_at 6667.8 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 809817 and 810816 with 100% identity.  
2837\_s\_at 3235.4 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 810817 and 811816 with 100% identity.  
2838\_s\_at 7334.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 811817 and 812816 with 100% identity.  
2839\_s\_at 10256.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 812817 and 813816 with 100% identity.  
2840\_s\_at 11300.3 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 813817 and 814816 with 100% identity.  
2841\_s\_at 13332.4 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 814817 and 815126 with 100% identity.  
2842\_at 720.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 934909 and 935908 with 100% identity.  
2843\_at 896.5 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 935909 and 936908 with 100% identity.  
2844\_at -124.6 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 936909 and 937908 with 100% identity.

2845\_g\_at 1227.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 936909 and 937908 with 100% identity.

2846\_s\_at 2561.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 937909 and 938908 with 100% identity.

2847\_s\_at 3875.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 938909 and 939908 with 100% identity.

2848\_s\_at 5546.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 939909 and 940476 with 100% identity.

2849\_at 920.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 965554 and 966553 with 100% identity.

2850\_g\_at 815.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 965554 and 966553 with 100% identity.

2851\_s\_at 1390.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 966554 and 967553 with 100% identity.

2852\_s\_at 1244.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 967554 and 968553 with 100% identity.

2853\_s\_at 350.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 968554 and 969553 with 100% identity.

2854\_s\_at 736.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 969554 and 970553 with 100% identity.

2855\_s\_at 2575.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 970554 and 971189 with 100% identity.

2856\_at 806.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 979430 and 980429 with 100% identity.

2857\_at 694.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 980430 and 981429 with 100% identity.

2858\_at 119.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 981430 and 982429 with 100% identity.

2859\_at 1761.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 982430 and 983429 with 100% identity.

2860\_g\_at -27.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 982430 and 983429 with 100% identity.

2861\_s\_at 165.6 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 983430 and 984429 with 100% identity.

2862\_s\_at 589.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 984430 and 985429 with 100% identity.

2863\_s\_at 88.6 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 985430 and 986311 with 100% identity.

2864\_at 511.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 992726 and 993725 with 100% identity.

2865\_g\_at 615.8 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 992726 and 993725 with 100% identity.

2866\_s\_at 466.6 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 993726 and 994725 with 100% identity.

2867\_s\_at 1162.5 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 994726 and 995725 with 100% identity.

2868\_s\_at -878.5 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 995726 and 996725 with 100% identity.

2869\_s\_at 767.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 996726 and 997725 with 100% identity.

2870\_s\_at -108.7 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 997726 and 998725 with 100% identity.

2871\_s\_at 3628.9 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 998726 and 999623 with 100% identity.

2872\_at 185.1 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1042294 and 1043293 with 100% identity.

2873\_at 643.2 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1043294 and 1044293 with 100% identity.

2874\_g\_at 140.1 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1043294 and 1044293 with 100% identity.

2789\_s\_at 234.0 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1044294 and 1045293 with 100% identity.

2790\_s\_at 304.7 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1045294 and 1046293 with 100% identity.

2791\_s\_at 218.2 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1046294 and 1047293 with 100% identity.

2792\_s\_at 74.8 A  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1047294 and 1048293 with 100% identity.

2793\_s\_at 428.2 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1048294 and 1049293 with 100% identity.

2794\_s\_at 1780.5 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC\_001144 between 1049294 and 1050293 with 100% identity.

2795\_s\_at 1859.0 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in

NC\_001144 between 1050294 and 1051293 with 100% identity.  
2796\_f\_at 3472.4 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 1051294 and 1051379 with 100% identity.  
2797\_at 160.6 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 1071425 and 1072424 with 100% identity.  
2798\_g\_at 215.4 P  
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in  
NC\_001144 between 1071425 and 1072424 with 100% identity.  
2799\_at -60.6 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 63082 and 64081 with 100% identity.  
2800\_at 392.6 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 64082 and 65081 with 100% identity.  
2801\_at 222.5 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 65082 and 66081 with 100% identity.  
2802\_at 589.9 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 66082 and 67081 with 100% identity.  
2803\_at -302.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 67082 and 68081 with 100% identity.  
2804\_at 493.8 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 68082 and 69081 with 100% identity.  
2805\_g\_at 2272.5 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 68082 and 69081 with 100% identity.  
2806\_s\_at 2402.8 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 69082 and 69200 with 100% identity.  
2807\_at 1282.9 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 153719 and 154718 with 100% identity.  
2808\_at -1536.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 154719 and 155718 with 100% identity.  
2809\_at -58.5 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 155719 and 156718 with 100% identity.  
2810\_at 323.3 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 156719 and 157718 with 100% identity.  
2811\_at 436.2 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 157719 and 158718 with 100% identity.  
2812\_at 30.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 183363 and 184362 with 100% identity.  
2813\_at 823.0 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 189363 and 190244 with 100% identity.  
2814\_at -44.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 195413 and 196412 with 100% identity.

2815\_at 2760.5 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 201413 and 202412 with 100% identity.

2816\_at 5954.9 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 202413 and 202775 with 100% identity.

2817\_at 3355.5 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 356810 and 357809 with 100% identity.

2818\_at 443.5 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 357810 and 358809 with 100% identity.

2819\_s\_at 1821.0 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 358810 and 359809 with 100% identity.

2821\_at -177.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 360810 and 361809 with 100% identity.

2822\_at 1401.4 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 361810 and 362701 with 100% identity.

2823\_at -43.5 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 368593 and 369592 with 100% identity.

2824\_at 1900.8 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 369593 and 370592 with 100% identity.

2825\_at 222.3 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 370593 and 371592 with 100% identity.

2826\_at 302.9 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 371593 and 372592 with 100% identity.

2827\_g\_at 187.5 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 371593 and 372592 with 100% identity.

2828\_at -11.1 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 372593 and 373592 with 100% identity.

2829\_f\_at 2681.4 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 373593 and 374592 with 100% identity.

2748\_at -255.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 378593 and 379592 with 100% identity.

2749\_s\_at 565.3 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 379593 and 379699 with 100% identity.

2750\_at 204.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 677692 and 678691 with 100% identity.

2751\_at 893.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 678692 and 679691 with 100% identity.

2752\_at -30.5 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 679692 and 680691 with 100% identity.

2753\_at 157.2 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 680692 and 681691 with 100% identity.

2754\_at -135.1 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 681692 and 682691 with 100% identity.

2755\_at -5.8 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 682692 and 683691 with 100% identity.

2756\_at 309.0 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 683692 and 684691 with 100% identity.

2757\_g\_at 6419.6 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 683692 and 684691 with 100% identity.

2758\_s\_at 8208.0 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 684692 and 685297 with 100% identity.

2759\_at -256.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 704078 and 705077 with 100% identity.

2760\_at 877.5 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 705078 and 706077 with 100% identity.

2761\_at 888.8 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 706078 and 707077 with 100% identity.

2762\_at 20.9 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 707078 and 708077 with 100% identity.

2763\_s\_at 51.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 708078 and 709077 with 100% identity.

2764\_s\_at 589.5 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 709078 and 710077 with 100% identity.

2765\_s\_at -444.2 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 710078 and 711077 with 100% identity.

2766\_s\_at 2642.6 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 711078 and 711608 with 100% identity.

2767\_at 543.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 726433 and 727432 with 100% identity.

2768\_at 356.1 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 727433 and 728432 with 100% identity.

2769\_at -714.8 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 728433 and 729432 with 100% identity.

2770\_at 41.9 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in

NC\_001145 between 729433 and 730432 with 100% identity.  
2771\_at 378.3 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 730433 and 731432 with 100% identity.  
2772\_at 686.3 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 731433 and 731964 with 100% identity.  
2773\_at -241.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 827528 and 828527 with 100% identity.  
2774\_at 265.2 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 828528 and 829527 with 100% identity.  
2775\_at 462.4 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 829528 and 830527 with 100% identity.  
2776\_at -748.6 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 830528 and 831527 with 100% identity.  
2777\_at 172.3 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 831528 and 832527 with 100% identity.  
2778\_g\_at 766.0 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 831528 and 832527 with 100% identity.  
2779\_s\_at 1449.3 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 832528 and 832753 with 100% identity.  
2780\_at 687.2 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 842936 and 843935 with 100% identity.  
2781\_at 326.0 M  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 843936 and 844935 with 100% identity.  
2782\_at 121.2 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 844936 and 845935 with 100% identity.  
2783\_g\_at 849.6 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 844936 and 845935 with 100% identity.  
2784\_s\_at 358.8 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 845936 and 846935 with 100% identity.  
2785\_s\_at 1166.1 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 846936 and 847935 with 100% identity.  
2786\_s\_at 3635.8 P  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 847936 and 847986 with 100% identity.  
2787\_at 315.7 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 879563 and 880562 with 100% identity.  
2788\_at 288.5 A  
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in  
NC\_001145 between 880563 and 881562 with 100% identity.  
2703\_g\_at -221.3 A



Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 880563 and 881562 with 100% identity.

2704\_s\_at 449.8 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 881563 and 882562 with 100% identity.

2705\_s\_at -134.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 882563 and 883562 with 100% identity.

2706\_s\_at 523.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 883563 and 884562 with 100% identity.

2707\_s\_at 258.6 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 884563 and 885562 with 100% identity.

2708\_s\_at 633.0 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC\_001145 between 885563 and 886016 with 100% identity.

2709\_s\_at 1173.2 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 871 and 1870 with 100% identity.

2710\_s\_at 423.8 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 1871 and 2870 with 100% identity.

2711\_s\_at 1914.6 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 2871 and 3870 with 100% identity.

2712\_s\_at 556.3 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 3871 and 4870 with 100% identity.

2713\_s\_at 641.5 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 4871 and 5870 with 100% identity.

2714\_s\_at 6044.8 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 5871 and 6080 with 100% identity.

2715\_at 47.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 130021 and 131020 with 100% identity.

2716\_at 484.9 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 131021 and 132020 with 100% identity.

2717\_at 1133.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 132021 and 133020 with 100% identity.

2718\_at 1714.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 133021 and 134020 with 100% identity.

2719\_at -694.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 134021 and 135020 with 100% identity.

2720\_at 96.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 135021 and 135939 with 100% identity.

2721\_at 103.3 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 147395 and 148394 with 100% identity.

2722\_g\_at 252.4 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 147395 and 148394 with 100% identity.

2723\_s\_at -1690.7 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 148395 and 149394 with 100% identity.

2724\_s\_at 752.4 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 149395 and 150394 with 100% identity.

2725\_s\_at 52.2 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 150395 and 151394 with 100% identity.

2726\_s\_at 469.0 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 151395 and 152394 with 100% identity.

2727\_s\_at 1833.7 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 152395 and 153394 with 100% identity.

2728\_s\_at 1380.3 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 153395 and 154379 with 100% identity.

2729\_at 145.4 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 161130 and 162129 with 100% identity.

2730\_at -90.2 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 162130 and 163129 with 100% identity.

2731\_at 1421.2 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 163130 and 164129 with 100% identity.

2732\_at 168.0 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 164130 and 165129 with 100% identity.

2733\_g\_at 1642.7 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 164130 and 165129 with 100% identity.

2734\_s\_at 1489.3 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 165130 and 166129 with 100% identity.

2735\_s\_at 3907.0 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 166130 and 166596 with 100% identity.

2736\_at -198.0 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 173087 and 174086 with 100% identity.

2737\_at 37.3 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 174087 and 175086 with 100% identity.

2738\_at -1103.4 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 175087 and 176086 with 100% identity.

2739\_g\_at 181.9 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 175087 and 176086 with 100% identity.

2740\_s\_at 103.9 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in

NC\_001146 between 176087 and 177086 with 100% identity.  
2741\_s\_at 163.4 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 177087 and 178086 with 100% identity.  
2742\_s\_at 306.1 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 178087 and 178847 with 100% identity.  
2743\_at -66.5 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 309454 and 310453 with 100% identity.  
2744\_at 512.0 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 310454 and 311453 with 100% identity.  
2745\_g\_at 372.6 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 310454 and 311453 with 100% identity.  
2660\_s\_at 120.6 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 311454 and 312453 with 100% identity.  
2661\_s\_at 132.9 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 312454 and 313453 with 100% identity.  
2662\_s\_at 1013.3 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 313454 and 314453 with 100% identity.  
2663\_s\_at 1532.2 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 314454 and 315379 with 100% identity.  
2664\_at 2520.6 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 524084 and 525083 with 100% identity.  
2665\_at 223.8 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 525084 and 526083 with 100% identity.  
2666\_s\_at -768.0 M  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 526084 and 527083 with 100% identity.  
2667\_s\_at 655.3 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 527084 and 528083 with 100% identity.  
2668\_s\_at 780.8 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 528084 and 529079 with 100% identity.  
2669\_at 2447.0 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 655170 and 656169 with 100% identity.  
2670\_at 190.6 P  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 656170 and 657169 with 100% identity.  
2671\_at -367.7 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 657170 and 658169 with 100% identity.  
2672\_at 164.8 A  
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in  
NC\_001146 between 658170 and 659169 with 100% identity.  
2673\_at 172.8 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 659170 and 660169 with 100% identity.

2674\_at -203.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 660170 and 661169 with 100% identity.

2675\_at 653.2 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 661170 and 661997 with 100% identity.

2676\_at 0.3 M

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 681191 and 682190 with 100% identity.

2677\_at 52.8 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 682191 and 683190 with 100% identity.

2678\_at -2026.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 683191 and 684190 with 100% identity.

2679\_at 715.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 684191 and 685190 with 100% identity.

2680\_at -72.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 685191 and 686190 with 100% identity.

2681\_g\_at 2380.1 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 685191 and 686190 with 100% identity.

2682\_s\_at 1700.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 686191 and 686613 with 100% identity.

2683\_at -985.3 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 761618 and 762617 with 100% identity.

2684\_at -214.7 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 762618 and 763617 with 100% identity.

2685\_at 1215.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 763618 and 764617 with 100% identity.

2686\_at 959.6 M

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 764618 and 765617 with 100% identity.

2687\_g\_at 19.4 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 764618 and 765617 with 100% identity.

2688\_s\_at 690.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 765618 and 766617 with 100% identity.

2689\_s\_at -157.0 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 766618 and 767617 with 100% identity.

2690\_s\_at 842.4 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 767618 and 768617 with 100% identity.

2691\_s\_at -246.0 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC\_001146 between 768618 and 768871 with 100% identity.

2692\_at 117.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 2078 and 3077 with 100% identity.

2693\_at 590.0 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 3078 and 4077 with 100% identity.

2694\_at 1442.2 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 4078 and 5077 with 100% identity.

2695\_at -613.6 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 5078 and 6077 with 100% identity.

2696\_at 573.9 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 6078 and 7077 with 100% identity.

2697\_g\_at 177.7 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 6078 and 7077 with 100% identity.

2698\_s\_at 587.2 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 7078 and 7615 with 100% identity.

2699\_at 839.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 169973 and 170972 with 100% identity.

2700\_at 39.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 170973 and 171972 with 100% identity.

2701\_g\_at 425.5 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 170973 and 171972 with 100% identity.

2702\_s\_at 2003.5 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 171973 and 172972 with 100% identity.

2618\_s\_at 558.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 172973 and 173972 with 100% identity.

2619\_s\_at 24.6 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 173973 and 174972 with 100% identity.

2620\_s\_at 74.6 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 174973 and 175972 with 100% identity.

2621\_s\_at 896.0 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 175973 and 176972 with 100% identity.

2622\_s\_at 1934.1 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 176973 and 177972 with 100% identity.

2623\_s\_at -221.3 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 177973 and 178972 with 100% identity.

2624\_s\_at 1444.1 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 178973 and 179808 with 100% identity.

2625\_at 710.0 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in

NC\_001147 between 346694 and 347693 with 100% identity.  
2626\_at 2051.7 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 347694 and 348693 with 100% identity.  
2627\_at 1870.1 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 348694 and 349693 with 100% identity.  
2628\_s\_at 709.8 M  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 349694 and 350693 with 100% identity.  
2629\_s\_at 1438.8 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 350694 and 351693 with 100% identity.  
2630\_s\_at 975.2 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 351694 and 352693 with 100% identity.  
2631\_s\_at 1449.4 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 352694 and 353693 with 100% identity.  
2632\_at 334.1 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 540261 and 541260 with 100% identity.  
2633\_at 377.1 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 541261 and 542260 with 100% identity.  
2634\_at 246.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 542261 and 543260 with 100% identity.  
2635\_at 8.1 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 543261 and 544260 with 100% identity.  
2636\_at 234.7 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 544261 and 545260 with 100% identity.  
2637\_g\_at 3123.9 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 544261 and 545260 with 100% identity.  
2638\_s\_at 6539.5 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 545261 and 545831 with 100% identity.  
2639\_at -632.4 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 618016 and 619015 with 100% identity.  
2640\_at 730.7 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 619016 and 620015 with 100% identity.  
2641\_g\_at 3132.3 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 619016 and 620015 with 100% identity.  
2642\_s\_at 1237.8 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 620016 and 621015 with 100% identity.  
2643\_s\_at 3155.2 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in  
NC\_001147 between 621016 and 622015 with 100% identity.  
2644\_s\_at 2617.1 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 622016 and 623015 with 100% identity.

2645\_s\_at 9860.6 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 623016 and 623873 with 100% identity.

2646\_at -1450.4 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 730506 and 731505 with 100% identity.

2647\_at -766.5 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 731506 and 732505 with 100% identity.

2648\_at 134.0 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 732506 and 733505 with 100% identity.

2649\_at -949.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 733506 and 734505 with 100% identity.

2650\_g\_at 774.5 M

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 733506 and 734505 with 100% identity.

2651\_s\_at 924.4 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 734506 and 735505 with 100% identity.

2652\_s\_at 1948.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 735506 and 735675 with 100% identity.

2653\_at 413.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 855642 and 856641 with 100% identity.

2654\_at 114.2 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 856642 and 857641 with 100% identity.

2655\_at 1825.9 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 857642 and 858641 with 100% identity.

2656\_at 1303.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 858642 and 859641 with 100% identity.

2657\_at 100.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 859642 and 860641 with 100% identity.

2658\_at 31.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 860642 and 861641 with 100% identity.

2659\_g\_at 233.6 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 860642 and 861641 with 100% identity.

2575\_s\_at 1710.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 861642 and 862641 with 100% identity.

2576\_s\_at 1155.7 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 862642 and 863641 with 100% identity.

2577\_s\_at 1340.6 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 863642 and 864641 with 100% identity.

2578\_s\_at 2934.4 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 864642 and 865088 with 100% identity.

2579\_at 1183.9 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 946724 and 947723 with 100% identity.

2580\_at 185.3 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 947724 and 948723 with 100% identity.

2581\_at 363.2 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 948724 and 949723 with 100% identity.

2582\_at -960.3 A  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 949724 and 950723 with 100% identity.

2583\_g\_at 1352.6 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 949724 and 950723 with 100% identity.

2584\_s\_at 1805.9 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 950724 and 951723 with 100% identity.

2585\_s\_at 4335.9 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 951724 and 952723 with 100% identity.

2586\_s\_at 2717.6 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 952724 and 953361 with 100% identity.

2587\_at 755.5 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 959693 and 960692 with 100% identity.

2588\_at 1523.4 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 960693 and 961692 with 100% identity.

2589\_g\_at 3535.3 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 960693 and 961692 with 100% identity.

2590\_s\_at 5792.2 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 961693 and 962692 with 100% identity.

2591\_s\_at 3297.6 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 962693 and 963692 with 100% identity.

2592\_s\_at 6892.8 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 963693 and 964692 with 100% identity.

2593\_s\_at 9373.4 P  
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC\_001147 between 964693 and 965472 with 100% identity.

2594\_at 520.5 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 19079 and 20078 with 100% identity.

2595\_at -34.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 20079 and 21078 with 100% identity.

2596\_at -1758.8 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in



NC\_001148 between 21079 and 22078 with 100% identity.  
2597\_at -52.6 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 22079 and 23078 with 100% identity.  
2598\_g\_at 1349.5 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 22079 and 23078 with 100% identity.  
2599\_s\_at 6564.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 23079 and 24078 with 100% identity.  
2600\_s\_at 3110.1 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 24079 and 24201 with 100% identity.  
2601\_at 591.7 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 108147 and 109146 with 100% identity.  
2602\_g\_at 4647.4 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 108147 and 109146 with 100% identity.  
2603\_s\_at 3923.0 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 109147 and 110146 with 100% identity.  
2604\_s\_at 8861.2 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 110147 and 111146 with 100% identity.  
2605\_s\_at 11776.5 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 111147 and 112146 with 100% identity.  
2606\_s\_at 10569.7 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 112147 and 113146 with 100% identity.  
2607\_s\_at 12824.6 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 113147 and 113815 with 100% identity.  
2608\_at 459.4 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 140119 and 141118 with 100% identity.  
2609\_at 1883.7 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 141119 and 142118 with 100% identity.  
2610\_at 119.1 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 142119 and 143118 with 100% identity.  
2611\_at 535.1 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 143119 and 144118 with 100% identity.  
2612\_g\_at 884.7 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 143119 and 144118 with 100% identity.  
2613\_s\_at 748.4 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 144119 and 145118 with 100% identity.  
2614\_s\_at 516.3 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 145119 and 146118 with 100% identity.  
2615\_s\_at 341.6 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 146119 and 146628 with 100% identity.

2616\_at -41.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 385268 and 386267 with 100% identity.

2617\_at 639.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 386268 and 387267 with 100% identity.

2532\_g\_at 189.8 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 386268 and 387267 with 100% identity.

2533\_s\_at 458.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 387268 and 388267 with 100% identity.

2534\_s\_at 1820.4 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 388268 and 389267 with 100% identity.

2535\_s\_at 2088.1 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 389268 and 390267 with 100% identity.

2536\_s\_at 1677.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 390268 and 391267 with 100% identity.

2537\_s\_at 4533.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 391268 and 392267 with 100% identity.

2538\_s\_at 3835.4 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 392268 and 393149 with 100% identity.

2539\_at 462.6 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 398975 and 399974 with 100% identity.

2540\_at 227.8 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 399975 and 400974 with 100% identity.

2541\_at -9.0 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 400975 and 401974 with 100% identity.

2542\_at -207.4 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 401975 and 402974 with 100% identity.

2543\_at -1124.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 402975 and 403974 with 100% identity.

2544\_at -22.2 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 403975 and 404451 with 100% identity.

2545\_at 198.7 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 435759 and 436758 with 100% identity.

2546\_at 96.3 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 436759 and 437758 with 100% identity.

2547\_at 322.8 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 437759 and 438758 with 100% identity.

2548\_at 42.7 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 438759 and 439758 with 100% identity.

2549\_at 10.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 439759 and 440758 with 100% identity.

2550\_at -96.4 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 440759 and 441758 with 100% identity.

2551\_at -310.0 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 441759 and 442758 with 100% identity.

2552\_at -206.8 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 442759 and 443758 with 100% identity.

2553\_at 357.7 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 443759 and 444574 with 100% identity.

2554\_at 492.9 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 446337 and 447336 with 100% identity.

2555\_at 2493.9 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 447337 and 448336 with 100% identity.

2556\_at -141.8 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 448337 and 449336 with 100% identity.

2557\_at 354.0 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 449337 and 450336 with 100% identity.

2558\_at 290.1 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 450337 and 451336 with 100% identity.

2559\_at 664.5 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 451337 and 451904 with 100% identity.

2560\_at -353.2 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 519230 and 520229 with 100% identity.

2561\_at 739.2 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 520230 and 521229 with 100% identity.

2562\_g\_at 18.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 520230 and 521229 with 100% identity.

2563\_s\_at 1951.6 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 521230 and 522229 with 100% identity.

2564\_s\_at 3223.0 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 522230 and 523229 with 100% identity.

2565\_s\_at 972.0 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 523230 and 524229 with 100% identity.

2566\_s\_at -819.5 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in

NC\_001148 between 524230 and 524453 with 100% identity.  
2567\_at 640.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 536315 and 537314 with 100% identity.  
2568\_at 96.6 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 537315 and 538314 with 100% identity.  
2569\_at -899.9 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 538315 and 539314 with 100% identity.  
2570\_at 389.2 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 539315 and 540314 with 100% identity.  
2571\_s\_at 896.5 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 540315 and 541314 with 100% identity.  
2572\_s\_at 704.3 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 541315 and 541465 with 100% identity.  
2573\_at 8.2 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 542577 and 543576 with 100% identity.  
2574\_at 1018.1 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 543577 and 544576 with 100% identity.  
2489\_at 31.7 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 544577 and 545576 with 100% identity.  
2490\_s\_at 3153.8 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 545577 and 546576 with 100% identity.  
2491\_s\_at 3073.9 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 546577 and 547576 with 100% identity.  
2492\_f\_at 856.2 P  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 547577 and 547638 with 100% identity.  
2493\_at -156.1 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 624964 and 625963 with 100% identity.  
2494\_at 501.4 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 625964 and 626963 with 100% identity.  
2495\_at 70.0 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 626964 and 627963 with 100% identity.  
2496\_g\_at -890.1 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 626964 and 627963 with 100% identity.  
2497\_s\_at 406.3 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 627964 and 628963 with 100% identity.  
2498\_s\_at 632.7 A  
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in  
NC\_001148 between 628964 and 629963 with 100% identity.  
2499\_s\_at -67.4 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 629964 and 630740 with 100% identity.

2500\_at 1057.0 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 759478 and 760477 with 100% identity.

2501\_g\_at 994.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 759478 and 760477 with 100% identity.

2502\_s\_at -145.8 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 760478 and 761477 with 100% identity.

2503\_s\_at 90.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 761478 and 762477 with 100% identity.

2504\_s\_at 432.1 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 762478 and 763477 with 100% identity.

2505\_s\_at 941.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 763478 and 764477 with 100% identity.

2506\_s\_at 1310.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 764478 and 765477 with 100% identity.

2507\_s\_at 459.8 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 765478 and 766477 with 100% identity.

2508\_s\_at 2229.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 766478 and 766991 with 100% identity.

2509\_at 1056.5 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 869140 and 870139 with 100% identity.

2510\_at 165.2 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 870140 and 871139 with 100% identity.

2511\_g\_at 904.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 870140 and 871139 with 100% identity.

2512\_s\_at 29.0 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 871140 and 872139 with 100% identity.

2513\_s\_at 505.9 M

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 872140 and 873139 with 100% identity.

2514\_s\_at 842.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 873140 and 874139 with 100% identity.

2515\_s\_at 912.5 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC\_001148 between 874140 and 874421 with 100% identity.

2516\_at 309.2 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 25441 and 26440 with 100% identity.

2517\_at 1049.4 M

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 26441 and 27440 with 100% identity.

2518\_at 591.9 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 27441 and 28440 with 100% identity.

2519\_at -2484.3 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 28441 and 29440 with 100% identity.

2520\_at -377.3 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 29441 and 30440 with 100% identity.

2521\_f\_at 444.9 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 35441 and 35606 with 100% identity.

2522\_at -480.7 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 51513 and 52512 with 100% identity.

2523\_at 84.6 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 52513 and 53512 with 100% identity.

2524\_at 62.8 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 53513 and 54512 with 100% identity.

2525\_at 316.7 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 54513 and 55512 with 100% identity.

2526\_at 45.4 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 55513 and 56512 with 100% identity.

2527\_at 18.2 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 56513 and 57512 with 100% identity.

2528\_at 468.6 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 57513 and 58512 with 100% identity.

2529\_at -1465.5 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 58513 and 59512 with 100% identity.

2530\_at 215.2 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 59513 and 59815 with 100% identity.

2531\_at 934.8 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 73564 and 74563 with 100% identity.

2446\_at -265.3 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 74564 and 75563 with 100% identity.

2447\_g\_at 353.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 74564 and 75563 with 100% identity.

2448\_s\_at 1220.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 75564 and 76563 with 100% identity.

2449\_s\_at 2209.7 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 76564 and 77563 with 100% identity.

2450\_s\_at 1408.9 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in

NC\_001134 between 77564 and 78563 with 100% identity.  
2451\_s\_at 5674.3 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 78564 and 79261 with 100% identity.  
2452\_at 174.9 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 187307 and 188306 with 100% identity.  
2453\_at 13.2 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 188307 and 189306 with 100% identity.  
2454\_at -244.5 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 189307 and 190306 with 100% identity.  
2455\_at 1126.3 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 190307 and 191306 with 100% identity.  
2456\_at 93.1 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 191307 and 192306 with 100% identity.  
2457\_at 118.8 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 192307 and 192975 with 100% identity.  
2458\_g\_at 6313.0 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 192307 and 192975 with 100% identity.  
2459\_at 630.1 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 220363 and 221362 with 100% identity.  
2460\_at 26.7 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 226363 and 227362 with 100% identity.  
2461\_at 745.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 227363 and 228362 with 100% identity.  
2462\_g\_at 1316.3 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 227363 and 228362 with 100% identity.  
2463\_s\_at 1362.4 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 228363 and 229362 with 100% identity.  
2464\_s\_at 3418.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 229363 and 230362 with 100% identity.  
2465\_s\_at 2918.1 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 230363 and 231362 with 100% identity.  
2466\_s\_at 1353.3 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 231363 and 232362 with 100% identity.  
2467\_s\_at 2933.2 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 232363 and 233362 with 100% identity.  
2468\_s\_at 3705.6 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in  
NC\_001134 between 233363 and 234362 with 100% identity.  
2469\_s\_at 4393.1 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 234363 and 234580 with 100% identity.

2470\_at 1753.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 505265 and 506264 with 100% identity.

2471\_g\_at -350.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 505265 and 506264 with 100% identity.

2472\_s\_at -647.0 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 506265 and 507264 with 100% identity.

2473\_s\_at 344.1 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 507265 and 508264 with 100% identity.

2474\_s\_at 169.1 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 508265 and 509264 with 100% identity.

2475\_s\_at 357.3 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 509265 and 510264 with 100% identity.

2476\_s\_at 741.8 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 510265 and 511264 with 100% identity.

2477\_s\_at 788.8 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 511265 and 512233 with 100% identity.

2478\_at -148.9 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 517809 and 518808 with 100% identity.

2479\_at -5.5 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 518809 and 519808 with 100% identity.

2480\_at 288.9 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 519809 and 520808 with 100% identity.

2481\_at 14.0 M

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 520809 and 521808 with 100% identity.

2482\_at 286.2 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 521809 and 522808 with 100% identity.

2483\_at -35.8 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 522809 and 523808 with 100% identity.

2484\_at -245.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 523809 and 524808 with 100% identity.

2485\_at -476.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 524809 and 525808 with 100% identity.

2486\_at -35.5 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 525809 and 526808 with 100% identity.

2487\_at 565.7 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 526809 and 526984 with 100% identity.



2488\_at 287.7 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 637162 and 638161 with 100% identity.

2421\_at 264.0 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 638162 and 639161 with 100% identity.

2422\_at 274.7 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 639162 and 640161 with 100% identity.

2423\_at -13.6 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 640162 and 641161 with 100% identity.

2424\_at 354.7 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 641162 and 642161 with 100% identity.

2425\_at 333.3 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 642162 and 642542 with 100% identity.

2426\_at 525.0 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 751813 and 752812 with 100% identity.

2427\_at 528.4 P  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 752813 and 753812 with 100% identity.

2428\_at -262.9 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 753813 and 754812 with 100% identity.

2429\_at -815.5 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 754813 and 755812 with 100% identity.

2430\_at 659.2 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 755813 and 756812 with 100% identity.

2431\_at 52.6 A  
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC\_001134 between 756813 and 757578 with 100% identity.

2432\_at 5971.2 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 82220 and 83219 with 100% identity.

2433\_at 5309.1 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 83220 and 84219 with 100% identity.

2434\_at 1932.8 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 84220 and 85219 with 100% identity.

2435\_at 713.0 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 90220 and 91219 with 100% identity.

2436\_g\_at 2028.7 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 90220 and 91219 with 100% identity.

2437\_s\_at 6781.5 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC\_001135 between 91220 and 91533 with 100% identity.

2438\_at -234.2 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in

NC\_001135 between 177526 and 178525 with 100% identity.  
2439\_g\_at 116.8 M  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 177526 and 178525 with 100% identity.  
2440\_s\_at 308.1 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 178526 and 179525 with 100% identity.  
2441\_s\_at 258.7 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 179526 and 180525 with 100% identity.  
2442\_s\_at 1610.0 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 180526 and 181525 with 100% identity.  
2443\_s\_at 582.8 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 181526 and 182525 with 100% identity.  
2444\_s\_at -1118.1 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 182526 and 183525 with 100% identity.  
2445\_s\_at 1589.3 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 183526 and 184252 with 100% identity.  
2395\_at 437.3 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 275986 and 276985 with 100% identity.  
2396\_at 157.1 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 276986 and 277985 with 100% identity.  
2397\_at -683.9 A  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 277986 and 278985 with 100% identity.  
2398\_g\_at 1239.9 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 277986 and 278985 with 100% identity.  
2399\_s\_at 806.3 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 278986 and 279985 with 100% identity.  
2400\_s\_at 1758.7 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 279986 and 280985 with 100% identity.  
2401\_s\_at 1491.1 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 280986 and 281985 with 100% identity.  
2402\_s\_at 1982.7 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 281986 and 282985 with 100% identity.  
2403\_s\_at 5348.0 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 282986 and 283985 with 100% identity.  
2404\_s\_at 3579.0 P  
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in  
NC\_001135 between 283986 and 284665 with 100% identity.  
2405\_at 1179.4 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 79795 and 80794 with 100% identity.  
2406\_at 38.5 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 80795 and 81794 with 100% identity.

2407\_at 869.1 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 81795 and 82794 with 100% identity.

2408\_at 330.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 82795 and 83794 with 100% identity.

2409\_at -123.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 83795 and 84794 with 100% identity.

2410\_g\_at 833.9 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 83795 and 84794 with 100% identity.

2411\_s\_at 768.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 84795 and 85486 with 100% identity.

2412\_at 210.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 149704 and 150703 with 100% identity.

2413\_at 107.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 150704 and 151703 with 100% identity.

2414\_at 136.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 151704 and 152703 with 100% identity.

2415\_at -118.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 152704 and 153703 with 100% identity.

2416\_at 253.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 153704 and 154703 with 100% identity.

2417\_at 319.6 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 154704 and 155703 with 100% identity.

2418\_at 37.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 155704 and 156703 with 100% identity.

2419\_g\_at 1020.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 155704 and 156703 with 100% identity.

2420\_s\_at 1525.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 156704 and 157405 with 100% identity.

2352\_at 566.7 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 205861 and 206860 with 100% identity.

2353\_at 540.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 206861 and 207860 with 100% identity.

2354\_at -524.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 207861 and 208860 with 100% identity.

2355\_at -155.9 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 208861 and 209860 with 100% identity.

2356\_at 369.4 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 209861 and 210860 with 100% identity.

2357\_at 908.7 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 210861 and 211376 with 100% identity.

2358\_at 28.1 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 257132 and 258131 with 100% identity.

2359\_at -159.1 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 258132 and 259131 with 100% identity.

2360\_g\_at 2618.2 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 258132 and 259131 with 100% identity.

2361\_s\_at 3625.3 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 259132 and 260131 with 100% identity.

2362\_s\_at 3666.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 260132 and 261131 with 100% identity.

2363\_s\_at 2937.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 261132 and 262131 with 100% identity.

2364\_s\_at 3049.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 262132 and 262724 with 100% identity.

2365\_at 532.8 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 344736 and 345735 with 100% identity.

2366\_s\_at -313.6 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 345736 and 346735 with 100% identity.

2367\_s\_at 3093.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 346736 and 347735 with 100% identity.

2368\_s\_at 512.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 347736 and 348735 with 100% identity.

2369\_s\_at 438.9 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 348736 and 349735 with 100% identity.

2370\_s\_at 1181.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 349736 and 350536 with 100% identity.

2371\_at 84.4 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 618990 and 619989 with 100% identity.

2372\_at 1309.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 619990 and 620989 with 100% identity.

2373\_at -1291.6 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 620990 and 621989 with 100% identity.

2374\_at 1697.8 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in

NC\_001136 between 621990 and 622989 with 100% identity.  
2375\_s\_at 244.3 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 622990 and 623989 with 100% identity.  
2376\_s\_at 1565.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 623990 and 624214 with 100% identity.  
2377\_at 1003.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 630598 and 631597 with 100% identity.  
2378\_g\_at 3426.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 630598 and 631597 with 100% identity.  
2379\_s\_at 1396.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 631598 and 632597 with 100% identity.  
2380\_s\_at 2945.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 632598 and 633597 with 100% identity.  
2381\_s\_at 2543.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 633598 and 634597 with 100% identity.  
2382\_s\_at 3099.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 634598 and 635597 with 100% identity.  
2383\_at 572.4 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 735394 and 736393 with 100% identity.  
2384\_at 349.5 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 736394 and 737393 with 100% identity.  
2385\_at -391.0 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 737394 and 738393 with 100% identity.  
2386\_at 248.8 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 738394 and 739393 with 100% identity.  
2387\_at -72.8 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 739394 and 740393 with 100% identity.  
2388\_s\_at 153.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 756048 and 757047 with 100% identity.  
2389\_s\_at -12.9 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 757048 and 758047 with 100% identity.  
2390\_s\_at 224.6 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 759048 and 760047 with 100% identity.  
2391\_s\_at 267.6 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 760048 and 761047 with 100% identity.  
2392\_s\_at 697.2 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 761048 and 762047 with 100% identity.  
2393\_s\_at 1902.2 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 762048 and 763047 with 100% identity.

2394\_s\_at 1464.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 763048 and 763367 with 100% identity.

2309\_at 275.6 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 796686 and 797685 with 100% identity.

2310\_at -320.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 797686 and 798685 with 100% identity.

2311\_at 942.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 798686 and 799685 with 100% identity.

2312\_at 650.0 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 799686 and 800685 with 100% identity.

2313\_at 775.1 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 800686 and 801685 with 100% identity.

2314\_at 1079.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 801686 and 802685 with 100% identity.

2315\_at 632.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 802686 and 803685 with 100% identity.

2316\_at 220.7 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 877250 and 878249 with 100% identity.

2317\_at 142.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 878250 and 879249 with 100% identity.

2319\_f\_at -442.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 647450 and 647656 with 100% identity.

2320\_at -6.3 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1133751 and 1134750 with 100% identity.

2321\_at 328.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1134751 and 1135750 with 100% identity.

2322\_at 1067.2 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1135751 and 1136750 with 100% identity.

2323\_g\_at 692.1 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1135751 and 1136750 with 100% identity.

2324\_s\_at -83.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1136751 and 1137750 with 100% identity.

2325\_s\_at 891.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1137751 and 1138750 with 100% identity.

2326\_s\_at 869.1 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1138751 and 1139750 with 100% identity.

2327\_s\_at 682.8 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1139751 and 1139967 with 100% identity.

2328\_at 66.4 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1305061 and 1306060 with 100% identity.

2329\_at 581.4 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1306061 and 1307060 with 100% identity.

2330\_g\_at 312.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1306061 and 1307060 with 100% identity.

2331\_s\_at 1341.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1307061 and 1308060 with 100% identity.

2332\_s\_at 2684.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1308061 and 1309060 with 100% identity.

2333\_s\_at 1902.5 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1309061 and 1310060 with 100% identity.

2334\_s\_at 1142.4 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1310061 and 1311060 with 100% identity.

2335\_s\_at 1253.9 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1311061 and 1311164 with 100% identity.

2336\_at 1341.0 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1346165 and 1347164 with 100% identity.

2337\_at -299.0 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1347165 and 1348164 with 100% identity.

2338\_at -267.8 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1348165 and 1349164 with 100% identity.

2339\_at 714.3 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1349165 and 1350164 with 100% identity.

2340\_at 298.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1350165 and 1351164 with 100% identity.

2341\_g\_at 1335.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1350165 and 1351164 with 100% identity.

2342\_s\_at 1691.3 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1351165 and 1351842 with 100% identity.

2343\_at 2200.3 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1369375 and 1370374 with 100% identity.

2344\_g\_at 3534.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC\_001136 between 1369375 and 1370374 with 100% identity.

2345\_s\_at 464.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in

NC\_001136 between 1370375 and 1371374 with 100% identity.  
2346\_s\_at 91.1 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1371375 and 1372374 with 100% identity.  
2347\_s\_at -105.1 A  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1372375 and 1373374 with 100% identity.  
2348\_s\_at 1960.6 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1373375 and 1374374 with 100% identity.  
2349\_s\_at -130.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1374375 and 1375374 with 100% identity.  
2350\_s\_at 2409.7 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1375375 and 1376374 with 100% identity.  
2351\_s\_at 1219.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1376375 and 1377374 with 100% identity.  
2266\_s\_at 4134.2 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1377375 and 1378374 with 100% identity.  
2267\_s\_at 2220.1 P  
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in  
NC\_001136 between 1378375 and 1379085 with 100% identity.  
2268\_at 240.0 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 7553 and 8552 with 100% identity.  
2269\_at 420.0 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 8553 and 9552 with 100% identity.  
2270\_at 273.3 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 9553 and 10552 with 100% identity.  
2271\_at -444.8 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 10553 and 11552 with 100% identity.  
2272\_at 247.8 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 11553 and 12552 with 100% identity.  
2273\_at -207.9 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 12553 and 13552 with 100% identity.  
2274\_at -82.0 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 13553 and 13915 with 100% identity.  
2275\_g\_at -1239.0 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 13553 and 13915 with 100% identity.  
2276\_at -111.1 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 109004 and 110003 with 100% identity.  
2277\_at 8.0 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in  
NC\_001137 between 110004 and 111003 with 100% identity.  
2278\_at 474.4 P



Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 111004 and 112003 with 100% identity.  
2279\_g\_at 1792.2 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 111004 and 112003 with 100% identity.  
2280\_s\_at 1888.7 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 112004 and 113003 with 100% identity.  
2281\_s\_at 1821.9 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 113004 and 114003 with 100% identity.  
2282\_s\_at 4966.9 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 114004 and 115003 with 100% identity.  
2283\_s\_at 3150.9 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 115004 and 115300 with 100% identity.  
2284\_at 58.8 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 425685 and 426684 with 100% identity.  
2285\_at -133.0 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 426685 and 427684 with 100% identity.  
2286\_at 675.7 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 427685 and 428684 with 100% identity.  
2287\_at 265.5 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 428685 and 429684 with 100% identity.  
2288\_at 1945.3 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 429685 and 430684 with 100% identity.  
2289\_at -421.2 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 430685 and 431126 with 100% identity.  
2290\_at 2560.2 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 442412 and 443411 with 100% identity.  
2291\_g\_at 2932.3 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 442412 and 443411 with 100% identity.  
2294\_f\_at 1688.8 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 446412 and 447411 with 100% identity.  
2295\_at 408.2 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 476841 and 477840 with 100% identity.  
2296\_at 992.0 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 477841 and 478840 with 100% identity.  
2297\_at 31.7 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 478841 and 479840 with 100% identity.  
2298\_at -58.3 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 479841 and 480840 with 100% identity.

2299\_at -72.0 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 480841 and 481840 with 100% identity.

2300\_at 1093.1 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 481841 and 482840 with 100% identity.

2301\_at 40.5 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 482841 and 483321 with 100% identity.

2302\_at 154.2 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 491954 and 492953 with 100% identity.

2303\_f\_at 800.7 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 492954 and 493953 with 100% identity.

2306\_at 670.6 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 497954 and 498953 with 100% identity.

2307\_at 120.2 M  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 498954 and 499172 with 100% identity.

2308\_at -387.7 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 530026 and 531025 with 100% identity.

2223\_at 54.3 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 531026 and 532025 with 100% identity.

2224\_at 347.7 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 532026 and 533025 with 100% identity.

2225\_at 401.3 M  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 533026 and 534025 with 100% identity.

2226\_at 1190.7 P  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 534026 and 535025 with 100% identity.

2227\_at -276.9 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 535026 and 536025 with 100% identity.

2228\_at 81.8 A  
Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC\_001137 between 536026 and 536271 with 100% identity.

2229\_at 153.0 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC\_001138 between 69614 and 70613 with 100% identity.

2230\_at 526.7 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC\_001138 between 70614 and 71613 with 100% identity.

2231\_at -371.1 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC\_001138 between 71614 and 72613 with 100% identity.

2232\_at 311.1 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC\_001138 between 72614 and 73613 with 100% identity.

2233\_at 442.0 M  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in

NC\_001138 between 73614 and 74613 with 100% identity.  
2234\_at 286.8 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 74614 and 74871 with 100% identity.  
2235\_at 1222.7 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 136029 and 137028 with 100% identity.  
2236\_at -226.1 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 137029 and 138028 with 100% identity.  
2237\_at 36.4 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 143029 and 144028 with 100% identity.  
2238\_at -85.8 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 144029 and 145028 with 100% identity.  
2239\_at 1188.8 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 145029 and 145108 with 100% identity.  
2240\_at -631.4 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 184470 and 185469 with 100% identity.  
2241\_s\_at 762.4 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 185470 and 186469 with 100% identity.  
2242\_s\_at 652.4 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 186470 and 187469 with 100% identity.  
2243\_s\_at 480.8 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 187470 and 188469 with 100% identity.  
2244\_s\_at 747.6 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 188470 and 189469 with 100% identity.  
2245\_s\_at 1355.4 A  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 189470 and 190469 with 100% identity.  
2246\_s\_at 2225.7 P  
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in  
NC\_001138 between 190470 and 190825 with 100% identity.  
2247\_at 836.9 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 16307 and 17306 with 100% identity.  
2248\_at 219.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 17307 and 18306 with 100% identity.  
2249\_at -133.2 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 18307 and 19306 with 100% identity.  
2250\_at 2578.9 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 19307 and 20306 with 100% identity.  
2251\_at 333.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 20307 and 21306 with 100% identity.  
2252\_g\_at 2544.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 20307 and 21306 with 100% identity.

2253\_s\_at 152.6 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 21307 and 21608 with 100% identity.

2254\_at 1.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 103045 and 104044 with 100% identity.

2255\_at 179.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 104045 and 105044 with 100% identity.

2256\_at -268.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 105045 and 106044 with 100% identity.

2257\_at 1231.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 106045 and 107044 with 100% identity.

2258\_at 154.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 107045 and 108044 with 100% identity.

2259\_at 736.3 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 108045 and 109044 with 100% identity.

2260\_g\_at 322.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 108045 and 109044 with 100% identity.

2261\_s\_at 921.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 109045 and 109906 with 100% identity.

2262\_at 1370.6 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 131050 and 132049 with 100% identity.

2263\_g\_at 1805.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 131050 and 132049 with 100% identity.

2264\_s\_at 2157.8 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 132050 and 133049 with 100% identity.

2265\_s\_at 1442.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 133050 and 134049 with 100% identity.

2180\_s\_at 4223.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 134050 and 135049 with 100% identity.

2181\_s\_at 5949.0 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 135050 and 136049 with 100% identity.

2182\_s\_at 7537.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 136050 and 137049 with 100% identity.

2183\_s\_at 9492.7 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 137050 and 138049 with 100% identity.

2184\_s\_at 6965.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 138050 and 139047 with 100% identity.

2185\_at 677.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 176031 and 177030 with 100% identity.

2186\_at 784.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 177031 and 178030 with 100% identity.

2187\_at 444.1 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 178031 and 179030 with 100% identity.

2188\_at 250.2 M  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 179031 and 180030 with 100% identity.

2189\_at 262.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 180031 and 181030 with 100% identity.

2190\_g\_at 2126.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 180031 and 181030 with 100% identity.

2191\_s\_at 2486.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 181031 and 181622 with 100% identity.

2192\_at -392.3 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 241856 and 242855 with 100% identity.

2193\_at 207.6 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 242856 and 243855 with 100% identity.

2194\_at 3438.3 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 243856 and 244855 with 100% identity.

2195\_at 865.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 244856 and 245855 with 100% identity.

2196\_s\_at 2475.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 245856 and 246855 with 100% identity.

2197\_s\_at 3512.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 246856 and 247627 with 100% identity.

2198\_at 190.0 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 331616 and 332615 with 100% identity.

2199\_at -115.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 332616 and 333615 with 100% identity.

2200\_at -166.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 333616 and 334615 with 100% identity.

2201\_at -2845.8 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 334616 and 335615 with 100% identity.

2202\_g\_at 622.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 334616 and 335615 with 100% identity.

2203\_s\_at 1684.4 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in

NC\_001139 between 335616 and 336615 with 100% identity.  
2204\_s\_at 2365.6 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 336616 and 337137 with 100% identity.  
2205\_at 2645.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 547463 and 548462 with 100% identity.  
2206\_g\_at 193.9 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 547463 and 548462 with 100% identity.  
2207\_s\_at 627.1 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 548463 and 549462 with 100% identity.  
2208\_s\_at 933.1 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 549463 and 550462 with 100% identity.  
2209\_s\_at 1343.4 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 550463 and 551462 with 100% identity.  
2210\_s\_at 3073.9 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 551463 and 552462 with 100% identity.  
2211\_s\_at 2737.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 552463 and 553445 with 100% identity.  
2212\_at 854.9 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 659764 and 660763 with 100% identity.  
2213\_at -1465.3 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 660764 and 661763 with 100% identity.  
2214\_at -781.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 661764 and 662763 with 100% identity.  
2215\_g\_at 4238.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 661764 and 662763 with 100% identity.  
2216\_s\_at 4734.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 662764 and 663763 with 100% identity.  
2217\_s\_at 4422.2 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 663764 and 664763 with 100% identity.  
2218\_s\_at 4327.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 664764 and 665565 with 100% identity.  
2219\_at -442.0 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 683060 and 684059 with 100% identity.  
2220\_at -137.2 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 684060 and 685059 with 100% identity.  
2221\_at -233.6 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 685060 and 686059 with 100% identity.  
2222\_at 355.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 686060 and 687059 with 100% identity.

2138\_at 384.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 687060 and 688059 with 100% identity.

2139\_g\_at 701.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 687060 and 688059 with 100% identity.

2140\_s\_at 459.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 688060 and 689059 with 100% identity.

2141\_s\_at 2022.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 689060 and 689459 with 100% identity.

2142\_at 1642.7 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 860395 and 861394 with 100% identity.

2143\_at 67.2 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 861395 and 862394 with 100% identity.

2144\_at 973.7 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 862395 and 863394 with 100% identity.

2145\_at -179.4 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 863395 and 864394 with 100% identity.

2146\_at 537.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 864395 and 865394 with 100% identity.

2147\_at 623.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 865395 and 866330 with 100% identity.

2148\_at 53.5 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 923127 and 924126 with 100% identity.

2149\_at -103.6 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 924127 and 925126 with 100% identity.

2150\_g\_at 1026.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 924127 and 925126 with 100% identity.

2151\_s\_at -51.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 925127 and 926126 with 100% identity.

2152\_s\_at 258.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 926127 and 927126 with 100% identity.

2153\_s\_at 1006.0 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 927127 and 928126 with 100% identity.

2154\_s\_at 978.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 928127 and 929126 with 100% identity.

2155\_s\_at 1122.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 929127 and 930126 with 100% identity.

2156\_s\_at 882.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 930127 and 930307 with 100% identity.

2157\_at 154.6 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 955166 and 956165 with 100% identity.

2158\_at 567.0 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 956166 and 957165 with 100% identity.

2159\_at -1271.9 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 957166 and 958165 with 100% identity.

2160\_at 488.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 958166 and 959165 with 100% identity.

2161\_at 23.7 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 959166 and 960165 with 100% identity.

2162\_g\_at 10260.4 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 959166 and 960165 with 100% identity.

2163\_s\_at 13745.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 960166 and 960596 with 100% identity.

2164\_at 265.6 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1031505 and 1032504 with 100% identity.

2165\_g\_at 203.2 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1031505 and 1032504 with 100% identity.

2166\_s\_at 489.8 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1032505 and 1033504 with 100% identity.

2167\_s\_at 526.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1033505 and 1034504 with 100% identity.

2168\_s\_at 351.7 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1034505 and 1035504 with 100% identity.

2169\_s\_at 2135.6 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1035505 and 1036504 with 100% identity.

2170\_s\_at 1494.0 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1036505 and 1037190 with 100% identity.

2171\_at 21.2 A  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1051406 and 1052405 with 100% identity.

2172\_at 1713.5 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1052406 and 1053405 with 100% identity.

2173\_g\_at 945.2 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC\_001139 between 1052406 and 1053405 with 100% identity.

2174\_s\_at 1673.1 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in



NC\_001139 between 1053406 and 1054405 with 100% identity.  
2175\_s\_at 1501.3 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 1054406 and 1055405 with 100% identity.  
2176\_s\_at 1929.7 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 1055406 and 1056405 with 100% identity.  
2177\_s\_at 5327.2 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 1056406 and 1056753 with 100% identity.  
2178\_at 579.2 P  
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in  
NC\_001139 between 1084878 and 1085877 with 100% identity.  
2179\_at -253.9 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 39533 and 40532 with 100% identity.  
2100\_g\_at 2144.7 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 39533 and 40532 with 100% identity.  
2101\_s\_at 163.3 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 40533 and 41532 with 100% identity.  
2102\_s\_at 1466.4 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 41533 and 42532 with 100% identity.  
2103\_s\_at 3305.5 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 42533 and 43532 with 100% identity.  
2104\_s\_at 6863.9 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 43533 and 44532 with 100% identity.  
2105\_s\_at 2302.3 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 44533 and 45188 with 100% identity.  
2106\_at 1102.8 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 84563 and 85562 with 100% identity.  
2107\_at 94.1 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 150066 and 151065 with 100% identity.  
2108\_at -94.4 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 151066 and 152065 with 100% identity.  
2109\_g\_at 371.2 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 151066 and 152065 with 100% identity.  
2110\_s\_at 145.0 M  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 152066 and 153065 with 100% identity.  
2111\_s\_at 497.8 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 153066 and 154065 with 100% identity.  
2112\_s\_at 425.9 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 154066 and 155065 with 100% identity.  
2113\_s\_at 237.0 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 155066 and 156065 with 100% identity.

2114\_s\_at 1453.3 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 156066 and 156943 with 100% identity.

2115\_at 85.9 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 299647 and 300646 with 100% identity.

2116\_at 489.6 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 300647 and 301646 with 100% identity.

2117\_at -700.4 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 301647 and 302646 with 100% identity.

2118\_at 1592.4 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 302647 and 303646 with 100% identity.

2119\_g\_at 534.2 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 302647 and 303646 with 100% identity.

2120\_s\_at 88.7 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 303647 and 304646 with 100% identity.

2121\_s\_at -1770.8 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 304647 and 305646 with 100% identity.

2122\_s\_at 382.8 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 305647 and 306646 with 100% identity.

2123\_s\_at 491.8 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 306647 and 307646 with 100% identity.

2124\_s\_at 647.9 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 307647 and 308646 with 100% identity.

2125\_s\_at 773.7 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 308647 and 309646 with 100% identity.

2126\_s\_at 2536.7 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 309647 and 310646 with 100% identity.

2127\_s\_at 675.6 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 310647 and 311646 with 100% identity.

2128\_s\_at 1103.4 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 311647 and 312646 with 100% identity.

2129\_s\_at 3826.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 312647 and 313497 with 100% identity.

2130\_at -360.3 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 430206 and 431205 with 100% identity.

2131\_at -681.6 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 431206 and 432205 with 100% identity.

2132\_at -542.9 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 432206 and 433205 with 100% identity.

2133\_at -15.0 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 433206 and 434205 with 100% identity.

2134\_at 143.7 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 434206 and 435205 with 100% identity.

2135\_at -1102.9 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 435206 and 436205 with 100% identity.

2136\_at 2305.6 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 436206 and 437169 with 100% identity.

2137\_at 586.7 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 522872 and 523871 with 100% identity.

11394\_at 536.7 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 523872 and 524871 with 100% identity.

11395\_at 100.4 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 524872 and 525871 with 100% identity.

11396\_g\_at 378.0 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 524872 and 525871 with 100% identity.

11397\_f\_at 1011.1 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 525872 and 526871 with 100% identity.

11398\_s\_at 274.2 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 526872 and 527871 with 100% identity.

11399\_s\_at 4918.7 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 527872 and 528114 with 100% identity.

11400\_s\_at 202.9 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 532177 and 533176 with 100% identity.

11401\_at -388.1 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 533177 and 534176 with 100% identity.

11402\_at 135.0 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 534177 and 535176 with 100% identity.

11403\_at 373.1 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 535177 and 536176 with 100% identity.

11404\_at 10.3 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 537177 and 537754 with 100% identity.

11405\_at 2222.7 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC\_001140 between 543488 and 544487 with 100% identity.

11406\_f\_at 56.5 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in

NC\_001140 between 544488 and 545487 with 100% identity.  
11407\_f\_at -63.0 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 546488 and 547487 with 100% identity.  
11408\_f\_at 2377.9 P  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 547488 and 548487 with 100% identity.  
11409\_f\_at 43.4 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 548488 and 549487 with 100% identity.  
11410\_at -82.1 A  
Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in  
NC\_001140 between 549488 and 549898 with 100% identity.  
11411\_at -29.3 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 9696 and 10695 with 100% identity.  
11412\_at -173.0 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 10696 and 11695 with 100% identity.  
11413\_s\_at 668.1 P  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 11696 and 12695 with 100% identity.  
11414\_s\_at 13.5 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 12696 and 13695 with 100% identity.  
11415\_f\_at 1103.9 P  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 13696 and 14695 with 100% identity.  
11416\_at 1864.8 P  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 106607 and 107606 with 100% identity.  
11417\_at -324.6 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 107607 and 108606 with 100% identity.  
11418\_at 183.5 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 108607 and 109606 with 100% identity.  
11419\_at 167.4 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 109607 and 110606 with 100% identity.  
11420\_at -831.8 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 110607 and 111606 with 100% identity.  
11421\_at 0.9 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 111607 and 112606 with 100% identity.  
11422\_at -360.3 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 112607 and 113606 with 100% identity.  
11423\_at 66.6 A  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 113607 and 114606 with 100% identity.  
11424\_g\_at 2209.7 P  
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in  
NC\_001141 between 113607 and 114606 with 100% identity.  
11425\_s\_at 1599.4 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 114607 and 115606 with 100% identity.

11426\_s\_at 1235.1 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 115607 and 116404 with 100% identity.

11427\_at -1867.0 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 204053 and 205052 with 100% identity.

11428\_at 217.0 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 205053 and 206052 with 100% identity.

11429\_at -89.5 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 365963 and 366962 with 100% identity.

11430\_at 52.1 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 366963 and 367962 with 100% identity.

11431\_at -366.6 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 367963 and 368962 with 100% identity.

11432\_at 3923.4 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 368963 and 369962 with 100% identity.

11433\_at -305.2 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 369963 and 370962 with 100% identity.

11434\_g\_at 361.5 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 369963 and 370962 with 100% identity.

11435\_s\_at 1173.1 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 370963 and 371962 with 100% identity.

11436\_s\_at 451.8 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC\_001141 between 371963 and 372495 with 100% identity.