Expression Analysis: Pivot Tab

JJ52 total **Descriptions** Avg Diff Abs Call Diff Call Avg Diff Change B=A Fold Change Sort Score AFFX-MurIL2 at -128.8 M16762 Mouse interleukin 2 (IL-2) gene, exon 4 AFFX-MurlL10 at 92.2 M37897 Mouse interleukin 10 mRNA, complete cds AFFX-MurlL4 at 11.4 M25892 Mus musculus interleukin 4 (II-4) mRNA, complete cds AFFX-MurFAS at 127.1 M83649 Mus musculus Fas antigen mRNA, complete cds AFFX-BioB-5 at 2478.8 J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) AFFX-BioB-M at 3233.3 J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) AFFX-BioB-3 at 3699.8 J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) AFFX-BioC-5 at 7834.7 J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioC-3_at 7359.1 J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) 2883.0 AFFX-BioDn-5 at J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioDn-3 at 8369.9 J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) 4794.8 AFFX-CreX-5 at X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-CreX-3 at 7212.0 X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioB-5_st -5.6 J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) -526.7 AFFX-BioB-M_st J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) AFFX-BioB-3 st -516.4 J04423 E coli bioB gene biotin synthetase (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively) AFFX-BioC-5 st -429.1 J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioC-3 st 172.3 J04423 E coli bioC protein (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioDn-5 st -189.3J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3 prime respectively) AFFX-BioDn-3_st 511.6 Α

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J04423 E coli bioD gene dethiobiotin synthetase (-5 and -3 represent transcript regions 5 prime and 3
prime respectively)
AFFX-CreX-5 st
                         153.7
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3
prime respectively)
AFFX-CreX-3 st
                         -701.5
X03453 Bacteriophage P1 cre recombinase protein (-5 and -3 represent transcript regions 5 prime and 3
prime respectively)
AFFX-DapX-5 at
                         69.8
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)
                         310.9
AFFX-DapX-M at
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
                         -174.2
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
                         -59.9
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
                         -441.6
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
                         595.4
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
                         -270.2
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
                         -259.7
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
                         278.6
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
                         249.3
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
                         38.1
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
                         123.5
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
                         22.3
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
                         25.3
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
                         8.6
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
                         12601.9
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)
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AFFX-YFL039CM_at 10338.2 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 9205.5

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 5811.0 P

Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cervisiae TATA-binding protein (tfIId) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER148wM at 6903.0 P

Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cervisiae TATA-binding protein (tfIId) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER148w3 at 10325.6 P

Saccharomyces cerevisiae /REF=X16860 /DEF=SGD:YER148W Yeast S. cervisiae TATA-binding protein (tfIId) /LEN=723 (5, M, 3 represent transcript regions 5 prime, Middle, and 3 prime respectively)

AFFX-YER022w5_at 469.2 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 1163.6 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 1181.4 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 1576.4 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 528.9 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-18srRnac at 443.1 F

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 253.8 A

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 48.1 A

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 6233.4 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-25srRnab at 141.5 A

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 18.1 A

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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
                        127.1
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
                        2362.9
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 at 9010.5
X61388 SGD: YEL002C Yeast S.cerevisiae WBP1 Oligosaccharyltransferase beta subunit
AFFX-YEL018w/ at
                        2350.9
U18530 SGD:YEL018W Yeast S. cerevisiae Protein of unknown function
AFFX-YEL024w/RIP1 at 7073.1
M23316 SGD:YEL024C Yeast S.cerevisiae RIP1 Rieske iron-sulfur protein of the mitochondrial
cytochrome bc1 complex.
AFFX-YEL021w/URA3 at885.5
K02207 SGD:YEL021W Yeast S.cerevisiae URA3 gene coding for OMP decarboxylase
11378 at
           393.3
Aldehyde dehydrogenase 1, mitochondrial
11379 at
           909.3
Suppressor of Sulfoxyde Ethionine resistance
11380 at
           581.6
hypothetical protein
11381 at
           -74.2
                        Α
putative pseudogene
11382 at
           276.5
                        Α
putative pseudogene
11383 at
           49.6
                        Α
putative pseudogene
           154.3
                        Ρ
11384 at
hypothetical protein
11385 s at 1399.2
                        Ρ
putative Flo1p homolog
11386 at
           509.7
NADP-linked glutamate dehydrogenase
11387 at
           570.0
                        Ρ
similarity to alcohol/sorbitol dehydrogenase
11388 at
           6552.6
similarity to alcohol/sorbitol dehydrogenase
11389 at
           3003.0
ExtraCellular Mutant
                        Ρ
11390 at
            1230.1
Calnexin and calreticulin homolog
11391 at
           491.6
                        Α
questionable ORF
11392 at
           853.7
similarity to hypothetical protein YOR371c
11393 at
           2691.4
hypothetical protein
                        Ρ
11356 at
           2441.0
inducible acetyl-coenzyme A synthetase
           6501.7
11357 at
```

strong similarity to hypothetical proteins YOR365c, YGL139w, YPL221w

```
11358_at
            813.6
peroxisome proliferating transcription factor
11359 at
            8344.6
weak similarity to Legionella small basic protein sbpA
11360 at
            563.4
weak similarity to GTP-binding proteins
11361 at
            480.7
Spc72p interacts with Stu2p in the two-hybrid assay\; Spc72p localizes to the spindle pole bodies.
Molecular weight is 72 kD
11362_at
            2021.3
hypothetical protein
11363 at
            412.8
                        Α
hypothetical protein
11364 at
            10063.8
H-protein subunit of the glycine cleavage system
11365 at
            2557.6
pre-tRNA processing
11366 at
            5.2
                        Α
questionable ORF
11367_at
            9827.6
                        Ρ
Function unknown now
11368 at
            1625.3
Guanine nucleotide exchange factor (a.k.a. GDP-release factor) for cdc42
            4748.3
11369 at
G(sub)1 cyclin
11370_at
            7930.2
cytochrome c heme lyase (CCHL)
11371 at
            6912.7
Pyruvate kinase
                        Ρ
11372 at
            441.0
strong similarity to GTP-binding proteins
11373_at
            8639.2
Function unknown now
11374_at
            9908.4
                        Ρ
97 kDa protein
11375_at
            29.9
                        Α
questionable ORF
                        Р
11376_at
            483.3
hypothetical protein
11377_at
            1339.8
                        Ρ
Function unknown now
11333 at
                        Р
            3689.2
An integral subunit of RNase P and apparent subunit of RNase MRP
            575.7
11334_at
Function unknown now
11335 at
                        Ρ
            2267.8
FUN21
11336 at
            3260.3
homolog of Snc2p, vesicle-associated membrane protein (synaptobrevin) homolog, forms a complex with
Snc2p and Sec9p
11337_at
            6092.1
homolog of Snc2p, vesicle-associated membrane protein (synaptobrevin) homolog, forms a complex with
Snc2p and Sec9p
11338_at
            4300.1
myosin
                        Ρ
11339_at
            238.3
```

```
similarity to hypothetical protein YOR324c
11340 at
            660.0
                        Ρ
hypothetical protein
11341 at
            1418.3
Membrane-spanning Ca-ATPase (P-type), member of the cation transport (E1-E2) ATPases
11342 at
            2392.5
putative nuclear protein
11343_at
            979.9
putative GTP-exchange protein
11344_at
            11270.6
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
11345 at
            4012.2
predicted membrane protein
11346 at
            5589.9
95 kDa containing leucine rich tandem repeats
11347 at
            2416.9
Protein with similarity to human RCC1 protein
11348 at
            2037.4
Shows homology to SNF2 transcriptional regulator
11349 at
            433.9
                                                                                                  3
transmembrane domains
11350 at
            2016.3
                        Ρ
Serine\/threonine kinase
11351 at
            8370.7
protein phosphatase 2A regulatory subunit A
11352_at
            1098.3
DNA glycosylase
11353 at
                        Ρ
            4578.6
protein of unknown function
11354 at
            3742.5
regulation of phospholipid metabolism
11355_at
            9878.9
cystathionine gamma-lyase
11310_at
            590.1
possible mitochondrial transit peptide
11311 at
            843.3
Mitochondrial outer membrane protein involved in mitochondrial morphology and inheritance
11312_at
            2557.2
sporulation protein
11313_at
            2441.5
protein of unknown function
11314 at
            6404.0
p24 protein involved in membrane trafficking
11315_i_at 4727.5
Heat shock protein of HSP70 family, cytoplasmic
11316 r at 0.0
Heat shock protein of HSP70 family, cytoplasmic
11317 s at 15631.8
                        Р
Heat shock protein of HSP70 family, cytoplasmic
11318 at
            416.0
strong similarity to A.klebsiana glutamate dehydrogenase
11319 at
            8847.5
Translation elongation factor EF-1beta, GDPVGTP exchange factor for Tef1pVTef2p
11320 at
            8646.7
Translation elongation factor EF-1beta, GDPVGTP exchange factor for Tef1pVTef2p
11321_at
            1003.0
```

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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 Zn2+ binding motif.
11322 at
            2167.8
transcription factor tau (TFIIIC) subunit 138
11323 at
            621.0
                        Ρ
transcription factor tau (TFIIIC) subunit 138
11324_at
            4581.1
protein of unknown function
11325 at
            11116.3
p24 protein involved in membrane trafficking
11326 at
            2918.0
                        Ρ
beta transducin domain
11327 at
            8049.6
69 kDa subunit of the heterotrimeric RPA (RF-A) single-stranded DNA binding protein, binds URS1 and
CAR1
11328 at
            1858.4
34kDa subunit of the tetrameric tRNA splicing endonuclease
11329 at
            3556.8
maximal growth
11330_at
            9204.1
phosphoribosyl amino imidazolesuccinocarbozamide synthetase
11331_at
            503.1
protein kinase
                        Ρ
11332 at
            787.6
protein kinase domain
11287_f_at 717.4
strong similarity to members of the srp1p/Tip1p family
11288 at
            409.8
membrane protein
                        Ρ
11289 at
            1138.1
membrane protein
                        Ρ
11290_at
            2501.5
membrane protein
11291_at
            266.6
membrane protein
                        Ρ
11292 at
            23.0
hypothetical protein
11293_at
                        Ρ
            2051.2
membrane protein
11294_g_at 3359.1
                        Ρ
membrane protein
11295_r_at 1617.4
                        Ρ
membrane protein
                        Ρ
11296_s_at 949.5
membrane protein
11297 at
                        Ρ
            3216.4
Outer carnitine acetyltransferase, mitochondrial
11298 at
            2116.3
ankyrin repeat
                        Ρ
11299 at
            1603.5
Shows homology to the human oxysterol binding protein (OSBP)
11300_at
            -12.4
predicted nuclear targeting signal
11301_i_at -346.3
FLO1 putative cell wall glycoprotein
11302_at
            641.8
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predicted membrane protein
11303 s at 609.7
strong similarity to hypothetical protein YHR212c
11304 at
            344.2
putative pseudogene
11305 s at 85.6
                         Α
putative pseudogene
                         Ρ
11306 at
           509.7
Potential membrane protein
11307_s_at 6445.4
identical to YHR214w hypothetical protein, similarity to Sta1p
11308 s at 6792.8
Potential membrane protein
11309 at
            218.1
Potential membrane protein
11261 at
            -35.1
potential mitochondrial transit peptide
11262 s at 16492.1
Acid phosphatase, secreted
11263_f_at 7531.1
strong similarity to IMP dehydrogenases
11264 f at 8206.8
strong similarity to IMP dehydrogenases
11265 i at 595.9
hypothetical protein
11266_f_at 3585.5
                         Ρ
hypothetical protein
11267 at
                         Р
            196.7
identified by SAGE
11268 at
                         Α
            -2.3
hypothetical protein
11269_at
            385.8
                         М
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
            37.8
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
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
            457.5
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
            261.7
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
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
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
            104.1
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
            -23.5
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
11278 f at 1150.4
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 764.0
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
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
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 -62.1
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 327.3
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 5789.7
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
            7.5
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
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
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
            -278.6
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 401.7
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
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 162.2
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 507.4
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 479.7
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 -212.0
Centromere
11246 r at 45.1
                         Α
Centromere
11247_s_at 12341.9
strong similarity to members of the Sir1p/Tip1p family
```

non-annotated SAGE orf Found forward in NC_001133 between 19729 and 19968 with 100% identity.

```
11248_s_at 1621.2
strong similarity to members of the Sir1p/Tip1p family
11249 f at 2057.5
strong similarity to members of the Srp1p/Tip1p family
11250 s at 1029.2
strong similarity to Pep1p
11251_s_at 389.8
homology to maltase(alpha-D-glucosidase)
11252_s_at -65.3
                         Α
questionable ORF
11253 s at -11.1
                         Α
High-affinity hexose transporter
11254 at
            152.2
strong similarity to E.coli galactoside O-acetyltransferase
11255 at
            257.3
                         Α
hypothetical protein
11256 at
            2.6
                         Α
strong similarity to Mal62p
11257 at
            75.0
hypothetical protein
11258 at
            79.4
                         Α
High-affinity hexose transporter
11259 at
            1513.1
similarity to Methanobacterium aryldialkylphosphatase related protein
11260 at
            2573.4
strong similarity to S.pombe isp4 protein
11215 at
            169.5
questionable ORF
11216 at
            4587.5
                         Ρ
CH3HC4 zinc-binding integral peroxisomal membrane protein
11217 at
            1173.3
Protein required for COB mRNA stability or 5 processing
11218 at
            2633.1
                         Ρ
mitochondrial nuclease
11219 at
            1580.7
weak similarity to rat omega-conotoxin-sensitive calcium channel alpha-1 subunit rbB-I
11220 at
            726.5
                         Ρ
similarity to YIL130p and Put3p
11221 at
            5525.3
involved in secretion of proteins that lack classical secretory signal sequences
11222 at
            2028.3
weak similarity to Tor2p
                         Ρ
11223_at
            764.6
RNA splicing factor
11224 at
                         Α
            132.5
questionable ORF
                         Ρ
11225 at
            720.7
ExtraCellular Mutant
11226_at
            9195.2
strong similarity to aconitate hydratase
11227_at
            1318.9
hypothetical protein
                         Ρ
11228 at
            8991.2
strong similarity to Pho87p
11229_at
            1293.7
ubiquitin carboxyl-terminal hydrolase
```

```
11230_at
            12708.9
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
            -23.0
                         Α
questionable ORF
                        Ρ
11232 at
            1536.5
Protein involved in initiation of DNA replication
11233 at
            3804.3
similarity to Sly41p
                         Ρ
11234_at
            3174.1
hypothetical protein
                        Р
11235 at
            8375.6
Ribosomal protein S14B (rp59B)
11236 at
            4471.1
Ribosomal protein S22A (S24A) (rp50) (YS22)
11237 at
            11435.1
Ribosomal protein L39 (L46) (YL40)
11192 at
            855.2
                         Α
questionable ORF
11193_at
            2081.2
                        Ρ
protein kinase homolog
                         Ρ
11194_at
            1577.8
putative mannosyltransferase
11195 at
                        Ρ
            300.8
hypothetical protein
                        Ρ
11196_at
            2929.7
hypothetical protein
11197_at
                         Р
            5610.4
A new gene encoding a protein that is related to Mnn10p, and that is in a complex containing other MNN
gene products.
11198 at
            -73.4
                         Α
questionable ORF
                         Ρ
11199 at
            1715.6
similarity to hypothetical protein YJR030c
11200 at
            1034.9
essential for assembly of a functional F1-ATPase
11201 at
            1125.7
Putative homolog of subunit 1 of bovine prefoldin, a chaperone comprised of six subunits
11202 at
            6823.6
hypothetical protein
11203 i at 12262.6
                         Ρ
Ribosomal protein L17B (L20B) (YL17)
11204_s_at 8391.5
Ribosomal protein L17B (L20B) (YL17)
11205 i at 7433.2
Ribosomal protein L17B (L20B) (YL17)
11206 f at 13162.8
Ribosomal protein L17B (L20B) (YL17)
11207_at
            781.1
transcription factor
11208_at
            291.7
                        Α
questionable ORF
11209 at
            8930.2
Cell wall beta-glucan assembly
            9445.6
11210_at
subunit 3 of replication factor-A
```

```
11211_at
                         Ρ
            5211.5
carboxypeptidase yscS
                        Ρ
11212 at
            7260.8
similarity to YBR162c
11213 at
            2.7
An a-specific gene that is induced to a higher expression level by alpha factor
11214_at
            133.1
questionable ORF
11170_at
            629.6
                         Α
transcription factor containing a SET domain
            8561.7
11171 at
Farnesyl diphosphate synthetase (FPP synthetase)
11172 at
            7292.5
Ubiquinol cytochrome-c reductase subunit 8 (11 kDa protein)
11173 at
            2931.1
Protein kinase homolog, mutant is salt and pH sensitive
11174 at
            2946.4
putative catalytic subunit of cAMP-dependent protein kinase
11175 at
            485.3
hypothetical protein
11176_at
            471.2
                         Α
weak similarity to dnaJ proteins
11177 at
            362.1
                         Α
hypothetical protein
11178 at
            670.1
member of the Pir1p/Hsp150p/Pir3p family
11179 at
            8128.8
Heat shock protein, secretory glycoprotein
11180 at
            8433.7
Protein with homology to Hsp150p and Pir1p, Pir2p, and Pir3p
11181 at
            8102.7
Factor arrest protein
11182 at
            1574.8
sensitive to sulfonylurea herbicides on complex media (YPD)
11183 at
            1578.0
Fructose-2,6-bisphosphatase
11184 at
            1616.4
Protein involved in vacuolar sorting
11185 at
            509.7
L-myo-inositol-1-phosphate synthase
11186 at
            1176.5
questionable ORF
11187_at
            10491.6
similarity to hypothetical protein YDL123w
11188 at
            465.6
questionable ORF
11189 at
            938.4
similarity to hypothetical protein YDR131c
11190 at
            7669.1
RNA polymerase I subunit, not shared (A34.5)
11191_at
            950.2
weak similarity to C.elegans hypothetical protein C43G2.4
11147 at
            875.6
IME2-Dependent Signalling
11148_at
            4842.1
weak similarity to T.pacificus retinal-binding protein
```

```
Ρ
11149_at
            303.6
hypothetical protein
                        Ρ
11150 at
            9643.0
16.5 kDa inner membrane protein required for import of mitochondrial precursor proteins
11151 at
            895.8
questionable ORF
                        Ρ
11152_g_at 2198.2
questionable ORF
11153 at
            1109.7
Serine-threonine protein kinase
11154 at
            2245.7
fourth-largest subunit of RNA polymerase II
11155 at
            2629.0
Probable glycosyltransferase of KRE2VKTR1VYUR1 family\; located in the Golgi
11156 s at 11027.1
translation initiation factor eIF4A
11157 at
            525.2
self-glucosylating initiator of glycogen synthesis\; similar to mammalian glycogenin
11158 i at 3080.7
Ribosomal protein S21B (S26B) (YS25)
11159_s_at 10251.7
Ribosomal protein S21B (S26B) (YS25)
11160 at
            270.6
                        Ρ
questionable ORF
11161 at
            4995.3
                        Ρ
putative plasma membrane transporter capable of transporting sphingoid long chain bases into cells
11162 at
            1378.4
mitochondrial carrier protein
11163 at
            294.2
weak similarity to human phospholipase D
11164 at
            1281.3
weak similarity to nonepidermal Xenopus keratin, type I
11165 at
            10790.5
carbamoyl-phophate synthetase, aspartate transcarbamylase, and glutamine amidotransferase
11166 at
            1897.9
180 kDa high affinity potassium transporter
11167 at
            2328.8
MAP kinase kinase (MEK), may act as a scaffolding protein for Sho1p, Ste11p, and Hog1p
11168 at
            329.0
negative transcriptional regulator
11169 at
            1192.7
Nit2 nitrilase
            3254.5
11124_at
translational repressor of GCN4
            2911.6
11125 at
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
            6736.9
weak similarity to D.melanogaster troponin T and human nucleolin
11127 at
            5317.0
weak similarity to dog-fish transition protein S2
11128 at
            11049.9
D-ribulose-5-Phosphate 3-epimerase
11129 at
            342.4
                        М
questionable ORF
11130_at
            85.6
                        Α
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```
questionable ORF
                         Ρ
11131 at
            2784.6
hypothetical protein
11132 at
            8770.6
Putative inorganic phosphate transporter
11133 at
            3369.2
With NCA2, regulates proper expression of subunits 6 (Atp6p) and 8 (Atp8p) of the Fo-F1 ATP synthase
11134 at
            4004.0
Anti-silencing protein that causes depression of silent loci when overexpressed
11135 at
            1564.0
similarity to Met30p and N.crassa sulfur controller-2
11136 at
            3835.0
Component of Chaperonin Containing T-complex subunit seven
            1238.6
11137 at
GATA zinc finger protein 3 homologous to Dal80 in structure and function
11138 at
            6403.3
weak similarity to ATPase Drs2p
11139 at
            4051.8
strong similarity to hypothetical S. pombe protein
11140_at
            473.9
similarity to hypothetical S. pombe protein
11141 at
            505.4
Serine\Threonine protein kinase, positively regulated by IME1
11142 at
            50.8
similarity to hypothetical protein YKR029c
11143 at
            928.5
weak similarity to C.elegans hypothetical protein F45G2.c
11144 at
            610.8
putative regulatory protein
11145 at
            2897.0
mitochondrial elongation factor G-like protein
11146_at
            2281.8
gamma-glutamylcysteine synthetase
11102_at
            2867.1
similarity to hypothetical C. elegans protein C56A3.8
11103 at
            1858.7
Involved in chitin biosynthesis and Vor its regulation
11104 at
            2916.6
SIT4 associated protein, MW of 185 kDa
11105_at
            9148.8
similarity to hypothetical C. elegans protein T15B7.2
11106 at
            3840.1
ribosomal protein YmL49, mitochondrial
11107_at
            1575.2
putative 163 kDa protein kinase
11108 at
            1905.9
similarity to E.hirae NaH-antiporter NapA
11109 at
            1636.7
outward-rectifier potassium channel
11110 at
            1678.9
DNA helicase
11111 at
            4791.6
                         Ρ
weak similarity to human G protein-coupled receptor
11112 at
            1308.6
Part of the DNA polymerase II complex, acts in a checkpoiint pathway during S-phase
11113_at
            194.5
```

```
shows homology to DNA binding domain of Gal4p, has a leucine zipper motif and acidic region\;
lexA-Sip4p activates transcription
11114 at
            1498.4
Ornithine carbamovltransferase
11115 at
            1053.8
tRNA ligase
11116_at
            -15.9
                         Α
questionable ORF
11117 at
            278.4
70 kD component of the Exocyst complex\; required for exocytosis
11118 at
            1451.3
similarity to hypothetical protein YKR021w
11119 at
            1061.4
similarity to hypothetical protein YKR019c
            4412.1
11120 at
strong similarity to hypothetical protein YKR018c
11121 at
            4264.9
54.8 kDa actin-related protein
11122 at
            9941.6
May be required during cell division for faithful partitioning of the ER-nuclear envelope membranes,
involved in control of mitotic chromsome transmission
11123 at
            4595.0
Similar to plant PR-1 class of pathogen related proteins
11079 at
            6420.4
Similar to plant PR-1 class of pathogen related proteins
11080_at
            462.4
hypothetical protein
11081 at
            6603.3
                         Р
Establishes Silent omatin\; homolog of TOF2
11082 at
            430.3
questionable ORF
11083_at
            2150.3
required for structural maintenance of chromosomes
11084_at
            1988.8
DnaJ-like protein of the endoplasmic reticulum membrane
11085 at
            1720.0
                        Ρ
hypothetical protein
                         Ρ
11086_at
            1132.8
Acetylglutamate Synthase
11087_at
            681.2
similarity to AMP deaminases
11088 at
            4066.8
similarity to C.elegans hypothetical protein
11089_at
            4483.2
strong similarity to human esterase D
11090 at
            992.9
                         Α
questionable ORF
11091 at
            1183.1
                         Ρ
hypothetical protein
11092 at
            5514.3
weak similarity to DNA-directed DNA polymerase II chain C
11093_at
            193.4
hypothetical protein
11094_at
            5149.7
Mitochondrial ribosomal protein MRPL8 (YmL8) (E. coli L17)
11095_at
            2435.5
```

```
similarity to S.pombe SPAC13G6.3 protein
11096 at
            741.8
82-kDa protein, with putative coiled-coil domain, has carboxy-terminal domain, containing heptad repeats,
that binds Nsp1p\; nucleoporin
11097 at
            3446.2
similarity to kynurenine aminotransferase and glutamine-phenylpyruvate transaminase
11098 at
            687.6
Homolog of human CLN3
11099 at
            282.0
strong similarity to hypothetical protein YBR270c
11100 at
            362.5
probable serine Vthreonine kinase
11101 at
            1327.2
Metalloregulatory protein involved in zinc-responsive transcriptional regulation
11057 at
            10486.9
similarity to R.fascians hypothetical protein 6
11058 at
            3790.0
Translocase for the insertion of proteins into the mitochondrial inner membrane.
11059 at
            1921.6
Vacuolar protein similar to mouse gene H<br/>beta>58
11060 at
            14014.3
Glyceraldehyde-3-phosphate dehydrogenase 1
11061 g at 6777.4
Glyceraldehyde-3-phosphate dehydrogenase 1
11062 at
            763.3
hypothetical protein
11063 at
            3167.2
DEAD-box family helicase required for mRNA export from nucleus
11064 at
            710.8
hypothetical protein
11065 at
            4087.4
similarity to hypothetical protein YBR273c
11066 at
            568.7
Regulator of Ty1 Transposition
11067 at
            1169.8
similarity to E.coli lipoate-protein ligase A
11068 at
            392.1
strong similarity to succinate dehydrogenase flavoprotein
11069 at
            879.8
GTPase-activating protein for Ypt6
11070 at
            -1840.6
similarity to hypothetical protein YKR015c
11071_at
            7058.1
Putative microtubule-associated protein (MAP)
            7701.9
11072 at
Nucleoskeletal protein found in nuclear pores and spindle pole body
11073 at
            1838.4
similarity to human protein interacting with human nuclearpore protein Nup93
11074 at
            49.3
strong similarity to hypothetical protein YJL037w
11075 at
            1849.4
strong similarity to hypothetical protein YJL038c
11076 at
            621.3
weak similarity to Mvp1p
11077_at
            1511.5
weak similarity to P.gingivalis PgaA and B.japonicum nitrogen fixation protein
```

```
Ρ
11078_at
            10325.9
Homologue of mammalian BiP (GPR78) protein\; member of the HSP70 gene family
11034 at
            3215.6
putative RNA helicase
                        Ρ
11035 at
            829.8
questionable ORF
11036 at
            1618.2
Geranylgeranyltransferase Type II alpha subunit (PGGTase-II, alpha subunit)
11037 at
            1548.8
spindle-assembly checkpoint protein
11038 at
            1893.6
similarity to C.elegans hypothetical protein T05G5.8
11039 at
            254.9
hypothetical protein
11040 at
                        Ρ
            905.7
hypothetical protein
11041 at
            10607.1
small subunit of ribonucleotide reductase
11042 at
            599.1
                        Ρ
member of yeast Pol I core factor (CF) also composed of Rrn11p, Rrn6p and TATA-binding protein
11043 at
            669.7
similar to Aps1p and mammalian small subunit (sigma-2 adaptin) of plasma membrane-associated
clathrin assembly complex (AP-2)
11044 at
            366.8
Nuclear gene encoding mitochondrial protein
11045_at
            -9.2
questionable ORF
11046 at
            2661.7
                        Ρ
weak similarity to S.pombe hypothetical protein SPAC23A1.16
11047 at
            4740.5
similarity to P.falciparum glutamic acid-rich protein
11048_at
            345.3
hypothetical protein
11049_g_at 696.5
hypothetical protein
                        Ρ
11050 at
            1773.0
questionable ORF
                        Ρ
11051_at
            1111.8
hypothetical protein
11052_at
            4252.5
weak similarity to hypothetical protein YNL278w and YLR187w
11053 at
            156.4
questionable ORF
11054_at
            7107.6
Cytoplasmic chaperonin subunit gamma
11055 at
            941.6
Checkpoint protein required for cell cycle arrest in response to loss of microtubule function
11056 at
            8559.8
weak similarity to regulatory protein PHO81
11010 at
            4380.6
weak similarity to chicken hypothetical protein
            2853.8
11011_at
weak similarity to C.elegans hypothetical protei ZK792.5
            1260.5
11012 at
questionable ORF
11013_at
            10554.7
                        Ρ
```

```
Component of Chaperonin Containing T-complex subunit eight
11014 at
            11.9
hypothetical protein
11015 at
            2607.9
cyclin-related subunit of the kinase complex that phosphorylates the RPO21 CTD (carboxy-terminal
domain)\; also called CTDK-I beta subunit
11016 at
            1852.5
                        Ρ
adenylate cyclase
11017 at
            2751.0
Multicopy suppressor of ypt6 null mutation
11018 at
            1248.5
hypothetical protein
11019 at
            12411.5
64-kDa, alpha subunit of oligosaccharyltransferase complex\; homologous to mammalian ribophorin I
11020 i at 3814.9
Subunit of 20S proteasome
11021 f at 5165.2
Subunit of 20S proteasome
11022 at
            11212.6
Subunit of 20S proteasome
11023 at
            8686.7
weak similarity to A.thaliana aminoacid permease AAP4
11024 at
            3948.0
Protein component of the U3 small nucleolar ribonucleoprotein (snoRNP)
11025 at
            1410.1
hypothetical protein
            10447.3
                        Ρ
11026 at
alpha-agglutinin
11027 at
            1284.5
beta-adaptin, large subunit of the clathrin-associated protein complex
11028 at
            1576.9
DNA-directed DNA polymerase delta, 55 KD subunit
11029 at
            4168.6
                        Ρ
Translation initiation factor eIF-2 alpha subunit
11030 at
            285.3
similarity to S.pombe hypothetical protein
11031_s_at 14239.0
glyceraldehyde 3-phosphate dehydrogenase
11032 at
            2062.5
ATP sulfurylase
11033 at
            3483.3
Homologue of the SPC12 subunit of mammalian signal peptidase complex. Protein is important for
efficient signal peptidase activity.
10988_at
            401.4
hypothetical protein
                        Ρ
10989 at
            905.0
hypothetical protein
10990 at
            2881.9
                         Ρ
similarity to C.elegans B0491.1 protein
10991 at
            5508.8
strong similarity to S.pombe hypothetical protein SPBC16C6.05
10992_at
            2931.2
strong similarity to Sng1p
10993_at
            11517.2
dihydroxyacid dehydratase
10994_at
            10914.8
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Peptidyl-prolyl cis\trans isomerase (PPlase)
10995 at
            1167.2
questionable ORF
10996_at
                        Ρ
            1853.3
peroxisomal acyl-CoA thioesterase
10997 at
            179.7
questionable ORF
                        Ρ
10998 at
            617.9
meiotic recombination protein
10999_at
            75.4
meiotic recombination protein
11000 at
            1000.5
Sm-like protein
11001 at
            -47.3
                        Α
hypothetical protein
11002 at
            5875.9
weak similarity to C.elegans Z49131 E ZC373.5 protein
11003 at
            8282.2
3-hydroxyanthranilic acid dioxygenase
11004_at
            751.0
similarity to hypothetical protein YJL181w
11005 at
            2418.6
Component of a complex quanine nucleotide exchange activity for the ADP-ribosylation factor ARF
11006 at
            968.0
cyclophilin related to the mammalian CyP-40\; physically interacts with RPD3 gene product
11007 at
            900.8
similarity to Drosophila DmX gene
11008_at
            1231.7
Required for assembly of active cytochrome c oxidase
11009 at
            333.9
DNA-dependent ATPase, homologous to human Cockayne syndrome B gene ERCC6, that is a putative
helicase
10965 at
            779.5
similarity to human E6-associated protein
10966 at
            116.8
                        Α
questionable ORF
10967_at
            88.4
                         Α
questionable ORF
                        Р
10968 at
            560.7
hypothetical protein
                        Р
10969 at
            1262.7
putative transport protein involved in intracellular iron metabolism
10970_at
            3346.1
hypothetical protein
10971 at
            4432.4
Protein in nuclear pore complex\; may function in nuclear envelope integrity\; may also be involved in
tRNA biogenesis
10972 at
            204.9
                         Α
third (55 kDa) subunit of DNA polymerase delta
10973 at
            9875.7
weak similarity to putative transport protein YKR103w
10974 at
            3575.3
Mitochondrial matrix protein involved in protein importly; subunit of Scel endonuclease
            2158.7
10975 at
weak similarity to Xenopus vimentin 4
10976_at
            3617.1
```

а

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anaerobically expressed form of translation initiation factor eIF-5A
10977_at
            12542.6
                         Ρ
iso-1-cytochrome c
10978 at
                         Ρ
            1834.8
Associated with ferric reductase
10979 at
            464.2
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
            1917.7
osmotic growth protein
10981 at
            4183.6
Nucleotide excision repair protein involved in G(sub)2 repair of inactive genes
10982 at
            286.3
hypothetical protein
10983 at
            1588.8
                         Ρ
similarity to hypothetical protein YML047c
10984 at
            623.2
Protein required for growth at high temperature
10985 at
            1389.1
hypothetical protein
                         Ρ
10986 at
            1499.0
thymidylate kinase
10987 at
            5437.7
Clathrin-associated protein, small subunit
            2251.4
10943 at
Putative serine Vthreonine protein kinase that enhances spermine uptake
10944 at
            83.7
basic helix-loop-helix protein
10945_at
            23.3
similarity to Mnn4p
10946_at
            1181.7
52-kDa amidase specific for N-terminal asparagine and glutamine
10947 at
            4652.0
A12.2 subunit of RNA polymerase I
10948 at
            11003.2
subunit of chaperonin subunit epsilon
            7574.1
10949_at
actin-related gene
10950 at
            2086.6
                         Ρ
phosphatidylinositol kinase homolog
            1647.0
10951_at
Essential protein of unknown function
10952 at
            2328.2
Subunit 2 of Replication Factor C\; homologous to human RFC 37 kDa subunit
10953 at
            4344.3
controls 6-N-hydroxylaminopurine sensitivity and mutagenesis
10954 at
            12346.8
similarity to C.elegans hypothetical protein C14A4.1
10955_at
            8.6
questionable ORF
            5603.4
10956 at
strong similarity to C.elegans hypothetical protein and similarity to YLR243w
10957_at
            7340.4
```

```
Methylene-fatty-acyl-phospholipid synthase (unsaturated phospholipid N-methyltransferase)
10958 at
            5499.8
Protein interacts with Gsp1p
10959 at
            2408.5
putative mannosyltransferase
10960 at
            4184.9
Component of 10 nm filaments of mother-bud neck
10961 at
            10032.2
Mir1p has been purified as a mitochondrial import receptor (p32) which can bind to signal sequence
regions of mitochonidrial 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
            4476.9
similarity to mammalian indoleamine 2,3-dioxygenase
10963 at
            4389.4
questionable ORF
10964 at
            4550.8
                         Ρ
hypothetical protein
10920 at
            128.5
                         Ρ
questionable ORF
10921_at
            525.7
                         Ρ
hypothetical protein
                         Ρ
10922_at
            610.7
hypothetical protein
10923 at
            1503.3
weak similarity to S.pombe hypothetical protein SPAC1B3.08
10924_at
            12046.7
hypothetical protein
10925 at
            1708.2
                         Ρ
gamma subunit of G protein coupled to mating factor receptors
10926 at
            917.0
questionable ORF
10927_at
            3308.4
weak similarity to S.pombe hypothetical protein SPBC14C8.18c
10928_at
            1026.0
hypothetical protein
                                                                                                    F
10929 at
            1508.9
box protein with several leucine rich repeats
10930 at
            3746.6
Benomyl dependent tubulin mutant
10931_at
            1439.8
Component of a pre-mRNA polyadenylation factor that interacts with poly(A) polymerase
10932 at
            536.5
meiotic gene expression\; meiosis inducing protein
10933_at
            6772.6
Ribosomal protein L43B
10934 at
            192.0
protein related to mitochondrial carriers
10935 at
            2143.5
similarity to Corynebacterium 2,5-diketo-D-gluconic acid reductase and aldehyde reductases
10936 at
            553.7
weak similarity to Caj1p
10937_at
            808.4
weak similarity to Bacillus licheniformis esterase
10938 at
            480.8
ubiquitin hydrolase
                         Ρ
10939_at
            2031.7
```

```
weak similarity to Bud3p
10940 at
            2201.8
weak similarity to superoxide dismutases
10941 at
            1284.7
hypothetical protein
                         Ρ
10942 at
            7677.9
CTP synthase
10897 at
            7002.6
                         Ρ
Cu, Zn superoxide dismutase
10898_at
            10310.2
strong similarity to human adenosine kinase
10899 at
            525.4
ExtraCellular Mutant
10900 at
            1529.4
weak similarity to acylglycerol lipase
10901 at
            389.3
similarity to hypothetical protein YIL014c-a
10902 at
            5072.6
carbamyl phosphate synthetase
10903_at
            740.3
similarity to human myotubularin
10904_at
            1689.7
weak similarity to E.coli colanic acid biosynthesis positive regulator RcsB
10905 at
            900.3
involved in nuclear function
10906 at
            5973.3
similarity to bacterial, chloroplast and mitochondrial ribosomal protein S7
10907 at
            945.6
questionable ORF
10908 at
            1032.1
                         Ρ
similarity to hypothetical protein YBL043w
10909_at
            4973.0
similarity to hypothetical protein YPR114w
10910 at
            7170.9
zinc metallo-protease that catalyzes the first step of N-terminal processing of the yeast a-factor precursor
10911 at
            3685.7
weak similarity to Helicobacter pylori UreD protein
10912 at
            172.8
similarity to human retinoblastoma binding protein 2
10913_at
            -353.5
hypothetical protein
10914 at
                         Ρ
            8156.7
F(1)F(0)-ATPase complex beta subunit, mitochondrial
10915_at
            623.1
CCR4 associated factor
10916 at
            10008.7
Ribosomal protein S5 (S2) (rp14) (YS8)
10917 at
            2323.2
weak similarity to Staphylococcus multidrug resistance protein
10918 at
            2200.9
similarity to human KIAA0171 protein
10919_at
            2116.5
similarity to human prostate-specific membrane antigen and transferrin receptor protein
10875 at
            3164.1
similarity to regulatory protein Ard1p
10876_at
            -283.3
```

```
questionable ORF
10877 at
            826.0
weak similarity to hypothetical protein YNL024c
10878 at
            2387.5
similarity to O-succinylhomoserine (thiol)-lyase
10879 at
            625.7
specific alpha-mannosidase
10880 at
            1978.1
Putative Upf1p interacting protein
10881_at
            10355.0
strong similarity to hypothetical protein YDR399w
10882 at
            448.9
similarity to paramyosin, myosin
10883 at
            313.0
Required for maintenance of chromosomes and minichromosomes
10884 at
            1409.2
weak similarity to human 3,5-cyclic-GMP phosphodiesterase
10885 at
            7763.2
ExtraCellular Mutant
10886_at
            987.8
similarity to C.elegans hypothetical protein T08A11.1
10887 at
            11280.2
Homoserine dehydrogenase (L-homoserine:NADP oxidoreductase)
10888 at
            1669.4
involved in cell-cycle regulation of histone transcription
10889 at
            933.9
hypothetical protein
10890 at
            1395.4
similarity to thiamin pyrophosphokinase
10891 at
            8457.6
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
10892_at
            2124.3
involved in mitochondrial genome maintenance
10893_s_at 11117.4
Ribosomal protein S4A (YS6) (rp5) (S7A)
10894 at
            281.1
                        Ρ
questionable ORF
10895_at
            1253.3
heat shock transcription factor homolog
10896_at
            7214.8
Branched-Chain Amino Acid Transaminase
10851 at
            885.1
similarity to 2-nitropropane dioxygenase
10852_at
            108.1
Protein induced during anaerobic growth
10853 at
            1281.4
similarity to mucin proteins, YKL224c, Sta1p
10854 at
            1508.1
allantoate permease
10855 at
            301.5
                        Ρ
Endo-polygalacturonase
                        Ρ
10856_at
            371.1
hypothetical protein
10857_at
            1187.5
Hypothetical aryl-alcohol dehydrogenase (AAD)
10858_s_at 1572.5
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Thiamine biosynthetic enzyme
10859 at
            95.0
                         Α
hypothetical protein
10860_s_at 448.5
                         Ρ
hexose transporter
                         Ρ
10861_s_at 2586.1
sorbitol-induced sorbitol dehydrogenase
10862 s at 8.7
strong similarity to Mal31p
10863_i_at 844.6
identified by SAGE
10864 r at 1590.2
identified by SAGE
10865 at
            1302.8
C-terminal part of YJR030c
10866 at
            2377.2
similarity to human DDP gene, hypothetical protein of S.pombe (YA94 SCHPO) and Mrs11p
(YHR005c-a)
10867 s at 2170.2
Co-assembles with Bud3p at bud sites
10868 at
            6166.3
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
            3557.7
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 50.9
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 1595.1
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
            4715.3
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
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
            6139.6
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
            370.9
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
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
            218.6
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 969.5
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 342.4
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
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10833_at
            906.2
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
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
            1540.7
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
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
            290.9
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
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
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
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
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
            4081.4
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
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
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
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
            648.5
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
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
            657.1
10848 at
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
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
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
non-annotated SAGE orf Found reverse in NC_001142 between 424167 and 424301 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
10807 at
            711.5
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
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 275.7
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 180.2
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
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 496.8
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 -107.3
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 2220.6
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
            3348.7
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
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
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
            858.3
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
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
            2488.9
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 65.2
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
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
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
            418.8
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
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10825_at

425.8

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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
            16.7
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 548.6
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
            3866.3
small nuclear RNA128
10783 at
            79.6
                        Α
small nuclear RNA190
                        Ρ
10784 at
            2058.6
small nuclear RNA37
10785 at
                        Ρ
           876.3
snRNA
10786 i at -132.0
                        Α
Centromere
10787 at
            2470.3
                        Ρ
small nuclear RNA3
10788 at
            48.3
                        Α
ARS121 Found forward in NC_001142 between 683650 and 683699 with 100% identity.
10789 f at 1262.4
strong similarity to members of the Srp1p/Tip1p family
10790 at
            343.0
weak similarity to transcription factors, similarity to finger proteins YOR162c, YOR172w and YLR266c
10791 at
            115.8
weak similarity to human X-linked PEST-containing transporter
10792 at
            251.1
Ferric reductase, similar to Fre1p
10793 at
            2545.0
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p,
Cos4p, Cos8p, Cos6p, Cos9p
10794_at
            1874.7
threonine dehydratase
10795 at
            -90.4
                        Α
carboxylic acid transporter protein homolog
10796 at
            12217.6
dihydroorotate dehydrogenase
10797_at
            3509.5
similarity to P. aeruginosa hyuA and hyuB
10798 at
            5111.0
weak similarity to mouse transcriptional coactivator ALY
10799_at
            4953.9
                        Ρ
phospholipase A2-activating protein
10800 at
            9339.0
integral membrane protein localizing to the ER and Golgi
10801 at
            3918.5
anthranilate synthase Component II and indole-3-phosphate (multifunctional enzyme)
10802 at
            8316.4
ubiquitin activating enzyme, similar to Uba2p
10803 at
            385.4
ABC transporter, glycoprotein, component of a-factor secretory pathway
10804 at
            1107.9
Subunit of complex involved in processing of the 3 end of cytochrome b pre-mRNA
10805_at
            3951.9
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hypothetical protein
                        Ρ
10760 at
            1521.9
hypothetical protein
10761 at
            2188.0
                        Ρ
nuclear protein LOS1
                        Ρ
10762 at
            5243.3
probable purine nucleotide-binding protein
10763 at
            1880.5
phosphatidylinositol kinase homolg
10764_at
            335.9
questionable ORF
10765 at
            2379.7
member of the AAA-protein family
10766 at
            8157.2
v-SNARE
10767 at
            3796.4
similarity to rabbit histidine-rich calcium-binding protein
10768 at
            875.7
mitochondrial threonine-tRNA synthetase
10769 at
            1892.0
Interacts with and may be a positive regulator of GLC7 which encodes type1 protein phosphatase
10770_at
            9756.8
acyl carrier protein
10771_at
            7391.3
diphthamide synthesis protein
10772 at
            1645.7
Type 2B protein phosphatase\; regulatory B subunit of calcineurin
10773 at
            3906.3
Type 2B protein phosphatase\; regulatory B subunit of calcineurin
10774 at
            925.4
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
            271.0
peroxisomal ABC transporter 2
10776 at
            467.6
strong similarity to hypothetical protein YLR413w
10777_at
            2789.8
mRNA transport regulator
10778_at
            1772.7
probable purine nucleotide-binding protein
10779 at
            5899.9
Ornithine decarboxylase
                        Ρ
10780_at
            1018.4
hypothetical protein
10781 at
            8973.8
pentafunctional enzyme consisting of the following domains: acetyl transferase, enoyl reductase,
dehydratase and malonylVpalmityl transferase
10737 at
            12337.9
ribose-phosphate pyrophosphokinase
10738_i_at 73.8
Ribosomal protein L17A (L20A) (YL17)
10739_f_at 12963.4
Ribosomal protein L17A (L20A) (YL17)
10740_at
            4009.3
kinesin-like protein
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10741_at
                         Ρ
            8273.5
factor recptor
10742 at
            604.3
                         Α
questionable ORF
                         Ρ
10743 at
            2477.4
hypothetical protein
10744_at
            6536.6
                         Ρ
weak similarity to E.coli hypothetical protein
10745_at
            1450.3
probable transport protein
                         Ρ
10746 at
            2381.1
U5 snRNP-specific protein related to EF-2
10747 at
            6249.8
                        Ρ
Nucleolar protein
                         Ρ
10748 at
            715.7
probable serine\threonine-specific protein kinase (EC 2.7.1.-)
10749 at
            2029.0
mitochondrial ribosomal protein L14
10750 at
            611.4
questionable ORF
10751 at
            1119.0
probable serine\threonine-specific protein kinase (EC 2.7.1.-)
10752 at
            3789.2
16 kDa mitochondrial ribosomal large subunit protein
10753 at
            1012.2
cAMP-dependent protein kinase catalytic subunit
10754 at
            6384.1
Morphogenesis Checkpoint Dependent
10755 at
            11366.9
Protein containing tandem internal repeats
            1939.2
10756 at
Protein containing tandem internal repeats
10757 at
            218.4
                        Ρ
hypothetical protein
10758 at
            412.9
probable serine\/threonine-specific protein kinase (EC 2.7.1.-)
10759 at
            8994.8
similarity to hypothetical S. pombe protein
10714 at
            1063.9
hypothetical protein
10715 at
                         Ρ
            2478.9
hypothetical protein
10716_at
                         Ρ
            6123.0
aminopeptidase yscII
10717 at
            11448.3
                         Ρ
40S ribosomal protein S27A (rp61) (YS20)
10718 at
            555.8
                        Ρ
hypothetical protein
10719_at
            1365.5
signal recognition particle receptor, beta chain
10720_at
            191.0
questionable ORF
                         Ρ
10721 at
            10603.1
Phosphoglycerate mutase
10722_at
            2178.3
similarity to C.elegans hypothetical protein R107.2
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10723_at
            4214.4
                        Ρ
NADH-cytochrome b5 reductase
10724 at
            712.7
debranching enzyme
                        Ρ
10725 at
            3266.4
flavoprotein subunit of succinate dehydrogenase
10726_at
            402.9
questionable ORF
10727_at
            8735.8
strong similarity to S.pombe hypothetical protein C3H1.09C
10728 at
            11183.8
putative ATPase, 26S protease subunit component
10729 at
            2103.2
Subunit of RNA polymerase III
10730 at
            3058.6
low temperature viability protein
10731 at
            6401.7
mitochondrial ribosomal protein
10732 at
            7842.4
succinate dehydrogenase cytochrome b
            2379.5
10733 at
triglyceride lipase-cholesterol esterase
10734 at
            1389.4
alpha subunit of the kinase which phosphorylates the RNA polymerase largest subunit CTD
(carboxyl-terminal domain)
10735_at
            2081.4
15.5 kDa mitochondrial ribosomal protein YmL31
10736_at
            1016.5
hypothetical protein
                        Р
10692 at
            961.9
questionable ORF
10693_at
            2801.6
Beta-adaptin, large subunit of the clathrin-associated protein (AP-1) complex
10694_at
            525.9
probable neutral zinc metalloproteinase
10695 at
            354.7
probable purine nucleotide-binding protein
10696 at
            1503.2
probable folyl-polyglutamate synthetase
10697_at
            829.6
questionable ORF
10698 at
            1391.9
                        Ρ
Required for mother cell-specific HO expression
10699_at
            1022.3
myosin I
                        Ρ
10700 at
            8047.7
Phospo-mutase homolog
10701 at
            5843.4
phosphoglucomutase, minor isoform
10702 at
            4183.7
76.5 kDa Serine\/threonine protein kinase with similarity to protein kinase C, is 90\% identical to Ypk2p
10703_at
            2153.0
DNA-independent RNA Polymerase I transcription factor
10704 at
            530.9
suppressor of SHR3\; confers leflunomide resistance when overexpressed
10705_g_at -24.8
```

```
suppressor of SHR3\; confers leflunomide resistance when overexpressed
10706 at
            915.9
                        Ρ
questionable ORF
10707 at
            5745.9
                        Ρ
component of signal recognition particle
10708_at
            1066.0
strong similarity to YMR102c
10709_at
            10316.8
similarity to mitochondrial uncoupling proteins (MCF)
10710_at
            2052.6
25.2 kDa protein involved in assembly of vacuolar H(+) ATPase
10711 at
            213.2
                        Ρ
questionable ORF
                        Ρ
10712 at
            9669.8
Hsp90 (Ninety) Associated Co-chaperone
10713 at
            2898.3
probable serineVthreonine-specific protein kinase (EC 2.7.1.-)
10669 at
            1331.0
questionable ORF
10670_at
            3184.2
major apurinic\apyrimidinic endonuclease\3 -repair diesterase
10671 at
            2995.0
42 kDa 5 to 3 exonuclease required for Okazaki fragment processing
10672 at
            2678.8
transcriptional activator and ARS1 binding protein
10673_at
            613.9
questionable ORF
10674 at
                        Ρ
            6418.2
Protein involved in resistance to K. lactis killer toxin
10675 at
            4602.5
transcriptional activator protein of CYC1 (component of HAP2VHAP3 heteromer)
10676_at
            40.8
DNA replication and checkpoint protein 1
10677_at
            -22.2
weak similarity to S.antibioticus probable oxidoreductase
10678 at
            2708.6
aspartate aminotransferase, mitochondrial
10679_at
            1143.0
similarity to YMR086w
10680_at
            7948.7
Glutamine fructose-6-phosphate amidotransferase (glucoseamine-6-phosphate synthase)
10681 at
            3453.0
vacuolar aminopeptidase ysc1
10682_at
            -253.8
                        Α
hypothetical protein
            756.6
10683 at
Putative protein kinase homologous to S. pombe cdr1\/nim1
10684 at
            4047.1
similarity to C.elegans hypothetical protein
10685 at
            843.3
similarity to C.elegans hypothetical proteins C18G6.06 and C16C10.2
10686_at
            2966.3
hypothetical protein
10687_at
            -175.4
                        Α
hypothetical protein
                        Ρ
10688_at
            8348.2
```

```
cell wall mannoprotein
                        Ρ
10689 at
            3480.1
cell wall mannoprotein
10690 at
            430.0
similarity to C.elegans hypothetical proteins
10691 at
            5963.1
weak similarity to E.coli hypothetical protein
10646 at
            227.0
MBR1 protein precursor
10647_at
            630.7
GTPase-activating protein (GAP) for Rsr1pVBud1p
10648 at
            1044.1
strong similarity to Sec14p
10649 at
            795.8
hypothetical protein
10650 at
            377.6
Centromere protein required for normal chromosome segregation and spindle integrity
10651 at
            1016.4
similarity to C.tropicalis hal3 protein, to C-term. of Sis2p and to hypothetical protein YOR054c
10652_at
            2918.5
cytochrome c1 heme lyase
10653_at
            704.1
hypothetical protein
10654 at
            9795.6
mitochondrial malate dehydrogenase
10655 at
            5089.1
strong similarity to S.pombe hypothetical protein SPAC29B12
10656 at
            6400.5
weak similarity to C.elegans hypothetical protein
10657 at
            435.0
questionable ORF
10658_at
            8637.3
Translation elongation factor EF-1gamma
10659_at
            11983.8
Translation elongation factor EF-1gamma
10660 at
            8571.1
Vacuolar H-ATPas hydrophilic subunit C of V1 sector
            1349.0
10661 at
kinesin heavy chain homolog, but is not believed to act as a kinesin, colocalizes with Myo2p
10662_at
            2567.5
probable ATP-dependent RNA helicase
10663 at
            7576.3
hypothetical protein
                         Ρ
10664_at
            647.1
questionable ORF
                        Ρ
10665_g_at 977.7
questionable ORF
                        Р
10666 at
            1093.9
hypothetical protein
                         Ρ
10667 at
            1675.6
involved in early pre-mRNA splicing
10668_at
            1834.4
novel member of the Hsp70 family of molecular chaperones that localizes to the lumen of the
endoplasmic reticulum:
10624_at
            416.8
Binds Sin3p in two-hybrid assay
```

```
10625_at
            3105.1
weak similarity to A.parasiticus nor-1 protein
10626 at
            392.4
similarity to B. subtilis transcriptional regulatory protein
10627 at
            5410.9
strong similarity to hypothetical E.coli protein b1832
10628 at
            4326.1
Nuclear pore complex protein homologous to Nup116p
10629 at
            7576.5
Nucleoside diphosphate kinase
10630 at
            4013.7
hypothetical protein
10631 at
            8428.3
Yeast endoplasmic reticulum 25 kDa transmembrane protein
10632 at
            3674.4
                         Ρ
overexpression overcomes manganese toxicity
10633 at
            2460.7
weak similarity to mammalian microtubule-associated protein MAP 1B
10634 at
            2783.7
zinc finger protein
10635 at
                         Р
            623.1
hypothetical protein
                         Ρ
10636 at
            8956.9
aldolase
10637 at
            2653.8
similarity to C.elegans hypothetical protein
10638 at
            3727.1
Transcription factor IIA, small chain
            1435.2
10639 at
100-kDa protein (predicted molecular weight is 120 kDa) with two leucine zipper motifs, coiled-coil region,
and some homology to Nup133p
10640_at
            9824.1
strong similarity to human IgE-dependent histamine-releasing factor
10641_at
            705.5
probable acetoacetyl-CoA reductase
            10722.8
10642 at
similarity to glutenin, high molecular weight chain proteins and Snf5p
10643 at
            8062.3
similarity to C.elegans hypothetical protein T09A5.7 (12.5 kD)
10644_at
            954.9
questionable ORF
10645 at
            1411.8
                         Ρ
hypothetical protein
                         Ρ
10601_at
            2760.3
hypothetical protein
                         Ρ
10602 at
            408.6
similarity to YMR031c
10603 at
            760.5
high similarity to histone H3 and to human centromere protein CENP-A
10604 at
            540.5
protein kinase
                         Ρ
10605_at
            1778.8
hypothetical protein
                         Р
10606_at
            6892.1
strong similarity to YMR238w
10607_at
            1500.8
```

```
p58 polypeptide of DNA primase
10608 at
            4462.4
                         Ρ
hypothetical protein
10609 at
            4497.6
                         Ρ
putative transcription factor
10610_at
            1502.9
component of the spindle pole body
10611_at
            1835.3
endosomal Vps protein complex subunit
10612_at
            2342.5
NifU-like protein B
10613 at
            6670.9
                         Ρ
Putative membrane protein
10614 at
            3015.4
transcriptional repressor and activator
10615 at
            358.2
weak similarity to C.elegans ubc-2 protein
10616 at
            -38.6
                         Α
questionable ORF
10617_at
            10820.9
Uridinephosphoglucose pyrophosphorylase
10618 at
            2840.2
weak similarity to YOL013c
10619 at
            1325.9
hypothetical protein
10620_at
            7342.0
intrastrand crosslink recognition protein
10621 at
            667.4
hypothetical protein
10622 at
                         Α
            84.5
questionable ORF
10623_at
            8274.5
mitochondrial malic enzyme
10579 at
            4779.8
Large subunit of transcription factor tfIIE
10580 at
            2431.2
similarity to E.coli molybdopterin-converting factor chIN
10581_at
            1629.3
strong similarity to glutathione peroxidase
10582_at
            2972.7
76-kDa subunit of Pab1p-dependent poly(A) ribonuclease (PAN)
10583 at
            10318.5
uridine-monophosphate kinase (uridylate kinase)
10584_at
            1181.5
weak similarity to human cylicin II
            1155.1
10585 at
putative metal-binding nucleic acid-binding protein, interacts with Cdc23p and Cdc27p to catalyze the
conjugation of ubiquitin to cyclin B
10586 at
            3227.4
contains four beta-transducin repeats
10587_at
            1755.9
suppressor protein
                         Ρ
10588 at
            3074.5
CAAX farnesyltransferase alpha subunit
10589 at
            2486.2
similarity to C.elegans hypothetical protein
```

```
10590_at
                        Ρ
            1084.5
DNA helicase A
                        Ρ
10591 at
            5664.0
ATP synthase d subunit
                        Ρ
10592 at
            1113.5
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
10593_at
            3553.3
hypothetical protein
10594 at
            5146.0
                        Ρ
Arp Complex Subunit
10595 at
            1415.3
Splicing component that associates with the yeast U1 small nuclear ribonucleoprotein particle
10596 at
            1121.7
cruciform cutting endonuclease
10597 at
            3095.9
Ubiquitin Fusion Degradation
10598 at
            9814.2
mRNA turnover 4
10599 at
            7092.2
                        Ρ
strong similarity to Lag1p
10600 at
            4684.0
alpha subunit of capping protein
10555 at
            1890.5
required for transport of proteins between an early and a later golgi compartment, possible NSF
attachment protein receptor (V-SNARE)
10556_i_at 18865.1
Ribosomal protein L14A
10557_f_at 10023.0
                        Ρ
Ribosomal protein L14A
                        Ρ
10558 s at 11416.7
Ribosomal protein L14A
10559_at
            2373.9
weak similarity to YKR029c and D.melanogaster transcription elongation factor DmS-II
10560 at
            8716.5
aureobasidin-resistance protein
10561 at
            3573.3
Mitochondrial ribosomal protein MRP17
10562 at
            2975.7
similarity to hypothetical protein YKL041w
10563_at
            5011.7
                        Ρ
adenylylsulfate kinase
10564 at
            3529.1
putative GTP-binding protein\; similar to mammalian Mx proteins
10565_at
            2406.9
poly(A) polymerase
                        Ρ
10566 at
            2602.0
similarity to Kes1p, Hes1p and Osh1p
10567 at
            1411.9
ExtraCellular Mutant
                        Ρ
10568 at
            592.3
hypothetical protein
10569_at
            4228.1
                        Ρ
mitochondrial ribosomal protein YmL13
10570 at
            1805.7
weak similarity to Streptococcus protein M5 precursor
10571_at
            1375.5
```

```
Member of RSC complex.
10572 at
            1000.9
peroxisomal multifunctional beta-oxidation protein
10573 at
            201.7
topoisomerase I interacting factor 2
10574 at
            1703.4
hypothetical protein
10575_at
            31.4
questionable ORF
10576_at
            13913.1
                         Ρ
Similar to plant PR-1 class of pathogen related proteins
10577 at
            2169.6
probable purine nucleotide-binding protein
10578 at
            -14.2
similarity to hypothetical protein YJL043w
10533 at
            1786.7
weak similarity to mysoin heavy chain proteins
10534 at
            105.3
similarity to human hypothetical KIAA0161 protein
10535_at
            5475.9
strong similarity to hypothetical protein YJL082w
10536 at
            298.8
Increased rDNA silencing
10537 at
                        Α
            116.1
hypothetical protein
10538_at
            775.5
strong similarity to hypothetical protein YJL084c
10539 at
            915.0
hypothetical protein
                         Р
10540 at
            351.3
similarity to S.pombe hypothetical protein SPAC23C4
10541_at
            2971.1
putative RNA helicase
10542_at
            1322.1
                         Ρ
hypothetical protein
                         Ρ
10543 at
            5348.0
translation initiation factor eIF2B, 34 KD, alpha subunit\; negative regulator of GCD12, thereby serving
indirectly as a positive regulator of GCN4
10544 at
            1414.1
                         Ρ
strong similarity to Chs6p
10545 at
            3193.1
Type 2A-related protein phosphatase
10546_at
            944.5
similarity to YJL105w and Lentinula MFBA protein
10547 at
            4309.9
weak similarity to NADH dehydrogenases
10548 at
            2390.9
Phospholipase D
10549_at
                         Α
            -36.8
hypothetical protein
10550_at
            208.6
                         Α
questionable ORF
10551 at
            -45.1
negative regulator of multiple nitrogen catabolic genes
            4163.5
10552_at
RAD52 Inhibitor (Fifty Two Inhibitor)
```

```
Ρ
10553_at
            899.4
CCR4 associated factor
10554 at
            854.2
component of spindle pole
10510 at
            1998.0
probable calcium-binding protein
10511_at
            548.3
general amino acid permease
10512_at
            997.0
questionable ORF
10513 at
                        Α
            19.5
hypothetical protein
10514 at
            10735.5
YOUTH, involved in determining yeast longevity
10515 at
            9606.2
weak similarity to phosphoglycerate mutase
10516 at
            819.5
hypothetical protein
10517_at
            891.2
                        Ρ
hypothetical protein
10518_at
                        Ρ
            13071.7
hypothetical protein
                        Р
10519 at
            1738.4
questionable ORF
10520 at
            9837.0
nucleosome assembly protein I
10521 at
            1966.9
hypothetical protein
10522 at
            2001.4
membrane protein\; low affinity potassium transport
10523 at
            764.8
similarity to C.elegans hypothetical protein
10524 at
            1346.0
mitochondrial carrier protein, highly homologous to Mrs3p
10525 at
            704.2
DHS-1-P phosphatase
10526 at
            3267.6
heavy chain of cytoplasmic dynein
10527 at
            1187.3
ras homolog--GTP binding protein
10528 at
            2633.8
endo-exonuclease yNucR
10529_i_at 1035.4
Ribosomal protein S21A (S26A) (YS25)
10530 at
            149.4
self-glucosylating initiator of glycogen synthesis\; similar to mammalian glycogenin
10531 at
            2052.1
hypothetical protein
            1620.9
10532_at
putative mannosyltransferase\; type 2 membrane protein
10487_at
            1233.8
Small subunit of TFIIE transcription factor
10488 at
            1043.9
May regulate expression of genes involved in bud formation and morphogenesis
10489_at
            709.3
weak similarity to transcription factors
```

```
Ρ
10490_at
            7123.5
hypothetical protein
                         Ρ
10491 at
            6497.4
Cytochrome-c peroxidase
10492 at
            2852.0
                         Ρ
strong similarity to Sct1p
10493 at
            7505.1
Hydrophilic protein that acts in conjunction with SNARE proteins in targeting and fusion of ER to Golgi
transport vesicles
10494_at
            2546.2
siroheme synthase
                         Р
10495 at
            2110.9
strong similarity to S. pombe phosphatidyl synthase
10496 at
            3120.4
weak similarity to C.elegans hypothetical protein
10497 at
            3937.7
sit4 suppressor
10498 at
            611.4
                         Ρ
hypothetical protein
10499_at
            4976.9
strong similarity to hypothetical S. pombe protein
10500_at
            1100.6
weak similarity to negative regulator Reg1p
10501 at
            1155.6
ExtraCellular Mutant
                         Ρ
10502_at
            890.3
hypothetical protein
10503 at
                         Ρ
            386.0
similarity to Vps5p
                         Ρ
            1371.0
10504 at
similarity to S.pombe hypothetical protein SPAC1D4.10
10505_at
            6258.6
NAD-dependent 5,10-methylenetetrahydrafolate dehydrogenase
10506_at
            8909.2
hypothetical protein
10507 at
                         Ρ
            3471.2
Nuclear pore complex protein involved in poly(A)+ RNA transport, nuclear pore distribution, and possibly
in the biogenesis of functional tRNA
10508 at
            327.1
                         Ρ
weak similarity to S.japonicum paramyosin
10509 at
            3044.6
Protein related to translation elongation factor EF-1alpha and to Suf12pVSup2pVGst1pVSup35p
10464_at
            2474.4
22.3 kDa mitochondrial ribosomal large subunit protein YmL20\; homologous to L17 of E. coli
10465 at
            1188.0
putative ATP-binding protein
10466 at
            2459.7
similarity to hypothetical Myxococcus xanthus protein
10467 at
            4195.4
weak similarity to b.subtilis spore germination protein II
10468_at
            1910.5
strong similarity to YOR081c
10469 at
            1715.8
similarity to chicken Lim protein kinase and Islet proteins
10470 at
            4388.6
Suppressor of rad53 lethality
```

```
10471_at
            10790.2
                         Ρ
nucleolar protein that is immunologically and structurally related to rat Nopp140, a nonribosomal protein
of the nucleolus and coiled bodies.
10472 at
            9315.6
Peptide transporter
                         Ρ
10473 i at 15952.8
Ribosomal protein L40B
10474 s at 8972.7
                         Ρ
Ribosomal protein L40B
                         Ρ
10475_at
            1623.0
myosin-like protein
                         Р
10476 at
            2468.2
similarity to mitochondrial aldehyde dehydrogenase Ald1p
10477 g at 364.4
similarity to mitochondrial aldehyde dehydrogenase Ald1p
10478 at
            579.2
phosphoenolpyruvate carboxylkinase
10479 at
            1264.0
Ubiquitin-specific protease
10480 at
            632.2
Transcription factor regulating basal and induced activity of histidine and adenine biosynthesis genes
10481 at
            2394.0
cause growth inhibition when overexpressed
10482 at
            381.6
repressor of silent mating loci
10483 at
            437.0
Protein with similarity to flocculation protein Flo1p
10484 at
            257.7
similarity to multidrug resistance proteins
10485 at
            377.0
similarity to multidrug resistance proteins
10486_s_at -101.7
                         Α
strong similarity to Sge1p and hypothetical protein YCL069w
10442_s_at 1067.8
regulates the mannosylphosphorylation
10443 at
            158.0
hypothetical protein identified by SAGE
10444_at
            762.5
                         Α
hypothetical protein
10445_s_at 4828.5
                         Ρ
regulates the mannosylphosphorylation
10446 s at 1706.4
Protein of unknown function
10447_s_at 3192.6
probable serine\/threonine-specific protein kinase (EC 2.7.1.-)
10448 s at 3581.3
strong similarity to holacid-halidohydrolase
10449 at
            -86.3
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
            176.0
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
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
```

```
Р
10452_at
            822.0
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
            114.2
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
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
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
            6550.8
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
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
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
            1040.3
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
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
            193.0
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
            3397.5
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
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
            1375.2
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
            1755.5
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
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
            715.4
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
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
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
            3523.0
```

non-annotated SAGE orf Found reverse in NC_001143 between 464717 and 464851 with 100% identity.

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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
10426 at
            332.2
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
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
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
            647.4
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
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
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
            762.8
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
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
            2618.2
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
            1609.4
10435 at
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
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
            1354.7
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
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
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
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
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
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
            -135.1
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

-14.6

```
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
            32.0
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
            -12.3
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
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
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
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
            580.3
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
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
            1592.6
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
            242.3
snRNA
10408 at
                         Ρ
            1498.5
snRNA
10409 at
            2779.3
snRNA
                         Ρ
10410 at
            528.0
snRNA
10411 f at 736.0
                         Ρ
Growth INhibitory protein
10412 f at 1707.6
strong similarity to members of the Srp1/Tip1p family
10413 at
            791.6
transacetylase
10414 at
                        Ρ
            221.5
weak similarity to M.leprae metH2 protein
10415 at
            118.6
strong similarity to amino acid transport protein Gap1p
10416 at
            884.9
Glutathione transferase
10417 at
            7.3
                         Α
hypothetical protein
10418 at
            1819.9
similarity to N.crassa O-succinylhomoserine (thiol)-lyase
10373 at
            135.4
similarity to E.coli dioxygenase
10374 at
            1435.7
weak similarity to Y.pseudotuberculosis CDP-3,6-dideoxy-D-glycero-L-glycero-4-hexulose-5-epimerase
10375 at
            766.6
similarity to Dal5p
```

```
10376_at
            1198.9
similarity to transcription factor Pip2p
10377 at
            3857.3
similarity to water channel proteins
10378 at
            2099.5
                        Ρ
member of mip family transmembrane channels
10379 at
            1300.8
similar to FRE2
10380 at
            12532.2
Cofilin, actin binding and severing protein
10381 at
            564.9
hypothetical protein
10382 at
            9919.5
yeast bile transporter, similar to mammalian bile transporter
10383 at
            629.0
questionable ORF
10384 at
            143.5
                         Α
ribonucleoprotein 1
10385 i at 19045.9
Ribosomal protein L8B (L4B) (rp6) (YL5)
10386_s_at 15592.8
Ribosomal protein L8B (L4B) (rp6) (YL5)
10387 at
            392.2
questionable ORF
10388 at
            3884.0
Suppressor of tps1\fdp1 and member of the MIP family of transmembrane channels\; may be involved in
glycerol efflux
                         Ρ
10389 at
            689.1
hypothetical protein
                         Ρ
10390 at
            4459.0
Succinate dehydrogenase (ubiquinone) iron-sulfur protein subunit
10391_at
            4135.3
involved in regulating membrane traffic
10392_at
            4438.8
ubiquitin
10393 at
            905.9
weak similarity to YJR125c and YDL161w
            44.0
10394 at
weak similarity to human platelet-activating factor receptor
10395_at
            1878.0
RNA splicing factor
10351 at
            492.6
                         Ρ
hypothetical protein
                         Ρ
10352_at
            5132.7
similarity to mammalian valosin
10353 at
            391.2
hypothetical protein
                         Р
10354 at
            580.9
hypothetical protein
10355 at
            3869.5
similarity to hypothetical protein YJL062w
10356_at
            -216.0
hypothetical protein
10357_at
            2806.5
similarity to M.jannaschii X-Pro dipeptidase and S.pombe hypothetical protein
10358_at
            10939.4
```

```
similarity to multidrug resistance proteins
10359 at
            3427.0
similarity to H.influenzae and E.coli hypothetical proteins
10360 at
            5391.6
heat shock protein 104
10361_f_at 330.4
strong similarity to members of the Srp1p/Tip1p family
10362 at
            7644.6
member of 70 kDa heat shock protein family
10363 at
            7467.4
similarity to hypothetical protein YLR064w
10364 at
            4122.0
Hat1 Interacting Factor 1
10365 at
            3215.2
spindle pole antigen
10366 i at 6187.4
                         Ρ
questionable ORF
10367_r_at 4748.3
                         Ρ
questionable ORF
10368_s_at 3684.7
                         Ρ
questionable ORF
                         Ρ
10369_at
            455.7
protein kinase homolog
10370 at
            12298.2
Aspartyl-tRNA synthetase, cytosolic
10371_at
            19.6
maybe part of SCD25
10372 at
                         Ρ
            233.9
homologous to cdc25
                         Р
10328 at
            1307.7
similarity to metal resistance proteins
10329_at
            6281.0
hypothetical protein
10330_at
            2360.4
similarity to Drosophila pumilio protein
10331 at
            6456.3
similarity to triacylglycerol lipases
10332 at
            4151.1
56 kDa nucleolar snRNP protein that shows homology to beta subunits of G-proteins and the splicing
factor Prp4
10333 at
            3545.1
strong similarity to hypothetical protein YLR019w
10334_at
            3206.8
cysteine-rich cytoplasmic protein
10335 at
            2331.0
putative ATP dependent RNA helicase
10336 at
            467.2
                         Ρ
hypothetical protein
10337_at
            1701.0
mitochondrial outer membrane protein
10338_at
            77.1
similarity to A.thaliana hyp1 protein
10339 at
            1431.1
Third subunit of the origin recognition complex
10340_at
            836.0
protein of unknown function
```

```
10341_at
            1253.5
Killed in Mutagen, sensitive to diepoxybutane and Vor mitomycin C
10342 at
            1510.1
Dynamin-related protein
                         Ρ
10343 at
             1090.3
hypothetical protein
10344 at
            3831.5
similarity to hypothetical C. elegans protein
10345 at
            2754.5
hypothetical protein
10346 at
            801.7
similarity to allantoate transport protein
10347 at
            5125.2
Component of RNA polymerase transcription factor TFIIH
10348 at
             1543.5
Two-component signal transducer that with SIn1p regulates osmosensing MAP kinase
cascade(suppressor of sensor kinase)
10349 at
            1110.5
hypothetical protein
10350_at
            4435.9
similarity to hypothetical protein YNL328c
10305_at
            6505.9
similarity to ribosomal protein L24.e.B
10306_at
            744.3
weak similarity to Aquifex aeolicus adenylosuccinate synthetase
10307_at
             1506.0
weak similarity to E.coli hypothetical 20.4 kDa protein
10308 at
            -41.9
hypothetical protein
10309 at
            -79.1
weak similarity to nitrogen regulatory proteins
10310_at
             1289.5
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
10311_at
             488.7
weak similarity to S.pombe hypothetical protein SPBC13G1
10312 at
            765.9
hypothetical protein
10313_at
            5637.1
Protein that regulates ADH2 gene expression
10314_at
            2133.9
hypothetical protein
10315 at
             1659.0
strong similarity to YLL010c
10316_at
            2154.8
similarity to triacylglycerol lipase
10317 at
                         Ρ
            1354.5
hypothetical protein
10318 at
            1394.4
similarity to C.elegans and M.jannaschii hypothetical proteins
10319 at
            6287.1
similarity to S.pombe hypothetical protein SPAC30D11.11
10320 at
            1864.6
similarity to ubiquitin--protein ligase Ubr1p
10321 at
            3368.8
involved in derepression of SUC2 in response to glucose limitation
10322_at
            839.0
```

```
Sed5p is a t-SNARE (soluble NSF attachment protein receptor) required in ER to Golgi transport.
10323 at
            12078.9
aspartate aminotransferase, cytosolic
10324 at
            7090.9
5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) transformylaseVIMP cyclohydrolase
10325 at
            12937.3
Ribosomal protein L15A (YL10) (rp15R) (L13A)
10326_g_at 11588.8
Ribosomal protein L15A (YL10) (rp15R) (L13A)
10327_at
            -129.9
hypothetical protein
                        Р
10283 at
            153.2
similarity to hypothetical protein YMR124w
10284 at
            1295.6
putative ATPaseVDNA helicase
10285 at
            1007.5
                        Ρ
hypothetical protein
10286 at
            8810.6
                        Ρ
strong similarity to SMF2 protein
10287_at
            564.9
similarity to human mutL protein homolog
10288_at
            2295.1
similarity to YIL089w
10289 f at 3013.7
strong similarity to members of the Srp1p/Tip1p family
10290 at
            11054.9
                        Ρ
subunit VIb of cytochrome c oxidase
            1747.2
10291 at
involved in transcription of ribosomal proteins and ribosomal RNA
10292 at
            10147.6
weak similartity to hypothetical protein YIL011w
10293_at
            76.2
questionable ORF
10294_at
            1051.1
                        Ρ
hypothetical protein
10295 at
                        Ρ
            8831.7
thioredoxin
                        Ρ
10296_at
            10329.7
pyruvate decarboxylase
10297_at
            1956.1
May play a role in attachment, organization, and Vor dynamics of microtubule ends at the spindle pole
body
10298_at
            799.4
strong similarity to Rta1p and Rtm1p protein
10299 at
            351.9
similarity to hypothetical protein YGL160w
10300 f at 12054.1
Ribosomal protein S0B
10301_at
            5489.1
                        Α
Ribosomal protein S0B
                        Ρ
10302_g_at 7796.9
Ribosomal protein S0B
                        Ρ
10303 at
            2501.3
hypothetical protein
10304_at
            9505.9
weak similarity to human MAC30 C-terminus
```

```
10260_at
            2609.7
similarity to human acidic 82 kDa protein
10261 at
            1441.2
hypothetical protein
10262 at
            75.2
                        Α
hypothetical protein
                        Ρ
10263_at
            481.8
hypothetical protein
10264 at
            3220.4
transcription factor, probable member of histone acetyltransferase SAGA complex
10265 at
            10754.4
C-5 sterol desaturase
                        Ρ
10266 at
            1077.7
weak similarity to mouse alpha-mannosidase
10267 at
            10501.4
                        Р
serine hydroxymethyltransferase
10268 at
            2436.3
suppressor of rna12/yme2
10269 at
            9536.2
Phenylalanyl-tRNA synthetase, alpha subunit, cytoplasmic
10270 at
            7918.8
Ribosomal protein L22A (L1c) (rp4) (YL31)
10271 at
            539.8
questionable ORF
                        Ρ
10272 at
            1139.1
ser/thr protein kinase
10273 at
            6324.7
weak similarity to Anopheles NADH-ubiquinone oxidoreductase, chain 4
            9698.2
10274 at
hypothetical protein
10275_at
                        Ρ
            4523.0
signal peptidase subunit
10276 at
            296.6
Involved in expression of mitochondrial COX1 by regulating translation of COX1 mRNA and by affecting
transcription or stability of COX1 mRNAs
10277 at
            208.8
hypothetical protein
10278_at
            4925.1
mitochondrial elongation factor G-like protein
10279_at
            918.9
strong similarity to sugar dehydrogenases
10280 at
            4167.0
component of RNA polymerase II holoenzymeVmediator complex, interacts with Sin4p, Gal11p, and a 50
kd polypeptide
10281 at
            1252.2
similarity to YFL042c, YFL043c, YDR326c and YHR080c
10282 at
            1855.0
                        Ρ
hypothetical protein
10238_at
            5968.8
weak similarity to human zinc finger protein
10239 at
            7610.9
Ribosomal protein L10\; Ubiquinol-cytochrome C reductase complex subunit VI requiring protein
10240 at
            1559.8
questionable ORF
10241_at
            1856.4
weak similarity to Xenopus RCC1 protein
```

```
1955.7
10242_at
necessary for vesicular transport from the ER to the Golgi complex
10243 at
            2055.7
P40 inhibitor of Cdc28p-Clb5 protein kinase complex
10244 at
            402.0
strong similarity to Emp47p
10245_at
            -146.6
galactose permease
10246 at
            689.1
Suppressor of rad53 lethality
10247 at
            11112.1
integral membrane protein\; p24a protein
10248 at
            3306.9
weak similarity to S.pombe hypothetical protein SPAC6F6
10249 at
            1858.3
Actin-related protein
10250 at
            693.7
Smc4 protein, member of SMC family
10251 at
            2778.6
hypothetical protein
10252 at
            2892.6
                         Ρ
Possible component of GPI:protein transamidase
10253 at
            10421.4
strong similarity to alanine transaminases
10254 at
            2240.4
Homolog of E. coli DnaJ, closely related to Ydj1p
10255 at
            78.1
hypothetical protein
10256 at
                        Ρ
            912.7
high affinity sulfate permease
10257_at
            1051.3
vacuolar v-SNARE
                        Ρ
10258 at
            728.0
hypothetical protein
10259 at
                        Ρ
            3833.1
hypothetical protein
10215 at
            3908.8
SerineVthreonine protein kinase
10216 at
            682.8
hypothetical protein
                        Ρ
10217 at
            521.4
DNA-binding transcriptional activator or CHA1
10218_at
            12919.3
similarity to YDR125c
10219 at
            11543.1
                        Ρ
similarity to rat ovarian specific protein
10220 at
            348.1
                        Ρ
questionable ORF
            490.7
10221_at
subunit of the anaphase promoting complex (APC)
10222_at
            1361.8
omosomal DNA replication initiation protein
10223 at
            2557.5
hypothetical protein
10224_at
            2412.1
tRNA splicing endonuclease subunit
```

```
10225_at
            3968.8
similarity to Kaposi s sarcoma-associated herpes-like virus ORF73 homolog gene
10226 at
            1211.8
similarity to Pan troglodytes prot GOR
10227 at
            452.9
                         Ρ
strong similarity to YDR132c
10228 at
            11760.2
similarity to C.boidinii peroxisomal membrane protein 20K A
10229 at
            407.4
strong similarity to Flo1p
10230 at
            -319.7
                         Α
hypothetical protein
                         Ρ
10231 at
            4073.7
hypothetical protein
10232 at
            8876.1
mitogen-activated protein kinase (MAP kinase)
10233 at
            1883.9
similarity to C.elegans hypothetical protein and YOR054c
10234 at
            1154.5
Component of cleavage factor II (CF II)\; 105-kDa protein associated with polyadenylation factor 1 (PF I)
10235 at
            2082.4
Branchpoint bridging protein -- component of the splicing commitment complex
10236 at
            671.6
SYnthetic lethal with cdc40 (Forty)
10237 at
            4873.1
similarity to several esterases
10192 at
            417.0
                         Р
suppressor of rna1-1 mutation
10193 at
            8282.9
GPI-anchored aspartic protease
10194 at
            6376.9
GPI-anchored aspartic protease
10195 at
            73.6
                         Α
hypothetical protein
10196 g at 469.9
                         Ρ
hypothetical protein
10197_at
            355.7
                         Ρ
questionable ORF
                         Ρ
10198 at
            230.3
hypothetical protein
10199 at
                         Α
            -45.7
hypothetical protein
10200_at
            737.0
weak similarity to P.aeruginosa anthranilate synthase component II
            268.7
10201 at
subunit of the anaphase promoting complex (APC)
10202 at
            1410.2
similarity to S.pombe hypothetical protein SPBC24E9
            4447.5
10203_at
DOM34 Interacting Protein
10204_at
            5092.7
Low-affinity zinc transport protein
10205 at
            1695.2
zinc finger transcription factor
10206_at
            1135.8
                         Ρ
hypothetical protein
```

```
10207_at
                        Ρ
            2395.6
choline kinase
                         Ρ
10208 at
            4533.4
pyruvate decarboxylase
                        Ρ
10209 at
            626.8
hypothetical protein
10210_at
            604.6
zinc finger containing homolog of mammalian TIS11, glucose repressible gene
10211 at
            1615.7
hypothetical protein
10212 at
            1694.6
                        Ρ
Putative Na+VH+ antiporter
10213 at
            351.4
73 kDa mitochondrial integral membrane protein
10214 at
            76.8
                        Α
questionable ORF
10170_g_at 3817.0
                        Ρ
questionable ORF
10171 at
            1304.0
transcription factor, member of UAF (upstream activation factor) along with Rrn9p and Rrn10p
10172_at
            290.8
proline oxidase
10173 at
            1395.3
weak similarity to Pyrococcus horikoshii hypothetical protein PHBJ017
10174 at
            2574.4
Identified as an activity necessary for actin polymerization in permeabilized cells
10175 at
            401.7
hypothetical protein
10176 at
                        Ρ
            2123.4
Spermine Synthase
10177 at
            2541.6
encodes a core snRNP protein
10178 at
            489.9
vacuolar membrane protein
10179 at
            168.9
hypothetical protein
10180 at
            12539.2
specific affinity for guanine-rich quadruplex nucleic acids
10181 at
            496.1
weak similarity to A.thaliana hypothetical protein ATU78721
10182 at
            2024.0
similarity to YOR3165w and YNL095c
10183_at
            8143.7
acetyl-coenzyme A synthetase
10184_at
            4812.2
hypothetical protein
10185 s at 7424.9
nitrogen catabolite-regulated cell-wall L-asparaginase II
10186_s_at 254.8
identical to hypothetical proteins YLR161w and YLR159w
10187_at
            5278.4
hypothetical protein
                        Ρ
10188 at
            3294.8
mitochondrial processing protease subunit
10189_at
            355.1
strong similarity to Sdh4p
```

```
10190_at
            439.6
weak similarity to H.influenzae hypothetical protein HI0176
10191 at
            1640.5
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
            11878.0
Ribosomal protein S31 (S37) (YS24)
10148 at
            1865.6
probably involved in intramitochondrial protein sorting
10149_at
            397.4
questionable ORF
10150 at
            2270.7
                        Ρ
clathrin-associated protein complex, small subunit
10151 at
            606.6
questionable ORF
10152 at
            7550.4
S-adenosylmethionine (AdoMet)-dependent methyltransferase of diphthamide biosynthesis
10153 at
            382.6
hypothetical protein
10154_at
            609.9
Cytosolic form of NADP-dependent isocitrate dehydrogenase
10155 at
            10481.0
major low affinity 55 kDa Centromere\/microtubule binding protein
10156 at
            1137.0
DNA binding protein, homologous to a family of mammalian RFX1-4 proteins which have a novel highly
conserved DNA binding domain
10157 at
            3615.3
similarity to suppressor protein Psp5p
10158 at
            2112.1
suppressor of cdc25
10159 at
                        Ρ
            13748.3
similarity to Tfs1p
10160 at
            9018.4
S-adenosylmethionine synthetase
10161 g at 4457.9
S-adenosylmethionine synthetase
10162_at
            928.0
hypothetical protein
                        Ρ
10163 at
            1420.6
regulatory protein
10164 at
            1060.2
                        Ρ
similarity to YDR501w
10165_at
            609.6
                        Α
weak similarity to ribulose-bisphosphate carboxylase
            355.1
10166 at
60S ribosomal protein L37A (L43) (YL35)
10167 at
            7181.6
strong similarity to S.pombe hypothetical protein C18G6.07C
10168 at
            1145.1
similarity to hypothetical protein YNL278w
10169 at
            7314.9
ATP-binding cassette (ABC) transporter family member
10124 at
            3012.8
similarity to P.aeruginosa rhamnosyltransferase 1 chain B
            2576.1
10125_at
hypothetical protein
```

```
10126_at
            602.9
Peroxisomal membrane protein that contains Src homology 3 (SH3) domain
10127 at
            10753.1
weak similarity to fruit fly transcription factor 5 large chain
10128 at
            1740.4
                        Ρ
similarity to G.gallus px19 and Msf1p
10129_at
            7758.6
                        Ρ
hypothetical protein
10130 at
            4026.7
                        Ρ
N-myristoyl transferase
10131 at
            8167.8
Protein with periodic trytophan residues that resembles members of beta-transducin superfamily because
of presence of WD-40 repeats
10132 at
            8093.9
homology to microtubule binding proteins and to X90565 5.cds
10133 at
            1338.8
questionable ORF
10134 at
            3059.8
                        Ρ
hypothetical protein
10135_at
            2819.7
Polypeptide 6 of a Yeast Non-native Actin Binding Complex, homolog of a component of the bovine
NABC complex
10136 at
            3241.3
similarity to hypothetical S. pombe protein
10137 at
            830.5
questionable ORF
                        Ρ
10138 g at 851.1
questionable ORF
10139 i at 12633.8
questionable ORF
10140_r_at 6560.1
                        Ρ
questionable ORF
10141 at
            6020.3
Protein involved in maturation of COX1 and COB mRNA
10142 at
            2180.9
protein of unknown function
10143 at
            5939.5
hypothetical protein
10144 at
            4890.6
                        Ρ
similarity to human tricohyalin and protein KIAA0171
10145 at
            823.9
HMG-CoA Reductase Degradation
            10987.7
10146_at
cytoplasmic protein involved in release of transport vesicles from the ER
10101_at
            4239.0
strong similarity to purine-nucleoside phosphorylases
10102 at
            1128.8
G(sub)2-specific B-type cyclin
10103_at
            876.1
hypothetical protein
10104_at
            1582.7
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
            484.7
similarity to UTR2 protein
                        Ρ
10106_at
            7021.0
```

```
Ferric (and cupric) reductase
10107 at
            1473.1
strong similarity to rat cell cycle progression related D123 protein
10108 at
            11929.5
cyclophilin related to the mammalian CyP-40\; physically interacts with RPD3 gene product
10109_at
            731.6
questionable ORF
                        Ρ
10110 at
            1002.2
hypothetical protein
                         Ρ
10111_at
            1990.7
hypothetical protein
                        Р
10112 at
            2004.1
Possible transmembrane Ca2+ transporter
10113 at
            4127.8
hypothetical protein
                        Ρ
10114 at
            3605.5
similarity to Dip2p
10115 at
            2305.3
                        Ρ
has a weak RNA-dependent ATPase activity which is not specific for rRNA
10116_at
            1675.3
hypothetical protein
                         Р
10117_at
            2843.3
strong similarity to YDR222w
10118 at
            2181.6
                        Ρ
hypothetical protein
                        Ρ
10119_at
            177.5
hypothetical protein
10120 at
            2504.7
                         Ρ
strong similarity to YDR213w, weak similarity to Lys14p
10121 at
            13394.1
member of the Rho subfamily of Ras-like proteins
10122_at
            286.8
questionable ORF
10123_at
            2372.3
strong similarity to rat kynureninase
10079 at
            157.9
                        Α
questionable ORF
10080_at
            318.3
                        Μ
Telomere elongation protein (ever shorter telomeres)
10081_at
            242.8
                        Ρ
DNA Topoisomerase III
10082 at
            358.1
                        Α
questionable ORF
10083_g_at -253.4
                         Α
questionable ORF
10084_at
            741.7
                         Α
hypothetical protein
                        Р
10085 at
            3241.1
thiamine transporter
                        Ρ
10086 at
            915.8
similarity to YDR200c
                        Ρ
10087_at
            1159.6
weak similarity to H.influenzae lipoate biosynthesis protein B
10088_at
            2680.5
phosphatidylinositol 3-kinase
10089_at
            1956.5
```

а

```
similarity to hypothetical S.pombe protein SPAC2G11.09
10090 at
            411.2
weak similarity to C.elegans R05H5.5 protein and Nup120p
10091 at
            6613.0
strong similarity to YOR262w
10092 at
            5976.0
methionine aminopeptidase
10093 at
            1684.3
strong similarity to B. subtilis cytidine deaminase
10094_at
            1742.3
similarity to human DHHC-domain-containing cysteine-rich protein
10095 at
            2512.2
similarity to S.pombe rad8 protein and Rdh54p
10096 at
            7053.6
SerineVthreonine protein kinase
10097 at
            8838.7
EF-3 (translational elongation factor 3)
10098 at
            2820.4
secretory protein
10099_at
            58.2
                        Ρ
similarity to peroxisomal rat membrane protein PMP22
10100 at
            507.4
                        Ρ
questionable ORF
10055 at
            1241.3
weak similarity to bacterial aminoglycoside acetyltransferase regulators
10056 at
            818.7
hypothetical protein
10057 at
                        Ρ
            258.5
hypothetical protein
10058 at
                        Ρ
            1816.0
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
10059_at
            4139.5
hypothetical protein
10060_at
            1166.1
Glycogen synthase (UDP-gluocse--starch glucosyltransferase)
10061 at
            8534.3
heat shock protein 60\; chaperonin protein
10062 at
            2854.5
sphingoid long chain base (LCB) kinase
10063_i_at 621.9
questionable ORF
10064_s_at 1656.3
                        Ρ
questionable ORF
10065_at
            521.8
highly homologous to the human GTPase, Rab6
10066 s at 2536.9
strong similarity to F49C12.11 (Z68227 K) from C. elegans
10067 at
            312.6
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 14053.3
Ribosomal protein S28B (S33B) (YS27)
10069 f at 6997.7
Ribosomal protein S28B (S33B) (YS27)
10070_at
            171.1
hypothetical protein
```

```
10071_at
            372.0
                        Ρ
weak similarity to transcription factors
10072 at
            7.8
                        Α
Bypass of PAM1
                        Ρ
10073 at
            2931.0
Synaptobrevin (v-SNARE) homolog present on ER to Golgi vesicles
10074_at
            8.0
questionable ORF
10075_at
            2734.0
strong similarity to YOR173w
10076 at
            569.4
hypothetical protein
10077 at
                        Ρ
            1141.8
similarity to human hypothetical ORF
10078 at
            561.5
Protein similar to Gac1p, a putative type 1 protein phosphatase targeting subunit
10032 at
            476.1
Member of complex that acts at ARS s to initiate replication
10033 at
            1066.7
U1 snRNP protein of the Sm class
10034 at
            5637.6
DEAD-Box Protein 9
                        Р
10035 at
            2357.5
subunit of Polyadenylation factor I (PF I)
10036 at
            1189.0
weak similarity to regulatory proteins
10037 at
            1213.2
questionable ORF
10038 i at 1926.2
                        Ρ
questionable ORF
10039_s_at 225.7
                        Α
questionable ORF
                        Ρ
10040 at
            270.5
similarity to polypeptide chain release factors
10041 at
            467.1
                        Α
questionable ORF
10042_at
            302.6
                        Ρ
weak similarity to Smc2p
10043 at
            236.5
Peroxisomal enoyl-CoA hydratase
10044 at
            3432.5
hypothetical protein
10045_at
                        Ρ
            16489.7
Endochitinase
                        Р
10046 at
            561.9
weak similarity to S.pombe hypothetical protein SPAC22E12
10047 f at 10379.1
Ribosomal protein S30A
            821.7
10048 at
involved in checkpoint control and DNA repair
10049_at
            573.8
GTPase
                        Ρ
10050 at
            2257.2
hypothetical protein
10051_at
            7871.4
translation initiation factor eIF2b, 43 kDa subunit\; negative regulator of GCN4 expression
```

```
10052_at
            5042.0
protein involved in membrane protein insertion into the ER
10053 at
            12847.1
GTP-binding protein
                        Ρ
10054 at
            7744.5
questionable ORF
10010_at
            5909.6
                        Ρ
ATP synthase subunit h
                        Р
10011_at
            154.2
hypothetical protein
                         Ρ
10012 at
            1371.2
weak similarity to Vibrio vulnificus VvpC protein
10013 at
            492.4
U1 snRNP protein required for pre-mRNA splicing
10014 at
            2506.6
gamma-glutamyltransferase homolog
10015 at
            10379.0
Exo-1,3-beta-glucanase
10016 at
            8027.8
                        Ρ
hypothetical protein
10017_at
                        Α
            -100.5
questionable ORF
                        Р
10018 at
            11897.9
O-Acetylhomoserine-O-Acetylserine Sulfhydralase
10019 at
            12070.0
Aconitase, mitochondrial
10020 at
            4360.7
encodes a phosphatidylinositol-4-kinase, homologous to VPC34
10021 at
            921.0
Ubiquitin-conjugating enzyme
10022_at
            -40.1
                         Α
Chitin Deacetylase
10023 at
            -280.0
                        Α
Chitin Deacetylase
10024 at
            3122.5
                         Ρ
similarity to human centromere protein E
10025 at
            811.8
regulatory protein of adenylate cyclase
10026 at
            -186.7
weak similarity to S.tarentolae cryptogene protein G4
10027 at
            63.3
hypothetical protein
10028_at
            679.7
homologous to Spa2p, localizes to sites of polarized growth
10029_at
            1177.1
Component of 10 nm filaments of mother-bud neck
10030 at
            236.8
weak similarity to rat apolipoprotein A-IV
10031 at
            2614.3
weak similarity to H.influenzae hypothetical protein HI0906
9986_at
            789.7
questionable ORF
                         Ρ
9987 at
            157.2
103 kD basic protein, catalytic subunit of telomerase
9988 at
            1377.1
Actin Interacting Protein
```

```
9989_at
                         Ρ
            815.1
hypothetical protein
                         Ρ
9990 at
            2080.1
homolog of Snf5p, member of the chromatin remodeling complex, RSC
9991 at
questionable ORF
                         Ρ
9992_at
            795.6
weak similarity to N.crassa uvs2 protein
9993 at
            290.2
strong similarity to YGR004w
9994 at
            9937.9
Ribosomal protein L38
                         Ρ
9995 at
            2288.2
hypothetical protein
                         Ρ
9996 at
            571.1
strong similarity to Stf2p
9997 at
            5134.7
strong similarity to YGR010w
9998 at
            -0.9
23 kDa protein containing a putative leucine zipper\; meiosis specific recombination protein\; mRNA is
induced early in sporulation
9999 at
            3758.6
Involved in chitin synthase III activity, also required for homozygosis in the first stages of mating
10000 at
            8.3
                         Α
questionable ORF
10001_at
            4307.5
Protein required for mating
10002 i at 14324.1
Ribosomal protein S25B (S31B) (rp45) (YS23)
10003 f at 12814.0
Ribosomal protein S25B (S31B) (rp45) (YS23)
10004_at
            71.6
questionable ORF
10005_at
            4160.0
nuclear pore complex protein with central repetitive domain similar to that of NSP1 and NUP1
10006 at
            2388.5
Suppressor of Glycerol Defect
10007_at
            5166.4
Proline-rich protein verprolin
10008_at
            -273.3
                         Α
questionable ORF
10009 at
            -254.0
                         Α
questionable ORF
9964_at
            3278.0
60S ribosomal protein P0 (A0) (L10E)
9965 at
            55.1
hypothetical protein
9966 at
            9848.1
                         Ρ
1,3-beta-D-glucan synthase
9967 at
            422.7
strong similarity to Gas1p and C.albicans pH responsive protein
9968_s_at 5641.1
Ribosomal protein L26A (L33A) (YL33)
9969 at
            1578.1
similarity to Pfk26p and other 6-phosphofructo-2-kinases
9970_at
            4485.8
```

```
weak similarity to YGR035c
9971 at
            3205.8
95 kDa structural and functional homolog of vertebrate karyopherin beta (importin 90)
9972 at
            5605.4
mitochondrial dicarboxylate transport protein
9973_at
            833.0
questionable ORF
9974_at
            9931.2
                        Ρ
strong similarity to YGR038w
9975_at
            9846.7
Nit3 nitrilase
                        Р
9976 at
            979.8
hypothetical protein
                        Ρ
9977_at
            1895.4
budding protein
9978 at
            11138.5
Transaldolase, enzyme in the pentose phosphate pathway
9979 at
            11494.1
acetohydroxyacid reductoisomerase
9980_at
            1193.0
similarity to SCM4 protein
9981_at
            648.7
                        Ρ
questionable ORF
                        Ρ
            2103.8
9982 at
Member of RSC complex.
9983 at
            9275.3
Adenylosuccinate Lyase
9984 at
            150.0
                        М
protein involved in vacuolar sorting
9985 at
            1537.4
similarity to YOR3329c
            1508.0
9941_at
Ser\/Thr protein kinase\; MEKK homolog
9942_at
            399.1
putative Upf1p-interacting protein
9943 at
            1588.3
hypothetical protein
9944 at
            98.0
                        Μ
weak similarity to Udf2p
9945_at
            12.0
                        Α
hypothetical protein
9946 at
            9548.3
                        Ρ
Ribosomal protein S22B (S24B) (rp50) (YS22)
9947_i_at
            18978.4
Ribosomal protein S22B (S24B) (rp50) (YS22)
9948 f at
            11535.8
Ribosomal protein S22B (S24B) (rp50) (YS22)
9949 at
            2415.1
hypothetical protein
                        Ρ
9950 at
            890.3
Hsp70 protein
                        Ρ
9951_at
            3798.6
Arp2V3 Complex Subunit
9952 at
            2688.9
GDP-GTP Exchange Protein (GEP) for the Rho1p Small GTP-binding Protein\; high copy suppressor of
cik1 and kar3 deletion mutants.
```

```
9953_at
            12161.7
                         Ρ
required for conversion of 24-carbon fatty acids to 26-carbon species
9954 at
            2919.6
similarity to hypothetical protein YGR071c
9955 at
            448.1
questionable ORF
                         Ρ
9956 at
            6105.3
Involved in pre-tRNA splicing and in uptake of branched-chain amino acids
9957 at
            879.9
hypothetical protein
                         Ρ
9958 at
            172.5
fructose-1,6-bisphosphatase
            11512.6
9959 at
membrane component of ER protein translocation apparatus
9960 at
            -50.8
questionable ORF
9961 at
            4862.1
                         Ρ
weak similarity to SEC14 protein
9962 at
            600.5
hypothetical protein
                         Ρ
9963 at
            2104.4
mitochondrial leucyl tRNA synthetase
9918 at
            1770.4
Protein involved in recombination repair, homologous to S. pombe rad18
9919 at
            6653.9
confers sensitivity to killer toxin
9920 at
            189.7
                         Ρ
hypothetical protein
                         Ρ
9921 at
            1875.2
similarity to hypothetical S. pombe protein
9922 at
            4887.6
similarity to YBR267w
9923 f at
           8384.9
Ribosomal protein S29A (S36A) (YS29)
9924 at
            1640.6
protease involved in a-factor processing
9925 at
            2862.9
ExtraCellular Mutant
9926 at
            10366.8
                         Ρ
Secretory Stress Response protein 1
9927 at
            264.2
hypothetical protein
9928_at
            707.7
essential for assembly of a functional mitochondrial ATPase complex
9929 at
            700.2
weak similarity to chicken RING zinc finger protein
9930 at
            8791.5
Cytochrome-c oxidase chain VIII
9931 at
            1245.5
Vacuolar sorting protein essential for vacuolar morphogenesis and function
9932 at
            3945.8
                         Ρ
homology to the CDC48 gene product
9933 at
            4448.2
antiviral protein, putative helicase
            2389.7
9934_at
                         Ρ
Bdf1p contains two bromodomains, localizes to the nucleus and to chomosomes in spread meiotic nuclei
```

```
but is excluded from the nucleolus
9935 at
            239.8
                         Ρ
hypothetical protein
9936_at
            2938.4
similarity to A.brasilense nifR3 protein
9937_at
            1601.6
hypothetical protein
9938 at
            1052.2
                         Ρ
split zinc finger protein
                         Ρ
9939_at
            932.1
hypothetical protein
                         Ρ
9940 at
            1888.1
similarity to A.brasilense nifR3 protein
9895 i at
            7866.1
Ribosomal protein L31B (L34B) (YL28)
9896 f at 9288.0
Ribosomal protein L31B (L34B) (YL28)
9897 f at 18390.1
Ribosomal protein L31B (L34B) (YL28)
9898 at
            1700.7
hypothetical protein
                         Ρ
9899 at
            696.0
hypothetical protein
                         Ρ
            4222.7
9900 at
strong similarity to S. pombe beta-transducin
9901_at
            5178.3
Homologous to S. pombe asp1+
9902 at
            8574.2
Copper Transporter
                         Ρ
9903 at
            2581.3
weak similarity to Candida maltosa cytochrome P450
            5093.6
9904_at
strong similarity to YKL187c
9905_at
            9219.0
weak similarity to YLR413w
9906 at
            -236.9
questionable ORF
                         Р
9907_at
            223.0
hypothetical protein
9908_at
            580.6
defective in vacuolar protein sorting
9909 at
            5028.5
Accessory factor associated with RNA polymerase II by affinity chromatography
9910_at
            2893.8
                        Ρ
similarity to helicases
            10743.4
                         Ρ
9911 at
dihvdrooratase
9912 at
            9060.2
weak similarity to human 42K membrane glycoprotein
9913 at
            3877.8
similarity to human DOCK180 protein
            224.9
9914_at
hypothetical protein
                         Ρ
9915 at
            176.1
weak similarity to Stu1p
                         Ρ
9916_at
            1381.9
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hypothetical protein
9917 at
            4678.0
weak similarity to 3-oxoacyl-[acyl-carrier-protein] reductase from E. coli
            633.8
9873 at
weak similarity to 3-oxoacyl-[acyl-carrier-protein] reductase from E. coli
9874 at
            3265.3
weak similarity to human transcription regulator Staf-5
9875 at
            840.2
questionable ORF
9876_at
            4554.3
has homology to the Dictyostelium and human actin-binding protein coronin
9877 at
            2289.2
component of a nuclear-localized tRNA splicing complex
9878 at
            225.7
weak similarity to rabbit trichohyalin
9879 f at
            10978.9
strong similarity to IMP dehydrogenases, Pur5p and YML056c
9880 at
            4259.3
Calcineurin subunit A\; type 2B protein serine\/threonine phosphatase catalytic subunit A1\; cytoplasmic
9881_at
            3014.5
questionable ORF
9882 at
            1931.2
                         Ρ
hypothetical protein
                         Ρ
9883 at
            2250.2
ExtraCellular Mutant
                         Ρ
9884_at
            1947.8
hypothetical protein
9885 at
            6642.3
                         Ρ
ornithine aminotransferase
9886 at
            6088.1
Putative snRNP protein containing Sm-like domain\; coprecipitates with U4, U5 and U6 snRNAs
9887_at
            3323.7
Mitochondrial 60S ribosomal protein L4
9888_at
            2127.3
hypothetical protein
9889 i at
            9861.2
Ribosomal protein S1A (rp10A)
9890_s_at 7701.0
Ribosomal protein S1A (rp10A)
9891_at
            1787.4
regulator of silent mating loci
9892 at
            1910.0
ExtraCellular Mutant
                         Ρ
9893_at
            218.0
questionable ORF
9894 at
            -3.5
                         Α
hypothetical protein
9850 at
            343.2
                         Α
weak similarity to hexokinases
9851 at
            9137.0
36 kDa subunit (D subunit of VO sector) of the vacuolar H(+) ATPase\; required for assembly
9852_at
            8843.8
60S ribosomal subunit protein L6B (L17B) (rp18) (YL16)
9853 at
            7012.5
60 kDa nuclear FK506 binding protein
9854_at
            4450.0
```

```
3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase isozyme
9855 at
            653.6
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
9856 at
            5226.8
Protein involved in desensitization to alpha-factor pheromone
9857 at
            267.3
Nuclear protein
9858 at
            3200.8
                         Ρ
similarity to YPR117w
            1967.3
9859 at
weak similarity to human G/T mismatch binding protein
9860 at
            713.8
strong similarity to YPR172w
9861 at
            288.1
Nap1p-binding protein
9862 at
            -112.4
                         Α
questionable ORF
9863 at
            3679.0
                        Ρ
cell division control protein
9864 at
            182.7
similarity to C.carbonum toxD protein
9865 f at
            1562.3
member of the seripauperin protein/gene family (see Gene class PAU)
9866 i at
            360.0
                        Α
questionable ORF
9867_s_at 325.9
                         Ρ
questionable ORF
            2092.5
9868 at
hypothetical protein identified by SAGE
9869 at
            5766.1
                        Ρ
identified by SAGE
                         Ρ
9870_s_at 1768.6
Mitochondrial ribosomal protein MRPL15 (YmL15)
9871 at
            1061.5
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
            1027.8
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
            3328.9
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
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
            1729.9
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
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
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
            280.9
non-annotated SAGE orf Found forward in NC_001144 between 603628 and 603825 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
9832 at
            -326.5
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
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
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
            3532.2
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
            10405.0
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 6672.1
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 9243.9
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 5597.2
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
            75.4
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
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
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
            47.0
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
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
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
            164.9
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
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
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
            2596.0
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
            943.3
```

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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
            735.0
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
            8676.4
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
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
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
            11.6
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
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
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
            365.1
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
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
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
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
            1892.4
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
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
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
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 1591.0
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
            -124.1
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
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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

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9823_at
            6821.7
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
            4011.5
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 795.0
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
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
            793.8
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
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
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
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
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
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
            1123.4
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
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
            631.3
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
            1112.9
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
            -3.9
                         Α
Centromere
9791 f at -7.5
                         Α
Centromere
9792 s at 1897.3
                         Ρ
CEN12-associated
9793 at
            282.9
                         Ρ
snRNA
9794_at
                         Ρ
            3678.7
snRNA
                         Ρ
9795_at
            5666.2
snRNA
                         Ρ
9796_at
            1371.8
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snRNA
                        Ρ
9797 i at
            318.5
snRNA
9798 at
            7763.7
                        Ρ
snRNA
                        Ρ
9799 at
            1195.6
snRNA
9800_s_at
            2761.2
                        Ρ
hypothetical protein Y .2
9801_at
            478.7
similarity to human leukotriene b4 12-hydroxydehydrogenase
9802 at
            3609.6
required for protein disulfide bond formation in the ER
9803 at
            3660.3
mitochondrial membrane protein
9757 at
            937.5
C-terminal part starting with aa 262 cause growth inhibition when overexpressed
9758 at
            7660.8
weak similarity to Los1p
9759 at
            10830.5
Hydroxymethylglutaryl-CoA Synthase
9760_at
            8713.7
strong similarity to cytochrome-b5- and nitrate reductases
            9042.3
9761 at
alpha-tubulin
9762_at
            11135.3
inorganic phosphate transporter, transmembrane protein
9763 at
            -308.5
hypothetical protein
                        Ρ
9764 at
            4265.8
Putative small GTPase
            2829.9
9765_at
mitochondrial NADH ubiquinone 6 oxidoreductase
9766_at
            624.3
hypothetical protein
9767 at
            161.4
                        Α
similarity to YMR285c
                        Ρ
9768_at
            1775.4
similarity to YPL184c
9769_g_at 2700.3
                        Ρ
similarity to YPL184c
                        Ρ
9770 at
            3148.4
questionable ORF
            1642.7
9771_at
predicted protein is very hydrophobic, has many membrane-spanning regions, several potential
glycosylation sites, potential ATP-binding site
9772 at
            3183.3
Vanadate resistance protein
            2490.4
9773_at
                        Ρ
hypothetical protein
                        Ρ
9774_at
            3252.3
datin, an oligo(dA).oligo(dT)-binding protein
9775 at
            1042.9
CTD kinase-I gamma subunit
            1539.9
9776_at
strong similarity to ubiquitination protein Bul1p
```

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Ρ
9777_at
            11773.8
DBF2 Interacting Protein
9778 at
            1014.8
multicopy suppressor of a sin4 defect
9734 at
            1046.9
hypothetical protein
                         Ρ
9735_at
            3080.9
hypothetical protein
9736 at
            10616.7
Orotate phosphoribosyltransferase 1
9737 at
            4775.6
signal recognition particle subunit, homologue of mammalian SRP19
9738 at
            1233.6
Intermediate filament protein involved in organelle inheritance
9739 at
            2325.8
Nucleoporin
9740 at
            2896.7
                         Ρ
p60 subunit of the yeast omatin Assembly Factor-I (CAF-I)
9741 at
            -510.2
questionable ORF
            6617.8
                         Р
9742 at
weak similarity to YMR264w
9743 at
            4510.9
123 kD regulatory subunit of trehalose-6-phosphate synthase\/phosphatase complex\; homologous to
TPS3 gene product
                         Ρ
9744_at
            549.4
questionable ORF
9745 at
            780.3
                         Р
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
9746 at
            1911.0
TFIID subunit
            3537.7
9747_at
required for Golgi to vacuole trafficking, shares similarity to mammalian ras inhibitors
9748_at
            1300.1
similarity to asparagine synthases
9749 at
            388.8
Endonuclease (with Rad1p) that degrades single-stranded DNA for repair
9750_at
            137.6
questionable ORF
9751_at
            4450.2
Putative homolog of subunit 5 of bovine prefoldin, a chaperone comprised of six subunits
9752 at
            2485.4
similarity to P.falciparum liver stage antigen LSA-1
            12382.0
9753_at
proteasome component Y7
9754 at
            1293.4
subunit of mitochondrial RNase P
9755 at
            101.2
                         Α
hypothetical protein
9756 at
            -39.7
                         Α
questionable ORF
                         Ρ
9711_at
            1736.2
hypothetical protein
9712_at
            -65.1
                         Α
strong similarity to YML125c, similarity to cytochrome-b5- and nitrate reductases
9713_at
            7803.2
```

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D-arabinono-1,4-lactone oxidase
9714 at
            12532.9
                         Ρ
alpha-tubulin
9715 at
                         Α
            -227.4
hypothetical protein
9716 at
            -458.5
                         Α
hypothetical protein
                         Ρ
9717 at
            1508.1
similarity to N.crassa O-succinylhomoserine (thiol)-lyase
9718_at
            2951.3
strong similarity to ZMS1 protein
9719 at
            2086.7
similarity to A.brasilense nifR3 protein
9720 at
            1916.0
weak similarity to Synechocystis sp. hypothetical protein sll1188
9721 at
            11433.1
cyclophilin-3 (cyclosporin-sensitive proline rotamase-3)
9722 at
            3915.9
Bet5pV18kD component of TRAPP
9723_at
            1465.4
weak similarity to transcription factor
9724 at
            10268.5
3-hydroxy-3-methylglutaryl-coenzyme A (HMG-CoA) reductase isozyme
9725 at
            9394.8
Prolyl cis-trans isomerase, also called proline rotamase or peptidylprolyl cis-trans isomerase (PPlase)
9726 at
            12722.0
Ribosomal protein L6A (L17A) (rp18) (YL16)
            6378.1
9727 at
similarity to YOR3141c and YNL087w
9728 at
            3646.8
                         Р
hypothetical protein
                         Ρ
9729_at
            5833.1
putative dihydroxyacetone kinase
9730 at
            4483.5
Binds to catalytic subunit of DNA polymerase alpha (Pol1p)
9731 at
            821.9
similarity to C.elegans hypothetical protein
9732 at
            6332.5
weak similarity to YAL042w
9733_at
            10.3
                         Α
hypothetical protein
9689 at
            1337.6
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
            1127.8
GTP-binding protein of the ras superfamily involved in termination of M-phase
9691 i at
            13875.1
Ribosomal protein S1B (rp10B)
9692 at
            1430.7
Protein involved in mitochondrial import of fusion proteins
                                                                                                     5
9693 at
            1307.3
to 3 DNA helicase
9694 at
            2491.1
43-kDa 8-oxo-guanine DNA glycosylase
9695 at
            2883.9
similarity to C.elegans ZK370.4 protein
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9696_at
            8415.3
                         Ρ
Suppressor of mec lethality
9697 at
            127.9
                         Α
questionable ORF
                         Ρ
9698 at
            2779.3
Catalytic A subunit of calcineurin, type 2B protein serine Vthreonine phosphatase); redundant with Cna1\;
cytoplasmic
9699 at
            11024.9
strong similarity to IMP dehydrogenases
9700_at
            11447.1
strong similarity to IMP dehydrogenases
9701 at
            5638.1
subunit of signal peptidase complex, homologous to mammalian protein SPC25
9702 at
            390.1
Cytochrome b2 [L--lactate cytochrome-c oxidoreductase]
9703 at
            3653.1
hypothetical protein
9704 at
            8007.2
                         Ρ
putative integral membrane protein
9705_at
            5570.7
regulatory protein
9706_at
            331.7
                         Ρ
weak similarity to potato sucrose cleavage protein
9707 at
            2137.5
RNA splicing and ER to Golgi transport
9708 at
            7008.2
Glucose Signaling Factor
9709_at
            795.0
                         Ρ
questionable ORF
9710 at
            543.6
strong similarity to YJR054w
9666_at
            2406.9
RNA splicing factor associated with U1 snRNP
9667_at
            270.3
Component of rDNA transcription factor CF, which also contains Rrn6p and Rrn7p, which is required for
rDNA transcription by RNA polymerase I
9668 at
            335.7
Carnitine O-acetyltransferase, peroxisomal and mitochondrial
9669 at
            3010.5
hypothetical protein
9670 at
                         Ρ
            3322.1
hypothetical protein
                         Ρ
9671_at
            391.1
hypothetical protein
                         Ρ
9672 at
            1959.8
weak similarity to C.elegans hypothetical protein CELW03F8
9673 at
            3611.4
putative alpha-mannosidase
9674_at
            158.1
                         Α
questionable ORF
                         Ρ
9675_at
            1312.8
similarity to YDR458c
                         Ρ
9676 at
            1434.7
similarity to YDR458c
9677_at
            3624.6
Interacts with Rad51p by two hybrid analysis. mRNA is induced in meiosis during recombination
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9678_at
            615.3
                        Α
questionable ORF
                        Ρ
9679 at
            4163.4
Nuclear envelope protein with multiple putative transmembrane domains
9680 at
            3948.3
hypothetical protein
                        Ρ
9681_at
            2020.8
hypothetical protein
9682 at
            9355.0
                        Ρ
Thiol-specific antioxidant
9683 at
            4686.0
Homeobox-domain containing protein
9684 s at 13083.4
Ribosomal protein S18B
9685 at
            1298.4
ribosomal protein, mitochondrial
9686 s at 6597.5
Ribosomal protein S17A (rp51A)
9687 at
            2727.5
weak similarity to Nmd2p
9688 at
            7746.9
Adenine phosphoribosyltransferase
9643 at
            2509.6
uracil DNA glycosylase
                        Ρ
9644 at
            1484.0
hypothetical protein
9645 at
            5171.3
Putative new 37kDa subunit of N-oligosaccharyltransferase complex
            2762.6
9646 at
                        Ρ
similarity to YDR438w
            426.2
                        Ρ
9647 at
Polymerase suppressor 2\; Suppressors of group II intron-splicing defect.
9648 at
            2197.5
serine-threonine phosphatase Z
            1546.0
                        Ρ
9649 at
TFIID subunit
9650 at
            2179.2
similarity to C.elegans hypothetical protein C14B1.5
9651 at
            2240.5
hypothetical protein
9652 at
                        Α
            4.4
questionable ORF
9653_at
            10866.7
Component of the COPII coat of certain ER-derived vesicles
9654 at
            2221.9
hypothetical protein
9655 at
            1544.4
                        Ρ
transcription factor
9656_g_at 6801.3
                        Ρ
transcription factor
                        Ρ
9657_i_at
            657.4
questionable ORF
                        Ρ
9658 r at
           192.8
questionable ORF
                        Ρ
9659_at
            624.5
questionable ORF
```

```
9660_at
            7602.4
Mitochondrial ribosomal protein MRPL39 (YmL39)
9661 at
            11156.3
S-adenoslymethionine: delta 24-methyltransferase
9662 at
            1797.4
jun-like transcription factor
9663 at
            3114.5
hypothetical protein
9664 at
            1144.5
similarity to hypothetical S.pombe protein
9665 at
            8333.6
lactoylglutathione lyase (glyoxalase I)
9620 at
            444.8
hypothetical protein
                         Ρ
9621 at
            507.1
hypothetical protein
9622_at
            8339.8
                         Ρ
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
            2296.6
protein kinase which functions at the G(sub)2VM boundary
9624 at
            8730.0
similarity to hypothetical S.pombe and C.elegans proteins
9625 at
            1314.2
hypothetical protein
9626 at
            4172.2
Protein required for sorting proteins to the vacuole
9627 at
            3892.9
Protein required for protein synthesis
9628 at
            6187.4
strong similarity to Plb1p
                         Ρ
9629 at
            300.8
hypothetical protein
9630 at
            9514.2
Phospholipase B (lypophospholipase)
9631 at
            8546.3
weak similarity to P.aeruginosa regulatory protein mmsR
9632 at
            2698.8
weak similarity to hypothetical protein YDR352w
            4561.2
9633 at
high affinity hexose transporter-2
9634_at
            5917.7
CLU1 is similar to the Dictyostelium cluA gene
9635 at
            974.9
membrane protein required for core glycosylation
9636 at
            1785.0
weak similarity to S.pombe hypothetical protein SPAC4F10
            8418.1
9637 at
cytochrome P450 involved in C-22 denaturation of the ergosterol side-chain
9638 at
            2006.4
displays homologies to several transcription factors
9639 at
            133.7
DBF2 Interacting Protein\; SNAP 25 homolog
9640 at
            193.8
similarity to tetratricopeptide-repeat protein PAS10
```

```
9641_at
            1189.2
                         Ρ
Binds Sin3p in two-hybrid assay
9642 at
            1490.1
Multicopy suppressor of fenpropimorph resistance (fen2 mutant), shows similarity to Candida albicans
corticosteroid-binding protein CBP1
            1566.3
9598 at
metal-binding transcriptional activator
9599 at
            6813.0
ubiquitin conjugating enzyme
9600_at
            629.4
putative mitochondrial GTPase
9601 at
            2432.1
                        Ρ
Mitochondrial ribosomal protein MRPL3 (YmL3)
9602 at
            770.5
hypothetical protein
9603 at
            1154.6
C3HC4 zinc-binding integral peroxisomal membrane protein
9604 at
            5741.2
High level expression reduced Tv3 Transposition
9605 at
            721.5
42 kDa protein that pysically associates with the PP2A and SIT4 protein phosphatase catalytic subunits
9606_at
            732.2
                        Ρ
weak similarity to human nuclear autoantigen
9607 at
                        Ρ
            483.0
hypothetical protein
9608 at
            1602.5
similarity to YKL050c and human restin
9609 at
            351.9
questionable ORF
9610 at
            1965.8
                         Ρ
Cytokinesis
            4393.7
                         Р
9611_at
Actin-related protein
9612_at
            226.9
weak similarity to YPR201w
9613 at
            1283.3
Inner membrane protease (mitochondrial protein)
9614 at
            1266.7
homolog of S. pombe cdc25
9615_at
            3004.2
                        Ρ
zinc finger protein
9616 at
            8373.5
                         Ρ
Homocitrate
            5595.1
9617_at
suppressor of TFIIB mutations
9618 at
            691.3
                         Ρ
strong similarity to Yet1p
9619 at
            877.7
weak similarity to Pseudomonas L-fucose dehydrogenase
9575 at
            1699.2
Regulator of arginine-responsive genes with ARG81 and ARG82
9576_at
            6303.0
putative transcriptional activator of alpha-specific genes
9577_at
            3774.7
hypothetical protein
                         Ρ
9578_at
            3719.9
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Nuclear pore complex protein that is member of GLFG repeat-containing family of nucleoporins and is
highly homologous to Nup100p
9579 at
            803.1
hypothetical protein
9580 at
            8556.9
                         Ρ
weak similarity to A.thaliana PRL1 protein
9581 at
            263.8
Required for arrest in G1 in response to pheromone
9582 at
            607.5
questionable ORF
9583 at
            123.9
Binds Sin3p in two-hybrid assay and is part of large protein complex with Sin3p and Stb1p
            4141.9
9584 at
vacuolar proton pumping ATPase, 110-kDa subunit\; not in vacuole membrane
9585 at
            2267.8
Protein required for cell cycle arrest in response to loss of microtubule function
9586 at
            1857.9
mitochondrial ADPVATP translocator
9587 at
            113.7
hypothetical protein
9588 at
                         Ρ
            7969.7
multicopper oxidase
                         Р
9589 at
            1523.5
15kDa subunit of the tetrameric tRNA splicing endonuclease
9590 at
            1047.8
mitochondrial import receptor, heterodimerizes with Tom70p, preferentially recognizes the mature regions
of precursor proteins associated with ATP-dependent cytosolic chaperones
9591 at
            504.0
component of the cleavage and polyadenylation factor CF I involved in pre-mRNA 3 -end processing
9592 at
            2228.9
acetylornithine acetyltransferase
9593_at
            443.7
                         M
Regulator of Rim1p, required for IME1 expression
9594_at
            1079.7
basic, hydrophilic protein of 59 kDa
9595 at
            716.6
                         Ρ
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
            100.5
Synthesis Of Var
                         Ρ
9597 at
            2131.5
hypothetical protein
                         Ρ
9553_at
            129.5
weak similarity to mouse transcription factor NF-kappaB
9554 at
            479.0
hypothetical protein
9555 at
            715.0
2 Cys2-His2 zinc fingers at c-terminus, glutamine and asparagine rich
9556_at
            7129.9
                         Ρ
hypothetical protein
                         Ρ
9557 at
            8862.9
HMG-1 homolog, mitochondrial
9558 at
            2887.0
weak similarity to C-terminal part of cytochrome b5 and b2
            2707.9
9559 at
strong similarity to hypothetical S. pombe protein
```

```
9560_at
            512.7
weak similarity to human Mi-2 protein
9561 at
            205.2
questionable ORF
9562 at
            2505.0
                         Ρ
Precocious Dissociation of Sister chromatids
9563 at
            889.0
similarity to SNF7 protein
9564 at
            1234.2
chromosome transmission
9565 at
            9902.2
phosphatidylinositol transfer protein
            3136.9
                        Ρ
9566 at
putative helicase
                         Ρ
9567 at
            396.6
May regulate NAM7 function, possibly at level of mRNA turnover
9568 at
            -67.0
hypothetical protein
9569 at
            11893.6
                         Ρ
alcohol dehydrogenase isoenzyme III
9570_at
            478.9
putative pseudogene
9571 at
            -23.3
                         Α
putative pseudogene
                         Ρ
9572 at
            2383.4
similarity to YKL105c
                         Р
9573 at
            396.0
questionable ORF
9574 at
                         Ρ
            619.1
hypothetical protein
9530 at
                         Ρ
            4390.2
similarity to multidrug resistance proteins
9531 at
            3253.8
mitochondrial membrane ATPase of the CDC48VPAS1VSEC18 (AAA) family
9532 at
            675.6
strong similarity to B. subtilis conserved hypothetical protein yhfK
9533 at
            1950.9
nuclear protein localization factor
9534 at
            3787.1
                        Ρ
Protein localizes to actin cortical patches. Probable binding site on actin lies on front surface of
subdomain 3 and 4.
9535 at
            3123.0
                         Ρ
weak similarity to Pwp2p
9536_at
            256.4
58 kd component (Cbf3c) of the multisubunit Cbf3 kinetochore protein complex, which binds to the CDE
III element of centromeres
9537 at
            2000.8
SNZ1 proximal ORF, stationary phase induced gene
9538 at
            3716.0
encodes highly conserved 35 kDa protein that shows increased expression after entry into stationary
phase
9539_at
            1011.7
weak similarity to M.genitalium hypothetical protein homolog MG442
9540 at
            1001.3
hypothetical protein
                         Ρ
9541_at
            7296.6
```

```
similarity to P.ciliare possible apospory-associated protein
9542 at
            1764.0
Homolog of samB gene of Aspergillus nidulans (deletion of samB results in mislocalization of septa
9543 at
            515.4
similarity to YBR002c
                         Р
9544 at
            6618.3
strong similarity to YKL121w
9545 at
            2138.5
hypothetical protein
                         Ρ
9546_at
            538.4
protein kinase
                         Р
9547 at
            1149.8
Phosphoglucomutase
9548 at
            613.0
Ku80 homolog, exhibits DNA binding activity on its own, associates with Hdf1p to form major DNA
end-binding complex
9549 at
            -23.9
                         Α
hypothetical protein
9550 at
            8959.1
                         Ρ
acetolactate synthase
            4402.8
                         Р
9551_at
myosin I
                         Р
9552 at
            6949.2
similarity to aldehyde dehydrogenase
9507 at
            400.5
weak similarity to MSN1 protein
                         Ρ
9508 at
            1484.9
hypothetical protein
            4445.3
                         Ρ
9509 at
similarity to folylpolyglutamate synthetases and strong similarity to YKL132c
9510 at
            132.5
similarity to B. subtilis conserved hypothetical proteins yogW and yoaM
9511 at
            1521.3
                         Ρ
similarity to YKL133c
            9296.0
9512 at
WD repeat protein (G-beta like protein) that interacts with the translational machinery
9513 at
            9398.0
WD repeat protein (G-beta like protein) that interacts with the translational machinery
9514 at
            53.5
component of spindle pole
9515 at
            79.1
strong similarity to succinate dehydrogenase
9516_at
            2128.1
similarity to YNL008c
                         Ρ
9517 g at 4516.6
similarity to YNL008c
                         Ρ
9518 at
            2131.7
questionable ORF
9519 at
            6900.6
5-aminoimidazole-4-carboxamide ribonucleotide (AICAR) transformylaseVIMP cyclohydrolase
9520 at
            7104.6
Ribosomal protein L15B (YL10) (L13B) (rp15R)
9521 at
            411.8
                         Α
hypothetical protein
9522_at
            10575.9
resistance against Pichia farinosa killer toxin (SMK toxin) when expressed by a multi copy plasmid
```

```
9523_at
                         Ρ
            732.0
weak similarity to YLR031w
9524 at
            3924.9
transcriptional activator of glycolytic genes
9525 at
            763.1
                         Ρ
hypothetical protein
9526_at
            611.7
Protein involved in silencing HMR, homologous to acetyltransferases
9527_at
            4024.4
ExtraCellular Mutant
9528 at
            4509.0
                         Ρ
Nuclear pore membrane glycoprotein
            497.8
9529 at
similarity to D.melanogaster Dreg-2 protein
9484 at
            8043.6
similarity to human retinoblastoma-binding protein
9485 at
            130.2
                         Ρ
similarity to hypothetical S. pombe protein
9486 at
            -73.0
mRNA is induced early in sporulation
9487 at
            3040.5
hypothetical protein
                         Ρ
9488 at
            717.8
hypothetical protein
9489 at
            197.4
                         М
questionable ORF
                         Ρ
9490 at
            483.8
weak similarity to YIR013c and YLR013w
9491 at
            447.8
interstrand crosslink repair protein
9492 at
            710.2
                         M
GTP-binding protein
9493 at
            2979.0
Serine\threonine protein kinase, phosphorylates the mitotic activator IME1
9494 at
            3031.0
hypothetical protein
9495 at
            174.5
                         Ρ
hypothetical protein
9496 at
            15919.7
                         Ρ
Ribosomal protein L13B
                         Ρ
9497 i at
            3070.6
Ribosomal protein S16A (rp61R)
9498_f_at
            10111.1
Ribosomal protein S16A (rp61R)
9499 at
            388.2
weak similarity to Mlp1p
9500 at
            9152.8
mitochondrial cytosolically directed NADH dehydrogenase
            9806.5
9501_at
p39 subunit of translation initiation factor eIF3
9502 at
            1727.3
hypothetical protein
                         Ρ
9503 at
            6008.7
hypothetical protein
            8258.2
9504_at
oligosaccharyl transferase glycoprotein complex, delta subunit
```

```
9505_at
            4025.4
                         Ρ
Inner membrane protease (mitochondrial protein)
9506 at
            147.8
hypothetical protein
                         Ρ
9462 at
            1248.6
mitochondrial inner membrane protease
9463 at
            2838.1
similarity to Asm4p
9464 at
                         Α
            13.6
questionable ORF
9465 at
            233.6
Involved in proteolytic processing of Rim1p
9466 at
            459.9
weak similarity to E.coli hypothetical protein f402
9467 at
            572.2
weak similarity to S.pombe hypothetical protein SPAC23C11
9468 at
            2495.9
hypothetical protein
9469 at
            1002.7
                         Ρ
weak similarity to E.coli ribosomal S8 protein
9470 at
            -171.5
                         Α
questionable ORF
9471 at
            60.3
Protein homologous to human Sin3 complex component SAP18, possible coiled-coil protein
9472 at
            1472.1
weak similarity to fruit fly ecdysone-inducible protein
9473 at
            1211.4
                        Ρ
Homologous to E coli dnaJ protein
9474 at
            788.0
                        Ρ
similarity to ATPases
                         Ρ
9475 at
            302.0
hypothetical protein
9476 at
            1096.7
Predicted 758 amino acid polypeptide with poly-glutamine and poly-asparagine domains
9477 at
            1639.5
involved in plasmid maintenance
9478 at
            2025.2
                         Ρ
similarity to members of the mitochondrial carrier protein family
9479 at
            329.9
MutL homolog, forms a complex with Pms1p and Msh2p to repair mismatched DNA
9480 at
            384.9
contains an N-terminal Zn2Cys6 type zinc finger domain, a C-terminal acidic domain and a putative coiled
coil dimerization domain
9481_at
            363.3
Aldehyde Dehydrogenase (NAD(P)+)
9482 g at 2093.6
Aldehyde Dehydrogenase (NAD(P)+)
9483 at
            648.9
aldehyde dehydrogenase, (NAD(P)+), likely cytosolic
9439 at
            588.5
similarity to YKL124w
9440 at
            423.8
                         Ρ
similarity to MSN1 protein
9441 at
            -463.8
questionable ORF
                         Ρ
9442_s_at 6241.0
```

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flocculent specific protein\; contains >35 repeats of the amino acid sequence NNNDSYGS
9443 at
            9394.8
questionable ORF
9444 at
            1545.3
                         Ρ
Cytoplasmic inhibitor of proteinase Pep4p
9445 at
            -29.5
protein of unknown function
9446 at
            590.4
ExtraCellular Mutant
9447_at
            1446.7
Protein involved in mitochondrial iron accumulation
9448 at
            2017.0
similarity to C.elegans hypothetical protein
9449 at
            290.4
non-specific DNA binding protein
9450 at
            702.0
                         Ρ
similarity to YPL228w
                         Ρ
9451 at
            838.8
similarity to YPL229w
9452_at
            152.3
Putative transcriptional repressor with proline-rich zinc fingers
9453 at
            3632.4
SSO1 and SSO2 encode syntaxin homologs\; act in late stages of secretion
                         Ρ
9454 at
            3733.3
hypothetical protein
                         Ρ
9455_at
            1321.5
hypothetical protein
9456_at
            8960.9
                         Ρ
constitutively expressed heat shock protein
9457 g at 5607.9
constitutively expressed heat shock protein
9458_at
            2871.1
hypothetical protein
9459_at
            1545.5
weak similarity to bacterial ribosomal protein S17
9460 at
            5575.1
Glycine decarboxylase complex (P-subunit), glycine synthase (P-subunit), Glycine cleavage system
(P-subunit)
                         Ρ
9461 at
            802.8
has DNA helicase signature motifs
            3107.6
9416 at
hypothetical protein
9417_at
            198.3
similarity to mouse Tbc1 protein
9418 at
            3531.2
Mitochondrial ribosomal protein MRPL24 (YmL24)
9419 at
            506.4
                         Ρ
questionable ORF
9420_i_at
            4452.9
Ribosomal protein L36A (L39) (YL39)
9421_s_at 13850.6
Ribosomal protein L36A (L39) (YL39)
9422 at
            6952.4
similarity to YPL250c
                         Ρ
9423_at
            891.3
hypothetical protein
```

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9424_at
            2803.1
                        Ρ
Vti1p is a v-SNARE that interacts with two t-SNARES, Sed5p and Pep12p
9425 at
            1901.3
spindle pole body associated protein
9426 at
            2322.7
G(sub)1 cyclin
                        Ρ
9427_at
            4750.9
putative membrane protein
9428 at
            611.3
human xeroderma pigmentosum group A DNA repair gene homolog
9429 at
            15271.8
C-8 sterol isomerase
9430 at
            10761.1
Mitochondrial outer membrane protein\; forms the outer membrane import channel
9431 at
            659.6
weak similarity to D.melanogaster hypothetical protein DMC39E1
9432 at
            12078.6
phosphofructokinase beta subunit
9433 at
            -195.9
weak similarity to hypothetical protein YNR014w
9434 at
            1134.6
                        Р
Similar to acetyl-coenzyme A carboxylase
9435 at
            6225.7
mevalonate kinase
9436 at
            1452.6
                        Ρ
hypothetical protein
9437 at
            1597.4
similarity to P.glauca late embryogenesis abundant protein and YBR177c and YPL095c
9438 at
            1114.1
weak similarity to beta tubulins
9394 at
            2626.1
                        Ρ
weak similarity to myosins
9395 at
            433.6
S. cerevisiae homologue of S. pombe cdc5+
9396 at
            4645.5
dnaJ homolog
9397_at
            6873.7
                        Ρ
similarity to GAS1 protein
9398 at
            6187.1
                        Ρ
Serine Protein Kinase
9399 at
                        Ρ
            11463.0
GMP synthase
9400_at
            1298.3
hypothetical protein
9401 at
                        Ρ
            1269.7
Establishes Silent omatin
9402 at
            10796.9
48 kDa Phosphomevalonate kinase
9403 at
            7717.9
                        Р
weak similarity to photosystem II protein D2
9404 at
            5687.6
similarity to S.pombe dihydrofolate reductase
9405 at
            1695.2
encodes putative deubiquitinating enzyme
9406_at
            949.3
localizes to discrete sites in rad50s mutants. Mre11p, Rad50p, Mer2p and Xrs2p function in a complex by
```

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immunoprecipitation and two-hybrid analyses\; mutations in these genes have similar phenotypes. mRNA
is induced in meiosis
9407 at
            2380.6
Mitochondrial ribosomal protein MRPL44 (YmL44)
9408 at
            1617.6
Mitochondrial ribosomal protein MRPL44 (YmL44)
9409 at
            11461.8
similarity to ketoreductases
9410 at
            1031.1
TFIID subunit
9411 at
            1643.1
Mitochondrial RNA polymerase specificity factor
9412 at
            9561.8
Protein required for processing of pre-rRNA
9413 f at
            339.1
Ribosomal protein S10B
9414 f at
            8357.9
                        Ρ
Ribosomal protein S10B
9415 at
            458.0
peripheral vaculor membrane protein\; putative Zn-finger protein
9371 at
            565.7
involved in cell fusion during mating, also required for the alignment of parental nuclei before nuclear
fusion
                         Ρ
9372 at
            2715.9
strong similarity to YOR295w
9373_at
            492.2
                        Ρ
ribonuclease H
9374 at
                         Ρ
            6595.5
Protein involved in RNA processing and export from nucleus
9375 at
            7657.1
TFIID subunit
            4813.8
                         Ρ
9376_at
similarity to CHS6 protein
9377_at
            6460.9
Protein required for filamentous growth, cell polarity, and cellular elongation
9378 at
            1627.4
Ribonuclease III
                         Ρ
9379_at
            682.3
U2 snRNP protein
9380_at
            9313.8
DNA-binding protein, mtDNA stabilizing protein, mitochondrial inner membrane protein with low homology
to RIM2
9381_s_at 14763.5
Ribosomal protein L20A (L18A)
9382 at
            9755.7
Zinc- and cadmium-resistance protein
9383 at
            156.9
similarity to Uth1p, Nca3p, YIL123w and Sun4p
            2429.8
9384 at
                        Ρ
questionable ORF
9385_at
            1239.9
weak similarity to mouse thyrotropin-releasing hormone receptor
9386 at
            7547.0
long-chain fatty acid--CoA ligase and synthetase 4
9387_at
            5251.1
                         Ρ
hypothetical protein
```

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9388_at
            804.5
                         Ρ
similarity to glutamate decarboxylases
9389 at
            179.8
                         Α
strong similarity to YKR076w and YGR154c
9390 at
            7024.5
                         Ρ
hyperosmolarity-responsive gene
9391_at
            1214.0
                         Ρ
hypothetical protein
9392 at
            805.7
                         Ρ
strong similarity to YPL264c
9393 at
            183.1
hypothetical protein
                         Ρ
9349 at
            1047.2
hypothetical protein
                         Ρ
9350 at
            10303.2
subunit VII of cytochrome c oxidase
9351 at
            559.5
translational activator of cytochrome c oxidase subunit II
9352 at
            1222.9
hypothetical protein
9353 at
                         Р
            2014.0
hypothetical protein
                         Р
9354 at
            8669.4
Translation initiation factor eIF1A
9355 at
            4244.0
115 kD regulatory subunit of trehalose-6-phosphate synthaseVphosphatase complex
9356 at
            1008.9
similarity to S.pombe scn1 protein
9357 at
            1432.5
                         Ρ
subunit of the histone deacetylase B complex
9358 at
            4371.7
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
            810.6
hypothetical protein
9360 at
            8495.8
similarity to A.thaliana hyp1 protein
9361 at
            1851.4
mitochondrial inorganic pyrophosphatase
9362_at
            487.2
U4VU6 snRNA-associated splicing factor
9363 at
            2312.9
weak similarity to C.elegans hypothetical protein CELT23B3
            1535.0
9364_at
Upstream activation factor subunit
9365 at
            661.9
Orotate phosphoribosyltransferase 2
9366 at
            7639.0
desaturaseVhydroxylase enzyme
9367 at
            2170.8
Negative regulator of cell polarity
9368 at
            805.5
Protease involved in ras and a-factor terminal proteolysis
9369 at
            2213.3
Involved in the ubiquination pathway, possibly by functioning with Rsp5
9370_at
            11144.6
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ubiquitin-like protein
9326 at
             1885.1
TFIIF interacting Component of CTD Phosphatase
            1654.1
9327 at
similarity to phosphomannomutases
9328 at
            205.7
strong similarity to aminotriazole resistance protein
9329 at
            40.7
Zinc-cluster protein involved in activating gluconeogenic genes\; related to Gal4p
9330_at
            2016.1
hypothetical protein
                         Р
9331 at
            923.9
basic, hydrophilic 67.5 kDa protein
9332 at
            743.3
Initiator methionine tRNA 2 -O-ribosyl phosphate transferase
9333 at
            884.3
                         Ρ
DNA binding protein
9334 at
             1149.9
                         Ρ
similarity to Ccr4p
9335_at
            4802.6
Mitochondrial ribosomal protein MRPL33 (YmL33) (E. coli L30)
9336 at
            656.0
Protein essential for mitochondrial biogenesis
9337 at
            989.5
strong similarity to hypothetical S.pombe and C.elegans proteins
9338_at
             1790.0
hypothetical protein
9339 at
            5870.5
                         Ρ
Putative RNA-dependent helicase
9340 at
            30.5
questionable ORF
                         Р
9341_at
            2519.1
similarity to ser/thr protein kinase
9342_at
            8723.9
strong similarity to C.elegans hypothetical protein
9343 at
            739.7
                         Ρ
similarity to amidases
9344 at
            288.6
Coiled-coil domain protein required for proper nuclear migration during mitosis (but not during
conjugation)
9345 at
            787.9
                         Α
questionable ORF
                         Ρ
9346_at
            13097.1
similarity to YGR273c
                         Ρ
9347 at
            7990.3
Probable component of serine palmitoyltransferase, which catalyzes the first step in biosynthesis of
long-chain sphingolipids
9348 at
             11489.6
carboxypeptidase Y (proteinase C)
9304 at
            9414.8
hypothetical protein
                         Ρ
9305_at
            416.5
weak similarity to hypothetical protein YJL062w
9306 at
             1095.6
phosphoribosylpyrophosphate amidotransferase
9307_at
            2075.8
```

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mitochondrial ABC transporter protein
9308 at
            2157.0
Integral membrane mitochondrial protein
9309 at
            1477.7
                        Ρ
alcohol dehydrogenase II
9310 at
            1283.9
encodes putative deubiquitinating enzyme
9311 at
            447.4
questionable ORF
9312_at
            13130.3
member of the glucanase gene family
9313 at
            45.8
Protein with similarity to Gls1p and Gls2p (GB:Z49212)
9314 at
            202.6
                        Α
questionable ORF
9315 at
            9293.1
                        Ρ
cell surface glycoprotein 115-120 kDa
9316 at
            12483.8
Karyopherin
9317_at
            6705.5
~100 kDa cytoplasmic protein
9318_at
            3545.2
                        Ρ
similarity to YGR283c
9319 at
            1550.5
Regulates activity of protein phosphatase 1, Glc7p, which is involved in proper chromosome segregation
9320 at
            4401.0
hypothetical protein
9321 at
            990.3
similarity to YKR089c and YOR081c
9322 at
            11786.0
alpha-type of subunit of 20S proteasome
9323_at
            8901.8
                        Р
similarity to hypothetical S. pombe protein
9324_at
            6375.6
similarity to YOR385w and YNL165w
9325 at
            955.0
                        Ρ
questionable ORF
                        Ρ
9281_at
            832.6
questionable ORF
9282_at
            34.4
similarity to mucins, glucan 1,4-alpha-glucosidase and exo-alpha-sialidase
9283 at
            8778.3
strong similarity to alcohol-dehydrogenase
9284_at
            1218.0
Low-affinity Fe(II) transport protein
9285 at
            601.9
hypothetical protein
9286 s at 7277.0
                        Ρ
strong similarity to hypothetical proteins YPL273w and YLL062c
9287 s at 373.7
strong similarity to YPL280w, YOR391c and YDR533c
9288_s_at 808.3
strong similarity to phosphopyruvate hydratases
9289 at
            225.3
strong similarity to YBL108w, YCR103c and YKL223w
9290_f_at 1761.9
                        Ρ
```

```
strong similarity to members of the Srp1p/Tip1p family
9291 at
            11298.9
protein associated to the ATP synthase
9292 at
            187.9
hypothetical protein identified by SAGE
9293 at
            644.3
identified by SAGE
9294 at
            7668.3
                         Ρ
hypothetical protein
9295_g_at 4213.7
                         Α
hypothetical protein
                         Р
9296 at
            217.5
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
            525.9
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
            517.0
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
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
            41.0
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
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
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
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
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
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
            339.7
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
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
            276.2
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
            695.9
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
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

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9265_at
            546.4
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
            1110.2
9266 at
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
            11978.4
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
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
            4390.0
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
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
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
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
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
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 70.7
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
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
            41.3
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
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
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
            330.6
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
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
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
            914.2
non-annotated SAGE orf Found forward in NC_001145 between 434355 and 434564 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
9237 at
            1016.4
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
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
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
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
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
            -58.3
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
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
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
            -78.5
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
            749.9
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
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
            191.9
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
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
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
            396.1
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
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
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
            621.0
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
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9255_at

-114.8

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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
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
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
            5683.8
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
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
            5127.9
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
            -212.0
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
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
            -170.3
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
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
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
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
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
            110.8
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
            130.0
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
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
            126.2
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
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
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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

1100.2

```
9225 at
                        Р
            213.3
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
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
            8160.2
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 5957.7
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
            286.8
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
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 331.2
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
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
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
            2728.9
snRNA
                        Ρ
9187 i at
            192.0
Centromere
9188_at
                        Р
            241.8
snRNA
9189_at
            10980.0
snRNA
                        Ρ
9190 at
            600.9
snRNA
                        Р
9191 at
            2411.8
snRNA
9192_at
            315.2
                        Ρ
snRNA
9193 at
            1319.9
                        Ρ
snRNA
                        Ρ
9194_at
            2384.6
snRNA
                        Ρ
9195 at
            8277.2
snRNA
9196 s at 293.6
                        Α
similarity to M. verrucaria cyanamide hydratase, identical to hypothetical protein YFL061w
9197 s at 2768.0
                        Ρ
SNZ2 proximal ORF, stationary phase induced gene
9198 s at 949.9
Snooze: stationary phase-induced gene family
9199 at
            2414.4
Hypothetical aryl-alcohol dehydrogenase
9200_at
            2420.6
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histone deacetylase
9201 at
             1165.2
Member of the AAA-protein family that includes NSFp and PEX1p
9202 at
            316.0
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
            6551.6
Cell-cycle regulation protein, may be involved in the correct timing of cell separation after cytokinesis
9204 at
             1447.4
similarity to YOL003c, YLR246w and C.elegans hypothetical protein ZK757.1
9205 at
            898.2
FIG4 expression is induced by mating factor.
            317.2
9206 at
hypothetical protein
            3998.4
                         Ρ
9207 at
strong similarity to YCR094w and YNR048w
9208 at
             10128.7
Cell wall beta-glucan assembly
9163 at
            3639.0
weak similarity to Vcx1p
            3639.7
9164 at
strong similarity to S.pombe Bem46 protein
9165 at
            350.1
                         Α
questionable ORF
9166 at
            7.6
                         Α
hexose transport protein
9167 at
             1035.8
similarity to A.thaliana PRL1/2 protein
             1480.3
9168 at
prephenate dehydratase
9169 at
            4168.1
essential for assembly of a functional F1-ATPase
9170 at
            911.1
positive regulator of allophanate inducible genes
9171 at
            2120.5
similarity to C.elegans hypothetical protein
9172 at
            5864.9
subunit 2 of replication factor RF-A\; 29\% identical to the human p34 subunit of RF-A
9173 at
            420.4
hypothetical protein
9174 at
            3202.9
                         Ρ
similarity to S.pombe hypothetical protein SPAC24H6.02c
9175_at
            698.5
Binds Sin3p in two-hybrid assay and is present in a large protein complex with Sin3p and Stb2p
9176 at
             7123.8
similarity to S.pombe and C.elegans hypothetical proteins
9177 at
            9228.1
43.1 kDa SerineVthreonineVtyrosine protein kinase
9178 at
            2481.3
ribosomal protein of the small subunit, mitochondrial
9179 at
            7053.3
similarity to C-term. of A.nidulans regulatory protein (qutR)
9180 at
            672.4
similarity to Ypt1p and rab GTP-binding proteins
             1214.1
                         Ρ
9181 at
hypothetical protein
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9182_s_at 9498.0
Ribosomal protein S19B (rp55B) (S16aB) (YS16B)
9183 s at 7682.5
Ribosomal protein L18B (rp28B)
9184 at
            11715.8
Ribosomal protein L18B (rp28B)
9185 at
            10503.9
hypothetical protein
9140 at
            447.1
exhibits homology to Trf4p and Top1p
9141 at
            2153.6
protein kinase, homologous to Ste20p, interacts with CDC42
9142 at
            3153.4
similarity to S.pombe hypothetical protein SPAC23D3.13c
9143 at
            66.2
questionable ORF
9144 at
            416.6
                        Ρ
hypothetical protein
9145 at
            1144.2
                        Ρ
hypothetical protein
9146 at
                        Р
            823.5
Multicopy Suppressor of Bud Emergence
9147 at
            3034.0
Pseudouridine synthase
9148 at
            3125.3
N-glycosylated integral plasma membrane protein
9149 at
            2226.7
Subunit 3 of Replication Factor C\; homologous to human RFC 36 kDa subunit
            1195.4
9150 at
G(sub)1 cyclin that associates with PHO85
9151 at
            3132.4
strong similarity to C.elegans hypothetical protein
9152 at
            9091.8
non-clathrin coat protein involved in transport between ER and Golgi
9153 at
            1072.7
Cold sensitive U2 snRNA Supressor
9154 at
            366.7
hypothetical protein
                        Ρ
9155 at
            2639.5
Mitochondrial ribosomal protein MRPL10 (YmL10)
9156 at
            3442.5
Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC3
and WSC4
9157_at
            1385.0
involved in processsing of tRNAs and rRNAs
9158 at
            7788.4
strong similarity to YDR214w
9159 at
            5822.0
sterol C-14 reductase
                        Ρ
9160 at
            979.7
hypothetical protein
9161_at
            1616.6
                        Ρ
similarity to YLR187w
                        Р
9162 at
            260.8
homoserine O-trans-acetylase
9118_at
            536.2
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questionable ORF
9119 at
            1256.5
similarity to human band 3 anion transport protein
9120 at
            1594.6
similarity to glycerate- and formate-dehydrogenases
9121 at
            1971.9
topoisomerase I interacting factor 1
9122 at
            929.5
Protein with coiled-coil domain essential for vesicular transport
9123 at
            4895.7
contains formin homology domains\; homologous to BNR1 (BNI1 related protein)
9124 at
            869.7
Protein highly homologous to permeases Can1p and Lyp1p for basic amino acids
9125 at
            131.9
hypothetical protein
9126 at
            9378.7
                         Ρ
lysine permease
9127 at
            2005.9
                         Ρ
Phosphatidylinositol 4-kinase
9128_at
            411.6
questionable ORF
                         Ρ
9129_at
            810.2
similarity to human protein KIAA0174
9130 at
            2287.6
weak similarity to Sec14p
9131 at
            5997.6
YIP1-Interacting Factor, shows similarity to NADH dehydrogenases
9132 at
            2979.8
DNA polymerase II
                         Р
9133 at
            1565.9
Fifth largest subunit of origin recognition complex\; contains possible ATP-binding site
9134_at
            598.9
hypothetical protein
9135_at
            5502.7
Antioxidant protein and metal homeostasis factor, protects against oxygen toxicity
9136 at
            1642.4
hypothetical protein
9137_at
            1376.8
Interacts with SNF1 protein kinase
9138_at
            2405.7
similarity to bacterial dihydropteroate synthase
9139 at
            11578.8
strong similarity to nucleic acid-binding proteins
9095_at
            322.0
                         Ρ
hypothetical protein
9096 at
                         Ρ
            668.1
hypothetical protein
9097 at
            2575.9
ribosomal protein of the large subunit (YmL30), mitochondrial
9098 at
            2232.3
RNA recognition motif-containing protein that participates in sequence-specific regulation of nuclear
pre-mRNA abundance
9099 at
            684.3
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
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9100_at
                         Ρ
            188.0
similarity to YDR109c
9101 at
            8163.0
                         Ρ
49-kDa alpha subunit of RNA polymerase A
9102 at
            6444.0
cysteinyl-tRNA synthetase
9103 at
            2723.4
similarity to D.melanogaster SET protein
9104 at
            466.2
hypothetical protein
9105 at
            9425.0
translation initiation factor 3 (eIF3)
9106 at
            8013.0
transmembrane protein
9107 at
            1217.1
similarity to human hypothetical protein KIAA0404
9108 at
            10215.1
Glucose-6-phosphate dehydrogenase
9109 at
            2164.6
strong similarity to K.marxianus LET1 protein
9110_at
            5075.1
Ca2+-dependent serine protease
9111 at
            462.0
Yeast putative Transmembrane Protein
9112 at
            2923.9
component of RNA polymerase II holoenzyme\/mediator complex
9113 at
            509.5
questionable ORF
9114 at
            567.7
weak similarity to mouse hemoglobin zeta chain
9115 at
            2106.8
Is required to link Chs3p and Chs4p to the septins
9116 at
            3543.4
                        Ρ
hypothetical protein
9117 at
                         Ρ
            10187.4
weak similarity to Sec14p
9073 at
            1312.4
weak similarity to mammalian transcription elongation factor elongin A
9074 at
            2408.9
transcriptional regulator, putative glutathione transferase
            483.4
9075 at
similarity to dnaJ-like proteins
9076_at
            63.0
                         Α
questionable ORF
9077 at
            -166.8
                         Α
questionable ORF
9078 at
            917.7
chaotic nuclear migration\; predicted mass is 67kDa
9079_at
            950.1
hypothetical protein
9080_at
            225.3
Aut2p interacts with Tub1p and Tub2p\; Aut2p forms a protein complex with Aut7p\; Aut2p mediates
attachment of autophagosomes to microtubules
9081 at
            2663.5
functionally related to TFIIB, affects start site selection in vivo
9082_at
            3036.8
                         Ρ
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Component of nuclear RNase P and RNase MRP
9083 at
            10342.7
adenylosuccinate synthetase
9084 at
            5490.2
mannosyltransferase
9085 at
            122.1
                         М
similarity to E.coli hypothetical protein in serS 5 region
9086 at
            2848.1
weak similarity to E.coli bis(5 -nucleosyl)-tetraphosphatase
            1935.9
9087_at
repressor activator protein
            586.6
9088 at
similarity to hypothetical S. pombe protein
9089 at
            312.4
23 kDa peroxisome associated protein, binds Pex14p
9090 at
            1016.0
hypothetical protein
9091 at
            3477.9
                         Ρ
weak simlarity to C.cardunculus cypro4 protein
9092_at
            1193.4
hypothetical protein
9093_at
            52.5
encodes protein with RNA-binding motifs required for MRE2-dependent mRNA splicing
9094 s at 10377.9
Heat shock protein of HSP70 family, homolog of SSB1
9050 at
            10957.9
weak similarity to Colletotrichum gloeosporioides nitrogen starvation-induced glutamine rich protein
9051 at
            5310.2
similarity to M.jannaschii hypothetical protein MJ1073
9052 at
            1590.1
similarity to structure-specific recognition proteins
9053_at
            -132.2
                         Α
questionable ORF
9054_g_at 31.5
                         Α
questionable ORF
                         Ρ
9055 at
            257.2
sporulation-specific protein
9056 at
            -291.2
weak similarity to B.subtilis CDP-diacylglycerol--serine O-phosphatidyltransferase
            771.0
9057_at
peroxisomal 2,4-dienoyl-CoA reductase
9058 at
            1189.7
involved in regulation of carbon metabolism
9059_at
            1320.9
strong similarity to human TGR-CL10C
9060 at
            964.9
Activates transcription of glycolytic genes\; homologous to GCR1\; may function in complex with Gcr2p
9061 at
            232.1
questionable ORF
                         Ρ
9062 at
            1844.4
Protein involved in regulation of cell size
9063 at
            -206.8
sporulation-specific protein with a leucine zipper motif, regulated by the transcription factor Ume6 and
expressed early in meiosis
9064 at
            959.5
                         Ρ
hypothetical protein
```

```
9065_at
            -103.2
strong similarity to YDL222c and similarity to Sur7p
9066 at
            1326.9
hypothetical protein
                         Ρ
9067 at
            5448.3
chitin synthase 1
                         Р
9068 at
            1755.1
similarity to Synechocystis hypothetical protein
9069 at
            12769.1
hypothetical protein
9070 at
            5454.6
karyopherin alpha homolog of 60 kDa
9071 at
            560.5
involved in spindle pole body duplication and karyogamy, interacts with Cdc31p, localizes to the spindle
pole body
                         Ρ
9072 at
            708.0
hypothetical protein
9028 at
            9005.1
                         Ρ
                                                                                                     а
deubiquitinating enzyme
9029_at
            1089.9
ribosomal protein of the large subunit, mitochondrial
9030_at
            1210.7
questionable ORF
                         Ρ
9031 at
            1644.9
protein kinase homolog
9032_at
            1942.7
weak similarity to S.pombe hypothetical protein
            3569.7
9033 at
similarity to hypothetical S. pombe protein
9034 at
            540.3
hypothetical protein
9035_at
            10304.6
Ribosomal protein S3 (rp13) (YS3)
9036_at
            1045.4
hypothetical protein
                         Ρ
9037 at
            2322.3
weak similarity to Hkr1p
9038_at
            5601.9
similarity to S.pombe Rnp24p
9039_at
            773.3
hypothetical protein
9040 at
            930.5
multicopy suppressor of bem1 mutation, may be involved in G-protein mediated signal transduction
            2143.5
9041_at
Component of the anaphase-promoting complex
9042 at
            222.8
                         Ρ
questionable ORF
9043 at
            251.6
                         Ρ
questionable ORF
                         Ρ
9044 at
            8509.7
Phosphatidylserine Decarboxylase 1
9045_at
            3695.4
similarity to C.elegans ZK688.3 protein and E.coli hpcEp
9046 at
            2547.2
CREB like repressor, bZIP protein that binds to CRE motifs, interacts with Mig1p
9047_at
            1875.5
```

```
hypothetical protein
9048 at
            1476.6
similarity to YOR385w and YMR316w
9049 at
            1947.4
hypothetical protein
                        Ρ
9005_at
            2628.8
translation elongation factor eEF4
9006_s_at 10992.7
Ribosomal protein L42A (YL27) (L41A)
9007_at
            1463.3
                        Ρ
Protein kinase
                        Р
9008 at
            10069.6
YGP1 encodes gp37, a glycoprotein synthesized in response to nutrient limitation which is homologous to
the sporulation-specific SPS100 gene
9009 at
            1165.4
hypothetical protein
9010 at
            1190.8
                        Ρ
hypothetical protein
9011 at
            5634.7
                        Ρ
weak similarity to S.pombe hypothetical protein SPAC10F6
9012 at
            6613.3
similarity to YHR133c
                        Ρ
9013 at
            1942.2
hypothetical protein
9014 at
            3441.3
membrane-bound casein kinase I homolog
9015 at
            6235.0
Putative homolog of subunit 4 of bovine prefoldin, a chaperone comprised of six subunits
            1496.0
9016 at
hypothetical protein
9017 at
            3307.8
31-kDa subunit of RNA polymerase III (C)\; HMG1 like protein
9018 at
            1420.4
hypothetical protein
9019 at
            5116.7
weak similarity to S.pombe hypothetical protein
9020 at
            578.1
cofactor B
                        Ρ
9021 at
            1779.3
Sm-like protein
                        Ρ
9022 at
            290.3
hypothetical protein
9023_at
            450.8
                         Α
mating a-factor pheromone precursor
9024 at
            220.6
similarity to YHR131c
9025 at
            232.0
                        Α
hypothetical protein
9026_at
            663.9
Ammonia transport protein
9027_at
            6852.7
Adenosine deaminaseVadenine aminohydrolase
8982 i at
            789.1
questionable ORF
                         Ρ
8983_s_at 1908.9
questionable ORF
```

```
8984_at
            11265.7
                         Ρ
70-kDa adenylyl cyclase-associated protein
8985 at
            4300.2
                         Ρ
putative mitochondrial S4 ribosomal protein
8986 at
            1257.4
similarity to neurofilament triplet M protein
8987 at
            9627.4
peptidylprolyl cis-trans isomerase
8988 at
            8619.9
similarity to C.carbonum toxD gene
8989 at
            1038.2
hypothetical protein
8990 at
            1568.6
similarity to A. ambisexualis antheridiol steroid receptor
8991 at
            4638.4
Mitochondrial import receptor complex protein
8992 at
            8758.0
sn-1,2-diacylglycerol cholinephosphotransferase
8993 at
            1897.8
weak similarity to M.pneumoniae uridine kinase udk
8994 at
            271.2
Similar to human tumor suppressor gene known as TEP1, MMAC1 and PTEN1. Contains sequence
motifs characteristic of protein tyrosine phosphatases.
8995 at
            1157.1
similarity to C.elegans hypothetical protein
8996 at
            189.2
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
            4898.4
Protein with similarity to mammalian monocarboxylate transporters MCT1 and MCT2
8998 at
            2190.3
similarity to hypothetical S. pombe protein
8999 at
            6323.7
                         Ρ
weak similarity to C.jejuni serine protease
9000 at
            704.3
hypothetical protein
9001 at
            6284.6
70 kDa mitochondrial specialized import receptor of the outer membrane
9002 at
            313.6
questionable ORF
            1917.0
                         Ρ
9003 at
weak similarity to M.jannaschii hypothetical protein MJ1257
9004_at
            957.6
essential suppressor of the respiratory deficiency of a pet mutant
8959 at
            294.9
carbon-catabolite sensitive malate synthase
8960 at
            1468.0
weak similarity to RING zinc finger protein from Gallus gallus
8961 at
            1417.6
weak similarity to S.pombe hypothetical protein SPAC23C11
8962 at
            1522.8
questionable ORF
            9814.4
8963 at
subunit common to RNA polymerases I (A) and III (C)
8964 at
            6781.6
ATP-dependent RNA helicase of DEAD box family
```

```
8965_at
            9431.6
ATP-dependent RNA helicase of DEAD box family
8966 at
            10798.3
cytochrome b5
8967 at
            6655.1
weak similarity to fruit fly RNA-binding protein
8968 at
            324.0
weak similarity to cytochrome-c oxidase
8969 at
            3411.2
strong similarity to YOR110w
8970 at
            1636.8
similarity to human AF-9 protein
8971 at
            1436.8
inositol polyphosphate 5-phosphatase
8972 at
            73.7
                         Α
questionable ORF
8973 at
            8596.0
alpha-isopropylmalate synthase (2-Isopropylmalate Synthase)
8974 at
            1254.3
member of the leucine zipper family of transcriptional activators
            6367.9
8975 at
DNA polymerase I alpha subunit, p180
8976 at
            2569.8
similarity to YKL146w
8977 at
            1835.6
                         Ρ
hypothetical protein
8978 at
            4769.9
similarity to YNL032w, YNL056w and YDR067c
8979 at
            7453.8
Ras proto-oncogene homolog
            703.4
8980 at
involved in transcriptional regulation of PHO5
8981 at
            10019.5
Ribosomal protein S7B (rp30)
8936 at
            14867.0
Ribosomal protein S7B (rp30)
8937 at
            879.4
strong similarity to YOR092w
8938 at
            1193.1
similarity to S.pombe hypothetical protein
8939 at
            37.6
rab5-like GTPase involved in vacuolar protein sorting and endocytosis
8940 at
            68.9
similarity to hypothetical C. elegans proteins Y48E1C.2 and Y48E1C.c
8941 at
            3256.7
similarity to chicken h-caldesmon, Uso1p and YKL201c
8942 at
            2692.0
GTP-binding protein of the rho subfamily of ras-like proteins
8943_at
            -62.9
questionable ORF
8944_at
            2929.7
topoisomerase II, Top2p localizes to axial cores in meiosis
8945 at
            4349.9
weak similarity to synaptogamines
8946 at
            4278.1
hypothetical protein
```

```
8947_at
            6735.7
Protein involved in propagation of M2 dsRNA satellite of L-A virus
8948 at
            1413.3
Required for endocytosis and organization of the cytoskeleton
8949 at
            1743.2
weak similarity to rabbit peroxisomal Ca-dependent solute carrier
8950 at
            790.8
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
            1443.6
similarity to ribosomal protein S13
8952 at
            3160.8
                         Ρ
hypothetical protein
8953 at
            10475.5
                         Ρ
tropomyosin I
8954 at
            4861.1
                         Ρ
hypothetical protein
8955 at
            456.3
                         Ρ
similarity to dnaJ protein homolog YDJ1
8956_at
            2133.6
negative regulator of Ras cAMP pathway, shares weak homology with Spt2p
            6907.7
8957 at
similarity to YHR088w and C.elegans hypothetical protein F44G4.1
8958 at
            1700.4
Protein of unknown function
8914 at
            1839.7
mitochondrial lysine-tRNA synthetase
            2089.3
8915 at
RNase H(35), a 35 kDa ribonuclease H
8916 at
            6023.5
Dihydrolipoamide acetyltransferase component (E2) of pyruvate dehydrogenase complex
8917_at
            8283.1
translocase of the outer mito. membrane
8918 at
            13383.6
Ribosomal protein L16B (L21B) (rp23) (YL15)
8919 at
            1319.8
Fork Head homolog two
8920 i at
            12427.3
Ribosomal protein L9B (L8B) (rp24) (YL11)
8921_s_at 10014.0
Ribosomal protein L9B (L8B) (rp24) (YL11)
8922 at
            12036.0
Protein involved in the aging process
8923_at
            1858.0
similarity to resistance proteins
8924 at
            8129.4
yeast dnaJ homolog (nuclear envelope protein)\; heat shock protein
8925 at
            1150.8
weak similarity to Mycoplasma protoporphyrinogen oxidase
8926 at
            4883.6
RNA-binding (zeta) subunit of translation initiation factor 3 (eIF-3)
8927_at
            9282.8
90-kDa protein, located in nucleolus, that is homologous to a human proliferation-associated nucleolar
protein, p120
                         Ρ
8928_at
            1314.1
Actin-related protein
```

```
8929_at
                         Ρ
            5089.7
similarity to YIL117c
                         Ρ
8930 at
            271.1
questionable ORF
8931 at
            4043.6
similarity to YNL032w and YNL099c
8932 at
            13786.8
Outer mitochondrial membrane porin (voltage-dependent anion channel, or VDAC)
8933 at
            2837.2
vacuolar protein
8934 at
            918.2
Tyrosine protein phosphatase involved in adaptation response to pheromone
8935 at
            8947.6
Cytochrome-c oxidase chain Va
8891 at
            1117.4
hypothetical protein
8892 at
            721.6
                         Ρ
hypothetical protein
8893 at
            1828.2
                         Ρ
putative zinc finger protein
            4175.4
8894 at
Required for aspargine-linked glycosylation
8895 at
            1245.5
similarity to probable transcription factor Ask10p and hypothetical protein YPR115w, and strong similarity
to hypothetical protein YIL105c
8896_at
            2917.3
hypothetical protein
8897 at
            4797.3
                         Р
strong similarity to human leukotriene-A4 hydrolase
            168.7
8898 at
questionable ORF
                         Р
8899_at
            1451.8
Bypass of PAM1
8900_at
            1440.3
weak similarity to Mlp1
8901 at
            2093.6
weak similarity to M.genitalium alanine--tRNA ligase
8902 at
            2513.3
90 kd subunit of TFIIIB, also called TFIIIB90 or B or B 90 component
8903_at
            1320.1
hypothetical protein
8904 at
            6207.9
alpha-4-beta-4 subunit of mitochondrial isocitrate dehydrogenase 1
8905_at
            4074.0
involved in secretion of proteins that lack classical secretory signal sequences
8906 at
            1311.8
hypothetical protein
8907 s at -1.2
                         Α
nearly identical to YNL018c
8908 s at 220.1
nearly identical to YNL019c
8909_at
            2705.4
Tyrosine phosphatase
                         Р
8910 at
            10438.4
Histone H3 (HHT1 and HHT2 code for identical proteins)
8911_s_at 10162.6
```

```
Histone H4 (HHF1 and HHF2 code for identical proteins)
8912 at
            2401.3
Putative mannosyltransferase of the KRE2 family
            -171.9
8913 at
questionable ORF
                         Р
8868 at
            1930.8
putative transcription factor
8869 at
            2647.5
similarity to S.pombe hypothetical protein
8870_at
            631.4
C-type cyclin associated with the Ssn3p cyclin-dependent kinase
8871 at
            1044.2
                         Ρ
weak similarity to YBR271w and YJR129c
8872 at
            1477.3
Transcription factor homolog\; similarity to Drosophila melanogaster shuttle craft protein\; similarity to
human NFX1 protein\; similarity to human DNA-binding protein tenascin
8873 at
            2086.7
weak similarity to C.burnetii FMU protein
8874 at
            2747.3
histone deacetylase, shares sequence similarity with Rpd3p, Hos1p, Hos2p, and Hos3p
8875 at
            241.7
Predicted SerVthr kinase
                         Ρ
8876 i at
            879.8
hypothetical protein
8877 r at
            135.7
                         Α
hypothetical protein
8878 s at -129.9
                         Α
hypothetical protein
                         Р
8879 at
            9039.1
poly(A)+ RNA-binding protein
8880 at
            4794.4
Proteinase inhibitor I2B (PBI2), that inhibits protease Prb1p (yscB)
8881 at
            405.6
translation elongation factor eEF3 homolog
8882 at
            152.2
                         Ρ
questionable ORF
8883 at
            173.9
                         Ρ
encodes a protein with high similarity to phospholipase B
8884 at
            910.0
similarity to hypothetical A. thaliana protein T14G11.21
8885 at
            0.8008
weak similarity to B.subtilis hypothetical protein ykrX
8886_at
            246.0
peroxisomal NADP-dependent isocitrate dehydrogenase
8887 at
            2872.7
similarity to YMR119w
8888 at
            10314.3
                         Ρ
sit4 suppressor, dnaJ homolog
8889 at
            3889.8
Required for amino acid permease transport from the Golgi to the cell surface
8890 at
            1732.3
Mitochondrial ribosomal protein MRP7 (YmL2) (E. coli L27)
8845 at
            3173.3
hypothetical RNA-binding protein
8846_at
            1564.9
Member of family of mitochondrial carrier proteins
```

```
8847_at
            7140.3
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
            2661.9
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
            11275.3
citrate synthase. Nuclear encoded mitochondrial protein.
8850 at
            243.1
Putative transmembrane protein
8851 at
            1775.3
34-kDa subunit of RNA polymerase III (C)
8852 at
            84.4
weak similarity to bovine interferon gamma precursor
8853 at
            31.0
questionable ORF
8854 at
            2321.4
                         Ρ
hydrophilic protein\; has cysteine rich putative zinc finger esential for function
8855 at
            709.7
Protein involved in autophagocytosis during starvation
            3166.5
8856 at
weak similarity to human phosphatidylcholine--sterol O-acyltransferase
8857 at
            1066.8
hypothetical protein
8858 at
            1270.2
Protein required for accurate mitotic chromosome segregation
8859 at
            671.7
                        Р
putative RNA-dependent ATPase
8860 at
            1446.0
                        Ρ
Uridine kinase
            6503.4
8861 at
similarity to Pho87p and YJL198w
8862 at
            145.1
weak similarity to hypothetical protein YMR206w
            2652.3
8863 at
Suppressor of Mitochondrial Mutation in the tRNAasp gene
8864 at
            12842.3
acetyl-CoA carboxylase
                         Ρ
8865 at
            7211.1
23 kDa mitochondrial inner membrane protein
8866 at
            8373.6
hypothetical protein
                         Ρ
8867_at
            3997.5
Acyl-CoA cholesterol acyltransferase (sterol-ester synthetase)
8823 at
            610.6
hypothetical protein
8824 at
            4023.3
                         Ρ
hypothetical protein
8825 at
            1111.0
weak similarity to protein phosphatases
8826 at
            1580.6
73 kDa subunit of the SWIVSNF transcription activation complex, homolog of Rsc6p subunit of the RSC
chromatin remodeling complex
            1806.9
8827_at
weak similarity to Rpc31p
                         Ρ
8828_at
            1151.4
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questionable ORF
8829 at
            2822.9
Guanine nucleotide exchange factor for Sar1p.
8830 at
            3850.8
similarity to human pyridoxal kinase
8831 at
            1524.9
Cyclophilin
8832_at
            4012.8
                         Ρ
similarity to P.denitrificans cobW protein
            3515.4
8833 at
ExtraCellular Mutant
8834 at
            2935.7
                         Ρ
MAP kinase kinase kinase\; activator of Pbs2p
8835 at
            3604.1
Serine Vthreonine protein phosphatase involved in glycogen accumulation
8836 at
            2060.0
para-aminobenzoate synthase, PABA synthase
8837 at
            1263.4
shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains\; homologous to Sol2p
and Sol3p
8838_at
            3839.0
Arp Complex Subunit
                         Р
8839 at
            4857.4
strong similarity to ribosomal protein S12
8840 at
            1839.1
strong similarity to Mycoplasma ribosomal protein S19
8841 at
            5010.3
putative RNA helicase
                         Ρ
8842 at
            1698.2
weak similarity to Anopheles mitochondrial NADH dehydrogenase subunit 2
8843 at
            513.2
hypothetical protein
8844 at
            2645.6
para hydroxybenzoate: polyprenyl transferase
            944.3
8800 at
                         Α
hypothetical protein
8801 at
            13003.4
mevalonate pyrophosphate decarboxylase
8802 at
            11864.8
anchorage subunit of a-agglutinin
8803 at
            494.8
translational activator of cytochrome c oxidase
8804_at
            6464.8
strong similarity to S.pombe hypothetical protein SPAC31A2.02
8805 at
            809.4
similarity to ser/thr protein kinases
8806 at
            629.0
strong similarity to YCR094w and YNL323w
8807_at
            1673.2
small hydrophilic protein, enriched in microsomal membrane fraction, interacts with Sec1p
8808 at
            7434.2
Saccharopine dehydrogenase (NADP+, L-glutamate forming) (saccharopine reductase) (EC 1.5.1.10)
8809 at
            1430.3
weak similarity to chicken nucleolin
            4832.4
8810 at
                         Ρ
Putative transcription factor
```

Α

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Р
8811_at
            6823.8
strong similarity to human breast tumor associated autoantigen
8812 at
            5239.3
strong similarity to human breast tumor associated autoantigen
8813 at
            2035.9
similarity to C.elegans hypothetical protein CEESL47F
8814 at
            5864.8
Putative ion transporter similar to the major facilitator superfamily of transporters
            223.3
8815 at
transmembrane regulator of KAPAVDAPA transport
            848.6
                         Ρ
8816 at
dethiobiotin synthetase
            651.6
8817 at
7,8-diamino-pelargonic acid aminotransferase (DAPA) aminotransferase
8818 at
            193.7
similarity to to alpha-1,3-mannosyltransferase
8819 at
            450.5
similar to FRE2
8820 at
            1068.4
weak similarity to hypothetical protein YDL218w
8821 at
            190.6
weak similarity to H.influenzae L-lactate permease (lctP) homolog
8822 at
            79.8
weak similarity to CYC1/CYP3 transcription activator
8776 at
            5.5
similarity to R.capsulatus 1-chloroalkane halidohydrolase
8777 at
            4616.7
                         Ρ
strong similarity to YJL222w, YIL173w and Pep1p
8778 at
            979.7
strong similarity to Pep1p
8779 at
            6948.8
similarity to beta-glucan-elicitor receptor - Glycine max
8780 at
            616.0
similarity to Bul1p
8781 at
            76.0
similarity to central part of Bul1p
8782 at
            66.0
strong similarity to Snq2p
8783 at
            256.5
strong similarity to UDP-glucose 4-epimerase Gal10p
8784 s at 371.9
strong similarity to E.coli D-mannonate oxidoreductase, identical to YEL070w
            2993.2
8785_at
weak similarity to B.subtilis nitrite reductase (nirB)
            1639.1
8786 f at
member of the seripauperin protein\( \)gene family
8787 at
            2250.5
hypothetical protein identified by SAGE
8788_at
            1310.0
                         Р
hypothetical protein
                         Ρ
8789_s_at 7445.6
Aminopeptidase of cysteine protease family
8790 s at 5427.3
protein of unknown function
8791_at
            277.4
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
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```
8792 at
            -271.0
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
            1123.8
8793 at
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
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
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
            943.0
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
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
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
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
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
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
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
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
            13671.2
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
            -266.2
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
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
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
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
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
            2842.9
non-annotated SAGE orf Found reverse in NC_001146 between 478137 and 478292 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
8763 at
            -118.8
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
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
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
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
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
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 69.3
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
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
           -10.9
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
            4027.4
8772 at
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
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
            6812.9
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
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
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 7298.9
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
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
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
            694.1
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
            -44.9
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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
            959.3
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
            296.3
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
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 -146.7
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
            89.0
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
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
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
            225.1
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
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
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
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
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
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
            291.0
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
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
            -33.4
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
            1940.2
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
            1034.6
```

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

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8706_at
                         Р
            86.8
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
            222.8
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
            284.3
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
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
            719.8
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
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
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
            2251.4
snRNA
8714<sub>at</sub>
                         Ρ
            344.8
snRNA
8715 at
            120.3
                         Α
hypothetical protein
                         Р
8716 s at 1432.3
Hypothetical aryl-alcohol dehydrogenase (AAD)
8717 at
            633.0
similarity to Pseudomonas alkyl sulfatase
8718_at
            229.8
similarity to P.putida phthalate transporter
8719_at
            352.6
strong similarity to hypothetical protein YIL166c
8720 f at
            239.5
strong similarity to members of the Srp1p/Tip1p family
8721_at
            -6.8
                         Α
hypothetical protein
            1365.6
8722_at
                         Ρ
hypothetical protein
8723 at
            7987.4
similarity to subtelomeric encoded proteins
            1151.4
8724_at
similarity to glucan 1,4-alpha-glucosidase Sta1p and YAR066w
8725 g at 1805.6
similarity to glucan 1,4-alpha-glucosidase Sta1p and YAR066w
8726 at
            419.1
similarity to S.fumigata Asp FII
8727 at
            29.8
strong similarity to Cps1p
8728_at
            869.0
similar to FRE2
8683 at
            7159.2
induced by osmotic stress\; similar to dihydroflavonol 4-reductase from plants
8684_at
```

223.9

```
questionable ORF
8685 at
            1424.1
Decapping protein involved in mRNA degradation
8686 at
            527.9
transcription factor, member of the histone acetyltransferase SAGA complex
8687 at
            7594.1
Peroxisomal membrane protein
8688 at
            2229.6
hypothetical protein
            526.2
8689_at
CTR9 is required for normal CLN1 and CLN2 G1 cyclin expression
            1142.9
8690 at
hypothetical protein
8691 at
            9939.5
6,7-dimethyl-8-ribityllumazine synthase (DMRL synthase)
8692 at
            7864.1
strong similarity to hypothetical S. pombe protein
8693 at
            603.5
similarity to YDR435c and C.elegans hypothetical protein
8694_at
            2194.5
Acetylornithine aminotransferase
8695 at
            10057.5
mRNA cap binding protein eIF-4E
            1177.1
                        Ρ
8696 at
hypothetical protein
8697_at
            1056.0
weak similarity to tetracycline resistance proteins
8698 at
            1017.4
6-phosphofructo-2-kinase
8699 at
            1382.1
Stoichiometric member of mediator complex
8700_at
            63.4
                         Α
questionable ORF
8701_at
            3467.4
High level expression Reduces Ty3 Transposition
8702 at
            1230.5
similarity to glycophospholipid-anchored surface glycoprotein Gas1p
8703_at
            32.5
hypothetical protein
8704_at
            3568.6
                         Ρ
ALuminium Resistance 1
8660 at
            7139.8
similarity to hypothetical S. pombe protein
            1326.6
8661_at
strong similarity to protein kinase Mck1p
            12014.6
8662 at
Ribosomal protein L25 (rpl6L) (YL25)
8663 at
            10830.9
cytosolic malate dehydrogenase
8664 at
            1844.2
hypothetical protein
8665_at
            3639.8
                         Ρ
weak similarity to M.jannaschii hypothetical protein
8666 at
            6122.6
Putative polyadenylated-RNA-binding protein located in nucleus\; similar to vertebrate hnRNP AVB
protein family
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3704.8
8667_at
has been localized to both the plasma membrane and the mitochondrial membrane
8668 at
            13369.8
Ribosomal protein L18A (rp28A)
8669 at
            2810.7
similarity to monocarboxylate transporter proteins
8670 at
            135.7
hypothetical protein
8671 at
            456.0
weak similarity to human sodium channel alpha chain HBA
8672 at
            475.7
43 kDa protein, transcriptional activator
            937.9
8673 at
homologous to Trf5p and Top1p, associates with Smc1p and Smc2p
8674 at
            309.4
similarity to human DS-1 protein
8675 at
            648.7
SerineVthreonine protein kinase with similarity to Ste20p and Cla4p
8676 at
            1327.9
Multicopy Suppressor of Bud Emergence
            5806.1
8677 at
weak similarity to human ubiquitin-like protein GDX
8678 at
            2595.6
Involved in RAS localization and palmitoylation
8679 at
            10174.5
Overexpression yields resistance to Zeocin
8680 at
            959.5
Transcription factor involved in activation of phospholipid synthetic genes
8681 at
            685.8
weak similarity to human PL6 protein
8682 at
            860.2
questionable ORF
8638 at
            920.8
Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC2
and WSC4
8639 at
            335.8
Involved in meiotic chromosome segregation\; may stabilize homologus DNA interactions at telomeres
and is required for a telomere activity in distributive segregation\; is associated with telomeres
8640 at
            5504.7
                        Ρ
myo-inositol transporter
                         Ρ
8641 at
            1396.5
tRNA 2 -phosphotransferase
8642 at
            904.8
similarity to YOL002c and YDR492w
8643 at
                         Ρ
            366.7
SerVThr protein kinase
8644 at
            97.0
                         Α
questionable ORF
8645 at
            7360.6
similarity to hypothetical S.pombe protein
8646 at
            10874.4
cytoplasmic tryptophanyl-tRNA synthetase
8647 at
            1407.5
3,4-dihydroxy-5-hexaprenylbenzoate methyltransferase
8648 at
            761.5
Helicase in MItochondria
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8649_at
            1448.4
Subunit 4 of Replication Factor C\; homologous to human RFC 40 kDa subunit
8650 at
            1457.7
similarity to C.elegans hypothetical protein F25H8.1
8651 at
            6341.5
                         Ρ
strong similarity to YBR147w
8652_at
            88.4
                         Ρ
hypothetical protein
8653 at
            1688.4
MutS homolog encoding major mismatch repair activity in mitosis and meiosis, functions with Pms1p and
Pms2VMIh1p in a complex which interacts with either Pms3VMsh6p to repair single-base and
insertion-deletion mispairs, or Msh3p to repair only insertion-deletion mispairs
8654 at
            1525.3
putative transcription factor\; contains a zinc finger
            1730.8
8655 at
                         Ρ
protein disulfide isomerase related protein
8656 at
            1086.7
similarity to S.pombe hypothetical protein
8657 at
            6273.3
Alcohol dehydrogenase
8658 at
                         Α
            13.6
hypothetical protein
8659 at
            239.9
similarity to A.thaliana hyp1 protein
8615 at
            902.2
similarity to YOL082w
                         Ρ
8616 at
            2671.8
similarity to YOL083w
8617 at
            1958.6
encodes a GTPase activating protein, highly homologous to Ira1p, homologue of neurofibromin
8618 at
            1949.8
strong similarity to X.laevis XPMC2 protein
8619 at
            228.5
similarity to NADH dehydrogenases
            875.6
                         Ρ
8620 at
hypothetical protein
8621 at
            6551.9
strong similarity to C.elegans K12H4.3 protein
8622 at
            2186.2
Dislikes Extra CIN8, (MDM) Mitochondrial distribution and morphology
8623 at
            1442.1
similarity to A.gambiae ATP-binding-cassette protein
            2055.2
8624_at
hypothetical protein
8625 at
            2541.6
                         Ρ
hypothetical protein
                         Ρ
8626 at
            1023.6
similarity to hypothetical S. pombe protein
8627_at
            1320.7
hypothetical protein
                         Ρ
8628 at
            510.7
53-kDa coiled-coil protein
8629 at
            4747.0
Homolog of SIR2
8630_at
            317.0
Transcription factor (bHLH) involved in interorganelle communication between mitochondria,
```

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peroxisomes, and nucleus
8631 at
            2261.8
DRAP deaminase
            756.2
8632 at
inositol polyphosphate 5-phosphatase
8633 at
            5358.9
(2)5 -bisphosphate nucleotidase
8634 at
            1163.7
                        Ρ
hypothetical protein
8635_at
            2117.7
                         Ρ
Clathrin associated protein, medium subunit
8636 at
            8044.0
Phosphoribosylpyrophosphate synthetase (ribose-phosphate pyrophosphokinase)
8637 at
            2445.8
similarity to C.elegans hypothetical protein M02F4.4
8592 at
            3970.3
Glycerol-3-phosphate dehydrogenase (NAD+)
8593 at
            8238.0
arginosuccinate synthetase
8594_at
            503.9
similarity to hypothetical C. elegans protein F02E9.6
8595 at
            1583.4
phosphoglycerate mutase
8596 at
            1217.0
similarity to B. subtilis transcriptional activator tenA
8597_at
            1314.1
                        Ρ
weak similarity to transcription factors
            907.1
8598 at
hypothetical protein
                         Ρ
8599 at
            2505.4
DNA Damage Responsive
8600_at
            6101.7
S-adenosylmethionine decarboxylase
8601_at
            2791.3
Component of the RNA polymerase II holoenzyme complex, positive and negative transcriptional
regulator of genes involved in mating-type specialization
8602 at
            180.5
questionable ORF
                        Ρ
8603 at
            4282.0
Glutathione Synthetase
                        Ρ
8604 at
            977.3
similarity to YAL018c and YOL047c
8605_at
            120.5
weak similarity to hypothetical proteins YAL018c and YOL048c
8606 at
            -31.4
                        Α
questionable ORF
8607 at
            2115.8
similarity to ser/thr protein kinase
8608 at
            1153.2
44 kDa phosphorylated integral peroxisomal membrane protein
8609 at
            1790.7
Endonuclease III-like glycosylase 2
8610 at
            1836.6
similarity to CCR4 protein
            1455.7
8611_at
weak similarity to M.sativa nuM1, hnRNP protein from C. tentans and D. melanogaster, murine/bovine
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3

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poly(A) binding protein II, and Nsr1p
8612 at
            11393.5
40S ribosomal protein S15 (S21) (rp52) (RIG protein)
8613 at
            9396.3
60S acidic ribosomal protein P2A (L44) (A2) (YP2alpha)
8614_at
            10783.2
                        Ρ
alpha-type of subunit of 20S proteasome
8570_at
            13.1
questionable ORF
8571_at
            3538.5
weak similarity to YMR317w
8572 at
            154.3
                        Ρ
questionable ORF
8573 at
            950.7
similarity to S.pombe rad18 and rpqL29 genes and other members of the SMC superfamily
8574 at
            476.6
Mitochondrial glutamyl-tRNA synthetase
8575 at
            697.7
                        Ρ
hypothetical protein
8576_at
            1323.8
weak similarity to Y.lipolytica SIs1 protein precursor
8577_at
            6785.6
strong similarity to glycoprotein Gas1p
                        Ρ
8578 at
            2009.6
hypothetical protein
8579_at
            1111.2
                         Ρ
bZIP protein
8580 at
                        Ρ
            3277.8
similarity to YPR125w
                        Ρ
8581 at
            7315.8
hypothetical protein
                         Ρ
8582_at
            1961.5
Affects longevity
8583_at
            123.3
                         Α
hypothetical protein
                         Ρ
8584 at
            424.4
mitochondrial initiation factor 2
8585_at
            3443.1
weak similarity to rat apoptosis protein RP-8
8586_at
            3482.6
possible component of RCC1-Ran pathway
8587 at
            3514.5
Tryptophan permease, high affinity
8588_at
            5779.7
similarity to Rim9p and YFR012w
8589_at
            786.5
                        Ρ
tSNARE that affects a Late Golgi compartment
8590 at
            212.1
similarity to YFR013w
8591 at
            3304.5
Calmodulin-dependent protein kinase
8547_at
            -22.6
weak similarity to YKR015c
            3450.7
8548 at
hypothetical protein
                         Ρ
8549_at
            973.4
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Hmg-coa Reductase Degradation
8550 at
            7126.8
An evolutionarily conserved member of the histone H2A FVZ family of histone variants
            935.4
8551 at
strong similarity to phospholipases
8552 at
            2488.2
putative RNA 3 -terminal phosphate cyclase
8553 at
            1306.7
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
            1238.2
8554 at
hypothetical protein
            1573.9
8555 at
Appears to be a structural component of the chitin synthase 3 complex
8556 at
            1792.4
topoisomerase I
8557 at
            6079.2
RNA polymerase II subunit, homologous to S. pombe Rpb11p subunit
8558 at
            5425.9
DNA binding protein involved in transcriptional regulation
8559 at
            1565.0
similarity to C.elegans hypothetical protein, YDR126w, YNL326c and YLR246w
            5104.4
8560 at
strong similarity to YDR492w and S.pombe hypothetical protein
8561 at
            1407.5
negative transcriptional regulator
8562 at
            4945.0
                         Ρ
Ribosomal RNA Processing
            3896.7
8563 at
Required for glucosylation in the N-linked glycosylation pathway
8564 at
            2011.5
subtilisin-like protease III
8565 at
            7747.1
weak similarity to hypothetical protein YDR339c
            250.4
8566 at
ATP dependent DNA ligase
            1605.2
8567_at
similarity to M.jannaschii hypothetical protein MJ0708
8568 at
            9360.1
                        Ρ
small glutamine-rich tetratricopeptide repeat containing protein
8569 at
            2113.7
Cell wall integrity and stress response component 1
8525 at
            18.8
Killed In Mutagen, reduced growth in diepoxybutane and Vor mitomycin C
8526 at
            1970.2
similarity to Tir1p and Tir2p
8527 at
            6075.0
Cold-shock induced protein of the Srp1p\/Tip1p family of serine-alanine-rich proteins
8528 at
            1495.4
strong similarity to ATP-dependent permeases
8529_at
            492.1
                         Ρ
similarity to YDR391c
                         Ρ
8530 g at 837.4
similarity to YDR391c
8531 at
            1451.3
strong similarity to YDR391c
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```
8532_at
            2541.0
B-type regulatory subunit of protein phosphatase 2A (PP2A)
8533 at
            4650.4
hypothetical protein
8534 at
             1841.7
                         Ρ
p24 protein involved in membrane trafficking
8535 at
            2247.4
Mitochondrial membrane protein
8536 at
            598.0
Resistance to o-dinitrobenzene, calcium, and zinc
8537 at
            460.8
                         Ρ
similarity to YDR474c
8538 at
             10612.0
10 kDa mitochondrial heat shock protein
8539 at
            6394.6
                         Ρ
similarity to Pyrococcus horikoshii hypothetical protein PHBQ041
8540 at
            789.8
weak similarity to D.melanogaster probable Ca2+ transporter rdgB
8541 at
            2731.9
hypothetical protein
                         Ρ
8542 at
             369.4
hypothetical protein
                         Р
8543 at
            584.8
Homolog of SIR2
8544 at
             1435.4
Protein required for cell cycle arrest in response to loss of microtubule function
8545 at
             10765.0
Heat shock protein also induced by canavanine and entry into stationary phase
8546 at
            995.4
bZIP protein, can activate transcription from a promoter containing a Yap recognition site
8502_at
             -0.8
hypothetical protein
                         Ρ
8503 at
            489.6
involved in invasive growth upon nitrogen starvation
8504 at
             1097.1
Metallothionein-like protein
8505 at
            300.5
myc-family transcription factor homolog
8506 at
            889.0
Protein that complements a drug-hypersensitive mutation
8507 at
            966.3
Protein involved in constitutive endocytosis of Ste3p
8508_at
             1156.6
Required for mother cell-specific HO expression
8509 at
            543.3
integral membrane protein\; c-terminal TMD\; located in endosome
8510 at
            702.4
cytochrome c mitochondrial import factor
8511 at
            2838.3
putative repressor protein\; contains nuclear targeting signal
8512 at
            3659.2
Casein kinase II, beta subunit
8513 at
            477.7
Mitochondrial glyoxylase-II
8514_at
                         Ρ
            371.5
questionable ORF
```

```
8515_at
            1541.6
                         Ρ
weak similarity to YDR273w
8516 at
            1129.2
                         Ρ
Protein involved in growth regulation
8517 at
            3135.7
                         Ρ
weak similarity to YDR275w
8518 at
            11480.2
outer mitochondrial membrane protein, component of the mitochondiral protein translocation complex,
associates with Isp42p
                         Ρ
8519_at
            11778.0
RNA helicase
                         Р
8520 at
            5033.4
homologous to MTH1\; interacts with the SNF1 protein kinase and TBP in two-hybrid and in in vitro
binding studies
8521 at
                         Ρ
            1415.0
RNA trafficking protein\; transcription activator
8522 at
            4777.5
similarity to YER185w, Rta1p
8523 at
            254.3
hypothetical protein
8524 at
            3721.9
                         Ρ
weak similarity to myosin heavy chain proteins
8480 at
            5127.2
hypothetical protein
                         Ρ
8481 at
            1004.6
similarity to protamines
8482 at
            1161.0
similarity to Sis2p protein and C.tropicalis hal3 protein
8483 at
            81.5
questionable ORF
8484 at
            3463.5
weak similarity to human phosphorylation regulatory protein HP-10
8485 at
            1225.9
G2 allele of skp1 suppressor
8486 at
            1501.4
encodes component of the spindle midzone
8487_at
            2847.3
weak similarity to YGL144c
8488 at
            714.7
                         Ρ
hypothetical protein
8489 at
                         Ρ
            6819.6
alpha subunit of casein kinase II
8490_at
            1631.6
strong similarity to YKR075c
8491 at
            11926.0
Ribosomal protein L3 (rp1) (YL1)
8492 at
            2016.9
weak similarity to human retinoblastoma binding protein 2
8493_at
            4515.5
Cytochrome c1
                         Ρ
8494_at
            2179.7
hypothetical protein
                         Ρ
8495 at
            7108.4
glycosyl transferase
8496_at
                         Α
            0.5
hypothetical protein
```

```
Ρ
8497_at
            1399.6
GTPase activating protein
8498 at
            1014.4
strong similarity to Thi10p
8499 at
            514.8
hypothetical protein
                         Ρ
8500 at
            942.4
hypothetical protein
8501 at
            952.9
endoplasmic reticulum t-SNARE, coprecipitates with Sec20p, Tip1p. and Sec22p
8457 at
            1380.7
similarity to Hbs1p, Sup2p and EF1-alpha
            294.2
8458 at
similarity to mouse KIN17 protein
8459 at
            3858.6
weak similarity to YMR172w
8460 at
            3636.2
Multi-copy suppressor of SOD-linked defects
8461 at
            1767.9
hypothetical protein
            5407.0
                         Р
8462 at
strong similarity to YKR089c
8463 at
            1008.9
questionable ORF
8464 at
            1095.8
weak similarity to YKR091w
8465 at
            5735.8
hypothetical protein
            7458.5
8466 at
34-kDa, gamma subunit of oligosaccharyl transferase glycoprotein complex
8467 at
            3856.6
weak similarity to synaptogamines
8468 at
            1614.2
                         Ρ
hypothetical protein
                         Ρ
8469 g at 1820.3
hypothetical protein
8470 at
            1787.4
weak similarity to human calcium influx channel
8471 at
            4352.7
small GTP-binding protein\; geranylgeranylated\; geranylgeranylation required for membrane association\;
also involved in endocytosis post vesicle internalization
8472 at
            1590.3
similarity to ser/thr protein phosphatases
            940.4
8473_at
similarity to hypothetical S.pombe protein D83992 G
8474_at
            1580.7
ExtraCellular Mutant
8475 at
            770.2
similarity to S.pombe hypothetical protein SPAC22F3.04
8476 at
            2760.8
GTP-binding ADP-ribosylation factor
8477_at
            6371.7
Ribose-5-phosphate ketol-isomerase
            13346.0
8478 at
Ribosomal protein S7A (rp30)
8479_at
            5500.5
```

```
Ribosomal protein S7A (rp30)
8434 at
            1018.3
hypothetical protein
8435 at
            4225.5
                         Ρ
nuclear pore complex protein
8436 at
            6402.3
type 2 membrane protein\; probable secretory protein
8437 at
            359.7
similarity to mitochondrial carrier proteins
8438_at
            5338.2
ras proto-oncogene homolog
8439 at
            118.4
questionable ORF
                         Ρ
8440 at
            2688.8
16-kDa, epsilon subunit of oligosaccharyltransferase complex\; 40\% identical to vertebrate DAD1 protein
8441 at
            1001.8
hypothetical protein
                         Ρ
8442_g_at 977.7
hypothetical protein
8443_at
            383.8
member of the syntaxin family of proteins\; predicted C-terminal TMD
8444 at
weak similarity to human G-0/G-1 switch regulatory protein 8
            5523.1
8445 at
putative isoform of Leu4p
8446 at
            3299.3
inositol polyphosphate 5-phosphatase
8447 at
            2252.8
TFIIIC (transcription initiation factor) subunit, 55 kDa
8448 at
            393.6
weak similarity to B.subtilis maf protein
8449_at
            1551.6
similarity to C.elegans hypothetical protein
8450_at
            307.4
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
            278.2
hypothetical protein
8452 at
            2799.0
                         Ρ
involved in targeting and fusion of ER to golgi transport vesicles
8453 at
            2401.8
RNA polymerase III large subunit
8454_at
            7755.5
Probable 26S protease subunit and member of the CDC48VPAS1VSEC18 family of ATPases
8455 at
            610.2
hypothetical protein
8456 at
            866.3
similarity to a C.elegans ZK632.3 protein
            1599.8
8412 at
Similar to mammalian aldoVketo reductases
8413 at
            39.4
                         М
questionable ORF
            11936.6
                         Ρ
8414 at
profilin (actin-binding protein)
8415_at
            4128.8
extremely hydrophilic protein
```

```
8416_at
            3249.8
                         Ρ
Ubiquitin-specific protease
8417 at
            590.6
may encode a protein involved in one or more monoxygenase or hydroxylase steps of ubiquinone
biosynthesis
8418 at
                         Ρ
            1587.1
isoamyl acetate hydrolytic enzyme
8419 at
            2246.7
rho type GTPase activating protein
8420_at
            7538.6
phosphoribosylamino-imidazole-carboxylase
8421 at
            1549.6
                        Ρ
hypothetical protein
                         Ρ
8422 at
            973.9
mitochondrial integral membrane protein
8423 at
            3378.6
weak similarity to E.coli hypothetical 27K protein
8424 at
            3407.7
Peripheral membrane protein required for vacuolar protein sorting
8425_s_at 12184.0
translation elongation factor 2 (EF-2)
8426 at
            63.1
GTPase activating protein (GAP)
8427 at
            -4.4
                         Α
questionable ORF
8428_at
            10579.9
NAD+-dependent isocitrate dehydrogenase
8429 at
            1472.6
similarity to YLR361c
            2226.7
                         Ρ
8430 at
hypothetical protein
                         Ρ
8431_at
            722.8
questionable ORF
8432 at
            2911.8
Transcription factor
                         Ρ
8433 at
            1802.5
Actin-related protein
            8018.3
8389_at
Succinate-CoA Ligase (ADP-Forming)
8390_at
            656.9
Thiamin pyrophosphokinase
8391 at
            2165.4
weak similarity to human DNA-binding protein PO-GA and to bacterial H+-transporting ATP synthases
8392_at
            9712.9
strong similarity to hypothtical S. pombe protein and to hypothetical C. elegans protein
8393 at
            115.4
                         M
questionable ORF
8394 at
            137.4
                         Ρ
similarity to YHR194w
8395 at
            2044.5
required for final stages of splicesome maturation\; promotes step 1 of splicing
8396_at
            376.8
Involved in plasmid maintenance
8397_at
            2189.7
ribosomal protein of the large subunit, mitochondrial
8398_at
            7901.1
```

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second largest subunit of RNA polymerase II
8399 at
            972.7
                        Ρ
hypothetical protein
8400 at
            12692.0
multidrug resistance transporter
8401 at
            713.0
similarity to hypothetical A. thaliana proteins F19G10.15 and T19F06.21
8402 at
            1826.4
similarity to 5 -flanking region of the Pichia MOX gene
8403_at
            493.0
Interacts with C-terminus of CDC12
8404 at
            10359.5
                        Ρ
putative proteasome subunit
8405 at
            1756.0
Mitochondrial ribosomal protein of small subunit
8406 at
            1494.0
homologue of human E core protein
8407 at
            2197.6
Protein involved in mRNA transport from nucleus to cytoplasm
8408 at
            379.8
similarity to C.elegans cosmid F35C8
8409 at
            1029.4
                        Ρ
transcription factor
8410 at
            4113.5
strong similarity to S.pombe SPAC13G6.14 protein
8411_at
            3206.3
hypothetical protein
8366 at
            3615.9
                        Р
similarity to E.histolytica surface lectin
8367 at
            1474.2
hypothetical protein
8368_i_at
            10716.0
Ribosomal protein S28A (S33A) (YS27)
8369_f_at
            9283.5
Ribosomal protein S28A (S33A) (YS27)
8370 at
            6045.9
glutaminyl-tRNA synthetase
8371_at
            1016.5
questionable ORF
8372_at
            273.7
                        Ρ
questionable ORF
8373 at
            1488.2
                        Ρ
sphingoid long chain base (LCB) kinase
8374_at
            1620.6
similarity to finger protein YKL222c, YOR162c and YLR266c
8375 at
            216.9
strong similarity to YLR270w
8376 at
            2502.7
                        Ρ
Stoichiometric member of mediator complex
8377 at
            4420.9
similarity to human and murine C3f protein
8378_at
            3620.2
ferrochelatase (protoheme ferrolyase)
8379 at
            320.8
weak similarity to rat SCP1 protein
8380_at
            110.8
```

```
Regulatory subunit for Glc7p
8381 at
            1356.7
similarity to BRR5 protein
8382 at
            196.8
Peroxisomal enoyl-CoA hydratase
8383 at
            1973.7
Actin assembly factor
8384_f_at
            9865.9
                         Ρ
Ribosomal protein S30B
8385_at
            -72.0
                         Α
hypothetical protein
                         Р
8386 at
            8994.4
phosphoserine transaminase
8387 at
            2652.3
GTP binding protein, almost identical to Gsp1p
8388 at
            370.8
hypothetical protein
8343 at
            6678.1
                         Ρ
Translation elongation factor Tu, mitochondrial
8344 at
            1531.1
Protein that may play a role in polarity establishment and bud formation
8345 at
            1537.2
weak similarity to chicken nonhistone chromosomal protein HMG-2
8346 at
            90.6
sporulation-specific exo-1,3-beta-glucanase
8347_at
            696.8
contains motifs that are present in a family of DNA-dependent ATPases, the SWI2VSNF2-like proteins
8348 i at
            1228.0
strong similarity to Thi10p
8349 f at
            2116.8
strong similarity to Thi10p
8350_at
            347.9
weak similarity to YPL112c
8351_at
            1890.8
Transcription factor IIA, large chain
8352 at
            641.4
possible leucine zipper
                         Р
            2244.2
8353_at
Involved in lipoic acid metabolism
            6994.7
8354_at
                         Ρ
hypothetical protein
                         Ρ
8355 at
            8481.8
Multicopy suppressor of BFA (Brefeldin A)-induced lethality\; implicated in secretion and nuclear
segregation
8356 at
                         Α
            5.0
questionable ORF
                         Ρ
8357 at
            542.7
questionable ORF
8358_at
            3449.0
Ribose methyltransferase for mitochondrial 21S rRNA
8359 at
            6334.9
imidazoleglycerol-phosphate dehydratase
8360 at
            1424.8
                         Ρ
questionable ORF
            8244.9
8361_at
ATP-dependent RNA helicase of DEAD box family\; suppressor of a pre-mRNA splicing mutation, prp8-1
```

```
8362_at
                         Ρ
            1403.4
hypothetical protein
8363 at
            3012.8
                         Ρ
similarity to Brettanomyces RAD4 and to S.pombe hypothetical protein
8364 at
            8872.7
second-largest subunit of RNA polymerase III
8365 at
            2363.0
protein tyrosine phosphatase
8320 at
            8002.0
homology to bacterial nicotinate phosphoribosyl transferase
8321 at
            9767.3
RNA polymerase II subunit
8322 at
            766.5
encodes protein with GTP-binding domain related to dynamin
8323 at
            5094.9
beta subunit of G protein coupled to mating factor receptor
8324 at
            466.6
Involved in silencing at telomeres, HML and HMR
8325 at
            -180.5
hypothetical protein
                         Ρ
8326 at
            1337.3
similarity to M.xanthus hypothetical protein
8327 at
            729.6
Relieves uso1-1 Transport Defect
8328 at
            2369.7
Subunit 1 of Replication Factor C\; homologous to human RFC 140 kDa subunit
8329 at
            1046.4
questionable ORF
            3292.4
                        Ρ
8330 at
dipeptidyl aminopeptidase
8331 at
            5889.2
hypothetical protein
                         Ρ
8332 at
            1432.3
malonyl-CoA:ACP transferase
8333 at
            66.9
malonyl-CoA:ACP transferase
8334 at
            3015.9
                        Ρ
similarity to ADP/ATP carrier proteins
8335 at
            1918.9
                         Ρ
protein of unknown function
8336 at
            12166.4
16-kDa RNA polymerase subunit (common to polymerases I, II and III)
8337_at
            1130.5
questionable ORF
8338 at
                         Ρ
            7591.5
NifU-like protein A
                         Ρ
8339 at
            1998.2
similarity to microtubule-interacting protein Mhp1p
8340 at
            2946.5
weak similarity to YNR013c
8341 at
            5527.9
                        Ρ
Transcriptional modulator
8342 at
                        Ρ
            11432.6
Transcriptional modulator
8297_at
            1977.9
protein kinase involved in protein kinase C pathway
```

```
8298_at
            3048.6
GrpE homolog, mitochondrial matrix protein
8299 at
            4119.7
protein kinase
8300 f at
            9661.7
Ribosomal protein L33B (L37B) (rp47) (YL37)
8301 at
            -13.1
encodes snRNA U3, SNR17B also encodes snRNA U3
8302 at
            2265.4
                         Ρ
dihydrofolate reductase
8303 at
            -38.7
homology to human oxysterol binding protein
            2702.1
8304 at
similarity to hypothetical S. pombe protein
            2080.1
8305 at
hypothetical protein
8306 at
            2837.6
                         Ρ
similarity to C.elegans ZK1058.5 protein
8307 at
            6568.8
tetrahydrofolylpolyglutamate synthase
8308 at
            326.4
Sporulation Specific
                         Ρ
8309 at
            4897.0
similarity to M.jannaschii hypothetical protein MJ0588
8310 at
            1898.0
Acetyltransferase in the SAS gene family
8311 at
            3019.2
similarity to hypothetical C. elegans proteins
8312 at
            5015.0
weak similarity to reductases
            11416.4
8313 at
Suppressor of rad53 lethality
8314_g_at 11807.6
Suppressor of rad53 lethality
8315 i at
            7957.9
                         Ρ
questionable ORF
8316 at
            574.2
                         Ρ
subunit of the anaphase promoting complex
8317 at
            1327.4
CLeavage\Polyadenylation factor IA subunit\; interacts with Pcf11p in the 2-hybrid system
8318 at
            3507.2
similarity to thiosulfate sulfurtransferases
8319_at
            870.0
hypothetical protein
8274 at
            2521.3
                         Ρ
hypothetical protein
                         Ρ
8275 at
            2760.7
Protein involved in protein import into ER
8276_at
            -8.6
                         Α
hypothetical protein
                         Ρ
8277_at
            1493.8
strong similarity to secretory protein Ssp134p
8278 at
            3606.7
calcium-binding protein component of spindle pole bodies, localizes to half-bridges and interacts with
KAR1
8279_at
            698.5
                         Ρ
```

```
hypothetical protein
8280 at
            6497.6
ATPase\; component of the 26S proteasome cap subunit
            8928.4
8281 at
translation initiation factor eIF2b gamma subunit\; negative regulator in the general control of amino acid
biosynthesis
8282 at
            5813.2
Subunit of the regulatory particle of the proteasome
8283 at
            1528.3
similarity to YLR243w
8284 at
            75.2
                         Α
questionable ORF
                         Ρ
8285 at
             1682.5
hypothetical protein
8286 at
            5884.7
Binds to beta-tubulin and may participate in microtubule morphogenesis
8287 at
            555.4
Pentamidine resistance protein
8288 at
            7412.8
similarity to ser/thr protein kinases
8289 at
             175.4
                         Р
hypothetical protein
8290 at
            581.5
Required for viability in the absence of the kinesin-related Cin8p mitotic motor.
8291 at
            9154.5
Vacuolar H-ATPase 100 kDa subunit of membrane (V0) sector, essential for vacuolar acidification and
vacuolar H-ATPase activity
8292 at
            11679.0
strong similarity to Rattus tricarboxylate carrier
8293 at
            6753.0
microtubule-associated protein
            4602.2
8294_at
similarity to resistance proteins
8295_at
            974.6
transfer RNA isopentenyl transferase
8296 at
            558.0
similarity to A.nidulans palA protein
            9808.1
8252 at
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
             198.4
questionable ORF
            1618.0
8254_at
uroporphyrinogen III synthase
8255 at
            82.6
hypothetical protein
8256 at
            3116.2
similarity to S.pombe dihydrofolate reductase
8257_at
            5106.7
weak similarity to phosducins
8258 at
            240.5
                         Α
questionable ORF
                         Ρ
8259 at
            2766.8
weak similarity to phosphoglycerate mutases
8260 at
            860.1
weak similarity to M.jannaschii hypothetical protein MJ0694
```

```
8261_at
            9907.7
                         Ρ
similarity to D.melanogaster heat shock protein 67B2
8262 at
            7258.7
similarity to D.melanogaster heat shock protein 67B2
8263 at
            1405.8
weak similarity to PITSLRE protein kinase isoforms
8264 at
            1613.9
                        Ρ
Disulfide isomerase related protein
8265 at
            824.7
similarity to C.elegans hypothetical protein
8266 at
            5355.2
transcriptional regulator
            3332.0
8267 at
similarity to cation translocating ATPases
8268 at
            730.7
similarity to human and mouse glomerulosclerosis protein Mpv17
8269 f at
            8584.9
Ribosomal protein S10A
8270 f at
            16339.6
Ribosomal protein S10A
            3610.2
8271 at
similarity to human hypothetical protein
8272 at
            211.3
weak similarity to SWI/SNF complex 60 KDa subunit from man and mouse
8273 at
            1092.1
similarity to hypothetical S. pombe protein
8229 at
            4071.5
similarity to Sdh4p
8230 at
            44.3
                         Α
required for meiosis
                         Ρ
8231 at
            9220.5
multiprotein bridging factor
8232 at
            2139.1
                         Ρ
BUD site selection
                         Ρ
8233 g at 1906.1
BUD site selection
8234_at
            88.3
                         Α
questionable ORF
                         Ρ
8235 at
            3408.0
hypothetical protein
                         Ρ
8236 at
            7038.6
CPA1 leader peptide
            7329.3
                         Ρ
8237_at
Carbamoyl phosphate synthetase, arginine specific
8238_at
            1350.2
has strong homology to Drosophila ISWI
8239 at
            1958.6
AIP3 binding protein
                         Ρ
8240_at
            1552.1
hypothetical protein
8241_at
            6403.8
similarity to human X-linked PEST-containing transporter
8242 at
            3218.7
homolog of chloroplast phosphate transporter
8243_at
            789.8
weak similarity to YIL149c
```

```
8244_i_at
                        Ρ
            10788.7
questionable ORF
                        Ρ
8245 r at 925.3
questionable ORF
8246 s at 9283.9
questionable ORF
8247_at
            11251.8
57 kDa nucleolar protein
8248 at
            8118.7
similarity to hypothetical S. pombe protein
8249 at
            494.1
sporulation-specific protein
8250 at
            246.1
hypothetical protein
8251 at
                        Ρ
            2292.4
hypothetical protein
8206 at
            2861.0
Protein involved in cobalt accumulation\; dosage dependent suppressor of cobalt toxicity
8207 at
            5115.3
long chain fatty acyl:CoA synthetase
8208 at
            222.6
                        Μ
hypothetical protein
8209 at
            517.8
homolog of mammalian splicing factorVU2 snRNP protein
8210 at
            2594.9
hypothetical protein
8211 at
            1912.5
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
8212 at
            2619.9
similarity to hypothetical S.pombe protein SPAC1F12.05
8213 at
            10663.9
gamma-glutamyl phosphate reductase
8214 at
            819.8
                        Ρ
similarity to YAL028w
8215 at
            -148.4
                        Α
questionable ORF
8216_at
            4248.1
                        Ρ
myosin-1
                        Ρ
8217 at
            9876.0
vesicle-associated membrane protein (synaptobrevin) homolog
8218 at
            5408.0
Putative ABC transporter highly similar to Pdr5p
            1846.8
8219 at
Multicopy suppressor of clathrin deficiency and of ts mutants of IPL1
8220 at
            600.9
catalytic subunit of mitochondrial DNA polymerase
8221 at
            544.6
questionable ORF
            8089.3
8222 at
27-kDa subunit of the vacuolar ATPase\; E subunit of V1 sector
8223_at
            471.4
questionable ORF
                        Ρ
8224 at
            924.9
splicing factor
            7172.1
8225_at
Cytoplasmic alanyl-tRNA synthetase gene
```

```
8226_at
            3568.8
Appears to function early in (1,6)-beta-D-glucan synthesis pathway
8227 at
            1846.1
Mutants are defective in Ty1 Enhancer-mediated Activation
8228 at
            781.6
similarity to YAL034c
8183 at
            -89.8
strong similarity to E2 ubiquitin-conjugating enzymes
8184 at
            3822.4
DNA-dependent RNA polymerase I subunit A43
8185 at
            11212.3
RNA polymerase I subunit 190 (alpha)
            1973.8
8186 at
weak similarity to YAl037w
8187 at
            508.3
hypothetical protein
8188 at
            2742.0
TYE7, a 33 kDa serine-rich protein, is a potential member of the basic
region\helix-loop-helix\leucine-zipper protein family
8189 at
            91.2
questionable ORF
8190 at
            1127.2
                         Ρ
deoxycytidyl transferase
                         Ρ
8191 at
            2388.5
Pyruvate kinase, glucose-repressed isoform
8192 at
            265.5
                         M
putative proline-specific permease
8193 at
            65.8
Protein involved in chromosome segregation, required for microtubule stability
8194 at
            422.8
weak similarity to Esp1p and mitochondrial L.illustris cytochrome oxidase I
8195 at
            -11.1
mRNA is induced in meiosis, encodes a meiosis-specific serine\/threonine protein kinase which interacts
with and is believed to phosphorylate Hop1p
8196 at
            984.8
hypothetical protein
8197_at
            819.4
weak similarity to adenylate cyclases
8198 at
            1647.0
hypothetical protein
8199 at
                         Ρ
            5199.8
nam9-1 suppressor
8200_at
            5535.4
strong similarity to human electron transfer flavoprotein-ubiquinone oxidoreductase
8201 at
            1906.9
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 prevaculoar compartment), Grd19p-HA
co-localizes with the vacuolar H+-ATPase in the prevaculoar 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
            849.9
Component, along with Hap2p and Hap3p, of CCAAT-binding transcription factor
8203 at
            3277.0
hypothetical protein
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8204_at
            1507.8
low-Km (high-affinity) cAMP phosphodiesterase
8205 at
            8621.7
translation initiation factor eIF3 subunit
8161 at
            8538.3
proteasome component YC1 (protease yscE subunit 1)
8162 at
            870.6
Activator of peroxisome proliferation
8163 at
            290.4
hypothetical protein
8164 at
            88.3
                         Α
strong similarity to YAL053w
            139.8
8165 at
questionable ORF
8166 at
                        Ρ
            2372.1
Calponin homolog
8167 at
            328.5
                        Ρ
encodes a putative 3 -> 5 exonuclease
8168 at
            12805.5
40S ribosomal protein S12
8169 at
            6567.3
protein of the TCDVMRS6 family of GDP dissociation inhibitors (Rab escort protein)\; component of Rab
geranylgeranyl transferase
                        Ρ
8170 at
            815.8
similarity to YAL056w
                         Ρ
8171_at
            1898.9
hypothetical protein
8172 at
            1551.4
                         Р
nuclesome assembly protein I
8173 at
            3790.3
aldehyde dehydrogenase (E.C. 1.2.1.5) (sold by SIGMA under the catalogue number A5550, according to
A. Blomberg)
8174 at
            9288.3
NADP-specific glutamate dehydrogenase
8175 at
            -46.9
hypothetical protein
                         Ρ
8176 at
            751.0
Alcohol acetyltransferase
8177 at
            8.6
strong similarity to aminotriazole resistance protein
8178 at
            46.6
questionable ORF
                         Ρ
8179_at
            1337.8
weak similarity to Pdr3p
                         Ρ
8180 at
            332.4
similar to FRE2
                         Ρ
8181 at
            1822.8
hypothetical protein
8182 at
            7488.7
weak similarity to L.mexicana secreted acid phosphatase 2
8138_at
            8.2
similar to FRE2
                         Р
8139 at
            3153.5
strong similarity to hypothetical protein YMR316w
8140_at
            464.7
                         Р
photolyase
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8141_at
            -16.8
strong similarity to YGL258w
8142 s at -5.5
Protein with similarity to formate dehydrogenases
8143 at
            1346.2
strong similarity to putative pseudogenes YPL277c and YPL278c
8144 g at 1179.0
strong similarity to putative pseudogenes YPL277c and YPL278c
8145 s at 2476.0
nearly identical to YPL279c
8146 at
            107.8
hypothetical protein
8147 s at 130.1
strong similarity to members of the Srp1p/Tip1p family
8148 at
            286.0
                        Р
hypothetical protein identified by SAGE
8149 at
            1546.7
identified by SAGE
8150_s_at 1230.7
Sorting nexin I homologue
8151 s at 2294.9
Thymidylate synthase
8152 f at 597.8
                        Ρ
Thymidylate synthase
8153 at
            4753.5
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
            -101.6
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
            344.6
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 -19.7
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
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 3442.1
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
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
            103.0
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
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
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
            -62.5
non-annotated SAGE orf Found forward in NC_001147 between 464469 and 464630 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
8115 f at
            2348.8
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
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
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
            207.0
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
            611.7
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
            1168.1
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
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
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
            425.3
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
            2373.2
8124 at
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
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
            3295.2
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
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
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
            1661.9
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
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
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
            5180.9
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
            51.5
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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
            -197.4
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
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
            4668.5
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
            10268.3
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
            -189.9
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
            4489.7
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
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
            121.8
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
            6435.8
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
           2541.6
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
            4016.5
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
            70.4
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
            594.2
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
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
            175.0
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
            308.2
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
non-annotated SAGE orf Found forward in NC_001147 between 18708 and 18944 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

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8101_at
            302.6
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
            1763.7
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
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
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
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
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
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
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
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
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 -18.4
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
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
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
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
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
            5380.9
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
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
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
non-annotated SAGE orf Found reverse in NC_001147 between 979330 and 979470 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251 8071 f at 280.2 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 Р 8072 i at 190.7 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 -137.9 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 1116.1 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 482.7 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 207.7 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 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 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 196.4 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 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 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 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 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 412.4 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 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 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

non-annotated SAGE orf Found reverse in NC_001147 between 271475 and 271732 with 100% identity.

8087 at

186.2

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8039 at
            241.2
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
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
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
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
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
            6522.3
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
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
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
            874.9
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
            8283.7
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
            2.8
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
            -33.5
                         Α
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
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
            108.4
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
            459.2
                         Α
snRNA
8054 at
            1268.6
                         Ρ
snRNA
8055 i at
            -13.6
                         Α
Centromere
                         Ρ
8056_at
            2876.8
snRNA
```

See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

```
227.7
                        Ρ
8057_i_at
snRNA
8058_r_at
                         Ρ
            302.9
snRNA
                         Ρ
8059 at
            762.4
snRNA
8060_at
            1464.6
                        Ρ
snRNA
8061_at
            8.608
                         Ρ
snRNA
8062 at
            7386.5
                         Ρ
snRNA
                         Ρ
            104.5
8016 at
snRNA
                        Ρ
8017 at
            5678.6
snRNA
8018 i at
            143.5
                        Ρ
strong similarity to hypothetical protein YOR389w/putative pseudogene
8019 s at 829.7
strong similarity to hypothetical protein YOR389w/putative pseudogene
8020 s at -29.6
putative formate dehydrogenase/putative pseudogene
8021 at
            1416.6
strong similarity to amino-acid transport proteins
8022 at
            3299.3
weak similarity to M.leprae metH2 protein, and strong similarity to hypothetical protein YLL062c
8023 at
            43.7
hypothetical protein
                        Р
8024 at
            9537.5
nuclear gene for ATP synthase epsilon subunit
8025 at
            2286.7
ATP-binding cassette (ABC) transporter family member
8026 at
            580.6
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
            1118.9
phosphoinositide-specific phospholipase C
8028 at
            586.6
weak similarity to C.elegans transcription factor unc-86
8029_at
            6435.0
dimethyladenosine transferase
8030 at
            8730.2
dicarboxylic amino acid permease
8031_at
            1218.0
strong similarity to YMR253c
8032 at
            1667.2
similarity to Kel2p and Kel3p
8033 at
            15236.5
mitochondrial and cytoplasmic fumarase (fumarate hydralase)
8034 at
            182.9
questionable ORF
            2402.1
                        Ρ
8035_at
hypothetical protein
                        Ρ
8036_at
            1493.5
medium subunit of the clathrin-associated protein complex
8037_at
            931.3
```

```
similarity to B.subtilis transcriptional activator tenA, and strong similarity to hypothetical proteins YOL055c
and YPR121w
8038 at
            84.7
                         Α
weak similarity to YIL029c
7993 at
            2292.9
G(sub)1 cyclin
7994 at
            235.7
Involved in mitotic cell cycle and meiosis
7995 at
            1700.1
transcription factor, member of AdaVGcn5 protein complex
7996 at
            180.5
                         Α
Cik1p homolog
                         Ρ
7997 at
            6538.2
iron-sulfur protein homologous to human adrenodoxin
7998 at
            13.3
questionable ORF
7999 at
            9143.8
                         Ρ
weak similarity to YMR195w
8000 i at
            7185.5
Ribosomal protein L36B (L39) (YL39)
            472.1
8001 at
similarity to mouse Tbc1 protein
8002 at
            1077.2
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
8003 at
            1585.0
similarity to human HAN11 protein and petunia an11 protein
8004 at
            7612.2
weak similarity to mouse proteinase activated receptor 2
            2695.4
8005 at
weak similarity to human mutL protein homolog
8006 at
            3329.0
weak similarity to human UDP-galactose transporter related isozyme 1
8007 at
            3348.1
component of signal recognition particle
8008 at
            834.5
                         P
Homolog of the mammalian IQGAP1 and 2 genes\: probable regulator of cellular morphogenesis.
inducing actin-ring formation in association with cytokinesis
8009 at
            1482.6
involvement in microtubule function
8010_i_at
            8248.8
                         Ρ
heat shock protein
8011 at
            5516.5
YAR1 encodes a 200-amino-acid protein with two ANK repeat motifs and an acidic C terminus rich in
PEST-like sequences
                         Р
8012 at
            1500.0
questionable ORF
8013 at
            7707.0
beta subunit of translation initiation factor eIF-2
8014 at
            357.9
similarity to Prk1p, and serine/threonine protein kinase homolog from A. thaliana
8015 at
            6084.0
strong similarity to TATA-binding protein-interacting protein 49 from rat
7970 at
            8456.0
17-kDa subunit C of vacuolar membrane H(+)-ATPase
7971 at
            644.4
                         Р
hypothetical protein
```

```
7972_at
            5579.9
                         Ρ
SSO1 and SSO2 encode syntaxin homologs\; act in late stages of secretion
7973 at
            9274.0
alpha subunit of fatty acid synthase
7974 at
            -3.0
                         Α
Up in StarVation
                         Ρ
7975_at
            883.2
weak similarity to YMR181c
7976 at
            1901.0
mRNA capping enzyme beta subunit (80 kDa), RNA 5 -triphosphatase
7977 at
            2605.2
UDP-glucose:dolichyl-phosphate glucosyltransferase
7978 at
            11712.0
similarity to translation elongation factor eEF3
7979 at
            5939.1
hypothetical protein
7980_at
            2610.4
                         Ρ
Protein involved in mitochondrial iron accumulation
7981 at
            373.9
Induced by osmotic stress
7982 at
            68.6
                         Α
similarity to C.perfringens hypothetical protein
7983 at
            6177.3
Bypass of PAM1
7984 s at 9451.8
Ribosomal protein L1A, forms part of the 60S ribosomal subunit
7985 at
            1132.2
PHO85 cyclin
7986 at
                        Ρ
            10380.1
GTP binding protein
7987 at
            2728.4
similarity to human hypothetical protein KIAA0187
7988 at
            215.8
                         Ρ
similarity to YGL133w
            1351.8
7989 at
Protein required for assembly of ubiquinol cytochrome-c reductase complex (cytochrome bc1 complex)
7990 at
            2166.9
TMP pyrophosphorylase, hydroxyethylthiazole kinase
7991 at
            703.1
                         Ρ
similarity to A.thaliana U2 snRNP protein A
7992 at
            4463.6
intranuclear protein which exhibits a nucleotide-specific intron-dependent tRNA pseudouridine synthase
activity
7947_at
            4749.6
Nip7p is required for 60S ribosome subunit biogenesis
7948 at
            2587.3
component of signal recognition particle
7949 at
            391.2
Protein kinase
                         Ρ
7950 at
            1573.4
similarity to YHL039w
7951 at
            3613.4
                         Ρ
similarity to hypthetical proteins from A. fulgidus, M. thermoautotrophicum and M. jannaschii
            7140.8
7952 at
weak similarity to glycerophosphoryl diester phosphodiesterases
7953_at
            467.6
```

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questionable ORF
                        Ρ
7954 at
            5579.5
casein kinase I isoform
7955 at
            2827.9
cAMP-dependent protein kinase catalytic subunit
7956 at
            852.2
similarity to cell size regulation protein Rcs1p
7957_at
            -26.0
hypothetical protein
7958_at
            3.9
                         Α
hypothetical protein
                        Р
7959 at
            6467.9
weak similarity to T.cruzi p284 protein
7960 i at
            6896.2
Ribosomal protein L7B (L6B) (rp11) (YL8)
7961 f at 6902.6
Ribosomal protein L7B (L6B) (rp11) (YL8)
7962_s_at 11225.0
Ribosomal protein L7B (L6B) (rp11) (YL8)
7963_at
            306.0
questionable ORF
7964 at
            1435.5
weak similarity to S.pombe hypothetical protein SPAC8C9
7965 at
            1346.4
delta-like subunit of the yeast AP-3 adaptin component of the membrane-associated clathrin assembly
complex
7966 at
            818.9
DNA damage checkpoint gene
7967 at
            473.5
weak similarity to human centromere protein E
7968 at
            427.3
hypothetical protein
7969 at
            225.7
strong similarity to YGL082w
            1974.8
7924 at
polyadenylated RNA-binding protein
7925 at
            307.2
strong similarity to YGL084c
7926 at
            1765.9
similarity to Utr1p and YEL041w
7927 at
            9053.1
                        Ρ
mating factor alpha
7928_at
                        Ρ
            394.5
weak similarity to Xenopus protein xlgv7
7929 at
            -26.0
questionable ORF
7930 at
            2552.8
weak similarity to Pub1p
7931_at
            4436.2
ribosomal protein L36, mitochondrial
7932 at
            3906.3
similarity to Taf90p
                        Ρ
7933 at
            665.6
questionable ORF
7934_at
            531.9
weak similarity to YKR029c
```

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7935_at
                         Ρ
            2614.5
weak similarity to human I-caldesmon I
7936 at
            2929.7
protein phosphatase Q
                         Ρ
7937 at
            3968.4
Small subunit of nuclear cap-binding protein complex
7938 at
            5200.5
putative DNA binding protein which shows similarity in homeobox domain to human proto-oncogene
PBX1
7939_at
            2094.2
similarity to chinese hamster transferrin receptor protein
            1586.2
7940 at
N-acetylglucosaminyl-phosphatidylinositol biosynthetic protein
7941 at
            212.2
Nuclear import protein
7942 at
            1479.7
Mitochondrial ribosomal protein MRPL40 (YmL40)
7943 at
            1277.2
Putative farnesyl transferase required for heme A synthesis
7944 at
            649.5
NAD(P)H dehydrogenase
                         Ρ
7945 at
            2854.8
similarity to C.elegans LIM homeobox protein
7946 at
            4553.8
                        Ρ
INvolved in nuclear mRNA export, binds both poly(A)
7902 at
            68.0
weak similarity to E.coli bfpB protein
            706.6
7903 at
DNA polymerase
7904 at
            20.8
weak similarity to paramyosins
7905_at
            213.1
weak similarity to YHR207c
7906_at
            379.9
similarity to mismatch repair protein Mlh1p
7907 at
            10117.4
Serine and threonine rich protein.
7908_at
            1164.5
hypothetical protein
7909_at
            635.7
Involved in polarity establishment and bud emergence); interacts with the Rho1p small GTP-binding
protein
7910_at
            8665.9
cytosolic leucyl tRNA synthetase
7911 at
            1243.3
weak similarity to YPR151c
7912 at
            4320.2
weak similarity to human nucleolin
            744.5
7913 at
weak similarity to S.pombe hypothetical protein SPAC2G11.15c
7914_at
            1778.1
weak similarity to YDL010w
7915 at
            981.0
kinesin-related protein
                         Ρ
            9506.7
7916 at
vacuolar proteinase A
```

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204.3
7917_at
protein kinase, Mec1p and Tel1p regulate rad53p phosphorylation
7918 at
            1192.6
Resistant to Rapamycin Deletion 2
7919 at
            2293.6
strong similarity to A.thaliana PRL1 and PRL2 proteins
7920 at
            591.2
similarity to ser/thr protein kinases
7921 at
            2379.1
involved in autophagy
                         Ρ
7922 at
            823.4
Phosphopantetheine
                         Ρ
7923 at
            360.1
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
            1079.8
weak similarity to myosin heavy chain proteins
7880 at
            6536.4
Homologous to human oxysterol-binding protein\; implicated in ergosterol biosynthesis and regulation of
Golgi-derived transport vesicle biogenesis
7881 at
            5108.4
encodes snRNA U3, SNR17A also encodes snRNA U3
7882 f at
            12592.0
Ribosomal protein L33A (L37A) (YL37) (rp47)
7883 at
            418.1
questionable ORF
                         Ρ
7884 at
            1505.6
strong similarity to protein kinase Kin4p
7885 at
            427.1
protein kinase
7886 at
                         Ρ
            499.8
Transcriptional modulator
7887 at
            934.7
weak similarity to fruit fly polycomblike nuclear protein
7888 at
            1359.6
similarity to microtubule-interacting protein Mhp1p and to hypothetical protein YOR227w
7889 at
            -225.4
questionable ORF
                         Ρ
7890 at
            5762.9
NifU-like protein A
7891 at
            1248.8
                         Ρ
similarity to ADP/ATP carrier proteins
7892_at
            760.0
weak similarity to transcription factors
7893 at
            1020.9
Putative heme A biosynthetic enzyme involved in forming the formyl group at position 8 of the porphyrin
rina
7894 at
            9716.3
Ribosomal protein L5 (L1a)(YL3)
7895 at
            145.1
hypothetical protein
7896_at
            3910.4
                         Ρ
TFIIF subunit (transcription initiation factor), 30 kD
            2225.3
7897_at
TTAGGG repeat binding factor
7898_at
            3451.2
```

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histone H1
7899 at
            1919.1
weak similarity to fruit fly TFIID subunit p85
7900 at
            2503.7
weak similarity to YDR395w and cellular apoptosis susceptibility protein
7901 at
            356.5
Nuclear import protein
                         Ρ
7857_at
            322.1
similarity to ribonucleases
            1651.6
7858 at
TFIIH subunit Tfb2\; has homology to CAK and human IIH subunits
7859 at
            -13.9
Meiotic protein required for synapsis and meiotic recombination
7860 at
            1115.0
Required for sorting and delivery of soluble hydrolases to the vacuole.
7861 at
            689.6
putative ATP-dependent RNA helicase\; Dead box protein
7862 at
            2189.0
Component of small subunit of the mitochondrial ribosome
7863_at
            5269.6
Isopentenyl diphosphate:dimethylallyl diphosphate isomerase (IPP isomerase)
7864 at
            588.8
Protein with similarity to Hda1p, Rpd3p, Hos2p, and Hos1p
7865 at
            4250.3
has GTPase-activating protein activity toward the essential bud-site assembly GTPase Cdc42
7866_at
            655.0
questionable ORF
7867 at
            306.7
                         Р
similarity to glycerate dehydrogenases
7868 at
            3983.9
weak similarity to YOR193w
            5457.9
7869_at
arginase
7870 at
            4007.4
similarity to C.elegans hypothetical protein, weak similarity to Pho81p
7871 at
            526.6
similarity to aminoglycoside acetyltransferase regulator from P. stuartii
7872_at
            874.1
hypothetical protein
            561.5
7873_at
                         Ρ
hypothetical protein
7874 at
            10301.9
HSP70 family member, highly homologous to Ssa1p and Sse2p
            3233.7
7875_at
similarity to Smy2p
                         Ρ
7876 at
            1406.2
Aspartyl-tRNA synthetase, mitochondrial
7877 at
            2233.9
similarity to hypothetical M. tuberculosis protein
7878 at
            599.0
questionable ORF
7834_at
            3918.6
                         Ρ
hypothetical protein
7835_at
            1526.6
similarity to YFR021w
                         Р
7836_at
            1308.0
```

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weak similarity to Sulfolobus hypothetical protein
7837 at
            8910.7
similarity to S.pombe hypothetical protein
7838_at
            756.8
Tyrosyl-tRNA synthetase
7839 at
            2165.9
hypothetical protein
7840 at
            929.2
strong similarity to YBR177c
7841_at
            6606.4
membrane component of ER protein translocation apparatus
7842 at
            6862.5
similarity to M.jannaschii GTP-binding protein, GTP1/OBG-family, weak similarity to other GTP-binding
proteins
7843 at
                         Ρ
            1366.9
sensitive to sulfite
7844 at
            7579.8
                        Ρ
Glutathione oxidoreductase
7845 s at 11350.2
Ribosomal protein S6A (S10A) (rp9) (YS4)
7846 at
            5816.9
serum response factor-like protein
7847 at
            6126.3
similarity to aryl-alcohol dehydrogenases
7848 at
            6144.8
strong similarity to YBR183w
7849 at
            2697.4
Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs
7850 at
            1983.0
multidomain vesicle coat protein that interacts with Sec23p
7851 at
            1126.1
BCK1-like resistance to osmotic shock
7852 at
            788.3
                         Ρ
54kDa subunit of the tetrameric tRNA splicing endonuclease
7853 at
            2006.1
putative helicase
7854_i_at
            5638.5
Ribosomal protein S9A (S13) (rp21) (YS11)
7855 f at
            7819.3
                        Р
Ribosomal protein S9A (S13) (rp21) (YS11)
7856 at
            192.7
hypothetical protein
7811_at
            5002.7
                         Α
Ribosomal protein L21B
7812 at
            4819.3
                         Ρ
F(1)F(0)-ATPase complex delta subunit, mitochondrial
7813 at
            379.7
weak similarity to YBR197c
            1830.2
7814 at
Required for synthesis of N-acetylglucoaminylphosphatidylinositol, the first intermediate in synthesis of
glycosylphosphatidylinositol (GPI) anchors
7815_at
            690.7
similarity to Vps4p and YER047c
7816 at
            -67.3
                         Α
questionable ORF
                         Ρ
7817_at
            334.3
```

```
encodes putative deubiquitinating enzyme
7818 at
            783.2
hypothetical protein
7819 at
            876.5
                         Ρ
weak similarity to Vps9p
                         Ρ
7820_at
            584.7
geranylgeranyl diphosphate synthase
7821 at
            962.0
hypothetical protein
                         Ρ
7822_at
            6092.3
hypothetical protein
                         Р
7823 at
            2600.3
hypothetical protein
                         Ρ
7824 at
            1409.3
soluble, hydrophilic protein involved in transport of precursors for soluble vauolar hydrolases from the late
endosome to the vacuole
7825 at
            1774.5
weak similarity to S.pombe peptidyl-prolyl cis-trans isomerase
7826 at
            5745.5
similarity to hypothetical protein YLR019w, YLL010c and S.pombe hypothetical protein SPAC2F7.02c
7827 at
            242.3
hypothetical protein
                         Р
7828 at
            11874.2
cytosolic aldehyde dehydrogenase
7829 at
            393.9
strong similarity to Mrs2p
                         Р
7830 at
            4184.0
similarity to glutaredoxins
7831 at
            4154.8
multidrug resistance transporter
7832 at
            4196.5
Multicopy suppressor of cls2-2\; also suppresses rvs161 mutations
7833 at
            1419.9
                         Ρ
hypothetical protein
7788 at
                         Ρ
            1102.0
hypothetical protein
                         Ρ
7789 at
            366.0
protein of unknown function
7790 at
            7102.7
                         Ρ
mannosylphosphate transferase
                         Ρ
7791 at
            3479.7
hypothetical protein
                         Ρ
7792_at
            1530.5
strong similarity to ADP-ribosylation factors
7793 at
            3701.5
Protein required for complex glycosylation
7794 at
            5523.7
MAP kinase-associated protein
7795 at
            7648.8
Calcium and phospholipid binding protein homologous to translation elongation factor 1-gamma
(EF-1gamma)
                         Ρ
7796_at
            2190.6
hypothetical protein
                         Ρ
7797_at
            1570.1
Elongin C transcription elongation factor
7798_at
            1271.7
```

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Vacuolar sorting protein
                        Ρ
7799 at
            268.5
questionable ORF
7800_at
            5284.2
RNA recognition motif-containing protein
7801 at
            1212.7
cyclin(SSN8)-dependent serineVthreonine protein kinase
7802_at
            1873.4
hypothetical protein
7803_at
            1190.5
nuclear encoded mitochondrial isoleucyl-tRNA synthetase
            1146.8
7804 at
hypothetical protein
                         Ρ
7805 at
            730.3
zinc finger DNA binding factor, transcriptional regulator of sulfur amino acid metabolism, highly
homologous to Met32p
7806 at
            9648.8
GAL4 enhancer protein, has similarity to human transcription factor BTF3
7807 at
            1016.5
plasma membrane ATPase
7808_at
            741.8
questionable ORF
                         Ρ
7809 at
            1256.9
questionable ORF
7810 at
            87.2
                         Α
weak similarity to YLR426w
7766 at
            5557.9
styryl dye vacuolar localization
7767 at
            4998.0
negative transcriptional regulator, protein kinase homolog
7768 at
            1995.1
similarity to C.elegans hypothetical protein
7769 at
            948.6
putative ATP-dependent helicase
            7139.7
                        Ρ
7770 at
acetoacetyl CoA thiolase
7771_at
            402.4
hypothetical protein
                         Ρ
7772 at
            1864.5
serineVthreonine protein kinase homologous to Ran1p
            111.2
7773 at
questionable ORF
7774_at
            423.0
(N)egative regulator of (C)ts1 (E)xpression
7775 at
            3849.9
putative methylenetetrahydrofolate reductase (mthfr)
7776 at
            902.4
                        Ρ
UV endonuclease
7777_at
            -5.6
                         Α
ExtraCellular Mutant\; similar to SRD1
7778_at
            3002.2
weak similarity to Smt4p
                         Р
7779 at
            8975.2
strong similarity to YFL004w, similarity to YJL012c
7780_at
            1456.7
Important for chromosome segregation
```

а

```
7781_at
            54.5
strong similarity to Lpd1p and other dihydrolipoamide dehydrogenases
7782 at
            2178.2
Zinc-finger transcription factor
7783 at
            2764.6
Homolog of SIR2
7784 at
            1911.7
                         Ρ
hypothetical protein
7785 at
            3417.1
ribosomal protein S16, mitochondrial
7786 at
            5396.4
hypothetical protein
7787 at
            919.8
Component of the TAF(II) complex (TBP-associated protein complex)
7743 at
            5748.2
coatomer complex zeta chain
7744 at
            3867.7
similarity to M.jannaschii hypothetical protein
7745 at
            733.1
kinetochore protein in the DEAH box family
7746 at
             1186.0
hypothetical protein
7747 at
            4487.7
                         Ρ
predicted transmembrane protein
7748 at
            640.7
weak similarity to Nup2p
7749 at
            9140.5
strong similarity to YGR086c
7750 at
            520.4
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
            1155.1
                         Ρ
appears to be functionally related to SNF7
7752 at
            1178.2
                         Ρ
histone acetyltransferase
7753 at
            108.1
Mitochondrial isoform of citrate synthase
7754 at
            541.0
similarity to B.subtilis mmgE protein
            213.5
7755 at
similarity to sulphate transporter proteins
7756_at
            5796.7
strong similarity to electron transfer flavoproteins alpha chain
7757 at
            778.6
polar 32k Da cytoplasmic protein
7758 at
             1542.0
                         Ρ
Isocitrate lyase, may be nonfunctional
7759_at
            -44.9
                         Α
hypothetical protein
                         Ρ
7760_at
            1643.2
similarity to transcription factor
7761 at
            1827.3
similarity to sterol uptake protein Sut1p
            10166.2
7762_at
RNA polymerase I subunit A135
```

```
7763_at
            2196.0
similarity to ADP/ATP carrier proteins and Graves disease carrier protein
7764 at
            694.1
                         Μ
hypothetical protein
                         Ρ
7765 at
             1600.5
similarity to transcription factors
7721 at
            -11.0
                         Α
hypothetical protein
7722 at
            241.8
                         Α
similarity to transcription factors
            9902.7
7723 at
similar to human translation initiation factor 6 (eIF6)
            1466.2
7724 at
GDP dissociation factor for Sec4p
7725 at
            759.6
p90 subunit of yeast omatin Assembly Factor-I (CAF-I)
7726 at
             1763.3
essential for initiation of DNA replication\; homolog of S. pombe CDC21
7727 at
            3117.7
hypothetical protein
7728 at
             718.4
similarity to human citrate transporter protein
7729 at
            983.6
weak similarity to fruit fly dorsal protein and Snf5p
7730 at
             7303.5
similarity to human hypothetical protein
7731 at
            2553.4
Mitochondrial protein of the CDC48VPAS1VSEC18 family of ATPases
7732 at
             1075.2
novel cyclin gene\; encodes subunits of TFIIK, a subcomplex of transcription factor TFIIH
7733 at
            531.6
null mutant is viable\; increased tolerance to dehydration, freezing, and toxic levels of ethanol
7734 at
             199.9
similarity to YNL019c and YNL033w
            9240.5
                         Ρ
7735 at
Ypt Interacting Protein
7736 at
             10018.2
                         Ρ
Ypt Interacting Protein
7737 at
            4630.4
                         Ρ
Gamma-adaptin, large subunit of the clathrin-associated protein (AP) complex
7738 at
             142.7
similarity to YBL101c
                         Р
7739_at
            459.1
similarity to human zinc-finger protein BR140
             1155.2
7740 at
yeast homolog of the Drosphila tumor suppressor, lethal giant larvae
7741 at
            9141.1
cytoplasmic and mitochondrial histidine tRNA synthetases
7742_at
             1802.5
Actin-related protein
                         Ρ
7698 at
            13714.6
glutamine synthetase
                         Ρ
7699 at
            9888.0
54-kDa vacuolar H(+) ATPase subunit of V1 sector
7700 at
            4506.5
similarity to Erv1p and rat ALR protein
```

```
7701_at
            43.6
                        Α
questionable ORF
                        Ρ
7702_g_at 1450.6
questionable ORF
7703 at
            482.3
                        Α
questionable ORF
                        Ρ
7704 at
            1375.5
similarity to C.elegans C02C2.6 protein
7705 at
            5355.6
Translation initiation factor eIF-5
7706 at
            2909.9
similarity to Jsn1p
                        Ρ
7707 i at
            17765.1
Ribosomal protein L43A
7708 f at
                        Ρ
            8313.5
Ribosomal protein L43A
7709 at
            509.9
                        Ρ
questionable ORF
7710 at
            774.2
                        Ρ
similarity to C.elegans hypothetical protein
7711 at
            774.6
Required for chromosome segregation
7712 at
            531.8
alpha subunit of yeast mitochondrial phenylalanyl-tRNA synthetase
7713 at
            2501.0
similarity to M.domestica NADPH--ferrihemoprotein reductase and mammalian nitric-oxide synthases
7714 at
            1435.7
similarity to Uso1p
                        Ρ
7715 at
            595.2
questionable ORF
7716 at
                        Ρ
            3959.2
N-acetyltransferase
                        Ρ
7717 at
            7964.6
11-kDa nonhistone chromosomal protein
7718 g at 8870.2
11-kDa nonhistone chromosomal protein
7719 at
            2060.3
questionable ORF
7720 at
            -12.0
                        Α
MAP kinase
                        Ρ
7675 at
            886.0
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
            1579.5
Component of RNA polymerase transcription initiation TFIIH (factor b), 37 kDa subunit
7677 at
            1419.7
Protein involved in snRNP biogenesis
7678 at
            6521.9
putative mitochondrial carrier protein
7679 at
            301.3
questionable ORF
                        Ρ
7680_at
            6333.9
chorismate mutase
7681_at
            225.5
weak similarity to Synechococcus sp. DnaJ protein
7682_at
            7393.4
```

```
cytosine deaminase
                         Ρ
7683 at
            8291.7
hypothetical protein
7684 at
            335.8
                         Α
hypothetical protein
                         Ρ
7685_at
            2543.0
site-specific DNA binding protein, repressor
7686 at
            884.8
ubiquitin-like protein activating enzyme
7687_at
            1897.7
weak similarity to F.alni nitrogen fixation protein
7688 at
            340.0
Protein with similarity to Hda1p, Rpd3p, Hos2p, and Hos3p
7689 at
            7498.7
putrescine aminopropyltransferase (spermidine synthase)
7690 at
            765.3
hypothetical protein
7691_at
            1516.6
                         Ρ
strong similarity to YIL029c
7692_at
            3323.8
member of the NOT complex, a global negative regulator of transcription
7693 at
            1939.0
18-kDa phosphotyrosine phosphatase of unknown function
7694 at
            11384.6
Transketolase 1
                         Ρ
7695_at
            2032.8
imparts Far- phenotype
7696_at
            2.7
                         Α
questionable ORF
                         Ρ
7697 i at
            354.2
questionable ORF
7653_s_at -25.7
                         Α
questionable ORF
7654_at
            0.4
                         Α
hypothetical protein
                         Ρ
7655 at
            787.7
weak similarity to human insulin-like growth factor 2 receptor
7656_s_at 11223.4
translational elongation factor EF-1 alpha
7657_at
            1604.6
strong similarity to glycyl-tRNA synthetases
7658 at
            2362.6
S. pombe dim1+ in budding yeast
7659_at
            454.1
hypothetical protein
7660 at
                         Ρ
            1469.5
hypothetical protein
7661 at
            512.2
                         Ρ
hypothetical protein
                         Ρ
7662 at
            6970.6
transcription factor TFIIB homolog
7663_at
            647.2
questionable ORF
7664_at
            7685.8
Signal recognition particle subunit (homolog of mammalian SRP54)
7665_at
            1196.0
```

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questionable ORF
                         Ρ
7666 at
            4594.4
hypothetical protein
7667_at
            1395.1
weak similarity to C.elegans LIM homeobox protein
7668 at
            188.1
questionable ORF
7669 at
            655.5
                         Ρ
weak similarity to zinc-finger proteins
7670_at
            3149.9
weak similarity to chicken lim-3 protein
7671 at
            666.1
Suppressor of Ypt3
7672_at
            220.2
                         Α
hypothetical protein
7673 at
            3646.2
                         Ρ
hypothetical protein
7674 at
            8233.2
                         Ρ
hypothetical protein
7629_at
            233.2
                         Ρ
questionable ORF
7630 at
            3247.2
weak similarity to C.elegans hypothetical protein CEC25A1
7631 at
            1077.4
splicing factor
7632_i_at
            18970.1
Ribosomal protein L11A (L16A) (rp39A) (YL22)
7633 s at 13350.0
Ribosomal protein L11A (L16A) (rp39A) (YL22)
            11432.3
7634 at
proteasome subunit
7635_at
            544.9
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
                         Ρ
            2091.2
hypothetical protein
                         Ρ
7637_at
            950.2
protein kinase
7638_at
            1676.3
                         Ρ
Yeast 30kDa Homologue
7639 at
            7793.3
Subunit of the regulatory particle of the proteasome
7640_at
            838.1
weak similarity to human nicotinic acetylcholine receptor delta chain
            6517.5
7641 at
RNA polymerase III (C) subunit
7642 at
            196.0
kinase required for late nuclear division
7643 at
            458.4
kinase required for late nuclear division
7644_at
            1062.9
similarity to RNA-binding proteins
7645 at
            12082.3
phosphatidylinositol synthase
7646_at
            8530.1
```

```
similarity to YJR116w
7647 at
            3664.6
similarity to probable transcription factor Ask10p, and to YNL047c and YIL105c
7648 at
            -44.1
hypothetical protein
                         Ρ
7649 at
            1060.0
similarity to YLR454w
7650 at
            1175.9
                         Ρ
similarity to M.jannaschii translation initiation factor, eIF-2B
7651_at
            817.4
G(sub)2-specific B-type cyclin
7652 at
            2519.4
B-type cyclin
7607 at
            1112.4
similarity to B.subtilis transcriptional activator tenA, strong similarity to hypothetical proteins YPL258c and
YOL055c
7608 at
            1287.1
                         Ρ
putative homolog of human insulin-degrading endoprotease
7609 at
            751.2
questionable ORF
7610 at
            4526.4
High affinity copper transporter into the cell, probable integral membrane protein
7611 at
            6895.3
suppressor of mrs2-1 mutation
7612 at
            738.0
                         Ρ
questionable ORF
                         Ρ
7613 at
            1789.1
similarity to C-term. of N.tabacum auxin-induced protein
7614 at
            4563.4
similarity to carrier protein FLX1
7615 at
            3015.0
multicopy suppressor of clathrin deficiency
7616 at
            554.8
                         Ρ
questionable ORF
7617 at
            2971.0
similarity to N-acetyltransferases
7618 f at
           17432.0
                         Р
Ribosomal protein S23B (S28B) (rp37) (YS14)
7619 s at 7920.5
                         Р
Ribosomal protein S23B (S28B) (rp37) (YS14)
            2895.2
7620 at
similarity to C.elegans hypothetical protein
            10469.1
7621_at
Translocase of the Outer Mitochondrial membrane
7622 at
            991.8
Protein involved in splicing intron a15beta of COX1
7623 at
            1668.3
DNA polymerase alpha binding protein
7624_at
            240.6
questionable ORF
                         Ρ
7625_at
            3481.5
weak similarity to Taf90p
7626 at
            2804.3
NH4+ transporter, highly similar to Mep1p and Mep2p
7627_at
            2285.5
hypothetical protein
```

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7628_at
            1402.5
                         Ρ
similarity to human BTHS gene involved in Barth syndrome
7584 at
            1202.6
kinesin-like nuclear fusion protein
7585 at
            409.9
                         Ρ
questionable ORF
7586_at
                         Ρ
            1676.9
hypothetical protein
7587_at
            1907.3
similarity to YDR060w and C.elegans hypothetical protein
7588 at
            10104.2
asparagine synthetase
                         Ρ
7589 at
            1273.9
questionable ORF
7590 at
                         Ρ
            2387.5
hypothetical protein
7591 at
            3205.4
                         Ρ
hypothetical protein
7592 at
            8889.1
                         Ρ
involved in secretion of proteins that lack classical secretory signal sequences
7593 at
            144.5
questionable ORF
7594 at
                         Ρ
            684.1
weak similarity to YPL159c
            611.2
7595 at
hypothetical protein
                         Р
7596 at
            791.1
hypothetical protein
7597 at
                         Ρ
            5588.8
similarity to chicken growth factor receptor-binding protein GRB2 homolog
7598 at
            528.0
Regulates proper expression of subunits 6 (Atp6p) and 8 (Atp8p) of the Fo-F1 ATP synthase
7599 i at
            129.2
                         Ρ
similarity to multidrug resistance proteins
7600 s at 11627.5
similarity to multidrug resistance proteins
7601 at
            659.1
strong similarity to YGR141w
7602 at
            1114.1
similarity to YGR142w
                         Ρ
7603 at
            8158.8
potential beta-glucan synthase
7604_at
            221.6
Glycogen phosphorylase
                         Ρ
7605 at
            1482.2
CDC28Vcdc2 related protein kinase
7606 at
            2069.1
56-kDa subunit of origin recognition complex (ORC)
            10624.7
7561 at
                         Р
Translation initiation factor eIF-4B
7562 at
            526.5
killed in mutagen, sensitive to diepoxybutane and Vor mitomycin C
7563 at
            9623.2
GTP-binding protein of the rho subfamily of ras-like proteins
7564_at
            3528.8
14 kDa mitochondrial ribosomal protein\; homologous to E. coli S14 protein
```

```
7565_at
                        Ρ
            1173.2
phosphoadenylylsulfate reductase
7566 at
            413.6
                         Ρ
negative regulator of URS2 of the HO promoter
7567 at
            4718.4
hypothetical protein
7568_at
            38.0
                         Α
hypothetical protein
7569 at
            645.1
                         Ρ
hypothetical protein
                         Р
7570_at
            1027.2
strong similarity to YLR456w
            3761.1
7571 at
defective in vacuolar protein sorting
7572 at
            523.5
                        Α
weak similarity to Nbp1p
7573 at
            795.0
DNA polymerase epsilon, subunit B
7574 at
            4340.2
Geranylgeranyltransferase Type II beta subunit
7575_at
            332.2
questionable ORF
7576 at
            1022.5
associated with the U4VU6 snRNP
7577 at
            318.8
hypothetical protein
7578 at
            3142.0
Along with Uba2p forms a heterodimeric activating enzyme for Smt3p
7579 at
            1714.5
cytoplasmic GTPase-activating protein
7580 at
            5955.6
Sm or Sm-like snRNP protein
7581 at
            10018.4
dolichol phosphate mannose synthase
7582 at
            1625.8
similarity to human 4-alpha-glucanotransferase (EC 2.4.1.25)/amylo-1,6-glucosidase (EC 3.2.1.33)
7583_at
            1114.3
Autophagy
7538 at
            223.6
                         Ρ
Transcription factor IIIA (TFIIIA) with putative Zn-fingers
7539 at
            6930.0
subunit common to RNA polymerases I, II, and III
7540_at
            954.9
similarity to calmodulin and calmodulin-related proteins
7541 at
            1371.2
Contains 8 copies of the TPR domain
7542 at
            3618.7
82-kDa subunit of RNA polymerase III (C)
7543 at
            10185.0
40 kDa ubiquinol cytochrome-c reductase core protein 2
7544 at
            238.7
similarity to plasma membrane and water channel proteins
7545 at
Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs
7546 at
            193.7
similarity to S.pombe isp4 protein
```

```
7547_at
            50.4
                         Α
hypothetical protein
7548 at
            289.3
                         Ρ
strong similarity to regulatory protein Mal63p
7549 g at 3554.5
strong similarity to regulatory protein Mal63p
7550 at
            11.5
questionable ORF
7551 at
            3685.3
multi-copy suppressor of gal11 null\; member of drug-resistance protein family
7552 at
            1543.9
Similar to transcriptional regulatory elements YAP1 and cad1
7553 at
            302.8
Required for arsenate but not for arsenite resistance
7554 at
            28.9
                         Α
involved in arsenite transport
7555 s at 2713.5
trans-acting positive regulator of the enolase and glyceraldehyde-3-phosphate dehydrogenase gene
families
7556 at
            801.4
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
            11365.8
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
            -22.9
7558 at
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
            745.5
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
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
            4428.3
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
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
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
            -41.5
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
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
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
            349.7
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
            465.2
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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
            7919.9
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
            5668.6
7521 at
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
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
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
            1419.2
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
            1371.0
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
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
            68.6
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
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
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
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
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
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
            9034.2
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
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
            -56.5
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
            539.3
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
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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

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7489 at
            519.6
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
            833.7
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
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
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
            6789.1
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
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
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
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
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
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
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
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
            -193.0
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
            211.4
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
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
            224.2
7504 r at
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
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
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
            750.6
non-annotated SAGE orf Found reverse in NC_001148 between 408869 and 409009 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
7508 at
            344.1
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
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
            1340.8
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
            -356.0
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
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
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
            -1.7
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
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
            10260.6
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
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
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
            1264.7
snRNA
7474 at
            1525.1
                         Ρ
snRNA
7475 at
            5204.9
                         Ρ
snRNA
                         Ρ
7476 at
            2576.0
snRNA
                         Р
7477_at
            682.3
snRNA
                         Ρ
7478 s at 885.9
similarity to subtelomeric encoded proteins
7479 at
            1343.5
                         Ρ
hypothetical protein
7480 at
            916.6
yeast homolog of the Drosphila tumor suppressor, lethal giant larvae
7481 at
            1844.8
putative protein kinase
                         Ρ
7482 at
            1902.8
hypothetical protein
7483 at
            1082.7
Probable cytochrome c subunit, copper binding
```

```
8140.3
                        Р
7484_at
suppressor of sed5 ts mutants
7485 at
            3977.7
ExtraCellular Mutant
7486 at
            272.7
                        Α
questionable ORF
                        Ρ
7487_at
            8795.2
mitochondrial F1F0-ATPase alpha subunit
7488 at
            3866.4
similarity to human and D.melanogaster kynurenine 3-monooxygenase
7443 at
            45.7
BARREN, a gene with sequence similarity to Drosophila barren and Xenopus XCAP-H, and a functional
homolog of human BRRN1
7444 at
            1796.6
questionable ORF
7445 at
            1163.7
                        Ρ
similarity to C.albicans hypothetical protein
7446 at
            598.5
questionable ORF
7447_at
            1451.7
RNA polymerase II holoenzymeVmediator subunit
7448 at
            11080.9
Ribosomal protein L32
                        Ρ
7449 at
            2660.9
weak similarity to SCS2
7450 at
            9945.4
methionine aminopeptidase 2
            359.4
7451 at
Component of the small subunit of mitochondrial ribosomes
7452 at
            2087.8
weak similarity to A.thaliana aminoacid permease AAP3
7453_at
            1184.2
putative phosphatidylinositol kinase
7454_s_at 11704.5
Ribosomal protein L23A (L17aA) (YL32)
7455 at
            672.3
involved in sugar metabolism
7456_at
            2553.7
                        Р
BEM1-binding protein
7457_at
            2988.5
                        Ρ
component of the anaphase-promoting complex
7458 i at
            220.9
questionable ORF
                        Ρ
7459_s_at 3389.2
questionable ORF
7460 at
            4465.4
putative Dol-P-Man dependent alpha(1-3) mannosyltransferase involved in the biosynthesis of the
lipid-linked oligosaccharide
7461 at
            2044.1
                        Р
hypothetical protein
                        Ρ
7462_at
            322.9
62-kDa protein
7463 at
            2758.2
Nucleoporin highly similar to Nup157p and to mammalian Nup155p (nup170 mutant can be
complemented with NUP155)
7464_at
            5383.7
```

```
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.
            470.9
7465 at
questionable ORF
7421 at
            9877.5
cytoplasmic isoleucyl-tRNA synthetase
7422 at
            460.5
heat-inducible cytosolic member of the 70 kDa heat shock protein family
7423 at
            631.1
                         Ρ
splices pre mRNA of the MATa1 cistron
            137.5
7424 at
                         Α
questionable ORF
7425 s at 11806.6
                         Ρ
Ribosomal protein S8A (S14A) (rp19) (YS9)
7426 at
            639.2
hypothetical protein
7427 at
            14.7
                         Α
questionable ORF
7428 at
            6403.3
                         Р
ribose-phosphate pyrophosphokinase 4
7429 at
            1410.9
ubiquitin carboxyl-terminal hydrolase
7430 at
            251.4
putative transcription factor
7431 at
            324.5
questionable ORF
7432 at
            2470.3
                         Ρ
Homolog to thiol-specific antioxidant
7433 at
            593.8
kinesin related protein
7434 at
            494.7
                         Α
questionable ORF
7435 at
            1846.0
protoplast regeneration and killer toxin resistance gene, may be a post-translational regulator of chitin
synthase III activity, interacts with Chs3p
7436 at
            407.1
hypothetical protein
7437_at
            100.3
weak similarity to hypothetical protein YER093c-a
7438 at
            1005.6
weak similarity to hypothetical protein YER093c-a
7439 at
            7901.6
isolated as a suppressor of the lethality caused by overexpression of the phosphoprotein phosphatase 1
catalytic subuniut encoded by GLC7
7440 at
            2205.9
strong similarity to hypothetical S.pombe protein
7441 at
            2789.2
protein phosphatase type 2C
7442 at
            2797.7
similarity to hypothetical S.pombe protein
7398 at
            2097.7
Homolog to myb transforming proteins
7399 at
            1544.9
                         Р
```

questionable ORF

Form a protein complex with Aut2p, to mediate attachment of autophagosomes to microtubules. Aut7p

```
7400_at
            526.6
SAS3 for Something about silencing, gene 3. Influences silencing at HMR.
7401 at
            3534.4
similarity to S.pombe Z66568_C protein
7402 at
            3587.2
peripheral membrane protein required for vesicular transport between ER and Golgi
7403 at
            322.5
hypothetical protein
7404 at
            387.4
                        Ρ
hypothetical protein
7405 at
            5053.5
USO1 homolog (S. cerevisiae), cytoskeletal-related transport protein, Ca++ binding
            2792.1
7406 at
weak similarity to hypothetical protein YOR054c
7407 at
            7486.5
44 kDa core protein of yeast coenzyme QH2 cytochrome c reductase
7408 at
            -5.5
hypothetical protein
7409 at
            1563.6
                         Ρ
ExtraCellular Mutant
                         Ρ
7410 at
            9999.6
uridine permease
                        Ρ
7411 at
            9361.8
proteasome subunit
7412 at
            3702.0
encodes the HDEL receptor required for retention of ER proteins
7413 at
            8965.5
CTP synthase, highly homologus to URA8 CTP synthase
7414 at
            1205.4
Mitochondrial ribosomal protein MRPL16
7415 at
            1421.6
clathrin Associated Protein complex Large subunit
7416 at
            2800.4
Homolog to twitching motility protein (P. aeroginosa)
7417 at
            1945.4
                                                                                                   В
subunit of DNA polymerase alpha-primase complex
7418 at
            1833.6
suppressor of cold-sensitive tub2 mutation\; shown to be a component of the mitotic spindle
7419 at
            5039.4
GTP cyclohydrolase II
                        Ρ
7420 at
            7036.3
weak similarity to hnRNP complex protein homolog YBR233w
7374_at
            335.3
hypothetical protein
7375 at
            12172.7
mitochondrial ADPVATP translocator
7376 at
            655.7
                        Α
hypothetical protein
7377_at
            2663.7
involved in mating-type regulation
7378_s_at 15023.0
Ribosomal protein L19B (YL14) (L23B) (rpl5L)
7379 i at
            258.4
snRNA-associated protein of the Sm class
            120.9
7380_f_at
```

snRNA-associated protein of the Sm class

```
3564.1
                         Ρ
7381_at
snRNA-associated protein of the Sm class
7382 at
            682.2
Upstream activation factor subunit
7383 at
            6475.7
Probable proliferating-cell nucleolar antigen (human p120)
7384 at
            2954.3
Minichromosome maintenance protein, transcription factor
7385 at
            8475.2
mitochondrial ATP-dependent protease
7386 at
            1388.3
transcriptional activator protein of CYC1
7387 at
            3671.3
                        Ρ
67 kDa integral membrane protein
7388 at
            273.7
AP endonuclease
7389 at
            2645.0
integral subunit of RNase P and apparent subunit of RNase MRP
7390 at
            5787.3
carboxypeptidase Y sorting receptor in late Golgi\; Type I integral membrane protein 166aa cytoplasmic
tail, 1300 aa lumenal domain
7391 at
            4685.0
cdc2+VCDC28 related kinase with positive role in conjugation
7392 at
            2321.4
acetyl CoA hydrolase
7393 at
            1000.6
member of yeast Pol I core factor (CF) also composed of Rrn11p, Rrn7p and TATA-binding protein
7394 at
            500.6
Probable met-tRNA formyltransferase, mitochondrial
7395 at
            108.2
questionable ORF
            4094.2
7396_at
High copy suppresor of choline-transport mutants
7397_at
            370.6
hypothetical protein
                         Ρ
7352 at
            1998.6
strong similarity to DNA damage responsive Alk1p
7353_at
            646.9
putative repressor protein homologous to yeast Tup1p and mammalian retinal transducin\; contains
nuclear targeting signal
                         Ρ
7354 at
            6130.5
contains 3 SH3 domains, interacts with Bee1p
7355_at
            3955.5
hypothetical protein
7356 at
                         Ρ
            1625.3
Pleiotropic drug resistance protein 3
7357 at
            4113.1
weak similarity to Papaya ringspot virus polyprotein
7358 s at 17923.7
Histone H2A (HTA1 and HTA2 code for nearly identical proteins)
7359 at
            14311.6
Histone H2B (HTB1 and HTB2 code for nearly identical proteins)
7360 at
            7041.1
                         Ρ
ExtraCellular Mutant
7361 at
            1823.7
Neutral trehalase, highly homologous to Nth1p
```

```
7362_at
            2401.5
strong similarity to hypothetical protein YMR101c
7363 at
            5143.7
hexaprenyl pyrophosphate synthetase
7364 at
            3705.0
similarity to S.pombe hypothetical protein SPAC18B11.05
7365 at
            2628.1
strong similarity to hypothetical protein YDR003w
7366_at
            1195.0
hypothetical protein
7367 at
            2895.3
Major Facilitator Transporter
7368 i at
            7632.9
Histone H3 (HHT1 and HHT2 code for identical proteins)
7369 s at 9164.6
                        Р
Histone H3 (HHT1 and HHT2 code for identical proteins)
7370 at
            13776.2
Inorganic pyrophosphatase
7371 at
            1135.4
hypothetical protein
                        Ρ
7372 at
            1297.6
hypothetical protein
                        Ρ
7373 at
            2542.2
Glutaredoxin homolog
7328 at
            4916.0
Type II transmembrane protein
7329 at
            8546.7
strong similarity to hypothetical proteins YDL012c and YDR210w
7330 at
            3583.9
karyopherin beta 2, yeast transportin
7331_at
            185.6
galactose-1-phosphate uridyl transferase
7332 at
            212.6
                        Ρ
UDP-glucose 4-epimerase
7333 at
            272.5
galactokinase
7334 at
            4442.6
                        Ρ
uracil permease
                        Ρ
7335 at
            1706.8
hypothetical protein
                        Ρ
7336 at
            8188.2
chitin synthase 3
            1307.9
                        Ρ
7337_at
SCO1 protein homolog (S. cerevisiae)
7338 at
            9534.2
probable purine nucleotide-binding protein
7339 at
            1505.9
Nuclear protein that binds to T-rich strand of core consensus sequence of autonomously replicating
sequence
7340 at
            435.1
                         Α
hypothetical protein
                        Ρ
7341_at
            991.9
Probable serVthr-specific protein kinase, homolog to YKR2 and YPK1 (S. cerevisiae)
7342 at
            5627.3
CDP-diacylglycerol synthase, CTP-phosphatidic acid cytidylyltransferase, CDP-diglyceride synthetase
7343_at
            1431.8
```

```
involved in inositol biosynthesis
7344 i at
            1913.4
Ribosomal protein L4A (L2A) (rp2) (YL2)
7345 s at 13466.0
Ribosomal protein L4A (L2A) (rp2) (YL2)
7346 at
            418.9
hypothetical protein
7347 at
            326.5
Probable regulatory Zn-finger protein, V homolog to YKL251V
7348 at
            5308.1
nuclear protein arginine methyltransferase (mono- and asymmetrically dimethylating enzyme)
7349 at
            5914.7
pyridoxine (pyridoxiamine) phosphate oxidase
7350 at
            6869.4
contains 9 or 10 putative membrane spanning regions\; putative Ca2+ binding protein (homology to
EF-hand Ca2+ binding site)
7351 at
            2311.4
inner mitochondrial membrane protein
7306 at
            1897.3
chitin synthase 2
7307 at
            10713.3
gamma subunit of mitochondrial ATP synthase
7308 at
            626.5
integral membrane protein
7309 at
            2183.8
Fatty acid transporter
7310 at
            1921.8
Probable membrane-bound small GTPase
7311 at
            3610.1
similarity to benomyl/methotrexate resistance protein
7312 at
            746.8
similarity to chaperonin HSP60 proteins
7313 at
            182.5
Glc7-interacting protein.
7314 at
            1534.7
Homolog to quinone oxidoreductase (E. coli)
7315 at
            820.2
hypothetical protein
7316 s at 8981.4
                        Ρ
Ribosomal protein S11B (S18B) (rp41B) (YS12)
7317 at
            1244.2
RNA polymerase I enhancer binding protein
7318 at
            890.9
Possible regulatory subunit for the PP1 family protein phosphatase Glc7p
7319 at
            186.9
questionable ORF
7320 at
            7804.5
Homolog to YCR004, obr1 (S. pombe), trp repressor binding protein (E. coli)
            1900.3
7321 at
similarity to rat regucalcin
7322 at
            4330.5
Homolog to HSP30 heat shock protein YRO1 (S. cerevisiae) 7
7323 at
            2142.6
RNA splicing factor
7324 at
            649.1
Homolog to glucan-1,3--glucosidase (EC 3.2.1.5\; S. cerevisiae) 2
```

```
Ρ
7325_at
            521.6
Muddled Meiosis
                         Ρ
7326 at
            2290.4
Ubiquitin-specific protease
7327 at
            1622.9
                         Ρ
Probable protein kinase
                         Ρ
7283 at
            3106.0
origin recognition complex subunit 2
7284 at
            4623.3
Homolog to ftsJ protein (E. coli) ,V YCR054V
7285 at
            8958.7
similarity to rat neurodegeneration associated protein 1
7286 at
            965.3
Probable phosphopanthethein-binding protein
7287 at
            146.1
questionable ORF
7288 at
            394.7
                         Ρ
ExtraCellular Mutant
7289 at
            1202.5
                         Ρ
Probable Zn-finger protein
7290 at
            9750.2
cell wall mannoprotein
7291 at
            8694.7
                         Ρ
probable amino acid permease for leucine, valine, and isoleucine
7292 at
            3852.4
Probable amino acid transport protein
7293 at
            2190.7
osmotolerance protein
                         Ρ
7294 at
            1492.7
hypothetical protein
7295_at
                         Ρ
            1632.3
heat shock protein 26
7296 at
            2442.3
                         Ρ
Putative helicase similar to RAD54
            2489.5
7297 at
Homolog to aminopeptidase Y (S. cerevisiae)
7298 at
            1595.2
hypothetical protein
                         Ρ
7299 at
            248.1
ExtraCellular Mutant
                         Ρ
7300 at
            3610.8
hypothetical protein
7301_at
            10736.1
Homolog to sporulation specific protein SPS2 (S. cerevisiae)
7302 at
            8589.9
Homolog to sporulation specific protein SPS2 (S. cerevisiae)
7303 at
            6968.5
Exhibits significant sequence similarity with a subunit of the mammalian translation initiation factor 3
7304 at
            4555.6
cytoplasmic protein involved in protein transport between ER and Golgi\; ATPase
7305_at
            1911.6
transcription factor, member of the histone acetyltransferase SAGA complex
7260 at
            11574.3
ubiquitin-conjugating enzyme
7261_at
            6028.6
transcription factor of the TEAVATTS DNA-binding domain family, regulator of Ty1 expression
```

```
7262_at
            8078.0
                         Ρ
mitochondrial C1-tetrahydroflate synthase
7263 at
            3199.2
mitochondrial ADPVATP translocator
7264 at
            7678.4
                         Ρ
Probable transmembrane protein
7265 at
            2221.5
Subunit 5 of Replication Factor C\; homologous to human RFC 38 kDa subunit
7266 at
            6043.9
profilerating 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
            -15.3
                         Α
questionable ORF
                         Ρ
7268 at
            2375.0
11-kDa nonhistone chromosomal protein
7269 g at 3821.1
11-kDa nonhistone chromosomal protein
7270 i at
            10959.1
questionable ORF
7271_at
            172.9
                         Α
questionable ORF
7272_at
            2312.2
                         Ρ
Nuclear protein involved in mitochondrial intron splicing
                         Ρ
7273 at
            9633.6
Acid phosphatase, constitutive
            6773.5
7274_at
                        Ρ
Acid phosphatase, repressible
7275 at
            1309.4
weak similarity to pig tubulin-tyrosine ligase
            3614.2
7276 at
hypothetical protein
                         Ρ
7277_at
            2474.9
hypothetical protein
7278_at
            1960.4
Myristoylated SerineVthreonine protein kinase involved in vacuolar protein sorting
7279 at
            194.3
putative transcriptional (co)activator for DNA damage
7280 at
            246.2
weak similarity to T.brucei mitochondrion hypothetical protein 6
7281_at
            237.1
questionable ORF
            7925.1
7282 at
weak similarity to S.pombe hypothetical protein SPBC3B9.01
7238_at
            333.5
hypothetical protein
7239 at
            1591.3
weak similarity to human U3 snoRNP associated 55 kDa protein
7240 at
            2460.1
mitochondrial carrier protein
7241 at
            2291.9
involved in fructose-1,6-bisphosphatase degradation
7242 at
            14828.7
May be a membrane protein involved in inorganic phosphate transport and regulation of Pho81p function
7243 at
            569.4
weak similarity to N.crassa chitin synthase
7244_at
            391.0
```

```
Probable transcription factor
7245 at
            7908.1
Calmodulin
7246 at
            2865.8
                        Ρ
beta-1,4-mannosyltransferase
            9994.7
7247 at
Homolog to serendipity protein (D. melanogaster)
7248 at
            2899.8
Transcription regulatory protein
7249_at
            385.4
questionable ORF
                        Р
7250 at
            429.9
Radiation repair protein, putative DNA helicase
7251 at
            9841.3
alpha aminoadipate reductase
7252 at
            535.1
questionable ORF
7253_g_at 633.9
                        Ρ
questionable ORF
7254_at
            89.7
transketolase, homologous to tkl1
7255_at
            1893.9
U1 snRNP A protein
            867.6
7256 at
Translational activator of COB mRNA
7257_at
            11605.6
Glycyl-tRNA synthase
7258 at
            2162.7
                        Ρ
Mitochondrial ribosomal protein MRPL36 (YmL36)
7259 at
            2356.5
transcription factor tau (TFIIIC) subunit 95
7215_at
            -165.7
                        Α
questionable ORF
7216_at
            1428.6
Probable phosphoprotein phosphatase (EC 3.1.3.16)
7217 at
            6459.1
56 kD synthase subunit of trehalose-6-phosphate synthase Vphosphatase complex
            11257.4
7218 at
H+-transporting ATPase, vacuolar (EC 3.6.1.35)
7219_at
            90.2
required for autophagy
                        Ρ
7220 at
            904.2
imparts Far- phenotype
            4640.1
7221_at
cytoplasmic protein involved in mother-specific HO expression
7222 at
            1175.5
Calcium Caffeine Zinc sensitivity
7223 at
            383.8
Amino acid permease
7224 at
            2159.5
Negative regulator of swe1 kinase (which regulates cdc28)
7225_at
            3.9
questionable ORF
7226 at
            4047.6
subunit of the Cdc28 protein kinase
7227_at
            1000.1
```

```
similar to phosphatidylinositol(PI)3-kinases required for DNA damage induced checkpoint responses in
G1, SVM, intra S, and G2VM in mitosis
7228 at
            2731.7
hypothetical protein
                         Ρ
7229 at
            102.7
Unknown
                         Ρ
7230 at
            3797.7
Probable serine-type carboxypeptidase (EC 3.4.16.1)
7231 at
            1940.1
GTPase activating protein
7232 at
            1568.4
                         Ρ
hypothetical protein
7233 at
            2495.9
Probable pre-mRNA splicing RNA-helicase
7234 at
            8785.8
Ominipotent suppressor protein of nonsense codons
7235 at
            363.5
hypothetical protein
7236 at
            5842.5
                         Ρ
alcohol dehydrogenase isoenzyme V
7237 at
            2173.6
Probable mitochondrial ribosomal protein S9
7193 at
            1491.0
strong similarity to hypothetical protein YOL092w
7194 at
            114.4
Spore-specific protein
                         Р
            4918.6
7195 at
D-arabinose dehydrogenase
7196 at
            1397.9
Probable Zn-finger protein
7197_at
            3377.7
weak similarity to potato sucrose cleavage protein
7198 at
            128.2
U4VU6.U5-associated snRNP protein\; contains a PEST proteolysis motif
7199 at
            3300.5
Riboflavin biosynthesis protein
            8208.4
7200 at
25-kDa RNA polymerase subunit (common to polymerases I, II and III)
7201 at
            2229.1
Stress-inducible riboflavin biosynthetic protein homolog
7202 at
            734.4
weak similarity to myosins
7203_at
            176.1
hypothetical protein
                         Ρ
7204 at
            8099.0
hypothetical protein
7205 at
            6993.6
similarity to human 17-beta-hydroxysteroid dehydrogenase
7206_at
            5593.3
protein kinase catalytic subunit
7207 at
            717.9
Homolog to suppressor of reduced viability of starvation (SUR1, S. cerevisiae)
7208 at
            11156.5
similarity to hypothetical protein YJL171c
7209 at
            6505.6
                         Р
Protein that participates in secretory pathway
```

```
7210_at
            2610.0
                        Ρ
hypothetical protein
                        Ρ
7211 at
            6378.7
ADP-ribosylation factor-like protein 1
7212 at
            1311.5
General positive regulator of CDC34\; Suppress some cdc34 mutations when over-expressed
7213 at
            2718.4
Prephenate dehydrogenase (NADP+)
7214 at
            1098.3
Pop7 protein, an integral subunit of RNase P and apparent subunit of RNase MRP
7170 at
            55.3
weak similarity to hypothetical protein YLR324w
7171_at
            1894.8
HSP70 family member, highly homologous to Sse1p
7172 at
            2074.0
Suppressor of SEC63 (S.cerevisiae), novel ER translocation component
7173 at
            6279.3
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
            1408.3
Kinesin-related protein suppressing myosin defects (MYO2)
7175 at
            1701.3
20S proteasome maturation factor
7176 at
            40.1
                        Α
questionable ORF
7177_at
            3199.0
Probable GTP-binding protein
7178 at
            2216.0
Alpha-Ketoisovalerate Hydroxymethyltransferase
7179 at
            7143.7
Probable membrane receptor
7180_at
            -20.1
                        Α
questionable ORF
7181 at
            1334.1
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
            95.1
Probable resistance protein
7183 at
            1711.6
Probable DNA-binding transcription factor, Homolog to SRFVSL-2
7184 at
            7044.2
strong similarity to hypothetical protein YPL087w
7185_at
            254.2
alpha-galactosidase
7186 at
                        Ρ
            1273.5
respiratory chain assembly protein
7187 at
            28.6
Putative ATPase
            9357.2
7188 at
probable membrane protein
7189 at
            1198.7
splicing factor
7190 i at
            12692.5
Ribosomal protein S9B (S13) (rp21) (YS11)
7191_f_at
            10473.8
Ribosomal protein S9B (S13) (rp21) (YS11)
```

```
Ρ
7192_at
            150.2
questionable ORF
                         Ρ
7147 at
            5063.9
Ribosomal protein L21A
7148 at
            1787.2
Probable carrier protein, mitochondrial
7149 at
            403.2
Stoichiometric member of mediator complex
7150 at
            1617.9
hypothetical protein
7151 at
            1947.4
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
            12140.0
Glucose-6-phosphate isomerase
7153 at
            714.7
weak similarity to hypothetical protein YPL077c
7154 at
            4468.7
Probable transcription-associated factor protein, probable -transducin type
7155 at
            4147.8
Putative alpha-1,2-mannosyltransferase
7156 at
            494.4
                         Ρ
contains two SH3 domains
7157 at
                         Ρ
            3072.6
MCM3 protein homolog (S. cerevisiae)
7158 at
            233.8
hypothetical protein
7159 at
            1988.2
                         Ρ
Probable serine-active lipase, peroxisomal (EX 3.1.1.-)
7160 at
            4310.0
Putative alpha-1,2-mannosyltransferase
7161_g_at 6227.6
Putative alpha-1,2-mannosyltransferase
7162_at
            3746.6
questionable ORF
7163 at
            3358.1
probable membrane protein
7164 at
            1050.7
Urea amidolyase (contains urea carboxylase and allophanate hydrolase)
7165_at
            55.0
hypothetical protein
7166 at
            3199.8
                         Ρ
strong similarity to D.melanogaster cornichon protein
            404.1
7167_at
regulator of microtubule stability
7168 at
            2366.0
negative growth regulatory protein
7169 at
            2013.7
Effector in the expression of PAPS reductase and sulfite reductase
7124 at
            2874.2
strong similarity to hypothetical protein YGL056c
7125_at
            1115.0
highly charged, basic protein
7126_at
            723.4
strong similarity to hypothetical protein YGL060w
7127_at
            655.2
```

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autophagy
            9740.0
                        Ρ
7128 at
pyruvate carboxylase
7129 at
            1920.9
similarity to human acetyl-coenzyme A transporter
7130 g at 2300.0
similarity to human acetyl-coenzyme A transporter
7131 at
            8691.1
beta subunit of pyruvate dehydrogenase (E1 beta)
7132_at
            4562.0
Probable AMP-binding protein
7133 at
            1573.1
hypothetical protein
7134 at
            730.0
                        Ρ
questionable ORF
7135 at
            1420.7
                        Ρ
hypothetical protein
7136 at
            194.4
                        Α
questionable ORF
7137_at
            1958.9
Homolog to ATP-binding protein clpX (E.coli)
7138 at
            806.6
similarity to hypothetical A.thaliana protein
7139 at
            2857.7
Homolog to 1,4-a-glucosidase (S.cerevisiae) (EC 3.2.1.3) 3
            3714.7
7140_at
hypothetical protein
7141 at
            700.6
                        Ρ
similarity to human p97 homologous protein
7142 at
            273.9
questionable ORF
7143_at
            864.9
Homolog to human hnRNP complex K protein
7144_at
            6402.5
similarity to human Arp2/3 protein complex subunit p41-Arc and to human Sop2p-like protein
7145 at
            1069.1
similarity to bumetanide-sensitive Na-K-Cl cotransport protein
7146 at
            3681.4
RNA (guanine-7-)methyltransferase (cap methyltransferase)
7102_at
            588.9
RNA helicase homolog
7103 at
            2197.7
strong similarity to general chromatin factor Spt16p
            1461.9
7104_at
Probable Zn-finger protein
7105 at
            388.4
Probable Zn-finger protein
7106 at
            4408.9
Probable sugar transport protein
7107 at
            2412.9
                        Ρ
Probable ATPVGTP-binding protein
7108 at
            5901.7
UDP-N-acetyl-glucosamine-1-P transferase (GPT)
7109 at
            1243.3
Probable glutathione peroxidase (EC 1.11.1.9)
7110_at
            3111.5
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Homolog to SNF2VSWI2 DNA-binding regulatory protein
7111 at
            5337.4
                        Ρ
hypothetical protein
7112 at
            6922.0
                        Ρ
Putative 57 kDa protein with an apparent MW of 70 kDa by SDS-PAGE
7113 at
            8654.8
glutamine amidotransferase:cyclase
7114 at
            10193.5
3-deoxy-D-arabino-heptulosonate 7-phosphate (DAHP) synthase isoenzyme
7115_at
            116.3
hypothetical protein
                        Ρ
7116 at
            1417.0
Probable mitochondrial ribosomal protein S5
7117 at
            10314.5
dUTP pyrophosphatase (dUTPase)
7118 at
            380.2
                        Ρ
transcription factor, part of SrbVMediator complex
7119 at
            2139.3
probable membrane protein
7120_at
            330.8
hypothetical protein
                        Ρ
7121 at
            1133.4
Riboflavin synthase alpha-chain
7122 at
                        Ρ
            969.5
Required for normal 5.8S rRNA processing and for tRNA processing\; associated with RNase MRP and
RNase P
                        Ρ
7123 at
            696.8
hypothetical protein
7079 at
                        Ρ
            532.4
hypothetical protein
7080 at
            2595.8
similarity to C.elegans GTPase-activating protein
7081 at
            7330.9
                        Ρ
similarity to hypothetical S. pombe protein
7082 at
            3801.8
                        Ρ
questionable ORF
7083 at
            10902.0
Serine hydroxymethyltransferase, mitochondrial
7084 at
            2175.9
                        Ρ
Probable small GTP-binding protein
7085 at
            7434.2
probable membrane protein
7086 at
            2180.5
Probable mitochondrial protein L37
7087 at
            2141.0
hypothetical protein
7088 at
            355.3
Probable ATPVGTP-binding protein
7089 at
            1825.0
weak similarity to S.pombe uvi22 protein and hypothetical protein YNL024c
7090 at
            810.6
Hsm3p may be a member of the yeast MutS homolog family
7091 at
            2721.5
similarity to hypothetical protein YJL048c
7092 at
            1137.2
Probable protein kinase (growth factor & cytokine receptor family)
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7093_at
            957.6
RAP1-interacting factor, involved in establishment of repressed chromatin
7094 at
            3288.6
dual specificity protein phosphatase
7095 at
            16.0
questionable ORF
7096_at
                        Ρ
                                                                                                    С
            1152.6
and C subunits of DNA polymerase II
7097 at
            1947.6
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
            1587.3
hypothetical protein
7099 at
            1356.7
Probable G-protein, -transducin type
7100 at
            2490.1
Mitochondrial ribosomal protein MRPL27 (YmL27)
7101 at
            8482.1
Probable SEC61 protein homolog
7057_at
            322.5
similarity to AMP deaminase
7058 at
            -31.4
hypothetical protein
                        Ρ
7059 at
            14669.0
Aminopeptidase vscIII
7060 at
            6796.3
                        Ρ
similarity to hypothetical S. pombe protein
7061 at
            1685.5
clathrin associated protein medium chain
7062 at
            2086.4
transcriptional activator
7063_at
            1760.6
metal homeostasis protein\; putative membrane protein
7064_at
            10161.9
citrate tranporter in mitochondrial inner membrane
7065 at
            1025.1
                        Μ
hypothetical protein
                         Р
7066 at
            2158.9
Probable multidrug resistance protein
7067_at
            78.9
Probable sulfate transport protein
7068 at
            1534.3
Putative P-type Cu(2+)-transporting ATPase
7069_at
            8152.7
Homolog to phosphate-repressible phosphate permease
            410.6
7070 at
Maltose fermentation regulatory protein
7071 s at 646.0
maltose permease
                         Ρ
7072 s at 178.1
Maltase (EC 3.2.1.20)
                         Ρ
7073_at
            433.5
strong similarity to hypothetical protein YGR293c
7074_f_at
            2026.1
YKL224 c homolog
7075_at
            107.2
                        Α
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hypothetical membrane protein
7076 at
            2479.8
identified by SAGE
7077 at
            5127.0
                         Ρ
identified by SAGE
                        Ρ
7078 at
            1666.7
hypothetical protein
7033 at
            337.5
                        Ρ
questionable ORF - upstream ORF of ALG1
7034_i_at
            6706.1
identified by SAGE
7035 s at 12452.5
                        Ρ
identified by SAGE
7036 s at 2394.9
Protein involved in targeting of plasma membrane [H+]ATPase
7037 s at 678.6
Probable aldehyde dehydrogenase (EC 1.2.1.-)
7038 s at 1958.6
Degradation in the Endoplasmic Reticulum
7039 at
            -29.3
probable membrane protein
7040 g at 130.5
probable membrane protein
7041 s at 2509.6
Probable Zn-finger protein (C2H2 type)
7042 at
            873.8
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
            1769.3
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
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
            5150.8
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 8959.4
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
            3422.9
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
            643.6
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
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
            1929.4
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
            47.7
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
            561.4
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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
            -14.3
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
            -581.5
7054 i at
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
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
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
            320.7
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 2550.0
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
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
            15.7
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
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
            450.3
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
            1393.8
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
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
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
            1628.5
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
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
            9486.9
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
            -131.1
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
            1597.2
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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

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7024_at
            -62.2
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
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
            1144.7
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
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
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
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
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
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
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
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
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
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
            -124.3
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
            429.4
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
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
            908.7
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
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 5613.7
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
            1532.8
non-annotated SAGE orf Found reverse in NC_001134 between 747849 and 748010 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
6995 at
            1714.3
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
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
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
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
            1430.4
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
            -24.8
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 56.2
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
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
            -8.0
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
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
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
            -194.6
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
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
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 1262.1
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
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
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 1841.8
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
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20.8

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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 74.9
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
            1817.1
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
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
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
            179.3
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
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
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
            -121.0
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
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
            1968.1
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
            7270.6
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
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
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
            1833.1
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
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
            2304.8
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
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
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 129.6 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 2315.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 1 and 1000 with 100% identity.

6939 g at 1932.5 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 1 and 1000 with 100% identity.

6940 s at 333.7 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 1001 and 2000 with 100% identity.

6941_s_at 381.0 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 2001 and 3000 with 100% identity.

6942 at 231.8

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 3001 and 4000 with 100% identity.

6943 g at 181.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 3001 and 4000 with 100% identity.

6944 at 150.7 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 4001 and 5000 with 100% identity.

6945 g at 1554.2 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 4001 and 5000 with 100% identity.

6946 at 2850.6 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 5001 and 6000 with 100% identity.

6947_g_at 4261.4 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 5001 and 6000 with 100% identity.

6948 i at 100.7 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 6001 and 6215 with 100% identity.

6949 f at 443.0 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 6001 and 6215 with 100% identity.

6950_at 3282.4 P

snRNA

6951_at 6615.3 F

telomerase RNA component

6952_at 5283.3 I

telomerase RNA component

Α

6953_at 98.9

55_at 96.9

snRNA

6954_at 195.6 A

snRNA

6955 s at 127.8

putative pseudo-TY5

6956_s_at 225.4 P

Reverse transcriptase

6957_s_at 808.7

Bud site selection

6958_s_at 3049.9 P

```
Mating type protein alpha-2
6959 s at 4474.3
transcripton factor involved in the regulation of the alpha-specific genes
6960 at
            -115.4
questionable ORF
                        Ρ
6961_g_at 7090.4
questionable ORF
                        Ρ
6915_at
            2715.7
catabolic serine (threonine) dehydratase
            2560.1
6916_at
weak similarity to yeast translation regulator Gcd6p
6917 at
            781.8
similarity to myosin heavy chain form b from Chicken and Xenopus
6918 at
            3973.4
strong similarity to human Rev interacting protein Rip-1
6919 at
            754.8
hypothetical protein
6920 at
            4826.9
                        Ρ
Saccharolysin (oligopeptidase yscD)
6921_at
            5501.5
hypothetical protein
6922_at
            1527.0
May assist Ste12p in pheromone-dependent expression of KAR3 and CIK1
6923 at
            1919.1
                        Ρ
Methyltransferase
                        Ρ
6924_at
            2518.8
Protease B Non-derepressible
6925 at
            1518.5
involved in laminarinase resistance
6926 at
            5791.9
diadenosine 5,5 -P1,P4-tetraphosphate phosphorylase I
            6488.9
6927_at
hypothetical protein
6928_at
            17.0
strong similarity to sporulation-specific protein Sps2p
6929 at
            1168.5
hypothetical protein
6930_at
            2704.4
weak similarity to human ORF
6931_at
            82.5
                        Α
questionable ORF
6932 at
            2027.1
                        Ρ
hypothetical protein
                        Ρ
            12665.6
6933_at
protein disulfide isomerase
6934_at
            445.5
questionable ORF
6935 at
            997.8
                        Ρ
questionable ORF
                        Ρ
6936_g_at 8854.0
questionable ORF
6937_at
            9194.9
                        Ρ
Glucokinase
6893_at
            1132.1
regulatory protein
                        Ρ
6894_at
            2268.3
```

```
Membrane transporter
6895 at
            9615.2
SRO9 may overlap in function with tropomyosin and may be involved in organization of actin filaments
            4304.1
6896 at
similarity to hypothetical protein YDR514c
6897 at
            7771.7
Glutaredoxin (thiol-transferase)
6898 at
            3942.4
similarity to hypothetical S.pombe protein
6899_at
            2943.9
Transcription regulator
                         Р
            457.6
6900 at
possesses a SAM (sterile alpha motif): interacts with G protein and Ste11p
6901 at
            1653.1
involved in pre-rRNA processing and ribosome assembly
6902 at
            12619.8
histidinol dehydrogenase
6903 at
            491.0
                         Ρ
Microtubule-binding protein
6904_at
            7390.5
weak similarity to glutenins, high molecular weight chain
6905 at
            2322.6
serine\threonine-rich membrane protein
            995.9
6906 at
Protein involved in the integration of lipid signaling pathways with cellular homeostatis
6907_at
            3270.5
Amino acid permease
            108.0
                         Ρ
6908_at
questionable ORF
                         Ρ
            7706.5
6909 at
beta-IPM (isopropylmalate) dehydrogenase
6910_at
            7770.3
NifS-like protein
6911 at
            984.2
                         Ρ
hypothetical protein
6912 at
            1061.0
Cell cycle regulated protein required for axial bud formation\; co-assembles with Bud4p at bud sites
6913_at
            1692.1
part of budding protein Bud3p due to frameshift in DNA sequence
6914_at
            6149.8
Protein with RNA recognition motifs
6870 at
            855.8
strong similarity to Saccharomyces pastorianus hypothetical protein LgYCL010c
            9719.3
6871_at
Small regulatory subunit of Acetolactate synthase
6872 at
            173.1
                         Ρ
Calcofluor White Hypersensitivity
6873 at
            268.7
questionable ORF
                         Ρ
6874 at
            2023.3
strong similarity to Saccharomyces pastorianus hypothetical protein LqYCL005w
6875_at
            318.4
17-kDa phosphatidylserine synthase
6876 at
            2256.9
strong similarity to Saccharomyces pastorianus hypothetical protein LgYCL002c
6877_at
            4730.2
```

```
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
            45.7
                         Α
similarity to Dom34p
6879 at
            37.1
                         Α
hypothetical protein
                         Ρ
6880_at
            5836.8
conserved potential GTP-ginding protein
6881 at
            2386.7
Mitochondrial ribosomal protein MRPL32 (YmL32)
6882 at
            8216.0
FMN-binding protein
                         Ρ
            8027.5
6883 at
non-mitochondrial citrate synthase
6884 at
            199.1
hypothetical protein
6885_at
            5736.3
                         Ρ
SerVThr protein kinase
6886 at
            7346.6
                         Ρ
Reduced viability on starvation protein RVS161
            368.5
6887_at
strong similarity to Y.lipolytica GPR1 protein and Fun34p
6888 at
            3805.1
Active transport ATPase
6889 at
            35.6
weak similarity to M.leprae B1496_F1_41 protein
6890 at
            5762.0
3-phosphoglycerate kinase
6891 at
            428.5
DNA polymerase IV
6892 at
                         Ρ
            819.8
hypothetical protein
                         Ρ
6848 at
            1054.5
hypothetical protein
6849 at
                         Ρ
            5519.6
similarity to hypothetical S.pombe protein
6850 at
            1971.5
Transcription regulator
                         Ρ
6851 at
            1484.7
MAK32 sugar kinase
                         Ρ
6852 at
            331.4
Transcription regulator
6853 at
            4122.1
                         Ρ
MAK31 snRNP
                         Р
6854 at
Protein induced by heat shock, ethanol treatment, and entry into stationary phase\: located in plasma
membrane
6855 at
            281.8
                         Α
hypothetical protein
                         Ρ
6856 at
            2183.5
Membrane transporter
                        Ρ
6857_at
            557.5
Asn-tRNA synthetase
6858_f_at
            12781.8
Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)
6859_at
            -156.7
```

```
hypothetical protein
                        Ρ
6860 at
            496.0
Membrane phospho-diesterase
6861 at
            455.5
GTPase (RAS-related)
                        Ρ
6862 at
            2004.2
Amino acid permease
6863 at
            7706.9
                        Ρ
required for mitochondrial DNA replication
6864_at
            8410.1
required for mitochondrial DNA replication
6865 at
            1785.9
weak similarity to S.pombe hypothetical protein SPBC4C3.06
6866 at
            11632.7
Ribosomal protein S14A (rp59A)
6867 at
            997.8
Beige Protein Homologue 1
6868 at
            3141.8
similarity to mouse nuclear receptor co-repressor N-Cor
6869 at
            8882.2
Probable subunit of 1,3-beta-glucan synthase\; homolog of ELO1
6825 at
            2278.8
Component of the exosome 3->5 exoribonuclease complex with Rrp4p, Rrp41p, Rrp42p and Dis3p
(Rrp44p).
                        Ρ
6826 at
            3871.3
ribokinase
6827 at
            3256.0
May collaborate with Pho86p and Pho84p in inorganic phosphate uptake\; protein contains 12 predicted
transmembrane domains
                        Р
6828 at
            533.1
GTPVGDP exchange factor for Rsr1 protein
6829_at
            30.2
                        Α
questionable ORF
6830 at
            686.3
                        Ρ
TATA binding protein-associated factor (TAF)
6831 at
            2030.4
                        Ρ
hypothetical protein
            2720.1
6832_at
involved in manganese homeostasis
6833_at
            -147.8
                        Α
Protease
6834 at
            3785.9
                        Ρ
required for respiration and maintenance of mitochondrial genome
6835_at
            3511.6
Protein carboxyl methylase
6836 at
            88.9
                        Α
questionable ORF
6837 at
            7899.9
                        Ρ
Acyl-CoA cholesterol acyltransferase (sterol-ester synthetase)
6838 at
            3.9
questionable ORF
                        Ρ
6839_at
            2616.8
weak similarity to ankyrins
6840 at
            1869.2
a subunit of RSC, a fifteen-protein chromatin remodeling complex and related to the SwiVsnf Complex.
6841_at
            8432.8
```

```
threonine synthase
6842 at
            609.6
CTR86 shares a terminator region with THR4. CTR86 contains aGCN4 responsive site suggesting it may
also be involved in amino acid biosynthesis.
6843 at
            1633.2
                        Ρ
regulatory protein
            5659.8
                         Ρ
6844_at
weak similarity to hypothetical protein YDL177c
6845 at
            4759.2
regulatory protein
6846 at
            9813.7
                         Ρ
hypothetical protein
                         Ρ
6847 g at 8078.8
hypothetical protein
                         Р
6803 at
            7993.5
similarity to Ytp1p protein
6804 at
            11.6
                         Α
questionable ORF
6805 at
            1533.4
                         Ρ
G10-like protein
6806 at
            3190.4
                         Р
Transcription factor (fork head domain)
6807 at
            332.7
Zn finger protein, putative ATPase
6808 at
            4136.0
Intracellular transport protein
6809 at
            752.5
                         Ρ
similarity to hypothetical S.pombe protein
6810_g_at 758.1
similarity to hypothetical S.pombe protein
6811 at
            5311.2
cyclophilin homolog
6812 at
            1229.9
(required for) Integrity of Mitochondrial Genome 2
                        Ρ
6813 at
            5818.0
regulatory protein
                         Ρ
6814 at
            845.8
protein kinase
                         Ρ
6815 at
            7811.7
shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains\; homologous to Sol1p
and Sol3p
6816 at
            1817.0
                         Ρ
ERS1 protein, ER defect supressor
6817_at
            2222.8
                         Р
hypothetical protein
6818 at
            4770.9
Necessary for accurate chromosome transmission during cell division
6819 at
            895.6
weak similarity to A.thaliana protein phosphatase 2C
6820 at
            1401.7
activation mediator subcomplex of RNA polymerase I holoenzyme
            5792.3
6821_at
weak similarity to Rbk1p
6822 at
            2073.7
Thioredoxin type II
                         Ρ
6823_at
            6654.1
```

```
glucose repression regulatory protein, exhibits similarity to beta subunits of G proteins
6824 at
            254.6
                         M
hypothetical protein
6780 at
             1993.4
                         Ρ
hypothetical protein
                         Ρ
6781 at
             1133.9
questionable ORF
                         Ρ
6782 at
            3240.6
nucleic acid-binding protein
6783_at
            4592.8
Actin binding protein
                         Р
6784 at
            2829.0
predicted GPI-anchored cell wall protein
6785 at
            3164.6
hypothetical protein
6786 at
            -7.2
Putative serine Vthreonine protein kinase most similar to cyclic nucleotide-dependent protein kinase
subfamily and the protein kinase C subfamily
6787 at
            452.0
mutS homolog, forms a complex with Msh2p to repair insertion-deletion mispairs\; redundant with
Pms3VMsh6p in repair of insertion-deletion mispairs
6788 at
             1988.9
nuclear protein that negatively regulates basal transcription
6789 at
            2659.8
Cell Division Cycle mutant
6790 at
            430.9
hypothetical protein
6791_s_at -21.4
Homeobox-domain containing protein which, together with alpha2, represses transcription of
haploid-specific genes in diploid cells
6792 s at -23.4
Homeobox-domain containing protein which, together with alpha2, represses transcription of
haploid-specific genes in diploid cells
6793_at
            281.1
permease involved in the uptake of glycerophosphoinositol (GroPIns)
6794 at
            500.9
strong similarity to Pep1p
6795_at
            1152.3
strong similarity to Pep1p
6796_at
            7.6
strong similarity to Pep1p
6797 at
            1110.2
Alcohol dehydrogenase
6798_f_at
            1401.9
member of the seripauperin protein/gene family (see Gene class PAU)
6799 at
            460.5
Alcohol dehydrogenase
                         Р
6800 at
            778.7
Transcription regulator
6801 at
            69.2
                         Α
hypothetical protein
                         Ρ
6802_at
            328.5
hypothetical protein
6755_i_at
            36.9
                         Α
hypothetical protein
                         Ρ
6756_at
            202.2
```

```
high-temperature lethal
6757 i at -7.5
Homeobox-domain containing protein which, together with alpha2, represses transcription of
haploid-specific genes in diploid cells
6758 at
            103.4
hypothetical protein identified by SAGE
6759_at
            6150.6
identified by SAGE
6760_g_at 11977.2
identified by SAGE
6761 at
            590.4
similarity to starvation induced pSI-7 protein of C. fluvum
6762 s at 531.0
SerVThr protein kinase
6763 at
            2508.5
homologous to mouse and human Tsg101 tumor susceptibility genes
6764 g at 1081.9
homologous to mouse and human Tsg101 tumor susceptibility genes
6765 at
            -242.0
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
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
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
            1595.5
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
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
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 106.4
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
            -235.0
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
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
            757.9
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
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
            614.8
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
            1786.7
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
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6778_i_at 6010.1
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
           48.6
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
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
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
            11676.7
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
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
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 15.4
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
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
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
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
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
            -110.5
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
            1331.7
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
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
            52.2
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
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
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
            4695.8
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
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6748_at
            -25.7
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
            -36.1
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
            430.1
TY5-1
6751_at
            462.8
                        Ρ
snRNA
6752_i_at
            -50.6
                         Α
Centromere
                         Ρ
6753 at
            4228.7
snRNA
6754 at
            22.4
                         Α
snRNA
6708 at
            622.0
                        Ρ
snRNA
6709 i at
            88.4
strong similarity to sugar transport proteins
            1940.5
6710 at
Hypothetical aryl-alcohol dehydrogenase
6711 at
            13.5
strong similarity to hypothetical protein YPR079w
6712 at
            1224.7
hypothetical protein
6713 at
            1071.0
Protein similar to LIM-domain proteins and to rhoVrac GTPase-activating family of proteins
6714 at
            381.5
hypothetical protein
6715 at
            556.4
similarity to E.coli hypothetical protein and to chlorohydrolases
6716 at
            3916.2
hypothetical protein
6717 at
                        Ρ
            9651.7
p-nitrophenyl phosphatase
6718 at
            2499.3
Two-component phosphorelay intermediate
6719 at
            1051.8
protein of unknown function
6720 at
            480.7
hypothetical protein
                         Ρ
6721_at
            9613.7
3.6-kDa protein, probably membrane-located
6722 at
            942.9
hypothetical protein
6723 at
            2614.0
phosphotyrosine-specific protein phosphatase
6724 at
            273.7
similarity to A.klebsiana glutamate dehydrogenase
6725 at
            4659.6
Homothallic switching endonuclease
6726 at
            3882.3
ADP-ribosylation factor GTPase-activating protein (ARF GAP)
            2609.6
6727_at
similarity to Cdc11p, Cdc3p and human CDC10 protein
```

```
6728_at
            2344.0
Possible RNA binding protein. Homolog of Whi3.
6729 at
            1290.2
weak similarity to mucin
6730 at
            362.5
strong similarity to hypothetical protein YNL194c and similarity to YML052w
6686_at
            -214.8
questionable ORF
6687_at
            873.8
binds to single-stranded TG1-3 telomere G-tails
6688 at
            4242.3
strong similarity to S.equisimilis hypothetical protein
6689 at
            4750.6
strong similarity to S.equisimilis hypothetical protein
6690 at
            257.8
weak similarity to hypothetical protein YNR061c
6691 at
            2656.7
Mitochondrial inner membrane protein involved in import of proteins of the ADPVATP carrier (AAC) family
6692 at
            279.8
similarity to Jun activation domain binding protein homologue of A. thaliana
            1747.8
6693 at
NAD-dependent glutamate dehydrogenase
6694 at
            -65.8
strong similarity to putative protein kinase NPR1
6695 at
            2185.8
has an RNA recognition domain in the N-terminal region
6696_at
            10961.6
Integral membrane component of the endoplasmic reticulum
6697 at
            189.5
similarity to hypothetical protein YNL176c
6698 at
            97.8
GABA-specific transport protein
6699 at
            809.9
                         Ρ
similarity to hypothetical S. pombe protein
            12405.6
6700 at
HMG-like nuclear protein
6701 at
            747.2
Nuclear-export-signal (NES)-containing protein
6702 at
            515.5
                         Ρ
weak similarity to transporter proteins
6703 at
            444.2
phorphobilinogen deaminase (uroporphyrinogen synthase), the third step in heme biosynthesis
6704_at
            191.6
similarity to hypothetical protein YDR233c
6705 at
            620.5
                         Ρ
similarity to Skt5p
6706 at
            773.8
Mitochondrial ribosomal protein MRPL11 (YmL11)
6707 at
            3897.3
strong similarity to human D1075-like protein
6663_at
            633.2
6-O-methylguanine-DNA methylase
6664 at
            201.7
                         Α
similarity to sugar transporter proteins
6665_at
            6763.9
high copy suppressor of abf2 lacking the HMG1-like mitochondrial HM protein\; putative mitochondrial
```

```
carrier protein
6666 at
            1506.2
Anti-silencing protein that causes depression of silent loci when overexpressed
6667 at
            232.6
hypothetical protein
                         Ρ
6668_at
            10664.5
involved in protein transport from endoplasmic reticulum to Golgi
6669 at
            288.2
glucose transporter
6670_at
            1988.9
similarity to N.crassa hypothetical 32 kDa protein
6671 at
            3219.0
ADP-ribosylation factor
                         Ρ
6672_s_at 8381.6
Ribosomal protein L35A
6673 at
            3264.8
ubiquitin fusion degradation protein
6674 at
            419.8
hypothetical protein
6675_at
            781.4
                         Ρ
hypothetical protein
                         Ρ
6676_at
            3597.3
serine-threonine protein phosphatase 2A
6677 at
                         Ρ
            275.5
questionable ORF
6678_at
            266.5
                         Α
hypothetical protein
                         Р
6679 at
            10625.6
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+)-ATPase, and B is a 50K site-specfic endonuclease named VDE (PI-Scel) that is
homologous to HO. Cleavage is meiosis-specific and induces gene conversion at the TFP1 locus.
6680_s_at 5275.9
Ribosomal protein L41A (YL41) (L47A)
6681_at
            324.6
weak similarity to S.pombe hypothetical protein SPAC23H3
6682 at
            12415.7
homocitrate synthase, highly homologous to YDL131W
6683_g_at 13581.5
homocitrate synthase, highly homologous to YDL131W
6684_at
            1016.6
ATPase inhibitor
6685 at
            1886.7
                         Ρ
hypothetical protein
                         Ρ
6641_at
            1223.7
PHO85 cyclin
                         Ρ
6642 at
            4539.6
D-Lactate Dehydrogenase (Cytochrome)
6643 at
            570.8
similarity to hypothetical protein YCR059c
6644 at
            141.0
                         Ρ
hypothetical protein
                         Ρ
6645_at
            918.1
strong similarity to hypothetical protein YIL079c and weak similarity to cellular nucleic acid binding
proteins
6646_at
            8439.3
mitochondrial enzyme D-lactate ferricytochrome c oxidoreductase
```

```
6647_at
                        Ρ
            3042.8
hypothetical protein
                        Ρ
6648 at
            766.9
questionable ORF
6649 at
            7570.1
Glutamate synthase (NADPH)
6650 at
            519.7
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
6651 at
            309.4
protein of unknown function
6652 at
            3451.0
Long-chain alcohol dehydrogenase (glutathione-dependent formaldehyde dehydrogenase)
6653 at
            2229.4
Asparagine-rich protein
                        Ρ
6654 at
            3788.2
weak similarity to Pyrococcus horikoshii hypothetical protein PHBJ019
6655 at
            3908.0
nuclear protein that negatively regulates basal transcription
6656 at
            1748.7
DNA ligase
                         Α
6657_at
            -97.7
questionable ORF
6658 at
            -167.3
                         Α
hypothetical protein
6659 at
            1241.4
strong similarity to hypothetical protein YLR206w and to human KIAA0171 protein
6660 at
            3799.5
Putative RNA helicase of DEAD box family, required for Rap1p localization to telomeres
6661 at
            1054.8
MEK homolog
            1519.9
                        Ρ
6662 at
questionable ORF
                         Ρ
6618 at
            7969.3
hypothetical protein
            188.1
                         Α
6619 at
weak similarity to Pas7p
6620 at
            2292.5
G(sub)2-specific B-type cyclin
6621 at
            385.0
                        Α
MutS homolog involved in chromosome exchange
6622 at
            5849.4
Something About Silencing 10
6623_at
            282.8
                        M
questionable ORF
6624 at
                        Α
            53.7
questionable ORF
6625 at
            2423.4
RNA polymerase III (C) subunit, homologus to human BN51 protein
6626_at
            225.3
hypothetical protein
                        Ρ
6627_at
            2018.8
similarity to human mRNA clone RES4-25
6628 at
            7003.8
Subunit of the regulatory particle of the proteasome
6629_at
            392.5
weak similarity to Orc3p
```

```
6630_at
            11291.3
                         Ρ
alpha subunit of the coatamer complex\; gamma-alpha-COP
6631 at
            3972.5
hypothetical protein
                         Ρ
6632 at
            7065.6
Cytoplasmic chaperonin subunit required for actin cytoskeleton assembly or function
6633_at
            1312.5
Cardiolipin synthase
6634 at
            1742.1
                         Ρ
Biotin:apoprotein ligase
                         Ρ
6635 at
            9929.5
RNA polymerase II large subunit
6636 at
            393.5
                         Ρ
hypothetical protein
                         Ρ
6637 at
            618.4
suppressor of snf3 mutant
6638 at
            13203.7
ADP-ribosylation factor 2
6639 at
            6664.9
Rho GDP dissociation inhibitor with activity toward Rho1p
6640 at
            684.9
serine-threonine protein phosphatase 2A
6595 at
            2014.0
hypothetical protein
6596 at
            2762.5
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
            12994.2
6597 at
homocitrate synthase, highly homologous to YDL182W
6598 at
            5633.6
ATPase stabilizing factor
6599_at
            11139.7
Ribosomal protein P1B (L44) (YP1beta) (Ax)
6600_at
            4515.4
Ribosomal protein P1B (L44) (YP1beta) (Ax)
6601 at
            1173.4
hypothetical protein
                         Ρ
            7511.1
6602_at
vacuolar H+VCa2+ exchanger
6603_at
            1568.9
G1 cyclin
6604 at
            10867.0
Microsomal protein of CDC48\PAS1\SEC18 family of ATPases\; full length homology to mammalian
protein VCP\; involved in secretion, peroxisome formation and gene expression
6605 at
            10266.9
Yeast member of the Histidine Triad protein family (HIT)
6606 at
            463.2
Yeast member of the Histidine Triad protein family (HIT)
            4043.7
6607_at
                         Р
similarity to aldose reductases
6608 at
            2080.6
                         Ρ
similarity to hypothetical protein YJL151c
6609 at
            5891.6
Ubiquitin-specific protease
6610 at
            1757.6
                         Ρ
hypothetical protein
```

```
6611_at
            2794.5
Mitochondrial protein that regulates mitochondrial iron accumulation iron accumulation
6612 at
            1359.3
similarity to bovine Graves disease carrier protein
6613 at
            116.6
questionable ORF
                         Ρ
6614 at
            3844.1
similarity to hypothetical S. pombe protein
6615 at
            3796.4
Protein with homology to mammalian Nup107p
6616 at
            667.1
hypothetical protein
6617 at
            -267.8
weak similarity to Rhizobium nodulation protein nodG
6573 at
            457.0
                         Ρ
similarity to hypothetical protein YDR425w
6574 at
            2606.0
similarity to C-terminus of human TRP-185 protein
6575 at
            3846.8
Component of the exosome 3->5 exoribonuclease complex with Rrp4p, Rrp41p, Rrp43p and Dis3p
(Rrp44p).
                         Ρ
6576 at
            1846.7
hypothetical protein
                         Ρ
6577 at
            626.7
strong similarity to thiamine-repressed protein Thi4p
6578_at
            1229.6
serine-threonine kinase, subunit of transcription factor TFIIK, a subcomplex of TFIIH
6579 at
            252.9
cox1 pre-mRNA splicing factor
6580 at
            146.6
Homeobox-domain containing protein which is a positive regulator of PHO5 and other genes
6581_at
            279.5
protein of unknown function
6582_at
            123.8
similarity to H.influenzae sialoglycoprotease (gcp)
6583 at
            2870.2
UDP-N-acetylglucosamine pyrophosphorylase
6584 at
            980.2
largest and catalytic subunit of DNA polymerase III (delta)
6585_at
            885.8
protein kinase
6586 at
            6772.4
similarity to E.coli arsenical pump-driving ATPase
            3842.4
6587_at
weak similarity to myosin heavy chain proteins
            1215.7
6588 at
hypothetical protein
6589 at
            7998.2
                         Ρ
Subunit of the regulatory particle of the proteasome
6590 at
            381.7
questionable ORF
                         Ρ
6591_at
            9477.8
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
6592_at
            42.4
questionable ORF
                         Ρ
6593_at
            2014.2
```

```
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
6594 at
            3673.4
Signal recognition particle subunit
6550 at
            418.3
weak similarity to mouse FAF1 protein
6551 at
            3341.2
beta subunit of farnesyltransferase
6552 at
            2215.1
hypothetical protein
                         Ρ
6553_at
            1982.3
Suppressor of thermosensitive mutations in the DNA polymerase delta gene
6554 at
            862.1
Living Under Cap-binding complex expression
6555 at
            11714.6
similarity to hypothetical Synechocystis protein
6556 at
            -256.2
strong similarity to NADH dehydrogenase (ubiquinone)
6557 at
            9614.4
suppressor of the cold-sensitive snRNP biogenesis mutant brr1-1
6558_i_at
            12337.8
Ribosomal protein S16B (rp61R)
6559 f at
            11105.2
Ribosomal protein S16B (rp61R)
6560 at
            16190.6
Ribosomal protein L13A
6561_at
            6858.7
Acidic ribosomal protein P1A (YP1alpha) (A1)
            1784.3
6562 at
positive regulatory factor with thiamin pyrophosphate-binding motif for thiamin metabolism
6563 at
            651.6
MDS1 related protein kinase
6564_at
            102.1
MDS1 related protein kinase
6565_at
            4880.1
malate dehydrogenase
                        Ρ
6566 at
            1298.9
Required for the vacuolar morphogenesis in yeast
6567_at
            1530.5
hypothetical protein
6568_f_at
            16846.1
Ribosomal protein L31A (L34A) (YL28)
6569 at
            7065.3
Ribosomal protein L31A (L34A) (YL28)
6570_at
            2178.1
weak similarity to spindle pole body protein NUF1
6571 at
            1425.8
weak similarity to Cyprinus carpio calcium channel protein
6572 at
            5753.7
weak similarity to hypothetical protein YMR040w
6527 at
            2007.5
questionable ORF
6528_at
            5515.9
Bromodomain protein, homolog of Bdf1
6529 at
            775.3
translational activator of cytochrome b
6530_at
            239.0
```

```
questionable ORF
6531 at
            7582.2
Subunit VIIa of cytochrome c oxidase
6532 at
            9387.0
                        Р
Mitochondrial form of NADP-specific isocitrate dehydrogenase
6533 at
            1001.0
40 kDa farnesylated protein associated with peroxisomes
6534 at
            5844.1
ubiquitin-conjugating enzyme
6535_at
            3298.0
weak similarity to human estrogen-responsive finger protein
6536 at
            193.6
questionable ORF
6537_f_at
           10954.5
Ribosomal protein S29B (S36B) (YS29)
6538 at
            8174.6
similarity to C.elegans hypothetical protein
6539 at
            762.4
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
            1553.5
Integrin analogue gene
                        Ρ
6541 at
            890.1
hypothetical protein
6542_at
            1337.1
                        Ρ
transcription factor
            14175.7
                        Р
6543 at
mannose-1-phosphate guanyltransferase, GDP-mannose pyrophosphorylase
6544 at
            2507.9
hypothetical protein
6545_at
                        Ρ
            4004.1
hypothetical protein
6546_at
            6848.9
putative 1-acyl-sn-gylcerol-3-phosphate acyl transferase
6547 at
            3766.6
Protein homologous to human La (SS-B) autoantigen
6548_at
            840.5
questionable ORF
6549_at
            442.1
                        Ρ
KRE9 homolog
6504 at
            2124.2
SIT4 suppress mutations in DBF2
6505_at
            9099.1
                        Ρ
hypothetical protein
6506 at
            3663.8
homologous to Yml37p, component of the 37 S subunit of mitochondrial ribosomes
6507 at
            1071.0
FAD synthetase
6508 at
            1048.3
Necessary for the stability and/or processing of some large mitochondrial transcripts
            869.9
6509 at
snRNA-associated protein
6510 at
            1088.7
regulator of silent mating loci
6511_at
            812.7
```

```
questionable ORF
6512 at
            3757.6
N-terminal acetyltransferase
            5115.2
6513 at
questionable ORF
                         Ρ
6514_at
            2815.8
similarity to mucin proteins
6515_at
            3510.9
strong similarity to glucan 1,4-alpha-glucosidase
6516_at
            2528.7
strong similarity to RIB2 protein
6517 at
            1735.1
G-protein coupled receptor
6518 at
            85.5
                         Α
questionable ORF
6519 at
            1953.0
                         Ρ
similarity to H.influenzae hypothetical protein HI0174
6520 at
            400.1
questionable ORF
6521_at
            3050.6
                         Ρ
DEAD box protein 10
                         Ρ
6522_at
            796.1
RNA splicing factor
                         Ρ
6523 at
            7469.1
actin-related protein
6524_at
            607.5
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
            485.4
                         Ρ
hypothetical protein
6526 at
             115.9
                         Α
questionable ORF
6482 at
            1476.2
ser/thr protein kinase of the DEAD/DEAH box family
6483 at
            1272.2
strong similarity to acid phosphatase
6484 at
            30.8
questionable ORF
                         Р
6485 at
            4449.4
glycerol-3-phosphate dehydrogenase
6486_at
            500.5
Similar to GPM1 (phosphoglycerate mutase)
6487 at
            4454.2
involved in ubiquitin degradation pathway
6488 at
            3294.0
similarity to Osh1p
6489 at
            937.5
p24 protein involved in membrane trafficking
6490 at
            1363.0
serineVthreonine protein kinase
6491 at
             128.4
                         Α
questionable ORF
6492_at
            8055.3
similarity to rat synaptic glycoprotein SC2
```

```
6493_at
            10844.3
                        Ρ
nucleolar protein, homologous to mammalian fibrillarin
6494 at
            2516.4
Protein involved in hexose metabolism
6495 at
            7036.1
strong similarity to hypothetical protein YBR016w and YDR210w
6496 at
            265.4
questionable ORF
6497 at
            1229.9
similarity to hypothetical protein YBR014c and glutaredoxins
6498 at
            764.8
questionable ORF
6499 at
            2577.7
subunit of the anaphase promoting complex (APC)
6500 at
            4717.2
Probable 26S protease subunit and member of CDC48VPAS1VSEC18 family of ATPases
6501 at
            442.1
serine-threonine protein phosphatase
6502 at
            500.8
Stoichiometric member of mediator complex
            6817.9
6503 at
ATP synthase delta subunit
6459 at
            1004.1
Mitotic omosome Determinant\; similar to S. pombe RAD21\; may function in chromosome
morphogenesis from S phase through mitosis
6460 at
            1321.9
HMG1-box containing protein
            713.9
6461 at
similarity to hypothetical protein YFR048w, YDR282c and S.pombe hypothetical protein SPAC12G12.14
6462 at
            2473.7
neutral trehalase (alpha,alpha-trehalase)
6463_at
            11266.4
Yeast Ran Binder #1\; suppressor of FUS1\; homolog of mouse HTF9a and human RanBP1
6464_at
            925.8
strong similarity to hypothetical protein YBR005w
6465 at
            1817.1
RecA homolog (similar to DMC1, RAD51, and RAD55), interacts with Rad 55p by two-hybrid analysis
6466_at
            2130.8
required for sorting of Mod5p
6467_at
            1591.1
gene dosage suppressors of the conditional growth defect of several temperature-sensitive A kinase
mutants
6468 at
            2398.3
n-(5 -phosphoribosyl)-anthranilate isomerase
6469 at
            50.8
                        Α
questionable ORF
                        Ρ
6470 at
            420.7
galactokinase
6471_at
                        Α
            63.4
hypothetical protein
                        Ρ
6472 at
            11870.0
ABC transporter
6473 i at
            19136.7
Ribosomal protein L4B (L2B) (rp2) (YL2)
6474 at
            1070.6
similarity to human hypothetical KIAA0186 protein
```

```
6475_at
            257.0
weak similarity to chicken neurofilament triplet M protein
6476 at
            103.0
hypothetical protein
                         Ρ
6477 at
            2011.4
hypothetical protein
6478 at
            3001.3
Shows homology to basic leucine zipper family of transcription factors
6479 at
            189.1
strong similarity to hypothetical protein YBR042c
6480 at
            3806.5
glycine cleavage T protein (T subunit of glycine decarboxylase complex
6481 at
            143.2
weak similarity to uridine kinases and phosphoribulokinases
6436 at
            1315.5
DEAD-box protein, putative RNA helicase
6437 at
            877.7
cik1 suppressor
6438 at
            10589.4
                         Ρ
seryl-tRNA synthetase
6439 at
                         Μ
            -45.0
hypothetical protein
                         Р
6440 at
            1716.3
strong similarity to DNA-binding protein Reb1p
6441 at
            2055.1
Loss Upsets Vacuole
                         Ρ
6442 at
            1273.7
regulatory subunit for protein phosphatase Glc7p
6443 at
            449.1
                         Ρ
hypothetical protein
6444 at
            372.1
Protein involved in the same pathway as Rad26p, has beta-transducin (WD-40) repeats
6445 at
            1426.7
hypothetical protein
            10225.9
6446 at
strong similarity to S.pombe obr1
6447 at
            9616.6
strong similarity to putative heat shock protein YRO2
6448 at
            1254.2
Transcriptional activator of lysine pathway genes with 2-aminoadipate semialdehyde as co-inducerly,
saccharopine reductase synthesis
6449 at
            2475.1
identified by SAGE expression analysis
6450_at
            10542.4
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
            2945.5
similarity to enoyl CoA hydratase
6452 at
            14546.2
lysyl-tRNA synthetase
6453 at
            3143.4
                         Ρ
P-type ATPase involved in Na+ efflux
6454_g_at 5980.5
P-type ATPase involved in Na+ efflux
6455_s_at 4800.3
```

```
plasma membrane protein\; putative Na+ pump\; P-type ATPase
6456 at
            2002.7
weak similarity to bacterial ribosomal S10 proteins
6457_at
            111.8
hypothetical protein
                         Ρ
6458 at
            1549.9
Suppressor of SNf
6413 at
            5472.5
                         Ρ
Coproporphyrinogen III oxidase
6414_at
            6537.8
strong similarity to S.acidocaldarius transcription elongation factor tfs
6415 at
            6498.9
Valine transporter
                         Ρ
6416 at
            6110.6
uroporphyrinogen decarboxylase
6417 at
            -36.6
questionable ORF
6418 at
            612.8
                         Ρ
similarity to C.elegans K06H7.3 protein
6419_at
            8207.5
triosephosphate isomerase
6420_at
            3365.7
similarity to hypothetical A. thaliana protein BAC F7G19
6421 at
            60.5
cyclin-like kinase required for late nuclear division
6422_at
            -173.5
questionable ORF
6423_at
            1574.7
                         Ρ
ubiquitin-conjugating enzyme, E2
6424 at
            6817.8
strong similarity to SPS2 protein
6425_at
            3173.1
hypothetical protein
6426_at
            438.7
weak similarity to L.lactis mleR protein
6427 at
            741.7
TriGlyceride Lipase
6428_at
            1388.2
ubiquitin-conjugating enzyme
            2630.7
6429_at
similarity to mouse putative CCAAT binding factor CBF1 and CBF2
6430 at
            2183.4
similarity to E.coli modF and photorepair protein phrA
            9946.6
6431_at
Probable component of serine palmitoyltransferase, which catalyzes the first step in biosynthesis of
long-chain sphingolipids
6432 at
            3510.8
weak similarity to glia maturation factor beta
6433 at
            10545.2
Ribosomal protein S13 (S27a) (YS15)
6434_at
            415.6
                         Ρ
hypothetical protein
                         Ρ
6435 at
            406.7
similarity to hypothetical protein YER139c
6391_at
            1058.3
                         Р
similarity to YNL099c
```

```
2235.1
                         Ρ
6392_at
involved in genome stability
6393 at
            817.2
ubiquitin isopeptidase
                         Ρ
6394 at
            479.7
hypothetical protein
6395 at
            7106.9
                         Ρ
similarity to O.aries arylalkylamine N-acetyltransferase
6396 at
            4871.4
inositolphosphotransferase 1
6397 at
            2038.5
component of SWIVSNF global transcription activator complex
6398 at
            4641.7
Trehalose-6-phosphate phosphatase
6399 at
            1190.8
                         Р
protein phosphatase type 2A
6400 at
            277.6
RecA homolog (related to DMC1, RAD51, RAD57), interacts with Rad51p and Rad57p by two-hybrid
analysis
6401_at
            9634.3
putative cell surface glycoprotein
6402 at
            1122.7
                         Ρ
Preferential Use of Neither donor locus during mating type switching.
6403 at
            2550.8
cytochrome c oxidase-specific assembly factor
6404_at
            392.2
vacuolar protein sorting
            2181.0
6405_at
Asparagine and serine-rich protein
6406 at
            730.0
Involved in telemere length regulation, may be functional in telemere metabolism during late S phase
6407_at
            5249.6
similarity to hypothetical S.pombe protein
6408_at
            4512.4
similarity to hypothetical C.elegans protein
6409 at
            1517.1
coordinates regulation of alpha-factor receptor signalling and induction of morphogenesis during
conjugation
6410 at
            8291.9
endoplasmic reticulum protein that is part of the Sec61 trimeric complex and the Ssh1 trimeric complex
6411 at
            2071.0
involved in processing rRNA precursor species to mature rRNAs
6412_at
            691.4
involved in 3 splice site choices and 2nd step of splicing
6368 at
            2025.1
weak similarity to Streptococcus transposase
6369 at
            2709.0
weak similarity to YRO2 protein
6370 at
            9874.6
strong similarity to human RNase L inhibitor and M.jannaschii ABC transporter protein
6371 at
            8010.1
ubiquitin-conjugating enzyme
6372 at
            3076.7
similarity to P.falciparum ATPase 2
6373_g_at 8034.2
similarity to P.falciparum ATPase 2
```

```
Ρ
6374_at
            1777.9
questionable ORF
                         Р
6375 at
            428.1
hypothetical protein
6376 at
            824.6
                         Ρ
putative zinc finger protein
6377_at
            2881.7
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
            3838.3
similarity to Legionella glutaredoxin-like protein
6379 at
            8204.3
Homolog of mammalian 14-3-3 proteins
6380 at
            5698.7
similarity to Dictyostelium development-specific membrane protein
6381 at
            5574.7
weak similarity to proliferation-associated protein
6382 at
            134.2
hypothetical protein
6383 at
             1612.6
                         Ρ
Protein of the pheromone pathway
6384 at
            600.3
hypothetical protein
6385 at
            2396.4
similarity to mouse hypothetical protein
6386_at
            692.1
Actin-related protein
6387 at
            1123.1
                         Ρ
strong similarity to Emp70 protein
6388 at
            551.6
Probably has role late in meiosis following DNA replication
6389_at
            674.9
similarity to Mpa43p
6390_at
            497.0
DNA replication fork blocking protein
6346 at
             1131.8
strong similarity to alanine transaminase
6347_at
            33.2
                         Α
questionable ORF
6348_at
            202.2
                         Ρ
42-kDa nuclear protein
6349 at
            156.3
                         Α
questionable ORF
6350_at
            3422.3
similarity to bacterial ribosomal L34 proteins
6351 at
            1739.6
similarity to bacterial ribosomal L1 proteins
6352 at
            2222.6
similarity to mouse ligatin, a trafficking receptor for phosphoglycoproteins
6353 at
            386.4
subunit of the anaphase promoting complex (APC)
            3967.5
6354_at
similarity to B.subtilis tetracyclin resistance
6355 at
            3739.1
N2,N2-dimethylguanosine-specific tRNA methyltransferase
6356_at
            1721.0
```

```
weak similarity to YNC2beta protein
6357 at
            1400.8
SerineVthreonine protein kinase
6358 at
            747.6
helix-loop-helix protein
6359 at
            101.6
                         Α
hypothetical protein
6360 at
            -26.2
                         Α
ExtraCellular Mutant
                         Ρ
6361 at
            1327.5
similarity to hypothetical protein YLR246w and YOL003c
6362 at
            10426.0
pentafunctional arom polypeptide (contains: 3-dehydroquinate synthase, 3-dehydroquinate dehydratase
(3-dehydroquinase), shikimate 5-dehydrogenase, shikimate kinase, and epsp synthase)
6363 at
            2551.6
weak similarity to Sec27p, YMR131c and human retinoblastoma-binding protein
6364 at
            6654.0
fibrim homolog (actin-filament bundling protein)
6365 at
            620.1
weak similarity to sea urchin myosin heavy chain
            380.5
6366 at
similarity to hypothetical protein YJL149w
6367 at
            454.1
strong similarity to hypothetical protein YLR108c
6323 at
            10214.7
questionable ORF
                         Ρ
6324 g at 13930.9
questionable ORF
6325 at
            3187.1
Metal resistance protein with similarity to human cystic fibrosis protein CFTR and multidrug resistance
proteins
6326_at
            190.4
questionable ORF
6327_at
            2383.2
Reduced growth phenotype
6328 at
            544.4
Hyperrecombination protein that suppresses intrachromosomal excision recombination
6329_at
            6755.8
ubiquitin-like protein
6330_at
            5858.6
                         Ρ
ubiquitin-like protein
6331 at
            3626.4
                         Ρ
weak similarity H.influenzae protoporphyrinogen oxidase (hemK) homolog
6332_at
            1712.7
hypothetical protein
            442.0
6333 at
Member of beta-transducin-related (WD-40) protein family
6334 at
            2718.3
mating-type regulation protein
6335 at
            6962.3
                         Ρ
aspartyl protease related to Yap3p
6336_at
            1184.2
TFIID subunit
                         Р
6337_at
            1875.6
transcriptional activator
                         Ρ
6338_at
            501.5
```

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Ethanolamine Kinase
6339 at
            6508.5
dihydrolipoyl transsuccinylase component of alpha-ketoglutarate dehydrogenase complex in mitochondria
6340 at
            80.3
questionable ORF
                         Ρ
6341 at
            2299.9
Protein with variable number of tandem repeats of a 64 amino-acid polypeptide, potential Ca2+-binding
site, and pleckstrin homology domain
6342 at
            1181.1
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
            2224.8
weak similarity to C.elegans hypothetical protein CET26E3
            2754.8
6344 at
hypothetical protein
6345 at
            6449.4
                         Ρ
questionable ORF
6300_g_at 10046.0
                         Ρ
questionable ORF
6301_at
            9637.6
cyclophilin peptidyl-prolyl cis-trans isomerase
6302 at
            10189.9
RNA polymerase I subunit A14
                        Ρ
6303 at
            2250.6
questionable ORF
6304 at
            8304.4
aspartic beta semi-aldehyde dehydrogenase
6305 at
            1926.0
Leucine permease transcriptional regulator
6306 at
            606.7
Ssy1p controls expression of several transporter genes, including BAP2, TAT1, PTR2 and YDR046c
6307_at
            1933.7
protein phosphatase Two C-Interacting protein
6308_at
            559.8
                         Ρ
Nap1p-binding protein
                         Ρ
6309 at
            945.6
weak similarity to S.pombe hypothetical protein
6310 at
            864.1
Hydrophilic protein involved at the late stage of secretion
6311_at
            2358.6
weak similarity to hypothetical C.elegans protein
            2748.9
6312 at
107 kDa component of the Exocyst complex\; required for exocytosis.
            3260.1
6313_at
TFIID subunit
                         Ρ
6314 at
            6138.1
Cell cycle protein necessary for passage through START
6315 at
            767.2
Binds Sin3p in two-hybrid assay
6316 at
            9049.4
Guanine nucleotide exchange protein for ARF
6317_at
            4053.4
Similar to HSP26\; expression is regulated by stress conditions
6318 at
            6225.6
putative translation factor
                         Ρ
6319_at
            641.2
```

```
Regulator of arginine-responsive genes with ARG80 and ARG81
6320 at
            7056.3
Non-histone protein
6321 at
            1696.0
similarity to S.pombe hypothetical protein SPAC2F7.15
6322 at
            538.7
transcription factor\; genetic and mutant analyses suggest that Ngg1p (Ada3p) is part of two
transcriptional adaptorVHAT (histone acetyltransferase complexes, the 0.8 MD ADA complex and the 1.8
MD SAGA complex
            8711.2
6278 at
ubiquitin-conjugating enzyme
6279 at
            6404.2
succinate dehydrogenase membrane anchor subunit
6280 at
            118.6
hypothetical protein
6281 at
            237.3
                         Α
hypothetical protein
6282 at
            1758.3
                         Ρ
Sister chromatid cohesion protein
6283 at
            798.2
Involved in silencing at telomeres, HML and HMR
6284 at
            2938.6
Protein that affects bud emergence, intrachromosomal recombination, and nuclear division
6285 at
            939.7
weak similarity to thioredoxin
6286 at
            2166.0
Aip Three Complex\; interacts with AIP3, localized to the nucleus
6287 at
            265.3
strong similarity to Msf1p
6288 at
            550.6
hypothetical protein
                         Ρ
6289_at
            162.9
questionable ORF
6290_at
            7804.1
Cytoplasmic chaperonin of the Cct ring complex (previously called TCP1 or TRiC), distantly related to
Tcp1p and to Hsp60
6291 at
            1217.1
Hydrophilic suppressor of ypt1 involved in vesicle trafficking between ER and Golgi
6292 at
            7126.0
strong similarity to TATA-binding protein-interacting protein 49 - rat
6293 at
            561.1
Homolog of SIR2
                         Р
6294_at
            938.2
nucleoporin
6295 at
                         Α
            418.1
questionable ORF
6296 at
            6286.4
Mitochondrial RNA helicase of the DEAD box family
6297 at
            1451.9
RNA-binding protein involved in cleavage step of mRNA 3 -end formation, prior to polyadenylation
6298 at
            1740.5
similarity to C.elegans hypothetical protein T05G5.5
6299 at
            723.4
cytochrome b translational activator
            1112.0
6255_at
                         Р
hypothetical protein
```

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6256_at
            196.3
                         Α
questionable ORF
6257 at
            399.9
                         Ρ
similarity to hypothetical protein YLR238w
6258 at
            1689.6
component of spindle pole
6259 at
            1092.8
hypothetical protein
6260 at
            9.2
                         Α
questionable ORF
6261 at
            3474.7
                         Ρ
Involved in ubiquinone biosynthesis
6262 at
            1004.1
similarity to A.eutrophus cation efflux system membrane protein czcD, rat zinc transport protein ZnT-1
and Cot1p
6263 at
            1950.7
EST1-like bcy1 Suppressor
6264 at
            1815.6
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 rquires Ume4 for mitotic repression and
interacts with and requires Ime1p and Rim11p for induction of meiosis-specific transcription
6265 at
            2710.4
Phosphatidylinositol 4-phosphate kinase
6266 at
                         Ρ
             1058.5
questionable ORF
6267_at
            10070.7
strong similarity to hypothetical protein YBR016w
6268 at
            5266.2
Translation initiation factor eIF-2B epsilon subunit
6269 at
            8536.9
chaperonin subunit alpha
6270_at
            461.2
regulatory protein involved in control of sterol uptake
6271_at
            7803.5
similarity to hypothetical protein YNL281w
6272 at
            290.7
                         Α
hypothetical protein
            513.4
6273_at
positive transcriptional regulator of ADH2 and peroxisomal protein genes
6274_at
            699.8
cell cycle arrest protein
                         Р
6275 at
            170.2
Septin-related protein expressed during sporulation
            320.4
6276_at
hypothetical protein
6277_at
                         Ρ
            330.9
questionable ORF
6232 at
            851.6
weak similarity to the beta subunit of an ER luminal alpha-glucosidase from mouse
6233 at
            2532.6
strong similarity to hypothetical protein YLR225c
6234_at
            68.5
similarity to Ifh1p
6235 at
            11093.7
Histone H2B (HTB1 and HTB2 code for nearly identical proteins)
6236_i_at 18931.3
```

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Histone H2A (HTA1 and HTA2 code for nearly identical proteins)
6237_at
            10142.2
cytosolic adenylate kinase
6238_at
            354.0
regulator of silent mating loci
6239 at
            655.3
Component of pre-mRNA cleavage and polyadenylation factor I, interacts with Rna14p and Rna15p
6240 at
            776.5
hypothetical protein
                         Ρ
6241_at
            141.8
questionable ORF
                         Ρ
6242 at
            1816.8
hypothetical protein
                         Ρ
6243 at
            5728.8
5-aminolevulinate synthase
6244 at
            11078.1
similarity to hypothetical protein YDL204w
6245 at
            10059.2
homoaconitase
6246 at
            1270.2
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
            1167.1
similarity to hypothetical A. thaliana protein
6248 at
            639.9
Mitochondrial ribosomal protein MRPL7 (YmL7)
6249 at
            9359.0
encodes a subunit of yeast coatomer
6250 at
            2011.6
                         Ρ
hypothetical protein
6251 at
            587.9
Snurp = Small nuclear ribonucleoprotein particle of MW 56 kDa. Associated with the U1 snRNP\; no
counterpart in mammalian U1 snRNP. Serine-rich.
6252_at
            15.2
                         Α
questionable ORF
                         Ρ
6253 at
            1024.6
putative amidase
6254 at
            723.3
Required for the first step of splicing in vitro
6209_at
            458.2
69-kDa protein containing tetratricopeptide repeat (TPR)
6210 at
            4931.1
galactosyltransferase
            3937.6
6211_at
involved in targeting and fusion of ER to golgi transport vesicles
6212 at
            739.5
strong similarity to Sks1p
6213 at
            2641.6
strong similarity to E.coli thermoresistant gluconokinase
6214 at
            1625.9
weak similarity to cytochrome b
6215 at
            187.6
hypothetical protein
                         Ρ
6216 at
            2124.1
coiled-coil protein multicopy suppressor of loss of PP2A
6217_at
            979.0
```

```
Negative effect on expression of several genes transcribed by RNA polymerase II\; BTF3 homolog
6218 at
            323.8
zinc finger DNA binding factor, transcriptional regulator of sulfur amino acid metabolism, highly
homologous to Met31p
6219 at
            157.5
Protein necessary for stability of ARS-CEN plasmids\; suggested to be required for kinetochore function
6220 at
            1236.9
weak similarity to hypothetical S.pombe hypothetical protein SPBC29A3
6221_at
            158.2
catalase A
6222 at
            1219.8
                         Ρ
Transcription regulator
                         Ρ
6223 at
            1323.1
Mitochondrial heat shock protein 78 kDa
6224 at
            323.8
bZIP protein
6225 at
            1363.9
                         Ρ
hypothetical protein
6226 at
            2321.0
                         Ρ
Exo-1,3-b-glucanase
                         Р
6227 at
            2883.8
hypothetical protein
6228 at
            543.3
DNA-damage inducible gene
6229 at
            2670.6
Ankyrin repeat-containing protein
6230 at
            710.6
C3HC4 zinc-binding integral peroxisomal membrane protein
6231 at
            2191.6
similarity to hypothetical C.elegans protein
6187 at
            1953.3
weak similarity to human TAFII100 and other WD-40 repeat containing proteins
6188 at
            1155.8
                         Ρ
mitochondrial tryptophanyl-tRNA synthetase
6189 at
            90.5
                        Α
questionable ORF
6190 at
            4380.8
Copper-transporting P-type ATPase with similarity to human Menkes and Wilsons genes
6191 at
            167.6
questionable ORF
                         Ρ
6192 at
            1730.0
Cytoplasmic glyoxylase-II
6193_at
            223.2
weak similarity to YOR042w
6194 at
            459.1
hypothetical protein
6195 at
            1950.5
                         Ρ
weak similarity to YOR042w
6196 at
            11404.9
strong similarity to Hordeum vulgare blt101 protein
6197 at
            403.3
Protein is 61\% identical to Msn3p
6198 at
            109.7
hypothetical protein
                         Ρ
6199_at
            975.4
hypothetical protein
```

```
6200_at
            4144.5
Putative 3 -> 5 exoribonuclease\; component of exosome complex of 3 -> 5 exonucleases
6201 at
            3119.0
hypothetical protein
6202 at
            1082.8
similarity to hypothetical protein YDL001w, YFR048w and S.pombe hypothetical protein SPAC12G12.14
6203 at
            1428.0
eukaryotic initiation factor 2 alpha (eIF2-alpha) kinase
6204 at
            3371.6
Diacylglycerol Pyrophosphate Phosphatase
6205 at
            224.8
Synaptonemal complex protein, component of the central element
            1020.8
6206 at
hypothetical protein
                         Ρ
6207 at
            1455.0
similarity to inositolmonophosphatases
6208 at
            353.8
hypothetical protein
6163 at
            395.3
                         Ρ
hypothetical protein
                         Α
6164 at
            62.4
questionable ORF
                         Р
6165 at
            1647.5
similarity to B.subtilis helicases
6166 at
            2788.0
signal recognition particle receptor - alpha subunit
6167 at
            3950.1
putative protein phosphatase
6168 at
            8122.0
dihydrosphingosine phosphate lyase (also known as sphingosine phosphate lyase)
6169 at
            438.8
weak similarity to Uso1p, YPR179c and fruit fly tropomyosin
6170 at
            2948.3
                         Ρ
hypothetical protein
            6977.7
6171 at
Syringomycin response protein 2
6172 at
            4942.3
ATP synthase subunit 5\; oligomycin sensitivity-conferring protein
6173 at
            1842.8
involved in protein transport step at the Brefeldin A blocks
6174 at
            4280.9
gamma-glutamyl kinase
6175_at
            2857.2
Component of pre-mRNA cleavage factor II (CFII)\, 150-kDa protein associated with polyadenylation
factor 1 (PF I)
6176 at
            3275.4
weak similarity to human GPI-anchor biosynthesis protein
6177 at
            679.7
similarity to transcriptional regulator proteins
6178 at
            9144.2
Cyclophilin D, Peptidyl-prolyl cis-trans isomerase D
6179_at
            2641.0
Yeast member of the Histidine Triad protein family (HIT)
6180 i at
            196.1
Yeast member of the Histidine Triad protein family (HIT)
6181_r_at 31.4
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```
Yeast member of the Histidine Triad protein family (HIT)
6182 f at
            285.2
Yeast member of the Histidine Triad protein family (HIT)
6183 at
            2144.1
weak similarity to S.pombe hypothetical protein SPAC6F6
6184 at
            3084.6
similarity to Pmt1p, Pmt2p, Pmt3p and Pmt5p
6185 at
            2164.0
                        Ρ
RNA polymerase II holoenzyme component
6186 at
            7512.8
GTPase-interacting component 2
            4418.3
6140 at
Suppresor of mar1-1 (sir2) mutation
6141 at
            1174.3
Component of transcription initiation factor IIb, 75 kDa subunit
6142 i at
            241.1
high copy suppressor of G beta subunit temperature sensitive mutation
6143 f at 996.1
high copy suppressor of G beta subunit temperature sensitive mutation
6144_at
            923.1
Phosphatidylinositol(3)-phosphate binding
6145 at
            149.7
weak similarity to hypothetical S.pombe protein
            398.3
6146 at
                         Ρ
hypothetical protein
6147_at
                         Ρ
            1395.0
hypothetical protein
6148 at
                         Р
            350.3
hypothetical protein
                         Р
6149 at
            789.2
Involved in minichromosome maintenance
6150_at
            2481.7
hypothetical protein
6151 at
            319.4
similarity to hypothetical S. pombe protein and weak similarity to bovine auxilin
6152 at
            9766.3
Asparaginase I, intracellular isozyme
6153 at
            831.1
Mitochondrial ribosomal protein MRPL35 (YmL35)
6154_at
            10035.9
subunit e of mitochondrial F1F0-ATPase
6155 at
            165.7
cytosolic and peripheral membrane protein with three zinc fingers\; cysteine rich regions of amino acids
are essential for function
6156 at
            3374.6
weak similarity to beta transducin from S. pombe and other WD-40 repeat containing proteins
6157 at
            649.8
weak similarity to S.pombe hypothetical protein SPAC1B9
            699.7
6158 at
strong similarity to YHR080c, similarity to YFL042c and YLR072w
6159_at
            421.1
                         Ρ
questionable ORF
6160 at
            6889.8
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 SculCdc4 (also termed
SCFCdc4p) complex, which also contains the ubiquitin ligase Cdc34p, the cullin Cdc53p, and Cdc4p.
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involve the Cdc4p and Skp1p subunits. Following the SculCdc4-mediated monoubiquitination of Sic1p, a
polyubiquitin chain is added, andubiquitinated Sic1p is then degraded by the 26S proteosome.
6161 at
            976.4
48-kDa peroxisomal integral membrane protein
6162 at
            1230.0
similarity to hypothetical S. pombe protein
6117 at
            3649.3
Protein involved in the attachment of glycosylphosphatidylinositol (GPI) anchors to proteins
6118 at
            432.6
similarity to E.coli hypothetical protein and weak similarity to RNA helicase MSS116 / YDR194c
6119 at
            1478.1
similarity to hypothetical S. pombe protein
6120 at
            1144.8
similarity to nuclear Sth1p, Snf2p and related proteins
6121 at
            4247.1
Multicopy suppressor of snf1 mutation
6122 at
            1777.1
weak similarity to B. subtilis hypothetical protein X
6123 at
            2290.2
Mitochondrial ribosomal protein MRPS28 (E. coli S15)
6124 at
            1628.6
similarity to Erc1p
6125 at
            6596.5
weak similarity to hypothetical protein YOR004w
6126 at
            57.8
questionable ORF
6127 at
            13015.3
                         Р
strong similarity to arginine-tRNA ligase
6128 f at 7819.4
Hexose transporter
6129_f_at
                         Р
            6369.9
Hexose transporter
6130_at
            141.7
                         Α
hypothetical protein
                         Ρ
6131 at
            13627.6
High-affinity glucose transporter
6132 at
            2333.5
                         Р
similarity to hypothetical S.pombe protein
6133_at
            2525.3
37 kDa mitochondrial ribosomal protein
6134 at
            1512.9
similarity to hypothetical protein YHR097c
6135_at
            3895.0
GPI-anchored aspartic protease
            969.4
6136 at
protein of unknown function
6137 at
            2654.2
required for bud growth
6138 at
            1049.8
weak similarity to hypothetical proteins YOL092w, YBR147w and YMR010w
6139 at
            7886.7
Thioredoxin reductase
6095 at
            3009.2
anthranilate phosphoribosyl transferase
6096_at
            -94.1
```

SculCdc4 complexes transfer ubiquitin to phosphorylated Sic1p, and substrate recognition is thought to

```
questionable ORF
6097 at
            503.7
component of the spindle pole body that interacts with Spc42p, calmodulin, and a 35 kDa protein
6098 at
            1614.3
hypothetical protein
                         Ρ
6099 at
            1093.1
strong similarity to hypothetical protein YHR108w and weak similarity to signal transducing adaptor from
mouse and man
6100 at
            1224.1
hypothetical protein
6101 at
            -280.7
                         Α
questionable ORF
                         Ρ
6102 at
            2017.2
hypothetical protein
6103 at
                         Ρ
            968.7
91 kDa tau91 subunit of transcription factor IIIC (TFIIIC)
6104 at
            1462.9
Establishes Silent omatin
6105 at
            4746.8
Homolog of DSS1\; similar to hypothetical protein from S. pombe
6106 at
            2041.3
Member of the beta transducin family
6107 at
            1503.3
weak similarity to Streptococcus M protein
6108 at
            162.5
similarity to YOL106w and YER181c
6109 at
            1772.2
                         Р
hypothetical protein
                         Ρ
6110 at
            5618.6
homologous to the aldo-keto reductase protein family
6111 at
            369.5
                         Α
DNA repair protein
                         Ρ
6112 at
            1764.7
hypothetical protein
6113 at
                         Ρ
            89.7
similarity to chitinases
6114 at
            2778.8
similarity to hypothetical S. pombe protein
6115 at
            3845.9
strong similarity to human BDR-1 protein and other calcium binding proteins
6116 at
            210.3
similarity to hypothetical A. thaliana protein BAC F21M12
6072_at
            1124.4
Mitochondrial protein of the CDC48VPAS1VSEC18 ATPase family, required for expression of functional
Rieske iron-sulfur protein
                         Ρ
6073 at
            1368.1
adrenodoxin oxidoreductase homolog
6074 at
            4327.7
ATP synthase subunit f
                         Ρ
6075 at
            3802.8
Sm-like protein
6076 at
            327.5
Contains a Rho-GAP domain and two LIM domains. Has strong similarity to Rga1p. Has some similarity
to all known Rho-GAPs.
6077_at
            6676.4
similarity to Pdc6p, Thi3p and to pyruvate decarboxylases
```

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9422.0
6078_at
                         Ρ
Nuclear RNA-binding RNA annealing protein
6079 at
            7910.1
Nuclear RNA-binding RNA annealing protein
6080 at
            6594.1
Ribosomal protein P2B (YP2beta) (L45)
6081 at
            66.1
weak similarity to S.pombe paramyosin
6082 at
            4923.3
strong similarity to Y.lipolytica GPR1 gene
6083 at
            314.0
MMS and UV Sensitive\; Mus81p and Rad54p are found together in a complex from whole-cell extracts
6084 at
            615.5
similarity to Itr1p and Itr2p and E.coli araE
6085 at
            9601.1
involved in endocytosis
6086 at
            1215.4
GTPase activating protein (GAP) for RHO1
6087 at
            977.0
Protein with homology to mammalian ubiquitin activating (E1) enzyme
6088 at
            1367.2
strong similarity to hypothetical protein YOR013w
6089 at
            846.9
transcription factor, member of the histone acetyltransferase SAGA complex
6090 at
            314.1
mRNA (identified by a library screen) that causes growth arrest when overexpressed
6091 at
            4036.8
probable 26S protease subunit and member of the CDC48VPAS1VSEC18 family of ATPases
            3957.2
6092 at
Sxm1p
                         Ρ
6093 at
            318.8
hypothetical protein
                         Ρ
6094 at
            2054.6
repressor of class II transcription
            5896.6
6049 at
similarity to human KIAA0007 gene
6050 at
            5560.2
Hypoxanthine Phosphoribosyltransferase
6051 at
            6179.8
similarity to C. fasciculata inosine-uridine preferring nucleoside hydrolase (EC 3.2.2.1)
6052 at
            -70.9
Cytochrome P450 56, Dit2p catalyzes oxidation of N-formyl tyrosine to N,N-bisformyl dityrosine in vitro
6053_at
            12.0
questionable ORF
                         Ρ
            218.2
6054 at
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
            5681.9
dissociable subunit of RNA polymerase II
6056 at
            755.4
263-amino acid mitochondrial ribosomal large subunit protein\; similar to L23 family of ribosomal proteins
6057 at
            1255.4
probable multidrug resistance transporter
6058 at
            2090.1
weak similarity to Myo1p
                         Ρ
6059_at
            7180.5
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glycinamide ribotide transformylase
6060 at
            500.6
                         Ρ
similarity to Nfi1p
6061_at
            5456.7
farnesyl cysteine-carboxyl methyltransferase
6062 at
            2644.5
weak similarity to Der1p
6063 at
            383.0
weak similarity to NADH dehydrogenase
6064_at
            1237.8
questionable ORF
6065 at
            1047.6
Protein required for retention of luminal ER proteins
6066 at
            1731.1
strong similarity to bacterial leucyl aminopeptidase
6067 at
            1156.7
SYnthetic lethal with cdcForty
6068 at
            127.0
questionable ORF
6069_i_at
            16070.0
Ribosomal protein L12B (L15B) (YL23)
6070_s_at 11854.8
Ribosomal protein L12B (L15B) (YL23)
6071 at
            279.7
similar to E. coli DinB and S. cerevisiae REV1
6026 at
            2337.2
Type 1 membrane protein with EF hand motif
6027 at
            402.8
hypothetical protein
                         Ρ
6028 at
            1441.3
SNF1 protein kinase substrate
6029_at
            2958.5
Transcriptional activator involved in resistance to 1,10-phenanthroline\; member of yeast Jun-family of
transcription factors related to mammalian c-jun
6030 at
            7084.5
putative light chain of dynein
6031 at
            370.5
similarity to hypothetical protein YDL113c
6032 at
            187.4
questionable ORF
6033 at
            5386.6
                         Ρ
Subunit of the regulatory particle of the proteasome
6034_at
            2459.4
hypothetical protein
6035 at
            8917.4
Translation initiation factor 3 p33 subunit
6036 at
            1708.4
similarity to C.perfringens hypothetical hypA protein
6037_at
            64.3
questionable ORF
6038_at
            7611.0
nuclear shuttling protein with an RNA recognition motif
6039 g at 14535.6
nuclear shuttling protein with an RNA recognition motif
6040_i_at
            18911.3
questionable ORF
```

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6041_at
                        Ρ
            2527.1
similarity to S.pombe hypothetical protein
6042 at
            1843.4
similarity to YOL141w and hypothetical C.elegans protein
6043 at
            796.3
serine-threonine phosphatase Z
6044 at
            236.9
hypothetical protein
6045 at
            716.1
strong similarity to hypothetical protein YML018c
6046 at
            296.3
Loss of rDNA silencing
                        Ρ
6047 at
            878.9
Pachytene CHeckpoint
6048 at
            2752.8
Adenine phosphoribosyltransferase
6003 at
            -36.7
questionable ORF
6004 at
            2102.1
                        Ρ
RNA polymerase II holoenzyme component
6005 at
            697.4
similarity to hypothetical protein YGL144c and YDL109c
6006 at
            73.5
                        Α
questionable ORF
6007 at
            36.5
                         Α
ExtraCellular Mutant
                         Р
6008 at
            1306.4
transcription factor, member of ADA and SAGA, two transcriptional adaptorVHAT (histone
acetyltransferase)complexes
6009 at
            1433.0
hypothetical protein
6010_at
            939.9
strong similarity to Yox1p
            4671.6
6011_at
similarity to human sphingomyelin phosphodiesterase
6012 at
            1110.9
strong similarity to thiol-specific antioxidant proteins
6013_at
            11233.4
guanylate kinase
6014_at
            13.8
                         Α
questionable ORF
6015 at
            2052.9
                        Ρ
Na+VH+ exchanger
6016_at
            5406.2
hect-domain-containing protein, required for G2VM transition\; similar to RSP5\; contains motifs typical of
protein kinases
6017 at
            403.1
similarity to hypothetical protein YML034w and YML033w
6018_at
            1107.6
weak similarity to YNL326c
6019_at
            713.1
TFIIH subunit Tfb3, contains ring finger motify, similar to mammalian CAK subunit
6020 r at
            751.9
a-factor mating pheromone precursor
6021_f_at
            251.1
a-factor mating pheromone precursor
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6022_at
            2423.6
Mitochondrial ribosomal protein MRPL28 (YmL28)
6023 at
            1759.9
Nuclear-localized protein containing zinc finger motifs
6024 at
            938.2
negative regulator of prp genes
6025_at
            4739.6
Protein arginine methyltransferase
5980 at
            1758.5
similarity to ser/thr protein kinase
5981 at
            188.9
                         Α
questionable ORF
5982 at
            1176.1
tSNARE that affects a Late Golgi compartment
5983 at
            724.7
hypothetical protein
5984 at
            249.1
                         Ρ
similarity to chromosome segregation protein Cse1p
5985 at
            15268.3
Ribosomal protein L27B
5986 at
            2303.3
similarity to P.falciparum 41-2 protein antigen
5987 at
            841.9
essential splicing factor
5988 at
            1044.2
similarity to C-terminal region of YOR019w
            54.6
5989 at
                         Α
hypothetical protein
5990 at
                         Ρ
            7323.4
hypothetical protein
5991 at
            2621.1
protein serineVthreonine kinase
5992 at
            1569.7
RNAse MRP protein component
            663.3
5993 at
weak similarity to YHR150w
5994_at
            466.0
MAP kinase-associated protein
5995 at
            2518.4
repressible alkaline phosphatase
5996 at
            397.4
hypothetical protein
5997_at
            7442.2
alpha-1,2-mannosyltransferase
5998 at
            542.8
May interact with actin as a component or controller of the assembly or stability of the actin cytoskeleton
5999 at
            2283.8
similarity to trichohyalin
6000_at
            2120.7
                         Ρ
weak similarity to Snf7p
6001 at
            8453.9
3,4-dihydroxy-2-butanone 4-phosphate synthase
6002 at
            1565.7
Protein required in the absence of Cin8p
5958_at
            338.8
                         Ρ
hypothetical protein
```

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5959_at
                         Ρ
            957.9
SerVThr protein kinase
5960 at
            137.9
                         Α
questionable ORF
                         Ρ
5961 at
            7949.8
strong similarity to hypothetical protein YOL002c
5962_at
            872.1
hypothetical protein
5963 at
            1823.4
                         Ρ
hypothetical protein
5964 at
            139.0
                         Ρ
Vacuolar sorting protein
5965 at
            5019.8
similarity to hypothetical human and C.elegans proteins
            10900.0
5966 at
myo-inositol transporter
5967 at
            1980.3
                         Ρ
membrane glycoprotein, sorted by HDEL retrieval system
5968 at
            798.7
weak similarity to hypothetical C.elegans protein, M.genitalium peptide chain release factor 1 and
YJL149w
5969 at
            13100.9
60S ribosomal protein L37B (L43) (YL35)
            147.3
                         Ρ
5970 at
similarity to hypothetical protein YLR183c
5971_at
            8033.3
S-adenosylmethionine synthetase
            1297.6
5972 at
Lipid phosphate phosphatase
            4397.8
5973 at
similarity to hypothetical T.brucei protein
5974_at
            2129.1
high copy suppressor of ts mutations in DNA polymerase alpha
5975_at
            2634.0
similarity to FET3, YFL041w and F.floriforme diphenol oxidase
5976 at
            2943.9
                         Ρ
putative serineVthreonine kinase
5977_at
            8553.6
high-affinity glutamine permease
5978_at
            377.9
                         Ρ
questionable ORF
5979 at
            5319.1
may be involved in function and Vor structure of the eukaryotic kinetochore
5935_at
            3132.8
weak similarity to C. elegans protein F25H9.7 and to the human complement 3 precursor
5936 at
            2797.8
questionable ORF
5937 at
            7666.6
                         Ρ
Glutaredoxin (thioltransferase) (glutathione reductase)
5938 at
            2044.4
strong similarity to hypothetical protein YCL036w
5939 at
            741.3
regulates the copper-dependent mineralization of copper sulfide complexes on the cell surface in cells
cultured in medium containing copper salts
5940 at
            3258.9
strong similarity to glucokinase
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1668.5
                         Ρ
5941_at
weak similarity to hypothetical S.pombe protein
5942 at
            1622.9
Protein disulfide isomerase homolog
5943 at
            5917.8
FKBP (FK506 binding protein) 13\; peptidylprolyl cis-trans isomerase activity
5944 at
            825.7
weak similarity to transcription factors of the zinc finger class
5945 at
            -109.0
                         Α
questionable ORF
5946 at
            -193.5
                         Α
MiddleVlate gene of meiosis
5947 at
             153.7
serine\threonine kinase homologous to Ste20p\; expressed in middle\late meiosis
5948 at
            783.0
similarity to hypothetical human protein and YIL044c
5949 at
            5.4
hypothetical protein
5950 at
            480.8
                         Ρ
questionable ORF
            2001.6
                         Р
5951 at
weak similarity to Plasmodium yoelii rhoptry protein
5952 at
            625.0
similarity to Lre1p
5953 at
            8184.7
ubiquinol-cytochrome c oxidoreductase subunit 7 (14 kDa)
5954 at
            1262.3
5,5 -P-1,P-4-tetraphosphate phosphorylase II
5955 at
            3069.6
similarity to hypothetical A. thaliana and C. elegans proteins
5956 at
            94.3
weak similarity Plasmodium repeat organellar protein
5957 at
            8321.6
strong similarity to hypothetical proteins YPL280w, YOR391c and YMR322c
5913 at
            678.5
similarity to YOR383c, Sta1p and pig mucin
5914 at
            770.7
hypothetical protein
5915 at
            -34.3
                         Α
sugar transporter-like protein
5916 at
            214.5
questionable ORF
                         Ρ
5917_at
            4905.7
Phenylacrylic acid decarboxylase
5918 at
            4935.3
similarity to E.coli hypothetical 55.3 kDa protein in rfah-rfe intergenic region
5919 at
             178.1
                         Ρ
hypothetical protein
5920 at
            913.1
similarity to dihydroflavonol-4-reductases
5921_at
            10019.2
hypothetical protein identified by SAGE
5922 s at 4493.5
homing endonuclease with protein splicing activity
5923_at
            2282.0
identified by SAGE
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5924_at
            343.2
                         Ρ
identified by SAGE
5925 at
            5158.5
                         Α
identified by SAGE
5926 g at 0.0
                         Α
identified by SAGE
5927 at
            2929.7
                         Р
Involved in pre-tRNA splicing and in uptake of branched-chain amino acids
5928 at
            305.1
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
            1689.0
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
            684.4
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
            2445.2
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
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
            -184.1
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
            1306.5
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
            5279.5
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
            23.7
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
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
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
            -24.3
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
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
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
            17.1
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
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5895_at
            717.9
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
            345.7
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
            234.4
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
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
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
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
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
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
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
            5481.2
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
            213.0
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
            1904.4
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
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
            6651.8
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
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
            6246.5
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
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
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
            357.5
non-annotated SAGE orf Found forward in NC_001136 between 930871 and 931032 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251 5865 at 87.3 P

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 364.0 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 575.5 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 456.7 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 278.4 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 15.6 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 -10.1 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 990.0 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 376.1 F

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 911.3 F

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 -565.6 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 6222.5 F

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 878.1 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 3230.3 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 2565.7 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 1447.5 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 210.0 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 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 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 -90.7 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 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 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 703.1 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 120.1 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 -20.0 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 16.2 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 Ρ 5845 at 371.8 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 687.6 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 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 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 1782.5 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 162.8

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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
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
            343.2
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
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
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
            -124.1
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
            214.3
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
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
            -16.7
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
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
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
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
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
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
            418.8
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
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
            3162.6
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
            895.9
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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 -36.5non-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 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 19.8 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 190.8 Α 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 -47.8 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 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 -503.3non-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 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 441.0 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 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 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 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 75.5 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 436.7 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 170.9 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 -149.8non-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

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

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5838_at
            2421.4
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
            2144.5
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
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
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
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
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
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
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
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
            486.2
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
            1523.5
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
            3399.4
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
            -226.8
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
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
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
            2756.6
                         Ρ
snRNA
5805_i_at
            7.5
                         Α
Centromere
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740.7
                        Ρ
5806_i_at
snRNA
                        Ρ
5807 at
            9115.9
snRNA
5808 i at
            27.9
                        Α
questionable ORF
                        Ρ
5809_i_at
            570.6
similarity to subtelomeric encoded proteins
5810_s_at 2743.5
similarity to subtelomeric encoded proteins
5811 at
            206.9
                        Α
similarity to YJR108w
                        Ρ
5812 at
            112.1
hypothetical protein
5813 at
                        Ρ
            5891.2
strong similarity to Aip2p
5814 at
            353.6
                        Ρ
hypothetical protein
5815 at
            -23.6
weak similarity to YKL083w
            4614.3
5816 at
Histone and other Protein Acetyltransferase\; Has sequence homology to known HATs and NATs
5769 at
            1988.9
probably multidrug resistance protein
5770 at
            451.6
similarity to YBL089w
                        Ρ
5771 at
            5331.9
arginine permease
5772 at
            684.0
Non-membrane-embedded, PEST sequence-containing protein
5773 at
            795.4
Kinesin-related protein involved in establishment and maintenance of mitotic spindle
5774 at
            7915.4
                        Ρ
vacuolar protease B
5775 at
            3783.9
high copy suppressor of imp1 mutation, may be required for the function of the Imp1 peptidase andVor
the protein sorting machinery
5776_at
            757.3
hypothetical protein
5777_at
            10017.6
                        Ρ
Phosphoacetylglucosamine Mutase
5778 at
            230.2
hypothetical protein
5779_at
            4721.0
subunit of a cytoplasmic histone acetyltransferase
            3221.0
5780 at
DNA polymerase V that has motifs typical of DNA polymerase family
5781 i at
            11710.2
Ribosomal protein L12A (L15A) (YL23)
5782 at
            1700.4
glucose-repressible protein
5783_at
            3231.4
ATPase family gene
5784 at
            5692.1
Vacuolar H-ATPase D subunit of the V1 catalytic sector
5785_at
            2971.1
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Mitochondrial ribosomal protein L2 of the large subunit
5786 f at 677.1
member of the seripauperin protein/gene family (see Gene class PAU)
5787 at
             125.1
hypothetical protein
                         Ρ
5788 at
            9353.2
strong similarity to Osm1p
5789 at
            8613.5
Threonine Aldolase
5790_at
             136.7
weak similarity to cytochrome c oxidase III of T.brucei kinetoplast
5791 at
            3239.2
hypothetical protein
                         Ρ
5747 at
            4907.1
weak similarity to Mad1p
5748 at
            8777.6
Guanosine diphosphatase of Golgi membrane
5749 at
            244.3
strong similarity to Utr1p
5750_at
             12133.0
weak similarity to Bacillus 1,3-1,4-beta-glucanase
5751 at
            580.5
                         Ρ
iso-2-cytochrome c
                         Ρ
5752 at
            3625.9
similarity to K.oxytoca enolase-phosphatase E-1
5753 at
            8075.3
ubiquitin-like protein
                         Р
5754 at
            5511.2
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
            -108.1
                         Α
protein of unknown function
5756 at
            8926.0
                         Ρ
Translation initiation factor eIF-5A
5757 at
            3897.7
weak similarity to Sauroleishmania mitochondrial hypothetical ORF-5 protein
5758 at
            4578.7
Member of complex that acts at ARS s to initiate replication
5759 at
            9117.1
P-type ATPase
5760 at
            457.7
                         Α
ExtraCellular Mutant
                         Ρ
5761_at
             1417.5
similarity to hypothetical protein YNR027w
5762 at
            306.0
                         Ρ
hypothetical protein
5763 at
             11173.0
Vacuolar ATP synthase 17-kDa proteolipid C subunit of VO sector\; dicyclohexylcarbodiimide binding
subunit
             14822.9
                         Ρ
5764 at
strong similarity to high mobility group-like protein Nhp2p
5765_at
            733.8
hypothetical protein
5766 at
             10888.0
Rieske iron-sulfur protein of the mitochondrial cytochrome bc1 complex
5767_at
            348.0
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```
hypothetical protein
5768 at
            1469.0
ARF GTPVGDP exchange factor
5724 at
            342.9
orotidine-5 -phosphate decarboxylase
5725 at
            1149.0
similarity to O.formigenes oxalyl-CoA decarboxylase
5726 at
            169.6
Protein involved in DNA repair
5727_at
            2033.2
weak similarity to Rad50p
5728 i at
            14527.9
Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)
5729 f at
            11577.1
Proteolipid associated with plasma membrane H(+)-ATPase (Pma1p)
5730 at
            5775.9
hypothetical protein
5731 at
            722.5
                         Ρ
similarity to human nucleotide pyrophosphatase
5732_at
            2557.4
weak similarity to Spa2p
                         Ρ
5733 at
            283.9
hypothetical protein
5734 at
            2849.6
An armadillo repeat-containing protein localized on the vacuolar membrane
5735 at
            886.0
1,4-glucan-6-(1,4-glucano)-transferase
5736 at
            -94.8
hypothetical protein
                         Ρ
5737 at
            9915.5
transcriptional activator of amino acid biosynthetic genes
5738_at
            -31.6
hypothetical protein
5739_at
            3876.1
similarity to S.pombe pac2 protein
5740 at
            2760.1
similarity to peroxisomal membrane and mitochondrial carrier proteins
5741_at
            607.1
hypothetical protein
5742_at
            716.6
Shows sequence similarity to GOG5, a gene involved in vanadate resistance
5743 at
            3455.4
Putative homolog of subunit 2 of bovine prefoldin, a chaperone comprised of six subunits
5744_at
            11556.1
oligosaccharyl transferase glycoprotein complex, beta subunit
5745 at
            12281.6
hypothetical protein
5746 at
            5282.7
                         Ρ
Alpha-1,3-mannosyltransferase
5701 at
            2637.0
weak similarity to chicken microfibril-associated protein
            10235.3
5702_at
mannose-6-phosphate isomerase
5703 at
            9271.0
similarity to hypothetical E.coli and C.elegans proteins
5704_at
            1328.3
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similarity to Gda1p
5705 at
            7116.8
similarity to P.polycephalum myosin-related protein mlpA
5706 at
            813.9
Required for viability in the absence of the kinesin-related mitotic motor Cin8p\; required for normal
microtubule stability
5707 at
            9031.4
putattive ORF identified by SAGE
            3599.1
5708 at
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
            9876.9
5709 at
May coordinate the Ran-dependent (GSP1VGSP2) association and disassociation reactions of nuclear
import\; human homologue complements yeast mutants
5710 at
            3380.0
similarity to L.pneumophila dlpA protein
5711 at
            3901.2
Cold-shock induced protein of the Srp1p\/Tip1p family of serine-alanine-rich proteins
5712 at
            8414.6
22.6 kDa proteasome subunit
            1609.4
5713 at
helicase-like protein
                         Ρ
5714 at
            2079.3
protoporphyrinogen oxidase
5715 at
            224.0
Acyl-CoA synthetase (fatty acid activator 2)
5716 at
            614.5
                        Ρ
Blnding to Microtubules
5717 at
                        Ρ
            5930.2
ATP-dependent metalloprotease
5718 at
            1743.3
component of spindle pole
5719 at
            5106.7
putative neutral sphingomyelinase
            9124.1
5720 at
homologous to Sbh1p
5721 at
            3728.0
                         Ρ
nucleotide binding regulatory protein
5722 at
            3239.6
component of the regulatory module of the 26S proteasome, homologous to human p58 subunit
5723 at
            519.2
subunit of RNA polymerase II holoenzyme\/mediator complex
5678_at
            9626.9
delta 1-pyrroline-5-carboxylate reductase
5679 at
            607.4
similarity to carnitine O-acetyltransferase Yat1p
5680 at
            10880.1
gamma subunit of translational initiation factor eIF-2
5681 at
            7112.9
phosphatidylserine synthase
5682 at
            2474.0
glucose repression protein
5683 at
            633.9
similarity to Mig1p
5684_at
            3233.1
Associated with U1 snRNP as part of the Sm-core that is common to all spliceosomal snRNPs
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5685_at
            4449.3
                         Р
similarity to mouse nucleolin
5686 at
            4426.9
ras-like GTPase, highly homologous to YPT32
5687 at
             1036.1
Putative participant in 3 mRNA processing
5688 at
             1256.6
weak similarity to Nmd2p, Kex1p and hamster nucleolin
5689 at
             1180.8
hypothetical protein
5690 at
                         Ρ
            3768.1
hypothetical protein
5691 at
             11713.6
strong similarity to members of the ABC transporter family
5692 at
            748.1
strong similarity to hypothetical protein YGL224c
5693 at
             177.6
hypothetical protein
5694 at
            457.8
                         Ρ
Homologous to VRG4
5695 at
            784.5
positive nitrogen regulatory protein
5696 at
             1076.8
weak similarity to DNA repair protein Rad2p and Dsh1p
5697 at
            2085.2
responsible for the reduction of methionine sulfoxide
5698 at
            9072.5
putative S-adenosyl-L-homocysteine hydrolase
5699 at
            9462.1
                         Ρ
hypothetical protein
5700 at
            432.8
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 epiststic to
rad52, and is classified and an early recombination function. mRNA is meiosis-specific and has 88 bp
intron at 5 end spliced independently of MER1.
5655 n at -24.9
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 epiststic to
rad52, and is classified and an early recombination function. mRNA is meiosis-specific and has 88 bp
intron at 5 end spliced independently of MER1.
5656 at
             1221.2
weak similarity to transcription factor Sko1p
5657 at
            752.4
hypothetical protein
5658 at
            980.1
member of the AAA ATPase family of proteins
5659 at
            5469.8
Homologous to E. coli DnaJ\; contains leucine zipper-like motif
5660 at
             1810.1
putative ORF identified by SAGE
            4848.8
5661 at
strong similarity to hypothetical S.pombe protein YER049W
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5662_at
                         Ρ
            2183.7
hypothetical protein
                         Ρ
5663 at
            244.1
similarity to C.elegans hypothetical protein
5664 at
            6663.2
Aspartate kinase (L-aspartate 4-P-transferase) (EC 2.7.2.4)
5665 at
            2792.8
strong similarity to mitochondrial phosphate carrier protein
5666 at
            127.6
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
            11534.2
ATP phosphoribosyltransferase
            7800.9
5668 at
                         Ρ
purine-cytosine permease
5669 g at 8455.3
purine-cytosine permease
5670 i at 10118.8
Ribosomal protein L34A
5671_s_at 8183.5
Ribosomal protein L34A
5672 at
            10835.4
                        Ρ
Inhibitor of cell Growth\; heat shock inducible
5673 at
            1896.3
cytochrome c oxidase assembly factor
5674 at
            945.4
PHO85 cyclin
            2466.1
                        Ρ
5675 at
purine-cytosine permease
5676_at
            222.4
purine-cytosine permease
5677 at
            1717.7
Protein homologous to beta-keto-acyl synthase
5633 at
            5570.7
DL-glycerol-3-phosphatase
5634 at
            5617.2
Suppressor of the Transcriptional (T) defect of Hpr1 (H) by Overexpression (O)
5635 at
            5223.0
similarity to hypothetical protein YIL056w
            612.8
5636 at
isocitrate lyase
5637_at
            442.5
strong similarity to cell division control protein Cdc4p
5638_g_at 2581.2
strong similarity to cell division control protein Cdc4p
5639 at
            694.6
hypothetical protein
5640 at
            677.2
strong similarity to hypothetical protein YIL057c
5641_at
            1081.2
putative zinc finger protein
5642 at
            6434.3
N-acetyl-gamma-glutamyl-phosphate reductase and acetylglutamate kinase
5643 at
            8894.2
ribonucleotide reductase
```

```
5644_at
            961.9
                         Ρ
hypothetical protein
                         Ρ
5645 at
            14497.4
Homolog of S. pombe 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 cdc24-4ts mutant
5646 at
            6225.8
aldehyde dehydrogenase (NAD+)
5647_s_at 13265.4
40S ribosomal protein S24A
            876.7
5648 at
Protein tyrosine phosphatase
5649 at
            1055.3
similarity to killer toxin Khr1p
5650 at
            375.3
hypothetical protein
5651 at
            1080.8
                         Ρ
similarity to E.coli X-Pro aminopeptidase II
5652 at
            3510.3
hypothetical protein
5653_at
            2662.3
                         Ρ
hypothetical protein
5654_at
            630.3
strong similarity to phosphoglycerate dehydrogenases
5610 at
            1183.2
similarity to M.sexta steroid regulated MNG10 protein
5611_at
            8564.2
hypothetical protein
5612 at
            938.1
                         Ρ
questionable ORF
                         Α
5613 at
            81.9
weak similarity to myosins
5614_at
            9198.5
threonine deaminase
5615_at
            1046.3
similarity to E.coli prolyl-tRNA synthetase
5616 at
            6245.9
homologous to Sbh2p
5617_at
            3067.3
Derepression Of Telomeric silencing
5618_at
            6628.1
Protein phosphatase type 2C
5619 at
            8304.1
anthranilate synthase Component I
5620_at
            10450.7
vitamin B12-(cobalamin)-independent isozyme of methionine synthase (also called
N5-methyltetrahydrofolate homocysteine methyltransferase or 5-methyltetrahydropteroyl triglutamate
homocysteine methyltransferase)
5621 at
            2478.3
hypothetical protein
5622 at
            1052.7
weak similarity to S.epidermidis PepB protein
5623_at
            1187.7
similarity to hypothetical protein YBL059w
5624 at
            1468.7
similarity to hypothetical protein YBL059w
5625_at
            8067.3
```

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20S proteasome subunit (beta3)
5626 at
            4974.5
RecA homology; 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
            227.4
sporulation-specific homolog of csd4
5628 at
            6.3
weak similarity to ribosomal S3 proteins
5629_at
            362.0
ubiquitin carboxyl-terminal hydrolase
5630 at
            2667.8
ribose-phosphate pyrophosphokinase 2
5631 at
            2169.8
ubiquitin-conjugating enzyme
5632 at
            1197.7
Protein involved in targeting of plasma membrane [H+]ATPase
5588 at
            1338.2
member of 70 kDa heat shock protein family
5589 at
            520.5
hypothetical protein
5590 at
            5360.7
Nucleoporin similar to Nup157p and to mammalian Nup155p
5591 at
            277.9
hypothetical protein
5592_at
            3473.9
homologous to S. pombe RAE1 gene\; 2-hybrid analysis demonstrates an interaction with Srp1p and
Rip1p\; copurifies with Nup116p
                         Р
5593 at
            747.7
putative transcriptional activator of FLO1
5594 at
            210.1
putative transcriptional activator of FLO1
5595 at
            7483.2
                        Ρ
Karyopherin beta 4
5596 at
                         Ρ
            389.1
transcription factor
5597_at
            1697.8
U6 snRNA associated protein
5598 at
            1815.5
                         Ρ
similarity to Emp70p
            2966.6
                         Ρ
5599 at
Protein which binds Bem1p and contains a proline-rich sequence, an SH3 domain, and a pleckstrin
homology domain
            2606.4
5600_at
sporulation-specific protein
            149.4
5601 at
zinc-finger protein
5602 at
            1532.9
                         Ρ
Transmembrane osmosensor
5603 at
            1319.2
                        Ρ
weak similarity to E.herbicola tyrosine permease
5604_at
            -28.8
questionable ORF
5605 at
            11493.7
Likely to be involved in regulating INO1 expression, suppressor of a dominant nuclear mutation that is
```

inositol-dependent in the presence of choline

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5606_at
                        Ρ
            339.9
hypothetical protein
                         Ρ
5607 at
            2997.1
Zinc-finger-containing protein with similarity to Gcs1p and Sps18p
5608 at
            589.7
plasma membrane-bound casein kinase I homolog
5609_at
            1253.0
weak similarity to Dictyostelium WD40 repeat protein 2
5565 at
            5542.0
Rsp5p encodes a hect (homologous to E6-AP C terminus) and encodes a ubiquitin-protein ligase (E3
enzyme)
5566 at
            8912.9
weak similarity to E.coli colicin N
5567 at
            1404.0
Lethal with conditional pap1 allele
5568 at
            925.0
hypothetical protein
5569 at
            709.8
                        Ρ
DNA polymerase alpha suppressing protein kinase
5570_at
            2673.6
similarity to Msn2p and weak similarity to Msn4p
5571 at
            6681.6
Ribosomal protein S26B
                        Ρ
5572 at
            2476.9
Paralog of MDS3
5573_at
            1227.0
protein phosphatase type I
            6801.4
5574 at
protein phosphatase type I
5575 at
            1472.7
weak similarity to S.pombe SPBC13G1 and C.elegans F26F2.d hypothetical proteins
5576_at
            -86.2
hypothetical protein
5577_at
            7569.4
                        Ρ
GDP dissociation inhibitor
5578 at
            791.0
weak similarity to Mycoplasma hominis P120 protein
5579 at
            361.5
similarity to hypothetical protein YDR066c
5580_at
            803.0
hypothetical protein
5581 at
            11516.9
                         Ρ
cytochrome oxidase assembly factor
5582_at
            772.7
3-methyladenine DNA glycosylase
5583 at
            2392.9
DNA Damage Inducible
5584 at
            1871.8
Putative Ubiquitin-specific protease
5585 at
            4289.2
Iron permease
5586_at
            6375.3
                        Ρ
Sm-like protein
5587_at
            1330.8
weak similarity to mouse NAD(P)H dehydrogenase (quinone)
5542_at
            8732.4
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TATA-binding protein (tflId)
5543 at
            623.8
Protein with coiled-coil domain
5544 at
            1161.9
                         Р
strong similarity to putative cell surface glycoprotein Sed1p
5545_at
             1663.8
Ubiquitin-specific protease
5546 at
             7332.7
weak similarity to E.coli hypothetical protein f470
5547_at
             126.3
translational activator of cytochrome c oxidase subunit III
5548 at
            7217.6
Required for correct assembly of the cytochrome c oxidase and the ATP synthase complex
5549 at
            4768.0
Rho-type GTPase activating protein (GAP)
5550 at
            6840.7
similarity to hypothetical C. elegans protein C27H6.5
5551 at
            589.2
hypothetical protein
5552_at
             1288.8
                         Ρ
weak similarity to Afr1p
5553 at
            3146.9
Transcriptional regulator which functions in modulating the activity of the general transcription machinery
in vivo
5554 at
             1037.6
non-specific DNA binding protein (sin1)
5555 at
            404.8
Nucleotide excision repair protein
5556 at
            3311.2
weak similarity to E.coli cation transport protein
5557 at
            1719.8
transcriptional regulator
5558 at
            9846.9
Poly(A) binding protein, cytoplasmic and nuclear
            5368.3
                         Ρ
5559 at
similarity to ATPase P.falciparum ATPase 2
5560 at
            842.8
                         Ρ
SerineVthreonine protein kinase
5561 at
            884.4
tRNA nucleotidyltransferase (tRNA CCA-pyrophosphorylase)
5562 at
             1213.6
Repressor of PHR1 transcription\; binds to PHR1 URS
5563 at
            670.6
Adenylate kinase (mitochondrial GTP:AMP phosphotransferase)
5564 at
             1506.5
DNA repair helicase component of transcription factor b
5520 at
             1595.1
putative ATP-dependent RNA helicase
5521_at
            385.5
                         Р
checkpoint protein
5522 at
            1737.8
similarity to Legionella glutaredoxin-like protein
5523 at
            631.6
similarity to hypothetical protein YHR209w
            3190.3
5524_at
                         Р
DNA Helicase I
```

```
5525_at
            12571.5
Ribosomal protein L23B (L17aB) (YL32)
5526 at
            9343.8
alpha subunit of pyruvate dehydrogenase (E1 alpha)
5527 at
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
            110.4
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
            889.5
Meiosis-specific protein required for spore formation
5530 at
            93.3
                         Α
questionable ORF
5531_at
            987.2
                         Ρ
hypothetical protein
5532 at
            4093.0
                         Ρ
similarity to human 5,10-methenyltetrahydrofolate synthetase
5533 at
            538.9
similarity to multidrug resistance proteins Pdr3p and Pdr1p
5534 at
            377.7
strong similarity to Rtm1p
5535 at
            2565.7
weak similarity to hypothetical protein YMR316w
5536 at
            427.8
                         Ρ
similarity to killer toxin KHS precursor
                         Ρ
5537 at
            404.0
hypothetical protein
5538 at
            3596.9
Translocase in inner membrane of mitochondria involved in mitochondrial protein import
5539 at
            207.4
hypothetical protein
5540 at
            -232.4
hypothetical protein identified by SAGE
5541 at
            839.3
questionable ORF
                         Ρ
5497 at
            263.8
questionable ORF
5498 at
            119.2
                         Α
questionable ORF
5499_at
            189.7
                         Α
questionable ORF
5500 at
            209.0
                         Ρ
questionable ORF
5501 at
            65.2
                         Α
questionable ORF
5502_at
            412.0
                         Ρ
questionable ORF
5503_at
            115.5
                         Α
questionable ORF
5504 at
            145.1
                         Α
questionable ORF
5505_at
            -59.2
                         Α
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hypothetical protein

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ubiquitin-conjugating enzyme\; ubiquitin-protein ligase
5507 at
            364.6
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
            -643.5
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
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
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
            986.2
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
            1002.5
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
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
            5651.5
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
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
            9469.4
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
            10274.6
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
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
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
            789.8
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
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
            1123.5
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
            7468.5
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
            7493.2
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
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5506_s_at 849.8

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5478_i_at 1246.8
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 847.9
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
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
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
            2146.2
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
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
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
            -1485.5
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
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
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
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
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
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
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
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
            115.2
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
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
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 543.2
non-annotated SAGE orf Found forward in NC_001137 between 194842 and 194988 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
5449 at
            40.5
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
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
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
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
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
            686.4
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
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
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
            1091.0
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
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
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
            1011.0
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
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
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
            1801.9
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
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
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
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 11091.1
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
5468 at
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
            155.1
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
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
            847.4
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
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
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
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
            183.4
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
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
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
            1998.4
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
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 -231.5
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
            455.8
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
            2494.6
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
            214.2
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
            4189.5
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
            2071.4
snRNA
5412_at
            90.6
                         Α
```

non-annotated SAGE orf Found reverse in NC_001137 between 52391 and 52549 with 100% identity.

```
snRNA
                        Ρ
5413 at
            1291.0
RNase P RNA
5414_i_at
                        Α
            -54.2
Centromere
5415_r_at
            4.2
                        Α
Centromere
5416_at
            769.0
                        Ρ
snRNA R14
                        Ρ
            5322.0
5417_at
snRNA U4
                        Р
5418 at
            129.2
snRNA
                        Ρ
5419 at
            547.8
small cytoplasmic RNA
5420 s at 279.7
weak similarity to hypothetical E.coli protein
5421_i_at
            -83.4
similarity to mouse period clock protein
5422_s_at 1608.1
similarity to mouse period clock protein
5423_s_at 1407.7
strong similarity to aryl-alcohol dehydrogenases
5424 at
            26.9
Hypothetical aryl-alcohol dehydrogenase (AAD)
5425_at
            199.7
Amino acid permease
            933.2
5426_at
similarity to channel proteins
5427 at
            371.0
dihydroxyacetone kinase
5428_at
            23.5
                        Α
strong similarity to Mal63p, YPR196w and Mal13p
5429_at
            200.8
putative pseudogene
5430 at
            235.1
                        Α
ALuminium Resistance 2
                        Ρ
5431_at
            913.4
weak similarity to Npl6p
5432_at
            2295.3
47 kDa type I transmembrane protein localized to the Golgi
5433 at
            2177.6
similarity to S.pombe hypothetical protein SPAC2F7.18c
5434_at
            1097.1
weak similarity to middle part of C.elegans myosin heavy chain A
5435 at
            11416.9
phosphomannomutase
5389 at
            3577.1
                        Ρ
weak similarity to human dystrophin
5390 at
            2607.7
multicopper oxidase, type 1 integral membrane protein
5391_at
            -48.4
similarity to yeast glucose transport proteins
5392_at
            7865.3
Actin
5393_at
            12259.8
                        Ρ
```

```
Ras-like GTP-binding protein\; most similar to mammalian Rab1A protein
5394 at
            10483.3
beta-tubulin
5395 at
            2483.8
                         Ρ
mitochondrial RNA polymerase II
5396 at
            7319.1
Ribosomal protein L22B (L1c) (rp4) (YL31)
5397_at
            239.0
similarity to hypothetical S. pombe protein and to C.elegans F35D11 protein
5398 at
            825.8
Trehalose-associated protein kinase related to S. pombe cek1+
5399 at
            147.3
questionable ORF
                         Ρ
5400 at
            439.5
similarity to several transaminases
5401 at
            1878.2
Cyclin-dependent kinase-activating kinase
5402 at
            1343.8
                        Ρ
ABC ATPase
5403_at
            1107.9
weak similarity to P.falciparum Pfmdr2 protein
5404 at
            291.1
alpha-factor pheromone receptor\; seven-transmembrane domain protein
5405 at
            2073.5
                         Ρ
Negatively regulates COPII vesicle formation
5406 at
            565.1
                         Ρ
Probable chromatin protein because of homology to Drosophila Enahncer of Polycomb
5407 at
            1425.2
similarity to repeat structures in a Plasmodium falciparum protein (MESA) that binds human erythrocyte
protein 4.1.
5408 at
            8769.5
Phenylalanyl-tRNA synthetase, beta subunit, cytoplasmic
5409 at
            393.4
transcriptional activator with GATA-1-type Zn finger DNA-binding motif
5410 f at
            1148.3
member of the seripauperin protein\(\forall \)gene family (see Gene class PAU)
5411 at
            35.1
hypothetical protein
                         Ρ
5367 at
            12767.4
dihydrolipoamide dehydrogenase precursor (mature protein is the E3 component of alpha-ketoacid
dehydrogenase complexes)
5368 at
            2182.1
snRNP G protein (the homologue of the human Sm-G)
5369_at
            2797.7
similarity to hypothetical S. pombe protein and to hypothetical C.elegans B0024.12 protein
5370 at
            2517.0
DnaJ homolog involved in mitochondrial biogenesis and protein folding
5371 at
            295.5
weak similarity to YDR504c
5372 at
            1587.0
12 kDa heat shock protein
5373_at
            911.5
weak similarity to Dictyostelium protein kinase
5374 at
            -9.5
                         Α
questionable ORF
5375_at
            109.6
                         Α
```

```
hypothetical protein
5376 at
            138.1
High-affinity hexose transporter
5377 at
            542.4
                         Р
Involved in ammonia regulation of GAP1 activity
5378 at
            8318.5
questionable ORF
5379 at
            1008.9
beta subunit of large (heterotrimeric) G-proteins (beta-transducin)
5380_at
            2087.2
omosome segregation protein
5381 at
            6623.2
weak similarity to Mms19p
5382 at
            3136.3
hypothetical protein
5383 at
            6725.3
Ras-like small GTP-binding protein
5384 at
            7541.8
strong similarity to hypothetical protein YPL019c
5385_at
            343.7
meiosis specific protein, E.coli MutS protein, localizes to discrete sites on meiotic chromosomes
5386 at
            2696.7
ATP-dependent RNA helicase
                        Ρ
5387 at
            1660.7
Depressed growth-rate protein
5388 at
            5040.9
                        Ρ
weak similarity to rabbit triadin Spp41p
            2222.7
5344 at
96 kDa nucleoporin-interacting component
5345 at
            2578.9
hypothetical protein
5346_at
                         Ρ
            5173.4
Similar to S. pombe PAD1 gene product
5347_at
            1289.5
similarity to hypothetical A. thaliana proteins
5348 at
            4834.0
similarity to X-Pro dipeptidases
5349 at
            769.2
weak similarity to YER176w
            206.3
5350_at
weak similarity to human centromere protein E
5351 at
            7926.1
Member of ATP-binding cassette (ABC) family of proteins
5352_at
            8054.4
encodes putative deubiquitinating enzyme
5353 at
            1526.8
ochre suppressor tyr-tRNA
5354 at
            434.3
similarity to hypothetical protein YOL019w
5355 at
            831.7
                         Ρ
similarity to YOL017w
                         Ρ
5356_at
            392.6
Calmodulin-dependent protein kinase
5357 at
            312.0
Glycogen synthase (UDP-gluocse--starch glucosyltransferase)
5358_at
            1860.7
```

```
similarity to mammalian neurofilament proteins and to Dictyostelium protein kinase
5359 at
            552.1
                         Ρ
hypothetical protein
5360 at
            6930.6
                         Ρ
similarity to human glutaminyl-peptide cyclotransferase
5361 at
            3492.5
type II PI(4)P5-kinase (PIP4,5 kinase) similar to human PIP5K-II
5362 at
            2256.5
hypothetical protein
                         Ρ
5363_at
            1795.2
similarity to hypothetical protein YPL100w
5364 at
            297.3
similarity to Rod1p
5365 at
            77.6
                         Α
poly(A) binding protein\; related to PES4 protein homolog YHR015w
5366 s at 3384.0
similarity to Acanthamoeba myosin heavy chain IC and weak similarity to other myosin class I heavy
chains
5322 at
            872.0
                         Ρ
Histidinolphosphatase
                         Р
5323 at
            285.1
hypothetical protein
                         Р
5324 at
            345.6
hypothetical protein
5325 at
            1310.8
soluble tyrosine-specific protein phosphatase
5326 at
            512.2
Regulator of expression of the PTR2, GAP1, and BAP2 genes\; involved in the the control of peptide
transport
                         Р
5327 at
            1552.9
subunit of assimilatory sulfite reductase
5328_at
            1785.3
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 4341.2
Ribosomal protein L2A (L5A) (rp8) (YL6)
5330 at
            274.4
weak similarity to S.pombe polyadenylate-binding protein, YPR112c and Sbp1p
5331 at
            9658.4
Ribosomal protein L29 (YL43)
5332 at
            9913.8
ubiquinol-cytochrome c oxidoreductase subunit 6 (17 kDa)
5333_at
            1231.4
myc-type helix-loop-helix transcription factor
5334 at
            274.3
                         Ρ
hypothetical protein
5335 at
            1343.0
                         Ρ
cell division control protein
5336 at
            2837.7
Rsc8 is the eighth largest subunit of RSC, a fifteen-protein chromatin remodeling complex and related to
the SwiVsnf Complex.
5337_at
            769.0
strong similarity to mouse lymphocyte specific helicase
5338 at
            1497.8
similarity to hypothetical protein YGL228w
5339_at
            1128.6
```

```
155 kDa SIT4 protein phosphatase-associated protein
5340 at
            753.1
weak similarity to dnaJ-like heat shock proteins
5341 at
            2181.2
hypothetical protein
                         Р
5342 at
            807.8
hypothetical protein
5343 at
            14427.1
                         Ρ
similarity to hypothetical protein YBR281c
5299 at
            706.4
similarity to mitochondrial citrate transport proteins
5300 at
            1232.7
                         Ρ
hypothetical protein
5301 at
            6669.8
strong similarity to human quinolinate phosphoribosyltransferase
5302 at
            748.2
similarity to hypothetical S.pombe protein SPAC12G12.14 and to YDL001w and YDR282c
5303 at
            4953.9
mitochondrial ribosomal protein (precursor)
5304 at
            11894.8
proteasome subunit necessary for peptidyl glutamyl peptide hydrolyzing activity
5305 at
            7536.0
Coatomer (COPI) complex delta subunit
            4092.6
5306 at
cytoplasmic 32 - 34 kDa protein
5307_at
            1194.9
Hexokinase I (PI) (also called Hexokinase A)
5308 at
            0.88
hypothetical protein
5309 at
            -53.2
                         Α
questionable ORF
            2931.0
5310_at
strong similarity to beta-cystathionases
5311_at
            118.1
weak similarity to Cha4p
                         Ρ
5312 s at 608.6
hypothetical protein
5313_s_at 2843.0
                         Ρ
Mob1p-like protein
5314_at
            -312.4
                         Α
hypothetical protein
5315 at
            232.7
                         Α
questionable ORF
                         Ρ
5316_at
            832.6
questionable ORF
5317 s at 511.8
similarity to hypothetical protein YLR072w
5318 s at 8848.4
bZIP (basic-leucine zipper) protein
5319 at
            2189.0
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
            40.6
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
            1214.4
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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
            1878.7
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
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
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
            8585.2
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
            869.8
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
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
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 282.4
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
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
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
            1144.9
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
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
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
            437.9
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
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
            220.9
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
            -76.5
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
non-annotated SAGE orf Found forward in NC_001138 between 161226 and 161405 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251

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5292 at
            1001.5
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 q at -103.5
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
            119.8
ARS605 Found forward in NC 001138 between 135973 and 136029 with 100% identity.
5295 f at
            35.5
ARS607 Found forward in NC_001138 between 199390 and 199446 with 100% identity.
5296 i at
            32.0
ARS608 Found forward in NC 001138 between 216458 and 216508 with 100% identity.
5297 at
            6.7
Protein with strong similarity to subtelomerically-encoded proteins including Cos2p, Cos4p, Cos8p,
YIR040c, Cos5p, Cos9p, and Cos6p
5298 at
            -81.5
similarity to hypothetical protein YER187w
5251 f at
            2092.8
strong similarity to members of the Srp1/Tip1 family
5252_at
            155.2
GPI-anchored aspartic protease
5253_g_at 678.6
GPI-anchored aspartic protease
5254 i at
            27.4
strong similarity to hypothetical protein YOR387c
5255_s_at 125.7
strong similarity to hypothetical protein YOR387c
5256 at
            2740.1
similarity to Mnn1p
            5121.1
                         Ρ
5257 at
alcohol dehydrogenase isoenzyme IV
5258_at
            2764.1
high-affinity zinc transport protein
5259_at
            2137.8
putative transcription factor, has five zinc fingers
5260 at
            11984.6
Hexokinase II (PII) (also called Hexokinase B)
5261 at
            2262.8
Protein involved in interorganelle communication between mitochondria, peroxisomes, and nucleus
5262 at
            415.0
C4 zinc finger DNA-binding protein of low sequence specificity in vitro\; Probable 119 kD DNAVRNA
helicase family member
5263 at
            112.5
                        Α
hypothetical protein
5264 at
            58.6
Required for ZIPpering up meiotic chromosomes during chromosome synapsis
5265 at
            2754.3
3,5-Cyclic-nucleotide phosphodiesterase, low affinity
5266 at
            1981.2
similarity to hypothetical protein YHR036w
5267 at
            882.2
weak similarity to C.elegans dom-3 protein
            10627.7
5268 at
strong similarity to glutamine--tRNA ligase
5269_at
            938.8
Nuclear protein
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5270_at
            858.9
tRNA-specific adenosine deaminase 1 (TAD1)\; Tad1p\scADAT1
5271 at
            4532.5
weak similarity to Drosophila ANK protein
5272 at
            1503.0
similarity to Cse1p
                         Ρ
5273 at
            360.4
Doc1p and Cdc26p are associated with the anaphase-promoting complex and are involved in the
degradation of Clb2p
                         Ρ
5229_at
            216.3
questionable ORF
                         Ρ
5230 at
            4800.2
Protein required for accurate mitotic chromosome segregation
5231 at
            361.0
transcriptional activator protein of CYC1
5232 at
            1151.4
                         Ρ
strong similarity to gidA E.coli protein
5233 at
            -932.8
                         Α
questionable ORF
5234_at
            8894.1
glycinamide ribotide synthetase and aminoimidazole ribotide synthetase
5235 at
            1079.4
113kD component of the Exocyst complex, which contains the gene products encoded by SEC3, SEC5,
SEC6, SEC8, SEC10, SEC15 and EXO70.
5236 n at 537.5
weak similarity to P.falciparum dihydropteroate synthase
5237 at
            814.9
                         Ρ
weak similarity to P.falciparum dihydropteroate synthase
5238 at
            4607.5
hypothetical protein
5239 at
            97.7
                         Α
hypothetical protein
5240 at
            897.8
SAP4 is related to SAP155, SAP185, and SAP190, all of which associate with the SIT4 protein
phosphatase
5241 at
            6211.3
mRNA (identified by a library screen) that causes growth arrest when overexpressed
5242 at
            799.6
TOR inhibitor
5243_at
            7361.0
9.5-kDa zeta subunit of oligosaccharyltransferase complex
5244 at
            1278.7
similarity to N.crassa cytochrome-c oxidase chain V
            9982.2
5245_at
May regulate Golgi function and glycosylation in Golgi
5246 at
            3106.7
strong similarity to hypothetical protein YER037w
5247 at
            1609.0
weak similarity to Clostridium regulatory protein
5248 at
            -164.9
hypothetical protein
                         Ρ
5249_at
            1115.7
Ngg1p-interacting factor 3
            6490.8
5250 at
weak similarity to V.alginolyticus bolA protein
5206_at
            704.0
```

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hypothetical protein
5207 at
            78.8
                         Α
questionable ORF
5208 at
            177.8
                         Α
questionable ORF
                         Ρ
5209 at
            1025.2
Kinesin-related protein
                         Р
5210 at
            2384.2
Cyclin-like protein that interacts with Pho85p in affinity chromatography
5211_at
            -26.5
questionable ORF
                         Ρ
5212 at
            2005.2
antiviral protein, mRNA is induced early in meiosis
5213 at
            234.5
hydrophilic protein, heptad repeat motif
5214 at
            2012.6
similarity to M.jannaschii hypothetical proteins MJ1157 and MJ1478
5215 at
            2497.4
ras-like GTPase, highly homologous to YPT31
5216 at
            4361.4
Protein containing zinc fingers very similar to zinc fingers in Mig1p
5217 at
            581.9
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
            7467.9
transcription factor
5219 at
            7831.3
presumed vesicle coat protein
5220 at
            10.6
fatty-acyl coenzyme A oxidase
5221 at
            3521.8
questionable ORF
5222 at
            772.3
                         Ρ
carboxypeptidase B-like processing protease
5223 at
            11008.5
aromatic amino acid aminotransferase
5224 at
            457.4
                         Р
Member of the MCMVP1 family of proteins involved in DNA replication
5225 at
            14155.0
type I transmemebrane protein, component of COPII-coated, ER-derived transport vesicles
5226 at
            43.1
questionable ORF
                         Ρ
5227_at
            6818.2
weak similarity to Yip1p
                         Ρ
5228 at
            2332.2
Mck1 Dosage Suppressor 3\; negative regulator of early meiotic gene expression
5183 at
            4536.3
                         Ρ
hypothetical protein
5184 at
            5211.3
translational activator of GCN4 through activation of GCN2 in response to starvation
5185 at
            198.1
Protein with similarity to Hda1p, Rpd3p, Hos1p, and Hos3p
5186 at
            1156.7
questionable ORF
            127.4
5187_at
IME4 appears to activate IME1 in response to cell-type and nutritional signals and thereby regulate
```

```
meiosis
5188 at
            5937.1
subunit VIa of cytochrome c oxidase, may specifically interact with ATP
5189 at
            1061.9
Protein phosphatase 2A regulatory subunit B
5190 i at
            689.2
Ribosomal protein S26A
                         Ρ
5191_f_at
            9929.1
Ribosomal protein S26A
                         Ρ
5192_at
            179.4
hypothetical protein
                         Р
5193 at
            6399.5
subunit IV of cytochrome c oxidase
5194 at
            3867.7
similarity to hypothetical protein Fcy21p and weak similarity to FCY2 protein
5195 at
            2619.7
weak similarity to dehydrogenases
5196 at
            1282.6
strong similarity to Emericella nidulans cystathionine beta-lyase
5197_at
            -67.6
                         Α
hypothetical protein
5198 at
            69.8
                         Α
questionable ORF
                         Ρ
5199 at
            1160.3
Glycine-threonine-serine repeat protein
5200 at
            553.5
Protein kinase
                         Ρ
5201 at
            588.2
ser/thr protein kinase
                         Р
5202 at
            822.6
questionable ORF
            6858.0
5203_at
multicopy suppressor of POP2
5204_at
            1161.6
weak similarity to Oryctolagus calcium channel BIII
5205 at
            60.4
involved in meiotic recombination and chromosome metabolism
5161 at
            817.9
weak similarity to C.elegans hypothetical protein R08D7.1
5162_at
            7239.9
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
            4533.0
nuclear pore complex protein with GLFG repetitive sequence motif
5164 at
            5553.2
Contains domains found in the DEAD protein family of ATP-dependent RNA helicases\; high-copy
suppressor of kem1 null mutant
5165 at
            74.1
                         Α
hypothetical protein
                         Ρ
5166 at
            890.4
Protein involved in translation initiation
5167 at
            375.1
questionable ORF
                         Ρ
5168_at
            3242.1
Ca++-Pump, ATPase
```

```
5169_at
                         Ρ
            2129.5
Activator of transcription
5170 at
            621.7
                         Α
questionable ORF
5171 at
            1406.9
                         Ρ
similarity to S.pombe hypothetical protein SPAC31A2.10
5172 at
            1025.4
Required for X-ray damage repair, mitotic recombination, and full meiotic recombination. mRNA increases
in meiosis.
5173_at
            1530.9
Involved in sterol uptake
                         Р
5174 at
            4755.9
hypothetical protein
5175 at
            427.3
similarity to hypothetical protein YLR047c and Fre2p
5176 at
            1907.0
hypothetical protein
5177 at
            -15.8
                         Α
SerineVthreonine protein kinase
5178_at
            5280.2
similarity to V.vinifera dihydroflavonol 4-reductase
5179 at
            622.3
vacuolar alpha mannosidase
            1522.6
5180 at
polypeptide subunit of a yeast type 1 protein geranylgeranyltransferase
5181_at
            2908.8
aminoadipate-semialdehyde dehydrogenase small subunit (alpha-aminoadipate reductase)
5182 at
            265.1
questionable ORF
                         Ρ
5137 at
            1658.7
Peroxisomal peripheral membrane protein (peroxin) involved in import of peroxisomal matrix proteins
5138_at
            678.0
negative regulator of URS2 of the HO promoter
5139_at
            2881.7
Shows similarity to the Snf2p family of DNA-dependent ATPases
5140 at
            359.3
questionable ORF
                         Ρ
5141_at
            9236.3
Chorismate synthase
5142_i_at
           5511.0
                         Ρ
Ribosomal protein L9A (L8A) (rp24) (YL11)
5143 at
            289.3
hypothetical protein
5144_at
            503.6
transport protein that interacts with Sec20p\; required for protein transport from the endoplasmic reticulum
to the golgi apparatus
5145 at
            693.6
strong similarity to hypothetical protein YDL109c
5146_at
            679.3
Mitochondrial polypeptide chain release factor
5147 at
            879.0
Most likely an alpha 1,2 mannosyltransferase utilized for the addition of the third mannose onto the GPI
core structure.
5148 at
            2672.0
similarity to human human E6-associated protein
5149_at
            2463.5
```

```
weak similarity to Lactobacillus putative histidine protein kinase SppK
5150 at
            1108.3
strong similarity to hypothetical protein YPL221w
5151 at
            -12.3
hypothetical protein
                         Ρ
5152 at
            7297.7
encodes beta -subunit of yeast coatomer
5153 at
            746.3
weak similarity to E.coli ftsJ protein
5154_at
            695.0
                         Р
PHO85 cyclin
5155 at
            854.3
                         Ρ
similarity to hypothetical protein YPL216w
5156 at
            100.9
questionable ORF
5157 at
            1042.8
weak similarity to S.pombe hypothetical protein C3H1.12C
5158 at
            1819.3
mRNA guanylyltransferase (mRNA capping enzyme), alpha subunit
5159 at
            439.0
hypothetical protein
5160 at
            1036.4
weak similarity to rat cysteine string protein
5115 at
            1322.9
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
            7071.3
required for inositol prototrophy
5117 at
            2215.5
putative methylenetetrahydrofolate reductase (mthfr)
5118_at
            573.9
similarity to S.pombe hypothetical protein
5119 at
            9007.4
                         Ρ
Ribosomal protein S2 (S4) (rp12) (YS5)
5120 at
            7017.2
nuclear polyadenylated RNA binding protein
5121 at
            807.4
hypothetical protein
5122 at
            8721.8
                         Ρ
pre-mRNA processing factor involved in disassembly of spliceosomes after the release of mature mRNA
5123 at
            1125.7
multicopy suppressor of a cytochrome b mRNA translation defect, essential for the electron transfer in the
bc1 complex
5124_at
            118.5
                         Α
questionable ORF
                         Ρ
5125 at
            1350.0
hypothetical protein
5126 at
            1225.0
                         Ρ
beta-transducin homolog
                         Ρ
5127 at
            1844.3
associates with Snf1p
            2152.8
                         Ρ
5128_at
weak similarity to H.influenzae permease
5129 at
            1396.8
weak similarity to YOR165w
5130_at
            3080.2
```

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TATA-binding protein-associated-factor
5131 at
            4218.3
                         Ρ
hypothetical protein
            1169.1
                         Ρ
5132 at
hypothetical protein
5133_at
            58.3
                         Α
questionable ORF
5134_at
            1519.3
                         Ρ
weak similarity to hypotetical S.pombe protein
5135_at
            2387.9
strong similarity to hypothetical protein YBR238c
            9192.5
5136 at
light chain for myosin Myo2p
5092_at
            10152.1
Associated with tRNA and amino acyl-tRNA synthetases\; has affinity for quadruplex nucleic acids
5093 at
            514.2
similarity to glucose transport proteins
5094 at
            14122.1
Ribosomal protein L28 (L29) (rp44) (YL24)
5095_at
            333.7
questionable ORF
5096_at
            2021.9
strong similarity to hypothetical protein YBR242w
5097 at
            3468.6
nuclear pore protein, homologous to sec13
5098 at
            3484.3
similarity to putative human GTP-binding protein MMR1
5099 at
            932.2
hypothetical protein
                         Ρ
            6899.9
5100 at
pheromone response pathway suppressor
5101_at
            901.4
similarity to copper homeostasis protein Cup9p
5102_at
            672.1
cytosolic and peripheral membrane protein
5103 at
            945.8
135-kDa protein that is subunit of poly(A) ribonuclease
5104 at
            2546.6
component of spindle pole
5105_at
            3223.6
Nuclear pore complex protein with GLFG motif
5106 at
            1369.6
35 kDa nucleotide binding protein
5107_at
            162.0
Ligase Interacting Factor 1\; physically interacts with DNA ligase 4 protein (Lig4p)
5108 at
            11350.7
alpha mating factor
5109 at
            2894.2
                         Ρ
questionable ORF
5110 at
            3741.8
Similar to ubiquitin conjugating protein family
5111_at
            804.2
Coiled-coil protein involved in spindle-assembly checkpoint
5112 at
            1014.8
weak similarity to Staphylococcus aureus nuclease (SNase)
5113_at
            3040.9
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strong similarity to hypothetical protein YPL189w
5114 at
            727.4
suppressor of GTPase mutant
5069 at
            4994.3
                        Ρ
strong similarity to hypothetical protein YPL191c
5070 at
            296.9
hypothetical protein
5071_at
            3687.1
                        Ρ
strong similarity to C.elegans R07E5.13 protein
5072_at
            1643.5
hypothetical protein
                        Ρ
5073 at
            5936.9
ATP-dependent RNA helicase CA3 of the DEADVDEAH box family
5074 at
            7193.2
Transporter (permease) for choline and nitrogen mustard\; share homology with UGA4
5075 i at
            10114.3
Ribosomal protein L7A (L6A) (rp11) (YL8)
5076 f at 9714.6
Ribosomal protein L7A (L6A) (rp11) (YL8)
5077_at
            281.4
Mitotic Membrane Component
5078_at
            0.0
questionable ORF
                         Ρ
5079 at
            1427.0
heat shock transcription factor
5080 at
            113.8
questionable ORF
5081 at
            1659.0
                        Ρ
Putative transcription factor that binds the consensus site PyPuCACCCPu
5082 at
            6062.9
RNA polymerase II subunit
5083_at
            -233.2
questionable ORF
5084_at
            2492.6
probable ribosomal protein L12
5085 at
            3500.2
weak similarity to H.influenzae hypothetical protein
5086_at
            1750.1
hypothetical protein
5087_at
            2953.4
                        Ρ
glycosyltransferase
5088 at
            915.7
                        Ρ
similarity to YLR276c and YKR024c
5089_at
            716.5
pseudouridine synthase 2
                        Ρ
5090 at
            6520.2
pyruvate carboxylase
5091 at
            769.7
                        Ρ
Death Upon Overexpression
5047 at
            1761.6
strong similarity to hypothetical protein YBR216c
5048 at
            212.5
similarity to rat branched-chain alpha-ketoacid dehydrogenase kinase
5049 at
            2977.1
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
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residues are critical for sporulation and histone polyubiquitinating activity, but not UV repair or induced
mutagenesis.
                         Ρ
5050 at
            900.4
hypothetical protein
                         Ρ
5051 at
            3187.3
homologue of pombe SDS23\; localizes to spindle pole body
5052 at
            11360.4
delta-9-fatty acid desaturase
5053 at
            4429.3
strong similarity to D.melagonaster cni protein
            2314.6
5054 at
strong similarity to hypothetical proteins YAR031w, YGL051w, YAR028w, YAR033w and YCR007c
            207.2
5055 at
questionable ORF
                         Ρ
5056 at
            870.1
strong similarity to YAR033w protein
5057 at
            1311.5
hypothetical protein
5058 at
            1164.1
                         Ρ
mRNA cap-binding protein (eIF-4F), 130K subunit
            10140.7
5059 at
ATPase
5060 at
            822.1
                         Ρ
similarity to hypothetical S. pombe protein
5061 at
            412.9
hypothetical protein
                         Р
5062 at
            737.0
hypothetical protein
5063 at
            1531.9
component of the cleavage and polyadenylation factor CF I involved in pre-mRNA 3 -end processing
5064 at
            1515.3
RNA polymerase II elongation factor
5065 at
            1053.8
                         Ρ
questionable ORF
5066 at
            263.2
                         Α
weak similarity to YJL109c
5067_at
            7048.8
delta-aminolevulinate dehydratase (porphobilinogen synthase)
5068 at
            4604.3
                         Ρ
similarity to V. vinifera dihydroflavonol reductase
                         Ρ
5024 at
            1639.3
membrane-bound mannosyltransferase
5025_at
            7178.5
similarity to E.coli hypothetical 23K protein
            1366.8
5026 at
Mtf1 Two Hybrid Clone 2
5027 at
            622.5
C2H2 zinc finger protein which resembles the mammalian Egr and Wilms tumour proteins
5028_at
            60.8
                         Α
questionable ORF
5029 at
            49.4
Meiosis-specific gene required for the pairing of homologous chromosomes
5030 at
            118.4
adhesion subunit of a-agglutinin
5031 at
            11487.2
Ribosomal protein L24A (rp29) (YL21) (L30A)
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```
5032_at
            13372.2
Large ribosomal subunit protein L30 (L32) (rp73) (YL38)
5033 at
            4045.9
weak similarity to human chromatin assembly factor I p150 chain
5034 at
            4849.9
glucanase gene family member
5035_at
            4138.8
glucosidase I
5036 at
            13021.8
                         Ρ
tryptophan synthetase
5037 at
            760.6
                         Ρ
Probable transcription factor, polyglutamine domain protein
5038 at
            1095.4
                        Ρ
questionable ORF
5039 at
                         Ρ
            3626.8
weak similarity to Vsp27p
5040 at
            8931.0
required for protein glycosylation
5041 at
            867.5
DNA damage-responsive protein
5042 at
            6188.2
hypothetical protein
5043 at
            4738.7
                         Ρ
beta (38kDa) subunit of casein kinase II (CKII)
5044 at
            619.9
Homolog of E. coli Hsc20 co-chaperone protein
5045 at
            801.0
                        Р
arginyl-tRNA-protein transferase
5046 at
            1644.4
pleiotropic drug resistance regulatory protein
5002 at
            239.2
hypothetical protein
5003 at
            2735.5
similarity to Drosophila pumilio protein and Mpt5p protein
5004 at
            3474.8
zinc-finger transcription factor of the Zn(2)-Cys(6) binuclear cluster domain type
5005 at
            11057.3
Sterol C-24 reductase
5006 at
            7432.2
                         Ρ
Proteasome subunit YC7alphaVY8 (protease yscE subunit 7)
5007 at
            1376.8
similarity to hypothetical S. pombe protein
5008_at
            8681.7
isopropylmalate isomerase
5009 at
            8557.1
plasma membrane H+-ATPase
5010 at
            56.8
                         Α
questionable ORF
5011_at
            3707.6
putative vacuolar Ca2+ ATPase
5012_at
            245.5
weak similarity to Xenopus kinesin-related protein Eg5
5013 at
            1322.7
weak similarity to Tup1p
5014_at
            700.0
protein required for Clb2 and Ase1 degradation
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5015_at
                         Ρ
            1803.9
p24 protein involved in membrane trafficking
5016 at
            8792.4
putative 3-beta-hydroxysteroid dehydrogenase
5017 at
            1727.3
similarity to C.elegans hypothetical M142.5 protein
5018 at
            2337.9
similarity to C.elegans hypothetical M142.5 protein
5019 at
            1252.5
similarity to hypothetical S. pombe protein
5020 at
            811.6
similarity to D.melanogaster lin19 protein
5021 at
            1133.0
strong similarity to hypothetical protein YLR324w
5022 at
            1467.6
transcription initiation factor TFIIF middle subunit
5023 at
            327.4
RNA splicing factor associated with U5 snRNP
4979 at
            5816.1
choline phosphate cytidylyltransferase (also called phosphoethanolamine cytidylyltransferase or
phosphocholine cytidylyltransferase)
4980 at
            3880.2
ATPase stabilizing factor
            2130.9
4981 at
Putative t-SNARE of the plasma membrane
4982 at
            1062.3
strong similarity to hypothetical protein YLR328w
4983_g_at 1513.6
strong similarity to hypothetical protein YLR328w
            1681.0
4984 at
questionable ORF
4985_at
            1406.3
similarity to E.nidulans cysteine synthase
4986 at
            1188.2
Associated with U1 snRNP (no counterpart in mammalian U1 snRNP. Contains few SR-, RE- and
RD-dipeptides.
4987_at
            4698.9
                         Ρ
putative integral membrane protein
4988 at
            160.8
                         Ρ
similarity to hypothetical protein YGR031w
4989 at
            496.7
weak similarity to M.jannaschii hypothetical protein MJ1317
4990_at
            1565.1
hypothetical protein
4991 at
                         Α
            273.2
questionable ORF
4992 at
            3315.2
gamma-aminobutyrate (GABA) transaminase (4-aminobutyrate aminotransferase)
4993 at
            8587.9
Vacuolar H-ATPase 14 kDa subunit (subunit F) of the catalytic (V1) sector
4994 at
            710.4
similarity to M.leprae yfcA protein
4995 at
            205.1
                         Α
questionable ORF
            394.7
4996_at
acts in concert with Mid2p to transduce cell wall stress signals
```

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4997_at
                         Ρ
            3617.5
weak similarity to Methanobacterium thermoautotrophicum hypothetical protein MTH972
4998 at
            412.9
                         Α
questionable ORF
                         Ρ
4999 at
            4318.6
hypothetical protein
5000_i_at
            7971.8
Ribosomal protein S25A (S31A) (rp45) (YS23)
5001 f at 8008.2
Ribosomal protein S25A (S31A) (rp45) (YS23)
            3793.8
4956 at
40 kDa putative membrane-spanning ATPase
4957 at
            1700.4
integral subunit of RNase P and apparent subunit of RNase MRP
4958 at
            2291.7
similarity to hypothetical protein YGR015c and weak similarity H.influenzae dihydrolipoamide
acetyltransferase
4959 at
            4570.0
catalytic component of 1,3-beta-D-glucan synthase
4960 at
            2806.2
hypothetical protein
4961 at
            3942.4
                         Ρ
hypothetical protein
                         Ρ
4962 at
            568.1
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
            16120.2
Acyl-CoA-binding protein (ACBP)VDiazepam binding inhibitor (DBI)Vendozepine (EP)
            6208.2
4964 at
strong similarity to hypothetical protein YLR350w
4965 at
            161.5
questionable ORF
4966 at
            423.1
MAP protein kinase homolog involved in pheromone signal transduction
4967 at
            2716.8
Among a group of genes whose products are necessary for bud-site selection\; likely involvement in
positioning the proximal pole signal
            546.5
4968_at
hypothetical protein
4969_at
            472.4
strong similarity to transaldolase
4970 at
            2908.2
zinc finger protein\; negative regulator of meiosis\; directly repressed by a1-a2 regulator
4971_at
            468.1
questionable ORF
                         Ρ
4972 at
            333.6
hypothetical protein
4973 at
            2037.6
transcription factor tau (TFIIIC) subunit 131
4974 at
            2351.4
ubiquitin fusion degradation protein
4975 at
            8065.1
Protein that suppresses ts allele of CDC4 when overexpressed
4976 at
            1239.1
questionable ORF
4977_at
            67.4
                         Α
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questionable ORF
4978 at
            195.0
similarity to ser/thr protein kinases
4934 at
            -94.9
                        Α
hypothetical protein
                        Ρ
4935 at
            4584.0
similarity to C.elegans E04D5.1 protein
4936 at
            6844.6
high affinity methionine permease
4937_at
            2010.8
Member of RSC complex
4938 at
            969.8
Required for amino acid permease transport from the Golgi to the cell surface
4939 at
            1110.5
similarity to mouse calcium-binding protein
4940 at
            204.2
sporulation-specific homologue of the yeast CDC3V10V11V12 family of bud neck microfilament genes and
is regulated by ABFI
4941 at
            11776.1
                         Ρ
C-4 sterol methyl oxidase
4942 at
            10237.6
-phosphoribosylformyl glycinamidine synthetase
4943 at
            2626.8
Cytochrome OXidase gene 18
4944 at
            6084.3
Zn-finger protein, transcriptional regulator
4945 at
            806.0
questionable ORF
                        Ρ
4946 at
            1658.3
similarity to P.putida phthalate transporter
4947 at
            37.0
                        М
similarity to hypothetical protein YBR105c
4948 at
            657.7
                        Ρ
weak similarity to transcription factors
                        Ρ
4949 at
            1098.9
weak similarity to Rod1p
4950 at
            111.0
                        М
questionable ORF
4951 at
            786.0
                        Α
GDP-GTP Exchange Protein (GEP) for the Rho1p Small GTP-binding Protein
4952 at
            541.1
similarity to hypothetical protein YLR373c
4953_at
            505.9
factor stimulating decay of mRNAs containing premature stop codons\; acts with Nmd2p and Nam7p
4954 at
                         Ρ
            779.5
questionable ORF
4955 at
            790.5
                        Ρ
Homolog of human core snRNP protein D1, involved in snRNA maturation
4911_at
            921.0
                        Р
RNA splicing factor
4912 at
            2034.8
Mitochondrial ribosomal protein MRPL25 (YmL25)
            3868.6
4913 at
peroxisome associated protein containing a PTS1 signal
4914 at
            4382.9
Polypeptide 3 of a Yeast Non-native Actin Binding Complex, homolog of a component of the bovine
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5

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NABC complex
                         Ρ
4915 at
            2732.4
hypothetical protein
            3319.0
                         Ρ
4916 at
Twinfilin A, an actin monomer sequestering protein
4917 at
            1485.4
weak similarity to mammalian myosin heavy chain
4918 at
            7359.4
20 kDa mitochondrial outer membrane protein import receptor
4919 at
            2152.2
translation initiation factor eIF2B, 71 kDa (delta) subunit\; translational repressor of GCN4 protein
4920 at
            1353.8
35 kDa mitochondrial ribosomal small subunit protein
4921 i at
            14336.6
60S ribosomal protein L11B (L16B) (rp39B) (YL22)
4922 at
            8218.4
strong similarity to hypothetical protein YPL004c
4923 at
            -21.8
Third, minor isozyme of pyruvate decarboxylase
4924_at
            199.8
cytoplasmic catalase T
4925 at
            312.3
weak similarity to rat tropomyosin
            4929.0
                         Ρ
4926 at
hypothetical protein
4927_at
            1045.8
                         Ρ
pre-mRNA splicing protein
            1293.6
4928 at
SerineVthreonine protein kinase
4929 at
            2226.2
similarity to hypothetical S.pombe protein
4930_at
            11879.2
mitochondrial and cytoplasmic valyl-tRNA synthetase
4931_at
            6481.7
Putative 3 ->5 exoribonuclease\; component of exosome complex of 3 ->5 exonucleases
4932 at
            391.6
similarity to bovine Graves disease carrier protein
4933 at
            5025.7
transcriptional activator of the SKN7 mediated two-component regulatory system
4888_at
            1623.8
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
            1562.7
involved in controlling telomere length
4890 at
            821.8
Mac1-dependent regulator
4891 at
            2584.2
weak similarity to B.subtilis YqgP
4892 at
            1181.0
hypothetical protein
4893_at
            4520.7
similarity to zebrafish essential for embryonic development gene pescadillo
4894 at
            735.5
subunit of RNA polymerase II holoenzyme\/mediator complex
4895_at
            3844.6
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Protein involved in vacuolar H-ATPase assembly or function
4896 at
            10184.4
                        Ρ
hypothetical protein
4897_at
            17.8
                         Α
questionable ORF
            1094.9
                        Ρ
4898_at
G(sub)2-specific B-type cyclin
4899 at
            113.2
B-type cyclin
                         Ρ
4900_at
            353.9
weak similarity to YLR099c and YDR125c
4901 at
            968.7
                        Ρ
weak similarity to mosquito carboxylesterase
4902 at
            691.0
mitochondrial protein with homology to the mammalian SURF-1 gene
4903 at
            647.7
Duo1 And Mps1 interacting
4904 at
            -213.7
questionable ORF
4905_g_at 1502.6
questionable ORF
4906_at
            128.8
                        Α
questionable ORF
                        Ρ
4907 at
            1061.2
transcriptional regulator, interacts with histones, primarily histone H3, possesses nucleosome assembly
activity
                        Р
4908 at
            1768.5
hypothetical protein
4909 f at
                        Ρ
            17319.5
Ribosomal protein S23A (S28A) (rp37) (YS14)
4910 at
            796.8
Contains GLFG repeats in N-terminal half and heptad repeats in C-terminal half
4865 at
            992.9
                        Ρ
required for ER to golgi vesicle docking
4866 at
            883.2
ammonia permease
4867_at
            966.2
                        Ρ
hypothetical protein
                        Ρ
4868 at
            2222.9
serine\/threonine phosphatase
            12412.2
4869 at
asparagine synthetase
4870_at
            3708.5
similarity to S.pombe hypothetical protein SPAC24H6.11c
4871 at
            122.7
weak similarity to hypothetical protein YPR156c
4872 at
            1188.6
weak similarity to mouse T10 protein
            3638.7
4873_at
hypothetical protein
4874_at
            504.6
SYnthetic lethal with cdcForty
4875 at
            607.8
weak similarity to myosin heavy chain proteins
4876_at
            595.7
strong similarity to Nce2p
```

```
4877_at
            3593.4
mitochondrial protein, prohibitin homolog\; similar to S. cerevisiae Phb2p
4878 at
            195.4
Member of ubiquitin-conjugating protein family
4879 at
            1930.6
hypothetical protein
4880 at
            7333.6
proteasome component Y13
4881 at
            6797.3
weak similarity to chicken growth factor receptor-binding protein GRB2 homolog
4882 g at 3952.8
weak similarity to chicken growth factor receptor-binding protein GRB2 homolog
            713.5
4883 at
                         Ρ
questionable ORF
                         Ρ
4884 i at
            8277.2
similarity to multidrug resistance proteins
4885 at
            124.3
questionable ORF
4886 at
            657.8
                         Ρ
110 kDa subunit of the centromere binding factor CBF3
4887 at
            963.1
strong similarity to hypothetical protein YPR157w
4842 at
            1933.5
similarity to hypothetical protein YPR158w
4843 at
            4735.0
encodes a predicted type II membrane protein highly homologous to Kre6p
4844 at
            630.2
component of the biosynthetic pathway producing the thiazole precursor of thiamine
4845 at
            3580.3
similarity to C.elegans hypothetical protein
4846 at
            4745.6
hypothetical protein
4847 at
            1312.0
                                                                                                     Ν
alpha-acetyltransferase that acts on methionine termini
4848 at
            8060.5
Ribosomal protein L24B (rp29) (YL21) (L30B)
4849 at
            2018.5
hypothetical protein
                         Ρ
4850 at
            378.9
hypothetical protein
4851 i at
                         Ρ
            6909.8
questionable ORF
                         Ρ
4852_s_at 2138.6
questionable ORF
                         Р
4853 at
            626.0
GTP-binding protein of the ras superfamily involved in bud site selection
4854 at
            360.3
hypothetical protein
4855_at
            331.6
strong similarity to hypothetical proteins YKR076w and YMR251w
4856 at
            12694.7
Cystathionine beta-synthase
4857 at
            1186.9
hypothetical protein
            6601.5
4858_at
Phosphatidyl-ethanolamine N-methyltransferase
```

```
4859_at
            1688.4
                        Ρ
involved in mRNA transport
4860 at
            10285.3
nuclear localization sequence binding protein
4861 at
            251.9
questionable ORF
                        Ρ
4862_at
            3909.3
hypothetical protein
4863 at
            2977.7
mRNA cap-binding protein (eIF-4F), 150K subunit, highly homologous to Tif4632p, homologs of
mammalian p220
4864 at
            1156.2
GTP-binding protein
4819 at
            -37.1
                         Α
questionable ORF
                         Ρ
4820 at
            1727.5
hypothetical protein
4821 at
            1594.1
                        Ρ
Involved in biosynthetic pathway for cell wall beta-glucans
4822_at
            4901.2
Clathrin light chain
                        Ρ
4823 at
            808.6
hypothetical protein
                        Ρ
4824 at
            2759.2
similarity to Rib2p
4825_at
            1787.5
phosphatidylserine decarboxylase located in vacuole or Golgi
            1510.6
4826_at
mitochondrial methionyl-tRNA synthetase
4827 at
            4191.0
Golgi membrane protein
4828_at
            4996.2
strong similarity to human GTP-binding protein
4829_at
            420.8
Essential for the expression and activity of ubiquinol-cytochrome c reductase
4830 at
            7393.7
Squalene monooxygenase
4831_at
            -72.3
                        Α
questionable ORF
4832_at
            2753.4
                        Ρ
Alcohol acetyltransferase
4833 at
            7907.8
Poly(A)-binding protein binding protein
4834_at
            797.7
hypothetical protein
4835 at
                        Ρ
            11994.7
Ribonucleotide Reductase
4836 at
            7703.7
similarity to YHR004c-a
                        Ρ
4837 at
            5239.7
questionable ORF
4838_at
            7541.8
7.3 kDa subunit 9 of the ubiquinol cytochrome c oxidoreductase complex
4839 at
            2834.7
Ubiquitin-protein ligase
                        Ρ
4840_at
            8423.0
```

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tyrosyl-tRNA synthetase, cytoplasmic
4841 at
            3131.8
Transcription factor TFIIF large subunit
4797 at
            6022.6
HMG1V2 homolog
4798 at
            151.7
                         Α
SerineVthreonine protein kinase required for cell cycle arrest in response to loss of microtubule function
4799 at
            10467.7
similarity to Aspergillus fumigatus rAsp
4800_at
            114.6
questionable ORF
                         Ρ
4801 at
            4639.5
histidine permease
4802 i at
            18.1
Glyceraldehyde-3-phosphate dehydrogenase 3
4803 at
            1965.3
Protein X component of mitochondrial pyruvate dehydrogenase complex
4804 at
            801.7
xylulokinase
4805_at
            4640.5
                         Ρ
homolog of RNAse PH
                         Ρ
4806_at
            812.9
weak similarity to Tetrahymena acidic repetitive protein arp1
4807 at
            2013.1
involved in nitrosoguanidine resistance
4808 at
            3692.8
hypothetical protein
4809 at
            3599.0
                         Ρ
dolichyl phosphate-D-mannose:protein O-D-mannosyltransferase
4810 at
            2532.4
weak similarity to rape guanine nucleotide regulatory protein
4811_at
            986.3
strong similarity to translation elongation factor eEF1 alpha chain Cam1p
4812_at
            1049.4
phosphorylcholine transferase\; or cholinephosphate cytidylyltransferase
4813 at
            2817.6
weak similarity to X.laevis protein-tyrosin-phosphatase cdc homolog 2 and to hypothetical protein
YPR200c
                         Ρ
4814 at
            12172.9
encodes the cytoplasmic trifunctional enzyme C1-tetrahydrofolate synthase
4815 at
            241.0
similarity to S.pombe hypothetical protein D89234
4816_at
            1328.7
similarity to Xenopus transcription factor Oct-1.17
4817 at
            656.0
electron-transferring flavoprotein, beta chain
4818 at
            3336.3
phosphoserine phosphatase
4774_at
            8962.6
                         Ρ
thioredoxin
4775 at
            5101.9
similarity to M.jannaschii GTP-binding protein and to M.capricolum hypothetical protein SGC3
4776 at
            4845.9
zinc finger protein
4777_at
            127.8
weak similarity to S.pombe hypothetical protein SPAC18B11.03c
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4778_at
            1461.3
                        Ρ
involved in 7-aminocholesterol resistance
4779 f at 12409.4
Ribosomal protein S0A
                        Ρ
4780 at
            12116.8
Ribosomal protein S0A
                        Р
4781 at
            1102.9
strong similarity to hypothetical S. pombe protein
4782 at
            1751.7
Participates in synthesis of N-acetylglucoaminylphosphatidylinositol, the first intermediate in synthesis of
glycosylphosphatidylinositol (GPI) anchors
4783 at
            1514.9
putative calcium channel
4784 at
            606.6
omosome region maintenance protein
4785 at
            231.8
questionable ORF
4786 at
            3913.4
Mitochondrial ribosomal protein MRPL9 (YmL9) (E. coli L3) (human MRL3)
4787_at
            267.8
similarity to hypothetical protein YHR149c
4788 at
            3150.0
                        Ρ
translational activator of cytochrome c oxidase subunit III
4789 at
            907.8
weak similarity to hypothetical protein YFR021w
4790 at
            526.8
strong similarity to drug resistance protein SGE1
            83.9
4791 at
weak similarity to human p55CDC and Cdc20p
4792 at
            -23.7
hypothetical protein
4793_at
            2659.1
De-repression of ITR1 Expression
4794_at
            1684.2
questionable ORF
                        Ρ
4795 at
            2822.6
57 kDa nuclear protein
                        Р
4796_at
            314.4
questionable ORF
4751_at
            8281.1
mitochondrial protein, prohibitin homolog\; homolog of mammalian BAP37 and S. cerevisiae Phb1p
4752 at
            3418.0
possible homolog of human 26S proteasome regulatory subunit p28
4753_at
            5917.0
Positive regulatory protein of phosphate pathway
4754 at
            10297.6
Flavohemoglobin
4755 at
            3691.4
                        Ρ
hypothetical protein
4756 at
            107.0
                         Α
questionable ORF
                        Ρ
4757_at
            1249.7
weak similarity to YOR019w
4758 at
            1074.2
protein containing kelch repeats, similar to YHR158c and YPL263c
4759_at
            923.0
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weak similarity to hypothetical protein YHR160c
4760 at
            9026.4
phosphofructokinase alpha subunit
4761 at
            2033.0
Yeast Assembly Polypeptide, member of AP180 protein family, binds Pan1p and clathrin
4762 at
            -90.3
questionable ORF
                         Ρ
4763 at
            897.4
strong similarity to hypothetical protein YHR162w
4764_at
            5748.4
Succinate-CoA Ligase (ADP-Forming)
4765 at
            3596.3
similarity to hypothetical S.pombe protein
4766 at
            2501.8
RNA polymerase III transcription factor with homology to TFIIB
4767 at
            650.0
hypothetical protein
4768 at
            438.8
                         Ρ
similar to SOL3
4769_at
            94.7
Mga1p shows similarity to heat shock transcription factor
4770 at
            739.0
weak similarity to human cleavage stimulation factor 64K chain
            2254.1
4771 at
hypothetical protein
4772_at
            1080.8
                         Ρ
histone acetyltransferase
                        Ρ
4773 at
            8071.5
Proteasome subunit
4729 i at
                         Ρ
            4886.3
enolase I
                         Р
4730_s_at 7808.9
enolase I
4731 at
            3577.3
                         Ρ
COQ6 monooxygenase
4732 at
            573.2
6-phosphogluconate dehydrogenase
4733 at
            3057.0
similarity to C.elegans C16C10.1
4734_at
            1445.9
homolog of xeroderma pigmentosum group G (XPG) protein, copufurifies 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
            521.7
questionable ORF
4736 at
            11013.1
similarity to allantoate transport protein
4737 at
            3025.3
putative beta adaptin component of the membrane-associate clathrin assembly complex
4738 at
            2700.9
ser/thr protein kinase
                         Ρ
4739 at
            1226.4
weak similarity to E.coli lipase like enzyme
4740 at
            9732.6
methionyl tRNA synthetase
4741_at
            -6.3
                         Α
```

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questionable ORF
                        Ρ
4742 at
            2707.6
hypothetical protein
4743_at
            3624.3
                        Ρ
GTP-cvclohvdrolase I
                        Ρ
4744 at
            2448.5
weak similarity to S.pombe hypothetical protein SPAC17A5
4745 at
            296.6
questionable ORF
4746_at
            2704.9
Member of CDC48VPAS1VSEC18 family of ATPases
4747 at
                        Ρ
            531.8
strong similarity to S.pombe RNA helicase
4748 at
            2053.5
similarity to hypothetical S.pombe protein SPAC12G12.02
4749 at
            -41.0
similarity to hypothetical protein YMR295c
4750 at
            2943.5
Component of the TAFII complex required for activated transcription
4705_at
            2362.6
hypothetical protein
4706_at
            2614.2
                        Ρ
ribonuclease H
                        Ρ
4707 at
            2783.6
similarity to hypothetical S.pombe protein
4708 at
            228.3
                        Р
similarity to C.elegans LET-858
4709 at
            11016.1
glucanase gene family member
4710 at
            7748.3
weak similarity to Cbf5p
4711_at
            11229.1
ABC transporter
4712_at
            13611.1
Cell wall endo-beta-1,3-glucanase
4713 at
            1506.1
similarity to hypothetical protein YMR310c
4714 at
            5121.7
similarity to mouse Surf-4 protein
4715_at
            10921.3
                        Ρ
Zuotin, putative Z-DNA binding protein
4716 at
            3252.3
Biotin synthase
4717_at
            173.5
strong similarity to maltase
            609.1
4718 at
maltose pathway regulatory protein
4719 at
            474.9
alpha-glucoside transporter
4720 at
            320.2
hypothetical protein
4721_at
            -127.3
                        Α
hypothetical protein
                        Р
4722_s_at 235.7
strong similarity to hypothetical protein YBR300c
4723_f_at 1593.8
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strong similarity to members of the Srp1p/Tip1p family
4724 i at 5889.3
hypothetical protein
4725_f_at
                         Ρ
            480.3
hypothetical protein
4726 at
            127.3
                         Α
identified by SAGE
4727 s at 4560.9
                         Ρ
Protein essential for mitochondrial biogenesis and cell viability
4728 at
            165.6
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
            3315.2
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
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
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
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
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 1545.4
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
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
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
            810.6
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
            387.2
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
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
            75.4
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
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
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
            251.3
non-annotated SAGE orf Found forward in NC_001139 between 299797 and 299946 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
4696 at
            8495.9
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
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
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
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
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
            6299.7
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
            3330.9
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
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
            253.6
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
            1342.4
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
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
            344.0
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
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
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
            2045.7
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
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
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
            2566.0
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
            79.2
```

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 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 -58.1 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 5940.3 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 722.3 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 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 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 161.8 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 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 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 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 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 255.4 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 -29.4 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 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 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 536.1 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

228.3

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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 -241.0
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
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 50.9
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
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
           81.2
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
            230.5
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
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
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
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
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
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
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
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
            -7.2
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
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
            115.3
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
            989.7
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
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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

1582.0

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Р
4653_at
            640.3
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
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
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
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
            130.7
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
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
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
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
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
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
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
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
            3651.6
4615 at
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
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
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
            3159.8
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
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
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
            605.2
non-annotated SAGE orf Found forward in NC_001139 between 274428 and 274583 with 100% identity.
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See citation Velculescu, V.E., et al. (1997) Characterization of the yeast transcriptome. Cell 8:243-251
4622 at
            1557.0
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
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
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
            9893.0
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
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
            1545.1
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
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
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
            2136.4
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
            864.9
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
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
            774.2
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
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
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
            1940.4
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
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
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
            -64.1
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
            41.4
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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
            353.3
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
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
            252.1
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 78.9
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
            354.7
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
            2353.8
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
            3353.0
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
            2286.8
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
            1395.8
snRNA
                         Ρ
4604 i at
            586.1
snRNA
                         Р
4605_s_at
           1512.1
snRNA
4606_at
            1591.3
                        Ρ
snRNA
4607 at
                        Ρ
            1018.8
snRNA
                         Ρ
4561_s_at
            589.6
snRNA
4562 at
            130.8
                         Α
similarity to C.carbonum toxin pump
4563 f at
            2535.5
                        Ρ
strong similarity to members of the Srp1p/Tip1p family
4564 at
            132.8
                        Ρ
similarity to subtelomeric encoded proteins
4565 at
            173.2
ExtraCellular Mutant
4566 at
            86.0
                         Α
similarity to subtelomeric encoded proteins
```

4567_at

329.0

```
weak similarity to Drosophila hypothetical protein 6
4568 at
            2053.7
                        Ρ
similarity to C.carbonum toxin pump
4569 at
            1972.0
weak similarity to YPL208w
4570 at
            377.2
Cytochrome B pre-mRNA processing protein
4571 at
            355.4
hypothetical protein
                         Ρ
4572_at
            806.4
very low affinity methionine permease
4573 at
            1069.1
ABC transporter
4574 at
            8580.9
Single-strand nucleic acid binding protein
4575 i at
            16980.7
Ribosomal protein L8A (rp6) (YL5) (L4A)
4576 at
            815.8
glyerol kinase (converts glycerol to glycerol-3-phosphate
4577_at
            5199.8
SNARE protein with a C-terminal membrane anchor
4578 at
            1867.4
ExtraCellular Mutant
                         Ρ
4579 at
            2995.0
hypothetical protein
4580 at
            731.7
Putative integral membrane protein containing novel cysteine motif. Similarity to SLG1 (WSC1), WSC2
and WSC3
                        Ρ
4581 at
            8876.3
Meiotic regulatory protein\; Cys-His zinc fingers
4582 at
            1627.5
hypothetical protein
                         Ρ
4583 at
            3954.7
transcriptional regulator
4584 at
            622.3
RNA binding domain (N-term) with asparagine rich region?
4539 at
            842.5
hypothetical protein
4540 at
            6.0
                         Α
Encodes one of the earliest meiosis-specific recombination functions.
4541 at
            1068.7
weak similarity to Pseudomonas gamma-butyrobetaine hydroxylase
4542_at
            5001.6
negative regulator of phospholipid biosynthesis
4543 at
            623.6
Similiar to clathrin coat proteins
4544 at
            138.4
Dimerization cofactor of homeodomian protein NF1-alpha
4545 at
            1365.1
                        Ρ
Probable transmembrane protein PTM1
4546_at
            913.9
Urea transporter
                        Ρ
4547 at
            12903.4
Ribosomal protein S20
4548_at
            220.4
GTP-binding protein and glycogen phosphorylase (weak)
```

```
4549_at
            4038.3
similarity to C.elegans hypothetical protein F21D5.2
4550 at
            -18.9
UDP Glucose pyrophosphorylase
4551 at
            7606.1
ribose-phosphate pyrophosphokinase 3
4552 at
            217.2
similarity to C.elegans hypothetical protein
4553 at
            342.8
bZip DNA binding proteins
4554 at
            3120.4
Potential formate transporter nirC
4555 at
            2040.6
serine\threonine protein kinase
4556 at
            734.5
hypothetical protein
4557 at
            -248.4
                        Α
hypothetical protein
4558 at
            1456.8
                        Ρ
mitochondrial ribosomal protein, homologous to E. coli ribosomal protein S2, component of the 37 S
subunit of mitochondrial ribosomes
4559 at
            1993.0
YKL008c
                        Ρ
4560 at
            1633.7
SH3 domain
4515_i_at
            10867.1
Ribosomal protein L14B
4516 f at
                        Ρ
            10838.8
Ribosomal protein L14B
                        Ρ
4517 at
            3226.8
60kD chaperonin (weak)
4518_at
            5967.6
8.5 kDa subunit of the ubiqunol-cytochrome c oxidoreductase complex
4519_at
            574.5
Mitochondrial carrier protein/Grave s disease carrier protein
4520 at
            1930.8
thiF, moeB, ubiquitin activating enzyme (all weak)
            646.2
4521 at
similarity to YLL010c, YLR019w
4522_at
            2140.3
alpha subunit of G protein coupled to mating factor receptors
            8208.5
4523 at
May act cooperatively with Mrs5p in mitochondrial protein import or other related essential mitochondrial
processes
4524 at
            1562.2
Zinc finger (Cys(2)-His(2))
4525 at
            16422.8
cytochrome P450 lanosterol 14a-demethylase
4526_at
            3896.3
Manganese-containing superoxide dismutase
4527 at
            4230.6
similarity to S.pombe hypothetical protein
4528 i at
            8160.8
Ribosomal protein L27A
                        Ρ
4529_f_at
            8617.7
Ribosomal protein L27A
```

```
4530_at
                         Ρ
            523.9
Seryl-tRNA synthetase
                         Ρ
4531 at
            2263.8
Vacuolar protein sorting
4532 at
            2644.9
subunit of the major N alpha-acetyltransferase, complexes with the catalytic subunit of
N-a-acetyltransferase (Nat1)
4533 at
            179.6
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-chromatidVcentromere cohesion with nuclear
division. Spo13p has transcriptional activation activity in one-hybrid analysis.
            334.4
4534 at
PolyA-binding protein
                         Ρ
4535 at
            1631.1
SH3 domain in C-terminus
4536 at
            965.3
strong similarity to S.douglasii YSD83
4537 at
            6330.1
argininosuccinate lyase
            11010.0
4538_at
                         Ρ
Asparaginyl-tRNA synthetase
4493 at
            10295.6
Aminoacyl tRNA-synthetase
4494 at
            11308.6
40S Ribosomal protein S27B (rp61) (YS20)
4495 at
            1.5
                         Α
ExtraCellular Mutant
4496_at
                         Ρ
            63.9
RAS-related protein
                         Ρ
4497 at
            574.1
Class II Myosin
4498_at
            1381.5
53 kDa subunit of the mitochondrial processing protease
4499 at
            12555.4
homoserine kinase
4500 at
            9490.3
proteolipid protein of the proton ATPase
4501 at
            8327.5
Subunit of 26S Proteasome (PA700 subunit)
4502_at
            2999.9
Dipeptidyl aminopeptidase B (DPAP B)
4503 at
            3109.5
Thymidylate synthase (putative\; weak)
4504_at
            7080.8
putative protein kinase
4505 at
            1461.5
Pif1p, mitochondrial DNA repair and recombination protein
4506 at
            3685.0
ethionine resistance protein
4507 at
            1411.8
                         Ρ
Pro1p (Gamma-glutamyl kinase)
4508_at
            812.2
hypothetical protein
4509_at
            168.9
Sec23p (weak)
                         Ρ
4510_at
            350.5
```

```
similarity to hypothetical protein YGL247w
4511 at
            2682.9
delta-1-pyrroline-5-carboxylate dehydrogenase
4512 at
            522.6
Killed in Mutagen, sensitive to Diepoxybutane and Vor Mitomycin C
4513 at
            6470.4
Aldehyde dehydrogenases
4514_at
            14651.8
13-kDa vacuolar H-ATPase subunit
4469 at
            1372.1
                        Р
weak similarity to Hit1p
4470 at
            5002.4
RNA polymerase II holoenzyme\/mediator subunit
4471 at
            10251.4
NADP-cytochrome P450 reductase
4472 s at 3095.4
2-deoxyglucose-6-phosphate phosphatase
4473 i at
            124.9
2-deoxyglucose-6-phosphate phosphatase
4474_at
            2576.8
hypothetical protein
4475 at
            4036.8
                        Ρ
Inositol monophosphatase
4476 at
            7028.4
arginineValanine aminopeptidase
4477_at
            695.8
similarity to multidrug resistance proteins
4478 at
            4555.8
similarity to S.pombe dihydrofolate reductase and YOR280c
4479 at
            353.4
questionable ORF
4480_at
            2431.5
localized to mitochondrial membrane
4481_at
            7909.9
subunit VI of cytochrome c oxidase
4482 at
            3219.5
weak similarity to P.yoelii rhoptry protein
4483_s_at 9823.7
copper-binding metallothionein
4484_s_at 3818.1
weak similarity to YOR262w
4485 at
            5089.5
Peptidylprolyl isomerase (cyclophilin) ER or secreted
            1008.2
4486_at
RNA polymerase II transcriptional regulation mediator
4487 at
            597.1
weak similarity to Ustilago hordei B east mating protein 2
4488 at
            1735.2
required for V-ATPase activity
4489 at
            1787.5
GTPase-interacting component 1
4490 at
            2349.4
Protein subunit of nuclear ribonuclease P (RNase P)
4491 at
            3312.3
weak similarity to translational activator CBS2
4492_at
            12392.7
```

```
Hsp70 Protein
4446 at
            3406.4
RRP3 is a DEAD box gene homologous to elF-4a which encodes an RNA-dependent ATPase possessing
helicase activity which is not specific for RNA
4447 at
            971.8
                        Ρ
homologous to Ssf2p
                         Ρ
4448 at
            893.2
hypothetical protein
4449 at
            11194.4
Deoxyhypusine synthase
4450 at
            2017.8
3->5 exoribonuclease\; Component of the exosome 3->5 exonuclease complex with Rrp41p, Rrp42p,
Rrp43p and Dis3p (Rrp44p).
4451 at
            3394.0
strong similarity to N.crassa met-10+ protein
4452 at
            6081.6
G1VS cyclin (weak)
4453 at
            6443.4
                         Ρ
2,3-oxidosqualene-lanosterol cyclase
4454_at
            399.5
Oxysterol-binding protein
                         Ρ
4455 at
            1860.5
weak similarity to B.subtilis spore outgrowth factor B
4456 at
            573.6
ribosomal protein of the small subunit, mitochondrial
            1669.9
4457_at
weak similarity to C.elegans hypothetical protein CEW09D10
4458 at
            2203.8
hypothetical protein
                         Ρ
4459 at
            638.6
Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities
4460_i_at
            -56.7
Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities
4461_r_at
           -2.8
Ire1p is a transmembrane protein that has both serine-threonine kinase and endoribonuclease activities
4462 at
            1476.1
similarity to hypothetical protein YDR326c, YFL042c and YLR072w
4463 at
            896.5
weak similarity to human C1D protein
4464_at
            3558.8
                        Ρ
SerVThr protein kinase
                         Ρ
4465 at
            2323.9
hypothetical protein
                         Ρ
            2614.1
4466_at
Transcription factor
                         Р
4467 at
            1892.9
weak similarity to fruit fly brahma transcriptional activator
4468 at
            2319.3
putative RNA binding protein, involved in meiosis-specific splicing of the REC107 transcripts in
cooperation with the Mer1 protein
                         Ρ
4423 at
            494.8
hypothetical protein
4424 at
            2579.7
                         Ρ
similarity to hypothetical protein YNL075w
4425 at
            10461.5
small nucleolar RNP proteins
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4426_at
            1660.4
                        Ρ
NuBbiN
4427 at
            2171.8
                         Ρ
Arginyl-tRNA synthetase
4428 at
            280.8
                        Ρ
High-affinity glucose transporter
4429_at
            569.5
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
            8809.7
4430_at
High-affinity hexose (glucose) transporter
4431 at
            173.2
                        Α
hypothetical protein
                        Ρ
4432_at
            406.7
hexose transporter
4433 at
            2017.8
strong similarity to hypothetical protein YDR348c
4434 at
            977.6
strong similarity to hypothetical protein YDR348c
4435_at
            5234.9
binds to Sed5p and Sec23p by distinct domains
4436 at
            3962.7
ATMVMec1VTOR1+2-related
4437 at
                        Ρ
            1931.2
hypothetical protein
4438_at
            2176.0
                        Ρ
Bad in glucose or big cells
4439 at
            667.0
Bad in glucose or big cells
4440 at
            1071.5
SerVThr protein kinase
4441_at
            2048.3
functionally redundant and similar in structure to SBE2
4442 at
            3132.7
Aldo-keto reductase
                        Ρ
4443 at
            197.1
weak similarity to Mvp1p
                        Ρ
4444 at
            1871.2
Thioredoxin reductase
4445_at
            2350.8
Component of 10 nm filaments of mother-bud neck (septin)
4401 at
            7557.6
strong similarity to hypothetical protein YDR358w
4402_at
            257.2
hypothetical protein
4403 at
            3566.4
p24 protein involved in membrane trafficking
4404 at
            1618.0
moeB, thiF, UBA1
                         Ρ
4405 at
            3263.1
Cystathionine gamma-synthase
4406_at
            3466.6
Vacuolar aminopeptidase
4407_at
            1378.2
SH3 domain
4408_at
            2532.6
                         Ρ
```

```
strong similarity to hypothetical protein YNL116w
4409 at
            536.4
                         Ρ
hypothetical protein
4410 at
            1409.6
71-kDa component of the protein translocase of the outer membrane of mitochondria
4411 at
            100.9
50-kDa subunit of ORC
                         Ρ
4412 at
            1604.6
trithorax
4413_at
            1034.5
mutS homolog involved in mitochondrial DNA repair
4414 at
            2053.5
weak similarity to C.elegans hypothetical protein
4415 at
            1903.0
similarity to hypothetical C. elegans protein F45G2.a
4416 at
            1911.1
sn-1,2-diacylglycerol ethanolamine- and cholinephosphotranferase
4417 at
            3270.8
sn-1,2-diacylglycerol ethanolamine- and cholinephosphotranferase
4418_at
            170.2
meiosis-specific gene, mRNA is sporulation-specific
4419 at
            34.6
questionable ORF
                         Α
4420 at
            93.2
hypothetical protein
4421_at
            2690.7
(H)igh copy (S)uppressor of (N)34 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
            11791.0
UPRTase
4378 at
            439.9
                         Ρ
Centractin
                         Ρ
4379 at
            965.5
weak similarity to T.brucei H+-transporting ATP synthase
            1141.0
4380 at
Highly acidic C-terminus
4381_at
            5776.2
Carboxypeptidase
4382 at
            11701.5
                         Ρ
similarity to hypothetical protein YNL156c
4383 at
            288.8
hypothetical protein
4384_at
            3966.7
membrane-bound casein kinase I homolog
4385 at
            9127.7
17 kDa protein
4386 at
            8970.7
aromatic amino acid aminotransferase II
4387_at
            3366.4
                         Р
hypothetical protein
                         Ρ
4388 at
            208.9
sporulation-specific wall maturation protein
4389 at
            57.3
hypothetical protein
                         Ρ
4390_at
            490.2
hypothetical protein
```

```
4391_at
                         Ρ
            6613.0
weak similarity to cytochrome-c oxidases
4392 at
            10111.9
Ser-Thr rich protein
                         Ρ
4393 at
            5001.2
subunit of RNA polymerase II
4394_at
            3199.4
dCMP deaminase
4395 at
            102.7
                         Α
questionable ORF
                         Ρ
4396 at
            1867.7
similarity to pheromone-response G-protein Mdg1p
4397 at
            1419.2
Mitochondrial ribosomal protein MRPL6 (YmL6)
4398 at
            3640.7
ribosomal protein (weak similarity)
4399 at
            852.1
similarity to hypothetical protein YGR221c
4400 at
            475.2
weak similarity to YDR479c
            2490.9
4356 at
hypothetical protein
                         Р
4357 at
            2658.6
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
            109.3
sporulation protein
                         Ρ
4359 at
            1214.8
Establishes Silent omatin
4360 at
            1285.0
Snf1-interacting protein Sip3p
4361 at
            282.0
weak similarity to mouse kinesin KIF3B
4362 at
            264.3
mRNA is induced early in meiosis
4363 at
            1429.0
protein containing kelch repeats, similar to YGR238c
4364 at
            105.4
hypothetical protein
4365 at
            12.1
weak similarity to hypothetical protein YGR239c
4366_at
            1313.4
Yeast Assembly Polypeptide, member of AP180 protein family, binds Pan1p and clathrin
4367 at
            9306.9
strong similarity to hypothetical protein YGR243w
4368 at
shows similarity to glucose-6-phosphate dehydrogenase non-catalytic domains\; homologous to Sol2p
and Sol1p
                         Ρ
4369 at
            1145.6
DNA replication helicase
4370_at
            3610.4
                         Ρ
RNA splicing factor
4371 at
            94.8
                         Α
Cell division cycle protein
                         Ρ
4372_at
            1016.3
```

```
hypothetical protein
                         Ρ
4373 at
            722.7
GTP-binding protein
4374 at
            3635.1
                         Ρ
DEAD-box protein
                         Ρ
4375_at
            6666.4
putative Upf1p-interacting protein
4376_at
            486.7
autophagy
            1241.8
4377_at
spindle pole body component, associates in a complex with Spc98p and Tub4p perhaps as part of the
microtubule attachment site of the SBP
            49.4
4333 at
                         Α
hypothetical protein
4334 i at
            8449.7
                         Ρ
enolase
4335 at
            7465.2
                         Ρ
Putative low-affinity copper transport protein
4336 at
            1080.5
Dimethylaniline monoxygenase
4337_at
            518.8
weak similarity to Spombe pac2 protein
4338 at
            858.4
Zinc finger (6-Cys)
4339 at
            11460.8
NAPDH dehydrogenase (old yellow enzyme), isoform 2
4340 at
            400.0
hypothetical protein
            5555.8
                         Ρ
4341 at
similarity to mouse TEG-261 protein
4342 at
            916.0
hypothetical protein
4343 at
            13903.1
Phosphogluconate Dehydrogenase (Decarboxylating)
4344 at
            537.7
Involved in the control of meiotic nuclear divisions and spore formation
4345 at
            70.1
hypothetical protein
                         Ρ
4346 at
            3016.1
similarity to C.elegans hypothetical protein C10C5.6
4347 at
            320.9
confers sensitivity to killer toxin
            4849.1
4348_at
similarity to hypothetical C. elegans proteins F17c11.7
4349 at
            34.8
similarity to peptidyl-tRNA hydrolases
4350 at
            8852.5
                         Ρ
squalene synthetase
4351_at
            1405.9
protein of unknown function
4352_at
            1823.6
                         Ρ
hypothetical protein
4353 at
            9858.1
GAL4 enhancer protein, homolog of human alpha NAC subunit of the nascent-polypeptide-associated
complex
                         Ρ
4354_at
            1912.3
```

```
similarity to hypothetical protein YOR147w
4355 at
            2339.5
                        Ρ
hypothetical protein
4310 at
            2327.8
                        Ρ
hypothetical protein
                        Ρ
4311_at
            5081.4
hypothetical protein
                        Ρ
4312_at
            907.8
strong similarity to hypothetical protein YHR199c
4313_at
            5405.8
strong similarity to hypothetical protein YHR198c
4314 at
            9268.0
homolog of the mammalian S5a protein, component of 26S proteasome
4315 at
            2936.0
Cytosolic exopolyphosphatase
4316 at
            1117.2
similarity to S.pombe hypothetical protein SPAC17G6
4317 at
            3708.9
similarity to alpha-mannosidases
4318 at
            2269.5
cAMP-dependent protein kinase homolog, suppressor of cdc25ts
4319 at
            2552.7
Protein with similarity to DNA-binding region of heat shock transcription factors
4320 at
            1382.7
weak similarity to YPL165c
            10112.2
4321 at
branched-chain amino acid transaminase, highly similar to mammalian ECA39, which is regulated by the
oncogene myc
4322 at
                        Ρ
            1440.3
UDP-glucose-4-epimerase (GAL10, galE)
4323_f_at 9120.0
IMP dehydrogenase\; probable PUR5 gene
4324 s at 6537.2
                        Ρ
gene in Y repeat region
4325 at
            2.5
                        Α
questionable ORF
4326_at
                        Ρ
            617.8
questionable ORF
4327 at
            88.4
                        Α
questionable ORF
4328 at
            399.0
                        Α
questionable ORF
4329_at
            -252.0
                        Α
questionable ORF
4330 at
                        Ρ
            630.6
questionable ORF
4331 at
            66.5
                        Α
questionable ORF
4332_at
            12.8
                        Α
questionable ORF
                        Ρ
4286_s_at 1489.1
Highly acidic C-terminus
                        Ρ
4287 s at 813.5
similarity to hypothetical protein YER175c
4288_at
            2096.2
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
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4289 at
            -31.0
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
            323.6
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
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
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
            2144.0
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
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
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
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
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
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
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
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
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
            1345.9
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
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
            211.3
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
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
           -493.9
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
           -35.2
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
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4308 at
            165.3
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
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
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
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
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
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
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
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
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
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
            1922.9
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
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
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
            5855.8
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
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
            2861.6
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
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
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_i_at
            8.8
Centromere
```

Р

```
1146.4
                         Ρ
4278_at
snRNA
                         Ρ
4279 at
            1043.1
snRNA
4280 f at
            1786.2
                         Ρ
strong similarity to members of the Srp1p/Tip1p family
4281_i_at
            1646.2
High-affinity hexose transporter
4282 f at 62.7
High-affinity hexose transporter
4283 at
            107.1
                        Ρ
L-serine dehydratase
4284_at
            -40.5
                         Α
serine dehydratase
            630.4
                         Ρ
4285 at
similarity to allantoate permease Dal5p
4237 at
            1203.3
putative pseudogene
4238 at
            1840.1
                         Ρ
Nit1 nitrilase
            36.0
                         Α
4239 at
questionable ORF
                         Р
4240 at
            2034.1
hypothetical protein
4241 at
            121.7
peroxisomal 3-oxoacyl CoA thiolase
4242 at
            167.0
Bni1p-related protein, helps regulate reorganization of the actin cytoskeleton, potential target of Rho4p
4243 at
            2299.8
similarity to hypothetical protein YKR100c
4244 at
            3495.3
hypothetical protein
                         Ρ
4245 at
            501.5
Ubiquitin-specific protease
4246 at
            2231.7
glycerol-3-phosphate dehydrogenase, mitochondrial
4247_at
            3045.3
transcription factor
                         Ρ
4248 at
            3028.6
Resistant to Rapamycin Deletion
4249 at
            1139.0
hypothetical protein
4250_at
            986.3
similarity to mitochondrial aldehyde dehydrogenase Ald1p
4251 at
            393.1
Protein required for S-phase (DNA synthesis) initiation or completion
4252 at
            1170.2
similarity to Mlp1p and myosin heavy chains
4253_i_at
            12526.9
Ribosomal protein L40A
4254_at
            3787.0
histidine kinase osmosensor that regulates an osmosensing MAP kinase cascade and is similar to
bacterial two-component regulators
4255 at
            273.8
ExtraCellular Mutant
                         Ρ
4256_at
            2254.3
```

```
similarity to E.coli pantothenate synthetase
4257 at
            125.8
Dmc1p interacting protein
4258 at
            1291.2
DNA helicase homolog\; homolog of human XPBC, ERCC3
4259 at
            8736.9
molecular chaperone
                         Ρ
4260 at
            829.6
questionable ORF
                         Ρ
4215_g_at 1614.5
questionable ORF
                         Р
4216 at
            982.4
localizes to the plasma membrane
4217 at
            298.6
subunit of DNA polymerase-zeta (Pol-zeta), an enzyme whose sole function appears to be translesion
synthesis
4218 at
            1797.6
                         Ρ
Tropomyosin isoform 2
4219 at
            1731.9
                         Ρ
similarity to M.musculus aminopeptidase
4220 at
            -62.2
                         Μ
45-kDa mitochondrial outer membrane protein
4221 at
            1201.5
similarity to Ymk1p
4222 at
            725.5
mitochondrial inner membrane carrier protein for FAD
4223 at
            10650.5
Ribosomal protein L16A (L21A) (rp22) (YL15)
4224 at
            597.5
hypothetical protein
4225 at
            2070.7
similarity to Drosophila fork head protein
4226 at
            1341.3
similarity to Put3p and to hypothetical protein YJL206c
4227 at
            5607.3
similarity to hypothetical human protein
4228 at
            1239.4
Involved in nucleotide excision repair and regulation of TFIIH
4229 at
            1860.6
weak similarity to Smy2p
4230 at
            4113.4
helicase related protein, snf2 homolog
4231_at
            6536.5
alpha-ketoglutarate dehydrogenase
4232 at
            5765.0
similarity to C.perfringens nanH protein
4233 at
            10171.3
involved in cell cycle regulation and aging
4234_at
            414.8
hypothetical protein
                         Ρ
4235_at
            745.2
similarity to antibiotic resistance proteins
4236 at
            1083.4
similarity to antibiotic resistance proteins
4192_at
            424.9
                         Р
inhibitor of ras
```

```
4193_at
                         Ρ
            2613.9
ras homolog--GTP binding protein
4194 at
            2742.0
hydrophobic transmembrane domain
4195 at
            4891.6
                         Ρ
histidinol-phosphate aminotransferase
4196 at
            3603.1
159-kDa nucleoporin with coiled-coil domain and repeated motifs typical of nucleoporins
4197 at
            2649.0
voltage dependent anion channel (YVDAC2)
4198 at
            481.2
strong similarity to dual-specificity phosphatase Msg5p
4199 at
            400.5
similarity to ankyrin and coiled-coil proteins
            101.6
4200 at
                         Α
Cytochrome-c oxidase chain Vb
4201 at
            1402.8
weak similarity to hypothetical C.elegans protein
4202 at
            5660.8
The Sec23p-Sec24p complex is one of three cytoplamic COPII factors involved in ER to Golgi transport
            2544.2
4203 at
similarity to hypothetical S. pombe protein
4204 at
            357.3
6-Phosphofructose-2-kinase
4205 at
            709.6
weak similarity to probable transcription factor Ask10p
4206 at
            842.0
similarity to hypothetical S. pombe protein
            3441.1
4207 at
weak similarity to Dph2 protein
4208 at
            -73.1
strong similarity to YIL014c-a
4209 at
            116.7
DNA-binding transcriptional repressor
4210 at
            6.9
similarity to mouse Gcap1 protein and fruit fly Bkm-like sex-determining region hypothetical protein
CS314
4211_at
            818.2
intracellular glucoamylase
4212_g_at -28.5
intracellular glucoamylase
4213 at
            884.9
Formation of Mitochondrial Cytochromes 1
4214_at
            494.6
                         Р
hypothetical protein
                         Ρ
4170 at
            2917.8
hypothetical protein
4171 at
            119.0
probable serineVthreonine-protein kinase
4172 at
            9644.3
                         Ρ
Homo-isocitrate dehydrogenase
4173_at
            278.6
weak similarity to S.pombe hypothetical protein SPBC16A3
4174 at
            529.8
hypothetical protein
4175_at
            2074.8
                         Ρ
```

```
weak similarity to spt5p
4176 at
            3003.9
similarity to hypothetical S. pombe protein
4177 at
            979.8
similarity to hypothetical protein YLR036c
4178_at
            3873.1
weak similarity to A.thaliana aminoacid permease AAP4
4179 at
            3005.6
hypothetical protein
4180_at
            101.3
                        Μ
hypothetical protein
                        Р
4181 at
            1292.1
Putative mannosyltransferase of the KRE2 family
4182 at
            238.4
Functions are similar to those of SIN3 and RPD3
4183 at
            3790.3
hypothetical protein
4184 s at 2971.7
                        Ρ
Ty3-2 orf C fragment
4185_at
            1282.7
strong similarity to hypothetical protein YDL175c
4186 at
            9656.2
Threonyl-tRNA synthetase, cytoplasmic
4187 at
            735.7
hypothetical protein
4188_at
            4815.1
epsilon-COP coatomer subunit Sec28p
4189 at
            7571.7
RPN2p is a component of the 26S proteosome
4190 at
            3732.8
strong similarity to E.coli phosphoglycerate dehydrogenase
4191_at
            79.4
weak similarity to mouse polycystic kidney disease-related protein
4147_at
            -346.1
Meiosis-specific protein involved in homologous chromosome synapsis and chiasmata formation
4148 at
            196.2
hypothetical protein
4149 at
            5262.5
mitochondrial acidic matrix protein
4150_at
            2496.2
88 kD component of the Exocyst complex, which contains the gene products encoded by SEC3, SEC5,
SEC6, SEC8, SEC10, SEC15 and EXO70
4151_at
            2221.3
hypothetical protein
4152 at
            2572.8
                         Ρ
similarity to C.elegans hypothetical protein
4153 at
            1254.4
weak similarity to fowlpox virus major core protein
4154 at
            1433.6
nuclear protein, interacts with Gsp1p and Crm1p
4155 at
            9323.2
Arp Complex Subunit
4156 at
            191.0
U1snRNP 70K protein homolog
4157_at
            201.1
                        Μ
questionable ORF
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```
4158_at
                         Ρ
            536.0
hypothetical protein
4159 at
            325.4
                         Α
hypothetical protein
4160 at
            285.0
                         Α
strong similarity to YER067w
4161_at
            6197.7
similarity to YER064c
4162 at
            411.9
                         Ρ
hypothetical protein
4163 at
            252.9
                         Ρ
weak similarity to fruit fly NADH dehydrogenase
4164 at
            8001.0
DL-glycerol-3-phosphatase
4165 i at
            14971.7
Ribosomal protein L34B
4166 at
            10285.7
                        Ρ
Maintenance of Mitochondrial DNA 1
4167 at
            1796.2
PHO85 cyclin
4168 at
            4277.8
Protein required for filamentous growth, cell polarity, and cellular elongation
4169 at
            3479.3
ATPase that leads to neomycin-resistant protein when overexpressed
4124 at
            7588.4
plasma membrane protein
4125 at
            1147.9
Met30p contains five copies of WD40 motif and interacts with and regulates Met4p
4126 at
            221.6
Protein with 30\%% identity to protein corresponding to YER054
4127 at
            1635.6
weak similarity to zinc finger protein Gcs1p
4128 at
            8867.4
                         Ρ
cytochrome b reductase
            1219.1
4129 at
similarity to rat branched-chain alpha-ketoacid dehydrogenase kinase
4130 at
            8979.7
similarity to S.pombe hypothetical protein
4131 at
            2717.1
                        Ρ
weak similarity to T.brucei NADH dehydrogenase
            6958.8
4132 at
hypothetical protein
4133_at
            1601.0
General negative regulator of transcription\; may inhibit RNA polymerase II transcription machinery
4134 at
            167.0
hypothetical protein
4135 at
            1330.0
weak similarity to human cAMP responce element-binding protein
4136_at
            2702.0
alpha subunit of casein kinase II
4137_at
            2946.9
beta subunit of capping protein
4138 at
            6898.7
regulatory subunit of cAMP-dependent protein kinase
4139_at
            567.3
hypothetical protein
```

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4140_at
                         Ρ
            789.6
Suppressor of Mif Two
                         Ρ
4141 at
            4032.9
integral nuclear membrane protein
4142 at
            91.1
strong similarity to hypothetical protein YPR071w
4143_at
            328.1
putative pseudogene
4144 at
            6783.7
                         Ρ
hypothetical protein
4145 at
            447.5
                         Ρ
Irregular
4146 at
            -1.4
weak similarity to E.gracilis RNA polymerase subunit
4101 at
            536.9
hypothetical protein
4102 at
            4036.2
similarity to mouse MHC H-2K/t-w5-linked ORF precursor
4103 at
            4526.4
48.8 kDa protein involved in mitochondrial protein import
4104 at
            2840.4
45 kDa subunit of RNA polymerase II
4105 at
            1333.1
phosphoribosyl-5-amino-1-phosphoribosyl-4-imidazolecarboxiamide isomerase
4106 at
            799.8
weak similarity to S.pombe hypothetical protein SPAC3F10
4107 at
            513.2
hypothetical protein
                         Ρ
4108 at
            1436.7
18.3 kD integral membrane protein
4109 at
            57.3
encodes a-cell barrier activity on alpha factor
4110 at
            -44.1
strong similarity to hypothetical protein YIL102c
4111_at
            1514.9
similarity to Mnn1p
4112 at
            481.5
Putative member of the ABC family of membrane transporters
4113 at
            198.3
hypothetical protein
                         Ρ
4114 at
            4538.8
strong similarity to members of the Srp1p/Tip1p family
4115_at
            5319.4
Derepression Of Telomeric silencing
4116 at
            1944.6
181aa protein - 20.5 kD
4117 at
            1119.3
                         Ρ
181aa protein - 20.5 kD
4118_at
                         Ρ
            2319.7
Acyl CoA synthase
                         Ρ
4119_at
            3655.2
hypothetical protein
                         Ρ
4120 at
            553.1
similarity to C.elegans hypothetical protein
4121_at
            540.6
similarity to Flx1p
```

```
4122_at
            3093.6
                         Ρ
similarity to protein disulfide isomerases
4123 at
            1411.5
Synaptobrevin (t-SNARE) homolog present on ER vesicles recycling from Golgi
4079 at
            2285.2
strong similarity to Nbp35p and human nucleotide-binding protein
4080 at
            1204.4
phosphatidylinositol 4,5-bisphosphate 5-phosphatase
4081 at
            959.5
similarity to S.pombe hypothetical protein, weak similarity to human ankyrin
4082 at
            719.3
similarity to D.melanogaster RNA binding protein
            1199.5
4083 at
weak similarity to ATP-dependent RNA helicases
4084 at
            2886.6
                         Р
weak similarity to mammalian neurofilament triplet H proteins
4085 at
            1981.2
DnaJ-like protein required for Peroxisome biogenesis\; Djp1p is located in the cytosol
4086 at
            526.2
similarity to RNA-binding proteins
4087 at
            9663.8
polyA-specific ribonuclease
4088 at
            443.4
hypothetical protein
4089 at
            2073.6
p48 polypeptide of DNA primase
4090 at
            832.3
encodes YU2B, a component of yeast U2 snRNP
4091 at
            1410.4
                         Ρ
hypothetical protein
4092 at
            3362.4
restores protein transport when overexpressed and rRNA stability to a sec23 mutation
4093 at
            8958.8
contains multiple WD repeats and interacts with Qsr1p in two hybrid
4094 at
            202.8
strong similarity to YLR013w, similarity to YMR136w
4095 at
            873.4
hypothetical protein
4096 at
            448.2
                         Ρ
an integral subunit of RNase P but not RNase MRP
4097 at
            1868.9
weak similarity to YOL036w
4098_at
            796.8
Transcriptional activator of sulfur amino acid metabolism
            1572.3
4099 at
bZIP protein\; transcription factor
4100 at
            2117.4
cell surface flocculin with structure similar to serine Vthreonine-rich GPI-anchored cell wall proteins
4056_at
            692.2
                         Р
hypothetical protein
                         Ρ
4057 at
            2101.2
mitochondrial RNA splicing
4058 at
            3565.1
signal peptidase subunit
4059 at
            1389.3
Transcriptional activator for allantoin and GABA catabolic genes, contains a Zn[2]-Cys[6] fungal-type
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binuclear cluster domain in the N-terminal region
4060 at
            765.1
G1 Factor needed for normal G1 phase
4061 at
            468.3
hypothetical protein
4062 at
                        Ρ
            2397.4
nitrogen starvation-induced protein phosphatase
4063 at
            180.6
allantoinase
                        Ρ
4064_at
            287.0
allantoin permease
4065 at
            -54.6
                        Α
allantoicase
                        Ρ
4066 at
            873.3
involved in nitrogen-catabolite metabolism
4067 at
            314.2
Malate synthase 2
4068 at
            68.6
                        Α
ureidoglycolate hydrolase
4069_at
            1075.2
may be involved in the remodeling chromatin structure
4070 at
            5741.3
saccharopine dehydrogenase
            5286.9
                        Ρ
4071 at
similarity to human corticosteroid 11-beta-dehydrogenase
4072_at
            3280.9
similarity to E.coli fabD
4073_at
            8710.0
                        Р
putative glutathione-peroxidase
4074 at
            2138.6
Glutathione transferase
4075_at
            357.0
GPI-anchored aspartic protease
4076_f_at 272.8
similarity to members of the Srp1p/Tip1p family
4077 at
            721.0
weak similarity to B.licheniformi hypothetical protein P20
4078_i_at
            215.4
putative pseudogene
                        Ρ
4032_f_at 82.8
putative pseudogene
4033 f at 7567.9
                        Ρ
putative pseudogene
4034_at
            76.4
                        Α
hypothetical protein
4035 at
            17.0
                        Α
questionable ORF
4036 at
            758.4
                        Ρ
questionable ORF
4037 at
            77.8
                        Α
questionable ORF
                        Ρ
4038_at
            518.0
questionable ORF
4039_at
            3.0
                        Α
questionable ORF
                        Ρ
4040_at
            93.0
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questionable ORF
4041 at
            38.1
                         Α
hypothetical protein
4042 at
            606.8
                         Α
questionable ORF
4043 s at 275.6
                         Α
invertase (sucrose hydrolyzing enzyme)
4044 s at 1832.9
Mps One Binder
4045_s_at 228.8
Ribonucleotide reductase (ribonucleoside-diphosphate reductase) large subunit
4046 at
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
            195.9
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
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
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
            864.7
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
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
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 3445.3
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
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
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
            8934.0
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
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
            1671.8
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
            533.0
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
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
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4014_at
            1135.6
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
            503.3
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
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
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
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
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
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
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
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 211.6
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
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
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
            808.4
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
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
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
            1634.3
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
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
            1446.3
snRNA
3983 at
            50.4
cytochrome-c oxidase subunit II
3984_r_at 17.0
```

questionable ORF Found forward in NC_001224 between 74495 and 74804 with 99.677419% identity. 3985 i at 85.9 questionable ORF Found forward in NC 001224 between 74495 and 74804 with 99.677419% identity. 3986 f at 145.4 questionable ORF Found forward in NC 001224 between 74495 and 74804 with 99.677419% identity. 3987 at 6.9 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 108.6 cytochrome-c oxidase chain III 3989 at -5.6 strong similarity to maturase-related hypothetical protein RF2 3990 i at 24.3 similarity to hypothetical protein Sqc2p Found forward in NC 001224 between 75041 and 75472 with 64.392324% identity. 3991 r at -85.8 similarity to hypothetical protein Sgc2p Found forward in NC_001224 between 75041 and 75472 with 64.392324% identity. 3992 f at -98.3 similarity to hypothetical protein Sgc2p Found forward in NC_001224 between 75041 and 75472 with 64.392324% identity. 3993 at -15.7 strong similarity to Yeast (S.uvarum) mitochondria RF2 gene and maturase-related hypothetical protein RF2 3994 at 613.6 similarity to Sauroleishmania NADH dehydrogenase (ubiquinone) chain 5 Found forward in NC_001224 between 3940 and 4167 with 99.122807% identity. 3995 i at 51.8 RF2 protein Found forward in NC 001224 between 8526 and 8736 with 84.489796% identity. 3996 s at 1661.9 cytochrome-c oxidase subunit I Found forward in NC_001224 between 13818 and 13988 with 100% identity. 3997 at 3003.7 questionable ORF Found reverse in NC_001224 between 13748 and 14122 with 100% identity. 3998 at COX1 intron 1 protein Found forward in NC_001224 between 13818 and 16322 with 99.92016% identity. 3999 at 705.9 COX1 intron 2 protein Found forward in NC_001224 between 16473 and 18830 with 99.872774% identity. 4000_at COX1 intron 3 protein Found forward in NC 001224 between 18992 and 19996 with 98.308458% identity. 4001 at 6849.7 cytochrome-c oxidase subunit I Found forward in NC_001224 between 20508 and 20984 with 99.790356% identity. 4002 at 103.5 DNA endonuclease I-Scell Found forward in NC 001224 between 20985 and 21935 with 99.684543% identity. 4003_s_at 1520.5 cytochrome-c oxidase subunit I Found forward in NC_001224 between 21995 and 22246 with 97.22222% identity. 4004 at 940.7 probable mRNA maturase al5-alpha Found forward in NC 001224 between 21995 and 23167 with 99.40324% identity. 4005 at 10002.5

cytochrome-c oxidase subunit I Found forward in NC_001224 between 23612 and 23746 with 100%

identity. 4006_at 63.5 COX1 intron protein al5-beta Found forward in NC 001224 between 24120 and 25151 with 96.317829% identity. 4007 at cytochrome-c oxidase subunit I Found forward in NC 001224 between 26228 and 26530 with 99.339934% identity. 4008 at 301.1 cytochrome-c oxidase subunit I Found forward in NC 001224 between 26627 and 26701 with 100% identity. 3956 i at 1553.3 F1F0-ATPase complex, F0 subunit 8 Found forward in NC 001224 between 27666 and 27812 with 99.319728% identity. 3957_r at 840.8 F1F0-ATPase complex, F0 subunit 8 Found forward in NC 001224 between 27666 and 27812 with 99.319728% identity. 3958 r at 167.4 similarity to mouse Gcap1 Found forward in NC 001224 between 28122 and 28444 with 88.588589% identity. 3959 at 422.6 F1F0-ATPase complex, FO A subunit Found forward in NC_001224 between 28487 and 29266 with 97.564103% identity. 3960 at -32.4 endonuclease SCEI, small subunit Found forward in NC 001224 between 46046 and 46361 with 69.393939% identity. 3961 i at -18.6 endonuclease SCEI, small subunit Found forward in NC 001224 between 8238 and 8509 with 72.463768% identity. 3962 f at 539.2 endonuclease SCEI, small subunit Found forward in NC 001224 between 8238 and 8509 with 72.463768% identity. 11.9 3963_at endonuclease SCEI, small subunit Found forward in NC 001224 between 11057 and 11551 with 65.530303% identity. 3964 at -19.2 endonuclease SCEI, small subunit Found forward in NC 001224 between 77067 and 77606 with 61.663653% identity. 3965 i at -219.1 ORF5 Found forward in NC 001224 between 30874 and 31014 with 100% identity. 3966 i at -69.5 similarity to T.brucei mitochondrion protein SGC6 Found reverse in NC 001224 between 34032 and 34430 with 88.279302% identity. 3967_r_at -38.5 similarity to T.brucei mitochondrion protein SGC6 Found reverse in NC_001224 between 34032 and 34430 with 88.279302% identity. 3968 s at 626.7 ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC 001224 between 36540 and 36954 with 100% identity. 3969 at 20.1 mRNA maturase bl2 Found forward in NC 001224 between 37723 and 38579 with 99.883314% identity. 3970 s at 567.6 ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC_001224 between 39141 and 39217 with 100% identity. 3971 at -35.0 mRNA maturase bl3 Found forward in NC_001224 between 39141 and 40265 with 98.577778% identity. 3972_s_at 686.8

ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC_001224 between 40841 and 41093 with 100% identity. 3973 at 105.7 mRNA maturase bl4 Found forward in NC 001224 between 40815 and 42251 with 99.860821% identity. 3974 at ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC 001224 between 42508 and 42561 with 100% identity. 3975 at 1068.1 Ρ ubiquinol--cytochrome-c reductase subunit (cytochrome B) Found forward in NC 001224 between 43297 and 43647 with 100% identity. 11878.6 3976 at F1F0-ATPase complex, F0 subunit 9 Found forward in NC 001224 between 46723 and 46953 with 100% identity. 3977_i_at 102.6 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 -52.4 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 207.2 mitochondrial ribosomal protein Found forward in NC_001224 between 48901 and 50097 with 98.436214% identity. 3980 r at -6.7 mitochondrial ribosomal protein Found forward in NC 001224 between 48901 and 50097 with 98.436214% identity. 3981 at 352.6 probable mRNA maturase in 21S rRNA intron Found forward in NC 001224 between 61193 and 61729 with 100% identity. 3982 at -75.5 kanamycin resistance casette 3932 at -61.4 MAL-activator 23 (MAL23) gene 3933 s at 1059.8 Ρ Required for the catabolism of melibiose and regulated by several GAL genes 3934 at 2361.1 Protein that confers resistance to molasses 3935 at -120.9 Α Tropomyosin-related protein with transmembrane domain and basic C-terminal 3936 at 469.3 invertase (sucrose hydrolyzing enzyme) 3937 g at 1971.3 invertase (sucrose hydrolyzing enzyme) 3938 at 2141.8 Protein involved in targeting of plasma membrane [H+]ATPase 3939 at 541.8 Probable aldehyde dehydrogenase (EC 1.2.1.-) 3940 at 418.0 Degradation in the Endoplasmic Reticulum 3941 at 878.6 Р Ser√Thr protein kinase Ρ 3942 at 7382.3 bZIP (basic-leucine zipper) protein 3943 i at 12225.0

bZIP (basic-leucine zipper) protein

bZIP (basic-leucine zipper) protein

3944_f_at 5305.2

```
3945_at
           1181.2
Protein essential for mitochondrial biogenesis and cell viability
3946 at
            1818.7
Protein essential for mitochondrial biogenesis and cell viability
3947 at
            7823.9
strong similarity to holacid-halidohydrolase
3948 s at 1250.1
probable serine\threonine-specific protein kinase (EC 2.7.1.-)
3949 i at
           3033.4
protein of unknown function
3950 at
            1494.7
Rho family GTPase
                        Ρ
3951 at
           3023.5
micron plasmid recombinase
3952 at
           6569.9
micron plasmid rep1 protein
3953 at
           8027.7
micron plasmid D protein
3954 at
           7371.3
micron plasmid rep2 protein
3955 at
           458.4
micron plasmid recombinase
3907 f at
           1640.4
                       Ρ
strong similarity to subtelomeric encoded proteins
3908 i at
           22.5
                        Α
Ty1 LTR
                        Α
3909 f at
           15.1
Ty1 LTR
3910 at
                        Ρ
           158.4
Ty1 LTR
3911_at
           -1.9
                        Α
Ty1 LTR
                        Ρ
3912 f at
           9252.2
Ty1 LTR
3913 s at 5861.0
                        Α
Full length Ty1
3914_s_at 15144.5
Full length Ty1
                        Ρ
3915 s at 11569.1
Full length Ty1
3916 s at 13299.6
Full length Ty1
3917_f_at 9234.8
Full length Ty1
                        Ρ
3918 f at 12283.3
Full length Ty1
                       Ρ
3919 f at 11034.2
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in
NC_001133 between 160593 and 164183 with 100% identity.
3920 f at
           12527.9
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in
NC_001133 between 160593 and 164183 with 100% identity.
3921 s at 12480.0
Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found reverse in
NC_001133 between 164540 and 165862 with 100% identity.
3922_f_at 9619.4
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2

2

2

2

2

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Ρ
3923 f at 997.3
tRNA-Ala
3924_f_at 1540.7
                      Ρ
tRNA-Ser
3925 f at 8105.8
Ty3 LTR Found forward in NC_001133 between 182610 and 182949 with 100% identity.
3926 f at
           3855.8
Ty1 LTR
3927_f_at
           4534.7
                       Ρ
Ty2 LTR
3928 f at 73.0
Ty1 LTR
3929 s at 495.1
                       Ρ
tRNA-Thr
3930 i at
           74.3
                       Ρ
Ty1 LTR
3931 f at 747.7
                      Ρ
Ty1 LTR
3884_f_at
           1089.6
tRNA-Glu
3885 f at
           2612.1
                       Ρ
tRNA-Ala
                       Ρ
3886 f at 131.6
Ty3 LTR
3887_f_at 1406.9
Ty4 LTR
3888_s_at 97.8
                       Р
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 197614 and 198699 with 100% identity.
3889 s at 535.4
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 197614 and 198699 with 100% identity.
3890 s at 35.8
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 197614 and 198858 with 100% identity.
3891 s at 27.8
                      Α
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC_001142 between 198701 and 203026 with 100% identity.
3892 s at 177.7
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC_001142 between 198701 and 203026 with 100% identity.
3893 s at -93.9
                      Α
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 198701 and 203026 with 100% identity.
3894 s at -17.3
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 198701 and 203026 with 100% identity.
3895 s at 427.7
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 198701 and 203026 with 100% identity.
3896_s_at -61.5
                      Α
Full length Ty4
3897_s_at -1.1
                       Α
```

Ty1 LTR

Full length Ty4 3898_s_at -32.1

	. ,	
Full length T		Ъ
3899_s_at	123.5	Р
Full length T	y4	Ъ
3900_f_at	2391.0	Р
Full length T 3901_f_at		Р
Ty4 LTR	1537.1	Г
3902_f_at	4103.0	Р
Ty1 LTR	4105.0	Г
3903_i_at	18.0	Α
Ty1 LTR	10.0	^
3904_f_at	1904.6	Р
Tv1 I TR	1304.0	•
Ty1 LTR 3905_s_at	886.1	Р
tRNA-Asp	000.1	•
3906_f_at	1659.3	Р
tRNA-Arg		•
3859_i_at	7.7	Α
Ty1 LTR		
3860_f_at	7221.6	Р
Ty1 LTR		
3861_f_at	6565.4	Р
Ty1 LTR		
3862_f_at	949.5	Р
tRNA-Arg		
3863_f_at	1005.4	Р
tRNA-Arg		
3864 i at	-66.7	Α
Ty1 LTR		
Ty1 LTR 3865_f_at	-14.3	Α
Ty1 LTR		
3866_at	90.4	Р
Ty1 LTR		
3867_s_at	4368.8	Р
tRNA-Val		
3868_s_at	140.7	Р
tRNA-Met		
3869_f_at	-1795.7	Α
tRNA-Gly	10100	_
3870_s_at	1819.0	Р
tRNA-Lys	00.0	^
3871_at	-62.2	Α
Ty4 LTR	110.1	Ъ
3872_i_at	110.4	Р
Ty1 LTR	4 7	٨
3873_f_at	1.7	Α
Ty1 LTR	E 0	۸
3874_i_at	-5.8	Α
Ty1 LTR 3875_f_at	QO 1	Р
30/3_1_at Tv1 I TD	90.1	Г
Ty1 LTR 3876_at	918.9	Р
Ty4 LTR	310.3	•
3877_at	606.0	Р
Ty1 LTR	500.0	•
3878_s_at	1063.5	Р
5 5 1 5 _ 5 _ G.		-

```
tRNA-Leu
3879 f at 8951.5
                       Ρ
Tv1 LTR
3880_f_at
           10143.6
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 473751 and 477716 with 100% identity.
3881_f_at 10770.9
                       Ρ
Full length Ty1
3882_f_at 10277.0
Full length Ty1
                       Ρ
3883 f at 5666.7
Ty1 LTR
                       Ρ
3835 s at 18538.3
Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in
NC 001142 between 479334 and 483300 with 100% identity.
3836 f at 8245.2
                       Р
Full length Ty1
3837_f_at 10176.7
                       Ρ
Ty1 LTR
3838_s_at 440.8
                       Ρ
tRNA-Met
3839 at
           -8.3
                       Α
Ty1 LTR
                       Ρ
3840 f at
           1418.4
tRNA-Ser
3841 at
           311.3
                       Α
Ty1 LTR
3842_f_at
           -2049.4
                       Α
tRNA-Gly
                       Ρ
3843 at
           262.5
Ty1 LTR
3844_f_at
                       Ρ
           8772.9
Ty1 LTR
3845_i_at
           -180.4
                       Α
tRNA-Arg
3846 f at
           21.8
                       Α
tRNA-Arg
3847_i_at
           -420.2
                       Α
Ty1 LTR
3848_f_at
           4513.8
                       Ρ
Ty1 LTR
3849 f at
           153.0
                       Α
Ty1 LTR
                       Ρ
3850_at
           706.6
Ty1 LTR
3851_s_at 8467.0
Protein with similarity to members of the Ybr302pVYcr007pVCos8pVCos9p family, coded from
subtelomeric region
3852_f_at
          3709.5
Protein with similarity to members of the Ybr302pVYcr007pVCos8pVCos9p family, coded from
subtelomeric region
                       Ρ
3853_f_at 496.8
strong similarity to subtelomeric encoded proteins
3854_f_at
          121.5
strong similarity to Gin11p, YKL225w and other subtelomeric encoded proteins
3855_s_at -14.8
```

		omeric encoded proteins
3856_at	-53.0	Α
tRNA-Thr		
3857_at	-79.0	Α
Ty1 LTR		
3858_s_at	464.3	Р
tRNA-Asn		
3812_at	159.9	Α
Ty1 LTR		
3813_f_at	924.3	Р
	324.3	•
tRNA-Glu	000.7	Б
3814_f_at	906.7	Р
tRNA-Arg		•
3815_i_at	-13.7	Α
Ty1 LTR		
3816_f_at	27.7	Α
Ty1 LTR		
3817_f_at	7933.6	Р
Ty3 LTR		
3818_at	23.7	Α
Ty1 LTR		
3819_f_at	2944.4	Р
tRNA-Ala	2011.1	•
3820 f at	1120.7	Р
	1120.7	r
Ty1 LTR	4040.4	D
3821_f_at	1043.4	Р
tRNA-His		_
3822_f_at	2930.0	Р
Ty1 LTR		
3823_f_at	2894.6	P
Ty1 LTR		
3824_f_at	8994.0	Р
Ty1 LTR		
3825_at	-33.7	Α
Ty1 LTR		
3826_at	-43.6	Α
Ty1 LTR	.0.0	
3827_f_at	2492.7	Р
	2402.1	•
tRNA-Arg	1104.3	Р
3828_f_at	1104.3	r
Ty1 LTR	40707.7	Б
3829_f_at	10707.7	Р
Ty1 LTR		_
3830_f_at	2912.3	Р
tRNA-Ala		
3831_s_at	86.1	Α
strong simila	arity to subtel	omeric encoded proteins
3832_s_at	129.0	Α
	arity to subtel	omeric encoded proteins
-	-28.8	Α
Ty5 LTR	_0.0	
3834_s_at	10754.4	Р
		•
		omeric encoded proteins
3789_s_at	11452.4	P
		omeric encoded proteins
3790_s_at	9808.8	Р

```
strong similarity to subtelomeric encoded proteins
3791 s at 1552.3
strong similarity to subtelomeric encoded proteins
3792 s at 9198.8
strong similarity to subtelomeric encoded proteins
3793 f at 994.0
Ty1 LTR
3794_f_at
           1367.9
                      Ρ
tRNA-Ser
           -65.1
3795_at
                       Α
Ty3 LTR
                      Р
3796 f at
           934.1
tRNA-Ala
                      Ρ
3797_f_at
           8822.5
Ty1 LTR
                      Ρ
3798_s_at 15805.4
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found reverse in
NC_001144 between 215441 and 219403 with 100% identity.
3799 f at 8146.3
Ty1 LTR
3800_at
           12.0
                       Α
Ty1 LTR
3801 f at
           647.9
                       Α
Ty1 LTR
                       Ρ
3802_f_at
           3733.3
Ty3 LTR
                       Ρ
3803 f at
           1932.3
tRNA-Arg
3804_f_at 5409.5
                      Ρ
tRNA-GIn
3805_f_at
           4535.4
                      Ρ
Ty1 LTR
                       Ρ
3806 s at 9229.0
35S ribosomal RNA
3807 s at 737.5
                      Ρ
35S ribosomal RNA
                      Ρ
3808_s_at 10673.1
35S ribosomal RNA
                      Ρ
3809 s at 9992.3
35S ribosomal RNA
3810 s at 48.3
                       Α
35S ribosomal RNA
3811_s_at -158.0
                       Α
35S ribosomal RNA
                       Ρ
3764 s at 194.1
35S ribosomal RNA
                       Ρ
3765 s at 2187.1
25S ribosomal RNA
3766_s_at 2291.3
                       Ρ
25S ribosomal RNA
3767_s_at -45.2
                       Α
18S ribosomal RNA
3768 i at 1237.6
                      Α
5S ribosomal RNA
                       Ρ
3769_s_at 712.1
```

5S ribosomal RNA

```
3770_i_at 1502.0
5S ribosomal RNA
                       Ρ
3771 f at 9526.4
Ty1 LTR
                       Ρ
3772 f at 9177.1
Full length Ty1
3773_f_at 12022.3
                      Ρ
Full length Ty1
3774 f at
          10367.7
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found reverse in
NC 001144 between 476334 and 480296 with 100% identity.
3775 f at 8858.8
Ty1 LTR
3776_i_at -195.5
                       Α
Ty1 LTR
3777 f at
           269.8
                       Α
Ty1 LTR
3778_f_at 5980.6
                      Ρ
Ty1 LTR
3779_f_at
           10296.5
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in
NC_001144 between 594749 and 598706 with 100% identity.
3780 f at 7379.0
Full length Ty1
3781 f at 10584.2
                       Ρ
Full length Ty1
                       Ρ
3782 f at 6905.9
Ty1 LTR
3783 at
           152.8
                       Α
Ty1 LTR
3784_at
           -48.9
                       Α
Ty4 LTR
                       Ρ
3785 f at 8095.8
Ty1 LTR
3786 s at 14046.0
TY1B protein Found forward in NC 001144 between 652918 and 653385 with 100% identity.
3787 f at 9505.8
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in
NC 001144 between 654177 and 656387 with 100% identity.
3788_f_at 14306.3
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in
NC_001144 between 654177 and 656387 with 100% identity.
3740_f_at 8080.3
Full length Ty1
3741 f at 9473.0
                       Ρ
Full length Ty1
3742_f_at 6564.9
                       Ρ
Ty1 LTR
3743_f_at
           3418.6
                       Ρ
tRNA-Ala
3744 i at
           3897.4
Ty3 LTR
3745 f at
           1866.2
                       Ρ
Ty3 LTR
3746_at
                       Ρ
           576.5
Ty1 LTR
```

3747_at	-81.0	Α
Ty1 LTR 3748_i_at	-23.5	Α
Ty1 LTR 3749_r_at Ty1 LTR	-17.9	Α
3750_f_at Ty1 LTR	112.1	Α
3751_f_at Ty2 LTR	7373.2	Р
3752_f_at Ty1 LTR	2208.1	Р
3753_s_at tRNA-lle	287.2	Р
3754_s_at tRNA-Ser	1302.0	Р
3755_f_at Ty3 LTR	254.3	Α
3756_i_at Ty1 LTR	31.3	Α
3757_f_at Ty1 LTR	5792.4	Р
3758_f_at tRNA-Glu	895.3	Р
3759_f_at Ty1 LTR	2939.0	Р
3760_at tRNA-Arg	682.0	M
3761_f_at	8585.8	Р
Ty2 LTR 3762_s_at Saccharomy		P siae c
Jaccilai UIII	いしじろ しせにせい	อเลษ โ

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 941478 and 942778 with 100% identity.

3763 s at 4038.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 941478 and 942778 with 100% identity.

3717_s_at 12342.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 942777 and 946791 with 100% identity.

3718_s_at 15662.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 942777 and 946791 with 100% identity.

3719_s_at 8810.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 942777 and 946791 with 100% identity.

3720 f at 12704.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 942777 and 946791 with 100% identity.

```
3721_s_at 9667.8 P
Full length Ty2
3722_s_at 11110.1 P
Full length Ty2
3723_f_at 11914.2 P
Full length Ty2
3724_f_at 8083.9 P
Ty2 LTR
```

```
1100.9
                        Ρ
3725_at
Ty1 LTR
3726 f at 5776.6
                        Ρ
Ty2 LTR
                        Ρ
3727 f at 5041.4
Full length Ty2
3728_f_at 9312.8
Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found reverse in
NC 001144 between 976606 and 980109 with 100% identity.
           4139.8
3729 f at
Ty2 LTR
3730 at
                        Ρ
           847.1
Ty1 LTR
3731 s at 1597.7
strong similarity to subtelomeric encoded proteins
3732 s at 393.3
strong similarity to subtelomeric encoded proteins
3733 s at 2105.0
strong similarity to subtelomeric encoded proteins
3734_s_at 4319.7
strong similarity to subtelomeric encoded proteins
3735 f at
           11473.7
strong similarity to subtelomeric encoded proteins
3736_s_at 2677.2
strong similarity to subtelomeric encoded proteins
3737_s_at 2151.2
strong similarity to subtelomeric encoded proteins
3738 s at 9869.9
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos6p, Cos6p, Cos9p (COS3 and YBR302C code for identical proteins)
3739_f_at 9222.2
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos6p, Cos6p, Cos9p (COS3 and YBR302C code for identical proteins)
3695_f_at
           956.4
tRNA-Arg
3696 at
           56.1
                        Μ
Ty1 LTR
                        Р
3697_f_at
           7581.2
Ty2 LTR
3698_f_at
           -2029.8
                        Α
tRNA-Gly
3699 f at
           10783.0
                        Ρ
Ty1 LTR
                        Ρ
3700_f_at
           7053.6
Full length Ty1
3701 f at 10217.9
                        Ρ
Ty1 LTR
3702 f at 9398.5
                        Ρ
Ty1 LTR
           10540.9
                        Ρ
3703 f at
Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in
NC_001145 between 197939 and 201896 with 100% identity.
3704 f at 9725.8
                        Ρ
Full length Ty1
                        Ρ
3705_f_at 10396.7
Full length Ty1
```

3706_f_at	8384.3	Р
Ty1 LTR 3707_f_at	1433.2	Р
tRNA-Ser 3708_at	39.8	Α
Ty4 LTR 3709_f_at tRNA-Glu	991.2	Р
3710_f_at tRNA-Ala	2951.2	Р
3711_f_at Ty1 LTR	8482.9	Р
3712_s_at Full length		Р
3713_s_at Full length	8416.5	Р
3714_f_at Full length	8361.5	Р
3715_f_at Ty1 LTR	8602.2	Р
3716_f_at tRNA-His	1121.7	Р
3671_f_at Ty1 LTR	8826.6	Р
3672_f_at Full length	8719.1 Tv1	Р
3673_f_at Ty1 LTR	8918.0	Р
3674 i at	621.6	Α
Ty1 LTR 3675_r_at Ty1 LTR 3676_f_at	53.6	Α
Ty1 LTR	193.3	Р
3677_f_at Ty1 LTR	270.0	Α
3678_at Ty1 LTR	-3.4	Α
3679_at Ty1 LTR	105.7	Р
3680_i_at	-73.1	Α
Ty1 LTR 3681_s_at Ty1 LTR 3682_i_at	34.2	Α
Ty1 LTR	5.9	Α
3683_f_at Ty1 LTR	35.7	A
3684_f_at Ty4 LTR	1403.8	Р
3685_f_at Ty1 LTR	2419.6	Р
3686_f_at Ty1 LTR 3687_f_at	128.8	Α
3687_f_at tRNA-Arg	1012.9	Р

```
3688_f_at
           2705.9
                       Ρ
tRNA-Ala
                       Ρ
3689 f at
           6040.4
Ty2 LTR
3690_f_at
           1654.3
                       Α
tRNA-GIn
                       Ρ
3691_f_at
           1971.3
Ty4 LTR
3692_at
           121.4
                       Ρ
Ty1 LTR
                       Ρ
3693 f at
           133.4
Ty1 LTR
3694 at
           114.7
strong similarity to subtelomeric encoded proteins
3646 s at 557.3
strong similarity to subtelomeric encoded proteins
3647 f at
           1096.4
strong similarity to subtelomeric encoded proteins
3648 f at 9886.7
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p,
Cos4p, Cos8p, Cos6p, Cos9p
3649_f_at 64.3
tRNA-Gly
3650 f at 2521.3
                       Ρ
Ty4 LTR
3651_f_at 9953.3
                       Ρ
Ty1 LTR
3652_f_at 8845.9
                       Ρ
Full length Ty1
3653 f at
           10096.9
                       Ρ
Ty1 LTR
3654_i_at
           110.0
                       Ρ
Ty3 LTR
3655_f_at
           105.0
                       Α
Ty3 LTR
3656 f at
           6611.6
                       Ρ
Ty1 LTR
                       Ρ
3657_f_at
           8804.5
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in
NC_001146 between 520758 and 524702 with 100% identity.
3658 f at 8806.3
                       Ρ
Full length Ty1
3659_f_at
           7434.6
                       Ρ
Full length Ty1
                       Ρ
3660 f at 6385.1
Ty1 LTR
                       Ρ
3661 at
           3104.9
Ty3 LTR
3662_f_at
           7875.1
                       Ρ
Tv3 LTR
3663_f_at
                       Ρ
           1572.8
Ty4 LTR
3664_f_at
                       Ρ
           7681.9
Ty2 LTR
                       Ρ
3665_f_at
           8909.9
Full length Ty2
```

```
Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found reverse in
NC 001146 between 562383 and 566402 with 100% identity.
3667_f_at 7570.0
Tv2 LTR
                       Ρ
3668_f_at 2470.8
tRNA-Pro
3669_f_at
           4860.7
                       Ρ
Ty1 LTR
                       Р
3670_f_at
           1065.1
Ty4 LTR
3621 i at
           -41.7
                       Α
Ty3 LTR
                       Ρ
3622_f_at
           8395.4
Ty3 LTR
3623 f at
           6142.3
                       Ρ
Ty1 LTR
3624_at
           1312.5
                       Ρ
Ty1 LTR
3625_at
           718.3
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3626 i at
           789.0
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3627_r_at 692.9
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3628 f at 68.3
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3629_f_at
           517.0
strong similarity to subtelomeric encoded proteins
3630_at
           -61.4
Ty1 LTR
                       Ρ
3631 s at 1188.5
Ty4 LTR
3632_at
           -31.0
                       Α
Ty1 LTR
3633_f_at
           20.9
                       Α
tRNA-Gly
3634_f_at 575.3
                       Ρ
Ty1 LTR
                       Ρ
3635_f_at
           9841.6
Ty1 LTR
3636 f at
           10883.3
Saccharomyces cerevisiae chromosome XV. complete chromosome sequence. Found forward in
NC 001147 between 119305 and 123267 with 100% identity.
3637_f_at 9082.5
Full length Ty1
                       Ρ
3638_f_at 10121.3
Full length Ty1
3639 f at 11300.5
Ty1 LTR
3640_f_at -1254.0
                       Α
tRNA-Gly
```

3666_f_at 8749.6

Ρ

3641_f_at	102.5	Α
Ty3 LTR 3642_at	26.1	Α
Ty1 LTR 3643_i_at	-905.9	Α
Ty1 LTR 3644_f_at	1051.3	Α
Ty1 LTR 3645_f_at	-1917.3	Α
tRNA-Gly 3597_at	27.6	Α
Ty1 LTR 3598_f_at	2353.0	Р
tRNA-Arg 3599_at	-57.3	Α
Ty1 LTR 3600_i_at	-179.6	Α
Ty3 LTR 3601_f_at	151.2	Α
Ty3 LTR 3602_at Ty1 LTR 3603_at	257.2	Α
Ty1 LTR 3603_at	175.2	Ρ
Ty1 LTR 3604_f_at	32.3	Α
tRNA-Gly 3605_f_at	7.3	Ρ
Ty1 LTR 3606_f_at	8312.4	Ρ
Ty1 LTR 3607_f_at	6443.5	Р
Full length 3608_f_at	Ty1 8875.4	Р
3608_f_at Ty1 LTR 3609_i_at	33.6	Α
Ty1 LTR 3610_f_at	75.2	Α
Ty1 LTR 3611_f_at	165.0	Α
Ty1 LTR 3612_f_at	7811.3	Р
Ty2 LTR 3613_i_at	225.9	Р
Ty1 LTR 3614_f_at Ty1 LTR 3615_i_at	88.8	Α
Ty1 LTR 3615_i_at	-6.6	Α
Ty1 LTR 3616_f_at	145.7	Ρ
Ty1 LTR 3617_f_at	1793.6	Ρ
Ty4 LTR 3618_f_at	6644.9	Р
Ty2 LTR 3619_f_at		Р
Full length	1 y2	

```
3620_f_at 11329.7
                      Ρ
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found reverse in
NC 001147 between 704417 and 708436 with 100% identity.
3572_f_at 6142.8
Ty2 LTR
3573_f_at
           1577.4
                      Ρ
Ty4 LTR
                      Ρ
3574_f_at
           941.6
tRNA-Ala
                      Ρ
3575_f_at
           5688.6
Ty3 LTR
3576_f_at
           1331.7
                      Α
Ty3 LTR
3577_at
                      Ρ
           118.4
Ty1 LTR
                      Ρ
3578 f at
           5575.2
Ty2 LTR
                      Р
3579_f_at
           10960.4
Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in
NC_001147 between 971863 and 975882 with 100% identity.
3580 f at
          10512.7
                      Ρ
Full length Ty2
                      Ρ
3581 f at 5628.7
Ty2 LTR
                      Ρ
3582_f_at 6946.8
Ty1 LTR
                      Ρ
3583 i at
           500.1
Ty1 LTR
3584_f_at
           60.1
                      Ρ
Ty1 LTR
3585_f_at
           -43.5
                       Α
Ty3 LTR
                      Ρ
3586_f_at
           7563.8
Ty1 LTR
3587 f at 9762.4
Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in
NC_001148 between 58054 and 62016 with 100% identity.
3588_f_at 9513.6
Full length Ty1
3589_f_at 11157.1
                      Ρ
Full length Ty1
3590_f_at 8845.5
                      Ρ
Ty1 LTR
                      Ρ
3591_f_at
           4985.0
Ty2 LTR
3592_i_at
           -889.6
                       Α
Ty1 LTR
3593 f at
           1841.8
                      Ρ
Ty1 LTR
3594 f at
           1004.7
                       Ρ
tRNA-Glu
3595_at
           15.7
                       Α
Ty1 LTR
                      Ρ
3596_f_at
           5463.9
Ty2 LTR
                      Ρ
3548_s_at 860.9
```

```
tRNA-Cys
3549 f at 28.1
                     Α
Ty1 LTR
3550_i_at -69.1
                     Α
Ty1 LTR
3551_f_at 1076.7
                     Ρ
Ty1 LTR
3552_f_at 4.9
Ty1 LTR
                     Ρ
3553_f_at 1541.4
Ty4 LTR
3554_f_at 2282.4
                     Ρ
Full length Ty4
                     Ρ
3555_s_at 356.8
```

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 437328 and 439490 with 100% identity.

3556 s at 344.7 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 437328 and 439490 with 100% identity.

3557_s_at 14.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in NC_001148 between 439423 and 442737 with 100% identity.

3558_f_at	1486.2	Р
Ty4 LTR		
3559_f_at	10362.8	Р
Ty1 LTR		
3560_at	175.5	Р
Ty1 LTR		
3561_f_at	-692.1	Α
tRNA-Gly		
3562_f_at	857.4	Р
tRNA-Ser		
3563_s_at	302.2	Р
tRNA-Thr		
3564_f_at	9602.3	Р
Ty3 LTR		_
3565_at	332.9	Р
Ty1 LTR		
3566_i_at	74.4	Α
Ty1 LTR	4.0	
3567_r_at	-4.3	Α
Ty1 LTR	4050.4	_
3568_f_at	1359.1	Р
Ty1 LTR	400.4	^
3569_at	423.4	Α
Ty1 LTR	000.0	_
3570_f_at	820.6	Р
Ty1 LTR	C240 F	D
3571_f_at Ty1 LTR	6319.5	Р
	6452.6	Р
3524_f_at	6453.6	Р
Full length 3525_f_at	10222	Р
		۲
Full length		Р
3526_f_at	10090.2	

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found reverse in

```
NC_001148 between 804996 and 808958 with 100% identity.
3527_f_at 6422.2
Ty1 LTR
3528_f_at 8857.9
                       Ρ
Ty1 LTR
3529_f_at
          10202.2
                       Ρ
Full length Ty3
3530_f_at
           8944.5
                       Ρ
Ty1 LTR
3531_at
                       Ρ
           131.0
Ty1 LTR
3532 f at
                       Ρ
           11881.9
Ty1 LTR
3533_f_at
                       Ρ
           10064.6
Full length Ty1
                       Ρ
3534 f at
           9868.4
Ty1 LTR
3535_i_at
           17.9
                       M
Ty3 LTR
3536_f_at
           6549.8
                       Ρ
Ty3 LTR
                       Ρ
3537_f_at
           3143.6
tRNA-Ala
3538 f at
           -1878.5
                       Α
tRNA-Gly
3539_f_at
                       Ρ
           2719.2
Ty3 LTR
3540_at
           63.8
                       Α
Ty4 LTR
3541 at
           407.1
                       Α
Ty4 LTR
3542_f_at
           9428.0
strong similarity to subtelomeric encoded proteins
3543 s at 12377.1
strong similarity to subtelomeric encoded proteins
3544 at
           89.6
strong similarity to subtelomeric encoded proteins
           27.5
3545_i_at
Ty1 LTR
3546_f_at
           9.3
                       Α
Ty1 LTR
3547_f_at
           4069.8
                       Ρ
Ty2 LTR
3500_f_at
           -66.6
                       Α
Ty1 LTR
3501_f_at 5027.8
                       Ρ
Ty2 LTR
                       Р
3502 f at
          10558.5
Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in
NC_001134 between 31221 and 35240 with 100% identity.
3503_f_at 5010.8
Full length Ty2
3504 f at 3850.6
                       Ρ
Ty2 LTR
3505_s_at 1061.9
                       Α
Ty1 LTR
```

```
3506_s_at 1854.1
                      Ρ
Ty4 LTR
3507_at
           35.8
                       Α
Ty1 LTR
3508 f at
           -1898.8
                      Α
tRNA-Gly
                      Ρ
3509_f_at
           5080.2
Ty3 LTR
3510_s_at 708.1
                      Ρ
Ty1 LTR
                       Ρ
3511_f_at 8543.7
Ty1 LTR
                       Ρ
3512_f_at 9023.2
Full length Ty1
                       Ρ
3513_f_at 8507.8
Ty1 LTR
3514_f_at
           1391.4
                      Ρ
tRNA-Ser
3515_at
           560.5
                       Ρ
Ty1 LTR
3516_f_at
           7833.3
                       Ρ
Ty1 LTR
3517_f_at 6761.1
                      Ρ
Full length Ty1
                       Ρ
3518_f_at 7230.1
Ty1 LTR
3519 f at
                       Α
          7.9
Ty1 LTR
                      Ρ
3520_s_at 495.1
tRNA-Val
3521_i_at
           -4.7
                       Α
Ty1 LTR
                       Ρ
3522_f_at
           1928.0
Ty1 LTR
3523 at
           248.8
                       Α
Ty1 LTR
3477_at
           41.9
                       Α
Ty1 LTR
           7352.7
                       Ρ
3478_f_at
tRNA-GIn
                       Ρ
3479 f at
           984.6
tRNA-Arg
3480_at
           -5.5
                       Α
Ty1 LTR
3481 at
           273.0
                       Α
Ty1 LTR
                       Ρ
3482 f at
           970.7
tRNA-Glu
3483_f_at
           8692.7
Protein with similarity to members of the Cos3VCos5VCos1VCos4VCos8VCos9 family, coded from
subtelomeric region
3484_f_at
          14.5
                       Α
Ty5 LTR
3485_at
           -340.8
                       Α
Full length Ty5
```

3486_at

60.3

Α

```
Full length Ty5
3487_g_at 157.7
                       Α
Full length Ty5
3488_at
           39.4
                       Α
Full length Ty5
3489_f_at 17.7
                       Α
Full length Ty5
3490_f_at 1.3
                       Α
Ty5 LTR
                       Ρ
3491_f_at
           957.4
tRNA-Glu
           1701.8
                       Ρ
3492_f_at
Ty1 LTR
                       Ρ
3493_f_at
           3582.2
Ty1 LTR
3494_f_at
           6142.4
                       Ρ
Ty1 LTR
3495_f_at
           1339.0
                       Ρ
Ty1 LTR
3496_f_at
           7739.6
                       Ρ
Ty2 LTR
3497_f_at
           10395.2
Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in
NC 001135 between 86005 and 90030 with 100% identity.
3498_f_at 12072.1
Full length Ty2
                       Ρ
3499 f at 7575.6
Ty2 LTR
3451_f_at
           2232.0
                       Ρ
tRNA-Pro
3452_f_at
           7167.5
                       Ρ
Ty1 LTR
                       Ρ
3453_at
           240.0
strong similarity to subtelomeric encoded proteins
3454 s at
           602.8
tRNA-Asn
3455_f_at -1785.6
                       Α
tRNA-Gly
                       Ρ
3456_i_at
           76.2
Ty1 LTR
3457_f_at
           4469.1
                       Ρ
Ty1 LTR
                       Ρ
3458_f_at
           541.1
Ty1 LTR
3459_at
           110.1
                       Α
Ty1 LTR
3460 at
           32.2
                       Α
Ty4 LTR
3461_f_at
           7832.4
                       Ρ
Ty1 LTR
3462_f_at
           6010.4
                       Ρ
tRNA-GIn
                       Ρ
3463 at
           155.2
Ty1 LTR
3464_at
                       Ρ
           587.5
Ty1 LTR
```

```
43.2
3465_at
                       Α
Ty5 LTR
3466 i at
           54.8
                       Α
Ty1 LTR
                       Ρ
3467 f at
           3899.1
Ty1 LTR
3468_i_at
           -42.2
                       Α
Ty1 LTR
3469_f_at 53.8
                       Α
Ty1 LTR
3470_i_at
           1857.0
Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3471_f_at 3766.0
Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3472 f at -1797.3
tRNA-Gly
3473_f_at
           2670.5
                       Ρ
tRNA-Ala
3474_f_at
                       Ρ
           1587.2
Ty1 LTR
                       Ρ
3475 f at
           1676.1
Ty4 LTR
                       Ρ
3476_f_at
           1313.4
tRNA-Ser
3427 at
           143.7
                       Α
Ty1 LTR
3428_f_at
                       Ρ
           3403.1
Ty1 LTR
3429_f_at 7472.9
Ty2 LTR
                       Ρ
3430_f_at 12234.6
Full length Ty2
3431 f at 10970.1
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in
NC_001136 between 514037 and 518056 with 100% identity.
3432_f_at 6229.7
Ty2 LTR
3433_i_at
           20.9
                       Α
Ty1 LTR
3434_f_at
           301.4
                       Ρ
Ty1 LTR
                       Ρ
3435_f_at
           2449.6
Ty1 LTR
                       Ρ
3436_f_at
           5270.6
tRNA-GIn
3437_f_at 933.2
                       Ρ
tRNA-Arg
                       Ρ
3438_f_at
           1824.7
tRNA-Arg
3439_f_at
           5446.9
                       Ρ
tRNA-GIn
                       Ρ
3440_f_at
           6534.0
Ty1 LTR
```

Ρ

3441_f_at 8219.0

```
Full length Ty1
3442 f at 10205.9
                      Ρ
Full length Ty1
3443_f_at
          11957.3
                       Ρ
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in
NC 001136 between 645851 and 649813 with 100% identity.
3444_f_at 7225.9
                      Ρ
Ty1 LTR
3445_f_at 1847.0
                       Ρ
Ty3 LTR
3446 i at
           -119.8
                       Α
Ty1 LTR
3447 f at 544.7
                       Α
Ty1 LTR
3448_s_at 2922.2
                       Ρ
Ty3 LTR
3449 i at
           216.9
                       Ρ
Ty1 LTR
3450_r_at
           13.5
                       Α
Ty1 LTR
3404_f_at
           1930.7
                       Ρ
Ty1 LTR
                       Р
3405 f at
           6376.8
tRNA-GIn
                       Ρ
3406_f_at 8815.5
Ty1 LTR
                       Р
3407 at
           352.6
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in
NC 001136 between 804494 and 805681 with 100% identity.
3408 f at 5605.8
                      Ρ
Ty1 LTR
3409_f_at
           14135.7
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in
NC_001136 between 873398 and 877417 with 100% identity.
3410 f at 5190.8
                      Ρ
Full length Ty2
3411_f_at 4975.7
                       Ρ
Ty1 LTR
3412 f at 8347.7
                       Ρ
Full length Ty1
                      Ρ
3413 f at 10416.8
Full length Ty1
                       Ρ
3414_f_at
           10616.1
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in
NC 001136 between 878651 and 882613 with 100% identity.
3415_i_at
           46.7
Tv1 LTR
3416 s at 4496.2
                       Ρ
Ty1 LTR
3417 f at
           6010.9
                       Ρ
Ty3 LTR
3418_f_at
           1419.0
                       Ρ
tRNA-Ser
                       Р
3419_f_at
           4825.9
Ty1 LTR
                       Ρ
3420_f_at 12160.8
```

```
NC 001136 between 982747 and 986766 with 100% identity.
3421 f at 8736.6
Full length Ty2
3422 f at 7458.8
                      Ρ
Ty1 LTR
3423_f_at 6782.6
                      Ρ
Ty1 LTR
3424_f_at 7674.8
                      Ρ
Full length Ty1
                      Ρ
3425 f at 8196.5
Full length Ty1
                      Ρ
3426 f at 7867.3
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found reverse in
NC 001136 between 987525 and 991034 with 100% identity.
3379 f at
           6092.2
Ty1 LTR
3380_i_at
           120.9
                      Ρ
Ty3 LTR
3381_f_at
           24.8
                      Ρ
Ty3 LTR
3382_f at
           -1656.3
                      Α
tRNA-Gly
3383 f at 519.3
                      Ρ
tRNA-Glu
                      Ρ
3384_f_at 5411.2
Ty3 LTR
3385_s_at 3631.4
                      Ρ
tRNA-Val
                      Ρ
3386 f at 9473.7
Ty1 LTR
3387_f_at
           6908.5
                      Ρ
Full length Ty1
3388_f_at
          9954.9
Ty1 LTR
3389 f at
                      Ρ
           2999.3
Ty1 LTR
3390_at
           70.6
                      Α
Ty3 LTR
3391_f_at
           4373.5
                      Ρ
Ty1 LTR
3392_f_at
           9795.7
                      Ρ
Ty1 LTR
3393_f_at
           13548.5
Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in
NC_001136 between 1208292 and 1212254 with 100% identity.
3394 f at
           7686.6
Full length Ty1
3395_f_at 10096.4
                      Ρ
Full length Ty1
3396_f_at 7050.0
                      Ρ
Ty1 LTR
3397_f_at
           216.9
                      Α
tRNA-Gly
3398_f_at
           567.3
                       Α
```

tRNA-Ser

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in

```
3399_f_at 5178.6
                       Ρ
Ty1 LTR
                       Ρ
3400 i at
           75.7
Ty1 LTR
3401 f at
           -8.3
                       Α
Ty1 LTR
3402_at
           14.2
                       Α
Ty1 LTR
3403_f_at
           1214.5
strong similarity to subtelomeric encoded proteins
3356_f_at
           848.5
strong similarity to subtelomeric encoded proteins
           200.6
3357_at
strong similarity to subtelomeric encoded proteins
3358_f_at -1848.9
tRNA-Gly
3359_f_at
           7350.1
                       Ρ
Ty1 LTR
3360_at
           -20.0
                       Α
Ty1 LTR
3361_f_at
           1275.9
                       Ρ
tRNA-Ser
3362 at
           -87.6
                       Α
Ty1 LTR
3363_at
           -44.5
                       Α
Ty4 LTR
                       Ρ
           5695.6
3364 f at
tRNA-GIn
3365_f_at
           7233.1
                       Ρ
Ty1 LTR
3366_at
           11.4
                       Α
Ty1 LTR
                       Ρ
3367_f_at
           1286.6
Ty1 LTR
3368 f at
           929.5
                       Ρ
tRNA-Arg
3369_i_at
           11.9
                       Α
Ty1 LTR
           438.0
                       Ρ
3370_f_at
Ty1 LTR
                       Ρ
3371_f_at
           938.1
tRNA-Glu
                       Ρ
3372_f_at
           1122.8
tRNA-His
                       Ρ
3373 at
           492.8
Ty1 LTR
                       Ρ
3374_at
           352.4
Ty1 LTR
3375_f_at
           6814.4
                       Ρ
Ty3 LTR
3376_f_at
           6086.2
                       Ρ
tRNA-GIn
3377_at
           84.5
                       Α
Ty1 LTR
                       Ρ
3378_f_at
           849.1
tRNA-Ser
```

3332_i_at	21.3	Α
Ty1 LTR 3333_f_at	4300.5	Р
Ty1 LTR 3334_at	77.4	Α
Tv1 LTR		A
Ty1 LTR	83.9	
3335_at Ty1 LTR 3336_f_at Ty4 LTR 3337_i_at	1599.0	Р
3337_i_at Ty3 LTR	506.2	Р
3338_f_at	16.1	Α
Ty3 LTR 3340_f_at	7512.5	Р
Ty1 LTR 3342_f_at	7178.4	Р
Ty3 LTR		
3343_i_at Ty1 LTR	1465.6	Р
Ty1 LTR 3344_f_at Ty1 LTR 3345_f_at	1922.7	Р
3345_f_at Ty1 LTR	2378.5	Р
3346_at	365.6	Α
Ty4 LTR 3347_s_at	2609.3	Р
Ty1 LTR 3348_f_at	5964.8	Р
Ty1 LTR		
3350_f_at Full length	10078.7	Р
3352_s_at	10204.3	Р
3352_s_at Ty1 LTR 3354_s_at Ty1 LTR	554.9	Р
Ty1 LTR 3355_s_at	905.6	Р
Ty1 LTR		Α
3307_s_at Ty1 LTR	252.0	А
3308_s_at Ty1 LTR	823.4	Р
3309_s_at	169.6	Р
Ty1 LTR 3310_s_at	522.1	Ρ
3310_s_at Ty1 LTR 3311_f_at	6598.9	Р
Ty1 LTR 3313_f_at	3884.4	Р
Ty1 LTR 3315_f_at	11712.8	Р
Ty3 LTR		
3316_f_at Ty3 LTR	12881.8	Р
3317_f_at	12481.3	Ρ
Ty1 LTR		

```
12667.6
                       Ρ
3319_f_at
Ty1 LTR
3320 i at
           -50.5
                       Α
Ty1 LTR
3321 f at
           148.7
                       Α
Ty1 LTR
3322_at
           -17.3
                       Α
Ty1 LTR
3323_i_at
           -258.0
                       Α
Ty5 LTR
                       Ρ
3324_at
           319.1
Ty5 LTR
           1727.4
3325 f at
strong similarity to subtelomeric encoded proteins
3326 at
           289.5
strong similarity to subtelomeric encoded proteins
3327_f_at 9876.2
Protein with strong similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p,
Cos1p, Cos4p, Cos8p, Cos6p, Cos9p
3328_at
           62.8
Ty1 LTR
3329_f_at 3458.5
                       Ρ
Ty1 LTR
3330 f at 7211.2
                       Ρ
Ty2 LTR
          11305.2
3283_f_at
Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in
NC_001138 between 139492 and 143511 with 100% identity.
3284_f_at 9423.7
                       Ρ
Full length Ty2
3285_f_at 6213.1
                       Ρ
Ty2 LTR
                       Ρ
3286 f at
           1964.8
Ty1 LTR
3287 s at 238.3
                       Ρ
Ty4 LTR
3288_at
           61.2
                       Α
Ty1 LTR
3289 i at
           83.9
                       Α
Ty1 LTR
3290 f at
           208.4
                       Α
Ty1 LTR
3291_f_at
           2838.8
                       Ρ
Ty1 LTR
3294 at
           23.2
                       Α
Ty1 LTR
3296 at
           -21.6
                       Α
Ty1 LTR
3297_i_at
           -48.7
                       Α
Ty5 LTR
3298_f_at
           -68.5
                       Α
Ty5 LTR
3299 f at
           3.1
                       Α
strong similarity to subtelomeric encoded proteins
           1415.1
3301_f_at
Ty4 LTR
```

3302_f_at	5325.7	Р
Ty1 LTR 3303_f_at	561.0	Р
Ty1 LTR 3304_f_at	495.5	Α
Ty1 LTR 3305_at	-60.8	Α
Ty4 LTR 3306_i_at	931.9	Р
Ty1 LTR 3258_f_at	835.6	Р
Ty1 LTR 3259_at	3886.7	Р
Ty1 LTR 3260_f_at	7660.5	Р
Ty3 LTR 3262_at	15.3	Α
Ty4 LTR 3263_i_at	2973.2	Р
Ty1 LTR 3264_f_at	258.0	Р
Ty1 LTR 3267_f_at	2177.1	Р
Ty3 LTR 3268_f_at	9545.8	P
Ty1 LTR 3269_f_at	1404.2	Р
Ty1 LTR 3270_f_at	6883.7	Р
Ty1 LTR		
3271_i_at Ty3 LTR	30.1	Α
Ty3 LTR 3272_f_at Ty3 LTR	3761.0	Р
3274_at Ty1 LTR	119.9	Α
3276_i_at Ty1 LTR	-14.1	Α
3277_f_at	108.5	Α
Ty1 LTR 3279_f_at		Р
Full length T 3235_f_at	5504.0	Р
Ty1 LTR 3236_f_at		Р
Full length T 3237_f_at	10588.9	Р
Full length T 3239_f_at		Р
Ty1 LTR 3240_f_at	6887.5	Р
Ty2 LTR 3241_f_at	7364.7	Р
Full length T 3243_at		Р
tRNA-Leu		

```
Ρ
3244_i_at
           66.1
Ty1 LTR
                       Ρ
3245 f at
           366.0
Ty1 LTR
3247 s at 497.9
TY3B protein Found forward in NC 001139 between 707604 and 708461 with 100% identity.
3248 s at 1784.0
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in
NC 001139 between 708460 and 712248 with 100% identity.
3249 s at 4697.8
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in
NC 001139 between 708460 and 712248 with 100% identity.
3250 s at 2175.0
Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in
NC 001139 between 708460 and 712248 with 100% identity.
3251 s at 276.0
Full length Ty3
3252_s_at 3539.3
                      Ρ
Full length Ty3
3253_f_at 9182.0
Full length Ty3
                       Ρ
3255_at
           892.1
Ty1 LTR
3256 at
                       Α
           36.1
Ty1 LTR
3257_f_at
           7024.7
Ty3 LTR
3212_f_at
           1184.3
                       Ρ
Ty1 LTR
                       Ρ
3214 at
           311.2
Ty1 LTR
3215_f_at
                       Ρ
           312.2
Ty1 LTR
3216_at
           14.8
                       Α
Ty1 LTR
           31.7
3218 at
                       Α
Ty1 LTR
                       Р
3222_f_at
           9092.0
Full length Ty2
3223_f_at 6464.7
                      Ρ
Ty2 LTR
3225_f_at 8106.1
                       Ρ
Full length Ty1
                       Ρ
3226_f_at 8773.2
Ty1 LTR
3228_at
                       Ρ
           165.7
Tv3 LTR
3230 f at
           4520.8
Ty1 LTR
3232 f at
           2175.3
                       Ρ
Ty4 LTR
3233_f_at
           10282.1
                      Ρ
Ty1 LTR
```

Protein with strong similarity to other subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p, Cos4p, Cos6p, Cos9p

3234 at

6526.0

```
3187_s_at 5905.4
strong similarity to subtelomeric encoded proteins
3188 at
           814.0
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p,
Cos4p, Cos8p, Cos6p, Cos9p
3189_i_at -294.9
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p,
Cos4p, Cos8p, Cos6p, Cos9p
3190_f_at 251.3
Protein with similarity to subtelomerically-encoded proteins such as Cos5p, Ybr302p, Cos3p, Cos1p,
Cos4p, Cos8p, Cos6p, Cos9p
3191 i at
           30.7
Ty5 LTR
3192_f_at 8.3
                       Α
Ty5 LTR
3193 at
            1308.1
                       Α
strong similarity to subtelomeric encoded proteins
3195_f_at 8732.5
Ty3 LTR
3196_f_at
           1540.7
Ty4 LTR
                       Ρ
3199_f_at
           6186.8
Ty1 LTR
                       Ρ
3200 i at
           123.6
Ty1 LTR
3201_r_at
           11.8
                        Α
Ty1 LTR
3202_f_at
           -1.0
                       Α
Ty1 LTR
3203_f_at
           9610.3
                       Ρ
Ty1 LTR
3204_at
           677.5
                       Ρ
Ty1 LTR
3206_at
           8.0
                        Α
Ty1 LTR
3207_i_at
           323.5
                       Ρ
Ty1 LTR
                       Ρ
3208_f_at
           161.0
Ty1 LTR
3209_f_at
           7252.7
                       Ρ
Ty1 LTR
3161_f_at
           5082.9
                       Ρ
Ty3 LTR
                       Ρ
3162_at
           1107.1
Ty4 LTR
3163_i_at
                       Ρ
           33.4
Tv1 LTR
3164_f_at
           36.7
                       Α
Ty1 LTR
3165 at
           3.9
                        Α
Ty4 LTR
3166_i_at
           52.0
                        Α
Ty1 LTR
3167_r_at
           17.2
                        Α
Ty1 LTR
3168_f_at
           38.1
                       Α
```

```
Ty1 LTR
3169 f at 8574.3
                       Ρ
Ty2 LTR
3170_i_at
           24.7
                       Α
Ty1 LTR
3171_r_at
           -2.2
                       Α
Ty1 LTR
3172_f_at
           172.6
                       Ρ
Ty1 LTR
3173_i_at
           8.3
                       Α
Ty1 LTR
3174_f_at
           93.3
                       Α
Ty1 LTR
                       Ρ
3175_i_at
           323.8
Ty1 LTR
                       Ρ
3176 f at
           967.0
Ty1 LTR
3177_f_at
           311.0
                       Ρ
Ty3 LTR
3178_f_at 56.8
                       Α
Ty1 LTR
                       Ρ
3180_f_at 9331.5
Full length Ty1
3181 f at 10081.7
                       Ρ
Ty1 LTR
3182_i_at
           165.3
                       Α
strong similarity to subtelomeric encoded YDR544c
3183_f_at 10417.1
strong similarity to subtelomeric encoded proteins
3184 s at 374.5
strong similarity to subtelomeric encoded proteins
3185_s_at 189.4
strong similarity to subtelomeric encoded proteins
3133_f_at 2981.2
Ty1 LTR
                       Ρ
3136 s at 4525.8
Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in
NC_001141 between 206488 and 210129 with 100% identity.
3137 s at 1677.1
Full length Ty3
3139 f at 197.3
                       Ρ
Ty2 LTR
3141_i_at
           54.8
                       Ρ
Ty1 LTR
                       Ρ
3142 f at
           3397.7
Ty1 LTR
                       Ρ
3143 f at
           949.9
Ty3 LTR
3144_f_at
           1171.6
                       Ρ
Ty1 LTR
3145_at
           409.6
                       Ρ
Ty1 LTR
3147_at
           -8.6
                       Μ
Ty1 LTR
                       Ρ
3148_s_at 3815.9
mating hormone a2
```

3149 at 1307.6 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 13744 and 14743 with 100% identity.

3150_at 1798.3 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 14744 and 15743 with 100% identity.

3151_g_at 773.6 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 14744 and 15743 with 100% identity.

3152 at 2561.0 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 15744 and 16743 with 100% identity.

3153_at 192.9 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 16744 and 17743 with 100% identity.

3154 at 487.0 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 17744 and 18743 with 100% identity.

3155 at -460.5 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 18744 and 19729 with 100% identity.

3156_at 123.8 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC 001133 between 88357 and 89356 with 100% identity.

3157 at 266.0 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC 001133 between 89357 and 90356 with 100% identity.

3158 at 282.5 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 90357 and 91356 with 100% identity.

3159 at 374.4 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 91357 and 92356 with 100% identity.

3088 at 88.2 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 92357 and 93356 with 100% identity.

3089 g at 533.9 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 92357 and 93356 with 100% identity.

3090 s at 20.0 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 93357 and 93988 with 100% identity.

3091_at -271.7 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 159789 and 160788 with 100% identity.

3092 f at 51.4 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 160789 and 161788 with 100% identity.

3093 f at -90.1 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 161789 and 162788 with 100% identity.

3096 f at 131.2 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 164789 and 165788 with 100% identity.

3097_at 115.7 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 165789 and 166468 with 100% identity.

3098 at 1045.6 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 208649 and 209648 with 100% identity.

3099 at 334.2

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 209649 and 210648 with 100% identity.

3100 s at 896.3 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC 001133 between 210649 and 211648 with 100% identity.

3101 at 317.6 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 211649 and 212648 with 100% identity.

3102_s_at 879.2

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC 001133 between 212649 and 213648 with 100% identity.

3103 at 258.7 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 213649 and 214648 with 100% identity.

3104 at 262.9 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 214649 and 215648 with 100% identity.

3105 g at 455.4 A

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 214649 and 215648 with 100% identity.

3106 s at 462.2 F

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 215649 and 216648 with 100% identity.

3107_s_at 3662.9 P

Saccharomyces cerevisiae chromosome I, complete chromosome sequence. Found forward in NC_001133 between 216649 and 217143 with 100% identity.

3108 at 155.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 9138 and 10137 with 100% identity.

3109 at -372.7 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 10138 and 11137 with 100% identity.

3110 s at -244.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 11138 and 12137 with 100% identity.

3111_s_at 223.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 12138 and 13137 with 100% identity.

3112 s at 74.5

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 13138 and 14137 with 100% identity.

3113 s at 1575.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 14138 and 15137 with 100% identity.

3114 s at 2302.4 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 15138 and 15624 with 100% identity.

3115 at -153.9 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 41889 and 42888 with 100% identity.

3116 at 1474.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 42889 and 43888 with 100% identity.

3117_at -227.9 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 43889 and 44888 with 100% identity.

3118 at -2118.7 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 44889 and 45888 with 100% identity.

3119 at -329.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 45889 and 46888 with 100% identity.

3120_at 303.3 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 46889 and 47659 with 100% identity.

3121_at 1452.2

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 165921 and 166920 with 100% identity.

3122 at 928.5 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 166921 and 167920 with 100% identity.

3123 at -573.7 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 167921 and 168920 with 100% identity.

124 at 707.7

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 168921 and 169920 with 100% identity.

3125 at 1506.4 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 169921 and 170920 with 100% identity.

3126 at 168.4 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 170921 and 171920 with 100% identity.

3127 at 356.9

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 171921 and 172694 with 100% identity.

3128_at 445.4 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 196825 and 197824 with 100% identity.

3129 at -453.6 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 203825 and 204824 with 100% identity.

3130 at 56.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 204825 and 205824 with 100% identity.

3131_g_at 773.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 204825 and 205824 with 100% identity.

3045 s at 862.6 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 205825 and 206646 with 100% identity.

3046_at -66.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 212197 and 213196 with 100% identity.

3047 at 621.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in

NC_001142 between 213197 and 214196 with 100% identity.

3048 at 697.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 214197 and 215196 with 100% identity.

3049 at 25.5

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 215197 and 216196 with 100% identity.

3050 at 433.5 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 216197 and 217196 with 100% identity.

3051 at 187.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 217197 and 217402 with 100% identity.

3052_at -96.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 254933 and 255932 with 100% identity.

3053 at -1437.6 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 255933 and 256932 with 100% identity.

3054 at -441.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 256933 and 257932 with 100% identity.

3055 g at 469.7 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 256933 and 257932 with 100% identity.

3056 s at 314.7 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 257933 and 258932 with 100% identity.

3057 s at 2976.3 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 258933 and 259932 with 100% identity.

3058_s_at 1523.0 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 259933 and 260143 with 100% identity.

3059 at 55.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 368944 and 369943 with 100% identity.

3060_at 1102.1 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 369944 and 370943 with 100% identity.

3061 at -329.9

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 370944 and 371943 with 100% identity.

3062_at 987.6

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 371944 and 372943 with 100% identity.

3063 at -213.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 372944 and 373943 with 100% identity.

3064 at 2383.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 373944 and 374811 with 100% identity.

3065 g at 629.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 373944 and 374811 with 100% identity.

3066_at -8.6 M

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 424301 and 425300 with 100% identity.

3067 g at 17.7 M

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 424301 and 425300 with 100% identity.

3068 s at 923.4

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 425301 and 426300 with 100% identity.

3069 s at -291.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 426301 and 427300 with 100% identity.

3070 s at -882.3 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 427301 and 428300 with 100% identity.

3071 s at 1972.6

Ρ

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 428301 and 429300 with 100% identity.

3072 s at 4326.3 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 429301 and 430300 with 100% identity.

3073 s at 171.3 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 430301 and 430425 with 100% identity.

3074 at -3.4 M

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 510427 and 511426 with 100% identity.

3075 at 381.0 M

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 511427 and 512426 with 100% identity.

3076 at -34.9 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 512427 and 513426 with 100% identity.

3077 at 261.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 513427 and 514426 with 100% identity.

3078 g at 1037.6 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 513427 and 514426 with 100% identity.

3079 s at 2303.7 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 514427 and 515426 with 100% identity.

3080_f_at 3052.5 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 515427 and 515477 with 100% identity.

3081 at 1333.2 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 557997 and 558996 with 100% identity.

3082 at -107.6 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 558997 and 559996 with 100% identity.

3083 g at -141.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 558997 and 559996 with 100% identity.

3084 s at 352.1

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 559997 and 560996 with 100% identity.

3085_s_at 771.7 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 560997 and 561996 with 100% identity.

3086_s_at 438.4 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 561997 and 562996 with 100% identity.

3087_s_at -58.1

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 562997 and 563996 with 100% identity.

3003 s at 2108.1 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 563997 and 564996 with 100% identity.

3004_s_at 2647.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 564997 and 565996 with 100% identity.

3005_at 416.3

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 595249 and 596248 with 100% identity.

3006 at 306.0 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 596249 and 597248 with 100% identity.

3007 at 390.1 M

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 597249 and 598248 with 100% identity.

3008_at 383.6

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 598249 and 599248 with 100% identity.

3009 g at 1166.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 598249 and 599248 with 100% identity.

3010 s at -61.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 599249 and 600248 with 100% identity.

3011_s_at 789.8 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 600249 and 601248 with 100% identity.

3012 s at 1260.3 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 601249 and 602248 with 100% identity.

3013 at 225.4 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 629774 and 630773 with 100% identity.

3014 at 96.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 630774 and 631773 with 100% identity.

3015 at 436.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 631774 and 632773 with 100% identity.

3016 at 184.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 632774 and 633773 with 100% identity.

3017_g_at 720.6 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 632774 and 633773 with 100% identity.

3018 s at 574.3 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in

NC_001142 between 633774 and 634773 with 100% identity.

3019 at -608.8 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 690939 and 691938 with 100% identity.

3020 at 219.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 691939 and 692938 with 100% identity.

3021 at -353.1 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 692939 and 693938 with 100% identity.

3022 at -258.5 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 693939 and 694938 with 100% identity.

3023_at -119.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 694939 and 695938 with 100% identity.

3024 g at 1692.5 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 694939 and 695938 with 100% identity.

3025_s_at 1118.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 695939 and 696138 with 100% identity.

3026_at -27.0 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 712444 and 713443 with 100% identity.

3027 at 92.1 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC 001142 between 713444 and 714443 with 100% identity.

3028 at 441.3 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 714444 and 715443 with 100% identity.

3029 at 57.7 F

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 715444 and 716443 with 100% identity.

3030 at -1378.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 716444 and 717443 with 100% identity.

3031 at -240.7 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 717444 and 718443 with 100% identity.

3032 at 340.0 P

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 718444 and 719443 with 100% identity.

3033_s_at -2990.2 A

Saccharomyces cerevisiae chromosome X, complete chromosome sequence. Found forward in NC_001142 between 719444 and 720443 with 100% identity.

3034 at -35.7 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 9592 and 10591 with 100% identity.

3035 at 700.9 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 10592 and 11591 with 100% identity.

3036 at 1225.7 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 11592 and 12591 with 100% identity.

3037_at 89.0 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 12592 and 13591 with 100% identity.

3038 at 215.6 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 13592 and 14591 with 100% identity.

3039 s at 3463.8

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 14592 and 15208 with 100% identity.

3040 at 630.9 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 56435 and 57434 with 100% identity.

3041 at 220.5 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 57435 and 58434 with 100% identity.

3042 at -136.7

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 58435 and 59434 with 100% identity.

3043_at -89.5 A

Α

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 59435 and 60434 with 100% identity.

3044_at 62.7 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 60435 and 61434 with 100% identity.

2960_at 33.5 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 61435 and 62434 with 100% identity.

2961 at 614.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 62435 and 63434 with 100% identity.

2962 at 1124.2 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 63435 and 63899 with 100% identity.

2963 at 411.1 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 99643 and 100642 with 100% identity.

2964 at 13981.2 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 100643 and 101642 with 100% identity.

2965 g at 7643.8 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 100643 and 101642 with 100% identity.

2966_s_at 12524.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 101643 and 102642 with 100% identity.

2967 s at 8039.8 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 102643 and 103642 with 100% identity.

2968_s_at 9504.1 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 103643 and 104642 with 100% identity.

2969 s at 8993.1 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 104643 and 105642 with 100% identity.

2970 s at 15350.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 105643 and 106328 with 100% identity.

2971 at -1304.0 M

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 411757 and 412756 with 100% identity.

2972_at 370.6 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 412757 and 413756 with 100% identity.

2973 at 177.6 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 413757 and 414756 with 100% identity.

2974_at -834.8 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 414757 and 415756 with 100% identity.

2975 at 414.7 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 415757 and 416756 with 100% identity.

2976_at 74.9

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 416757 and 417146 with 100% identity.

2977_at -237.0 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 535784 and 536783 with 100% identity.

2978 at 273.5 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 536784 and 537783 with 100% identity.

979 at 1858.7

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 537784 and 538783 with 100% identity.

2980 at 230.5 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 538784 and 539783 with 100% identity.

2981 at 146.7 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 539784 and 540783 with 100% identity.

2982 at 130.5 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 540784 and 541783 with 100% identity.

2983 at -237.9 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 541784 and 542783 with 100% identity.

2984 at 10.5 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 542784 and 543783 with 100% identity.

2985 at -158.0 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 543784 and 544783 with 100% identity.

2986 at 137.3 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 544784 and 545783 with 100% identity.

2987 at 544.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 545784 and 546783 with 100% identity.

2988_at -1808.8 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 546784 and 547783 with 100% identity.

2989 at 235.1 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in

NC_001143 between 547784 and 548228 with 100% identity.

2990 g at 1178.8 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 547784 and 548228 with 100% identity.

2991_at 477.8

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 619375 and 620374 with 100% identity.

2992_g_at 397.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 619375 and 620374 with 100% identity.

2993 s at 496.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 620375 and 621374 with 100% identity.

2994_s_at 542.3 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 621375 and 622374 with 100% identity.

2995 s at 848.7 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 622375 and 623374 with 100% identity.

2996_s_at 1260.7 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 623375 and 624374 with 100% identity.

2997_s_at 2382.9 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 624375 and 624566 with 100% identity.

2998 at 516.0 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 642133 and 643132 with 100% identity.

2999 at 3319.9 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 643133 and 644132 with 100% identity.

3000 at 151.4 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 644133 and 645132 with 100% identity.

3001 at 623.2 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 645133 and 646132 with 100% identity.

3002_g_at 128.4 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 645133 and 646132 with 100% identity.

2917 s at 448.4 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 646133 and 647132 with 100% identity.

2918_s_at 333.4 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 647133 and 648132 with 100% identity.

2919 s at 2066.9 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 648133 and 648994 with 100% identity.

2920 at 1807.1 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 649494 and 650493 with 100% identity.

2921 at 1023.6 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 650494 and 651493 with 100% identity.

2922_at 809.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 651494 and 652493 with 100% identity.

2923 at 1186.8 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 652494 and 653493 with 100% identity.

2924 g at -461.1 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 652494 and 653493 with 100% identity.

2925 s at 1047.1 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 653494 and 654493 with 100% identity.

2926 s at 414.6 F

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 654494 and 655493 with 100% identity.

2927_s_at 450.9

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 655494 and 655865 with 100% identity.

2928_at 946.6 A

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 662918 and 663917 with 100% identity.

2929_at 424.9 M

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 663918 and 664917 with 100% identity.

2930 at 490.0 P

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC_001143 between 664918 and 665917 with 100% identity.

2931 at -30.1

Α

Saccharomyces cerevisiae chromosome XI, complete chromosome sequence. Found forward in NC 001143 between 665918 and 666445 with 100% identity.

2932 at 61.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 54710 and 55709 with 100% identity.

2933 at 578.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 55710 and 56709 with 100% identity.

2934 at 179.8 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 56710 and 57709 with 100% identity.

2935 at 2581.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 57710 and 58709 with 100% identity.

2936_at 169.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 58710 and 59709 with 100% identity.

937 at -24.2

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 59710 and 60709 with 100% identity.

2938_at -14.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 60710 and 61709 with 100% identity.

2939 at -74.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 61710 and 62709 with 100% identity.

2940 at 194.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 62710 and 63709 with 100% identity.

2941 at -227.2 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 63710 and 64061 with 100% identity.

2942_at -1053.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 99543 and 100542 with 100% identity.

2943 at 1117.5 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 100543 and 101542 with 100% identity.

2944_g_at 2371.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 100543 and 101542 with 100% identity.

2945_s_at 760.0 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 101543 and 102542 with 100% identity.

2946_s_at 1557.2 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 102543 and 103542 with 100% identity.

2947 s at 5103.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 103543 and 104542 with 100% identity.

2948 s at 1664.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 104543 and 104846 with 100% identity.

949 at 334.6

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 188164 and 189163 with 100% identity.

2950 at 543.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 189164 and 190163 with 100% identity.

2951 at 464.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 190164 and 191163 with 100% identity.

2952 at 245.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 191164 and 192163 with 100% identity.

2953 at 335.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 192164 and 193163 with 100% identity.

2954 at 193.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 193164 and 194163 with 100% identity.

2955 at -541.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 194164 and 194675 with 100% identity.

2956 g at 2146.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 194164 and 194675 with 100% identity.

2957 at 1602.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 307356 and 308355 with 100% identity.

2958 at -12.0 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 308356 and 309355 with 100% identity.

2959 at 3667.4 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 309356 and 310355 with 100% identity.

2875 at -1453.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 310356 and 311355 with 100% identity.

2876_at -870.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 311356 and 312355 with 100% identity.

2877 at -567.1 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 312356 and 313355 with 100% identity.

2878 at 358.1 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 313356 and 314355 with 100% identity.

2879 at 479.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 314356 and 315355 with 100% identity.

2880_at 504.2 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 315356 and 315877 with 100% identity.

2881 at 1236.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 330178 and 331177 with 100% identity.

2882 at 1352.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 331178 and 332177 with 100% identity.

883 at -809.2

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 332178 and 333177 with 100% identity.

2884_g_at 1451.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 332178 and 333177 with 100% identity.

2885 s at 1767.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 333178 and 334177 with 100% identity.

2886 s at 2430.3 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 334178 and 335177 with 100% identity.

2887 s at 3345.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 335178 and 335534 with 100% identity.

2888 at 1280.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 349507 and 350506 with 100% identity.

2889 at 781.2 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 350507 and 351506 with 100% identity.

2890 at -139.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 351507 and 352506 with 100% identity.

2891 at 406.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 352507 and 353506 with 100% identity.

2892_at -1377.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 353507 and 354506 with 100% identity.

2893 at -148.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in

NC_001144 between 354507 and 355506 with 100% identity.

2894 at -671.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 355507 and 356506 with 100% identity.

2895 at 5.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 356507 and 357506 with 100% identity.

2896 at -47.6 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 357507 and 358506 with 100% identity.

2897 at -209.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 358507 and 359506 with 100% identity.

2898 at -45.2 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 359507 and 360506 with 100% identity.

2899 at 625.1 M

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 360507 and 361506 with 100% identity.

2900 at -155.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 361507 and 362506 with 100% identity.

2901 at 110.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 362507 and 363506 with 100% identity.

2902 at -98.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 363507 and 364506 with 100% identity.

2903 g at 1798.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 363507 and 364506 with 100% identity.

2904_s_at 2102.7 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 364507 and 364831 with 100% identity.

2905 at -329.1 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 629184 and 630183 with 100% identity.

2906 at 144.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 630184 and 631183 with 100% identity.

2907 at -207.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 631184 and 632183 with 100% identity.

2908 at 26.5 M

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 632184 and 633183 with 100% identity.

2909 at -110.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 633184 and 634183 with 100% identity.

2910 at -4.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 634184 and 635183 with 100% identity.

2911 s at 4862.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 635184 and 635584 with 100% identity.

2912_at 301.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 769817 and 770816 with 100% identity.

2913 at 2482.9 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 770817 and 771816 with 100% identity.

2914 at -95.7

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 771817 and 772816 with 100% identity.

2915 g at 278.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 771817 and 772816 with 100% identity.

2916 s at 143.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 772817 and 773816 with 100% identity.

2832 s at 767.7

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 773817 and 774816 with 100% identity.

2833 s at 695.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 774817 and 775803 with 100% identity.

2834 at -123.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 808817 and 809816 with 100% identity.

2835 at 3269.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 809817 and 810816 with 100% identity.

2836_g_at 7518.4 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 809817 and 810816 with 100% identity.

2837 s at 3646.7 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 810817 and 811816 with 100% identity.

2838 s at 7055.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 811817 and 812816 with 100% identity.

2839 s at 10576.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 812817 and 813816 with 100% identity.

2840 s at 11717.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 813817 and 814816 with 100% identity.

2841_s_at 13375.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 814817 and 815126 with 100% identity.

2842 at 866.0 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 934909 and 935908 with 100% identity.

2843 at 947.1 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 935909 and 936908 with 100% identity.

2844 at -34.9 M

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 936909 and 937908 with 100% identity.

2845 g at 1222.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 936909 and 937908 with 100% identity.

2846_s_at 2647.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 937909 and 938908 with 100% identity.

2847_s_at 3948.3 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 938909 and 939908 with 100% identity.

2848 s at 5151.8 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 939909 and 940476 with 100% identity.

2849 at 848.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 965554 and 966553 with 100% identity.

2850_g_at 879.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 965554 and 966553 with 100% identity.

2851_s_at 1291.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 966554 and 967553 with 100% identity.

2852 s at 1144.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 967554 and 968553 with 100% identity.

2853 s at 281.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 968554 and 969553 with 100% identity.

2854 s at 864.1

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 969554 and 970553 with 100% identity.

2855_s_at 2693.3 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 970554 and 971189 with 100% identity.

2856 at 1204.4 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 979430 and 980429 with 100% identity.

2857 at 1007.6 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 980430 and 981429 with 100% identity.

2858 at 13.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 981430 and 982429 with 100% identity.

2859 at 1786.6 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 982430 and 983429 with 100% identity.

2860 g at -251.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 982430 and 983429 with 100% identity.

2861 s at 211.8 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 983430 and 984429 with 100% identity.

2862 s at 638.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 984430 and 985429 with 100% identity.

2863_s_at 291.2 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 985430 and 986311 with 100% identity.

2864 at 452.5 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in

NC_001144 between 992726 and 993725 with 100% identity.

2865_g_at 401.7 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 992726 and 993725 with 100% identity.

2866_s_at 610.7 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 993726 and 994725 with 100% identity.

2867 s at 1391.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 994726 and 995725 with 100% identity.

2868 s at -1149.9 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 995726 and 996725 with 100% identity.

2869_s_at 753.1 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 996726 and 997725 with 100% identity.

2870 s at -497.4 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 997726 and 998725 with 100% identity.

2871_s_at 3576.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 998726 and 999623 with 100% identity.

2872 at 142.3 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 1042294 and 1043293 with 100% identity.

2873 at 260.5 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 1043294 and 1044293 with 100% identity.

2874 g at 139.7 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1043294 and 1044293 with 100% identity.

2789_s_at 229.8 M

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1044294 and 1045293 with 100% identity.

2790 s at 464.0 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1045294 and 1046293 with 100% identity.

2791 s at 398.4 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1046294 and 1047293 with 100% identity.

2792 s at 132.1 A

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1047294 and 1048293 with 100% identity.

2793_s_at 690.8 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC 001144 between 1048294 and 1049293 with 100% identity.

2794 s at 2274.3 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1049294 and 1050293 with 100% identity.

2795 s at 2676.5 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1050294 and 1051293 with 100% identity.

2796 f at 4998.9 P

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1051294 and 1051379 with 100% identity.

2797_at 394.6 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1071425 and 1072424 with 100% identity.

2798 g at 292.0 F

Saccharomyces cerevisiae chromosome XII, complete chromosome sequence. Found forward in NC_001144 between 1071425 and 1072424 with 100% identity.

2799 at 25.7

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 63082 and 64081 with 100% identity.

2800 at 479.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 64082 and 65081 with 100% identity.

2801 at 194.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 65082 and 66081 with 100% identity.

2802 at 479.9

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 66082 and 67081 with 100% identity.

2803 at -497.0 P

Α

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 67082 and 68081 with 100% identity.

2804 at 496.6 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 68082 and 69081 with 100% identity.

2805_g_at 2573.0 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 68082 and 69081 with 100% identity.

2806 s at 2685.7 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 69082 and 69200 with 100% identity.

2807 at 1128.0 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 153719 and 154718 with 100% identity.

2808 at -1303.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 154719 and 155718 with 100% identity.

2809 at -68.8

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 155719 and 156718 with 100% identity.

2810 at 278.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 156719 and 157718 with 100% identity.

2811_at 351.3 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 157719 and 158718 with 100% identity.

2812 at 150.6

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 183363 and 184362 with 100% identity.

2813_at 830.6 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 189363 and 190244 with 100% identity.

2814 at -187.3 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 195413 and 196412 with 100% identity.

2815 at 2048.8 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 201413 and 202412 with 100% identity.

2816 at 5934.0 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 202413 and 202775 with 100% identity.

2817_at 3251.0 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 356810 and 357809 with 100% identity.

2818_at 765.7

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 357810 and 358809 with 100% identity.

2819 s at 1641.7 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 358810 and 359809 with 100% identity.

2821 at -276.9 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 360810 and 361809 with 100% identity.

2822_at 1089.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 361810 and 362701 with 100% identity.

2823 at 154.4 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 368593 and 369592 with 100% identity.

2824 at 1723.6 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 369593 and 370592 with 100% identity.

2825 at 310.3

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 370593 and 371592 with 100% identity.

2826 at 16.3 M

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 371593 and 372592 with 100% identity.

2827_g_at 235.8 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 371593 and 372592 with 100% identity.

2828 at 50.5

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 372593 and 373592 with 100% identity.

2829 f at 3347.3 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 373593 and 374592 with 100% identity.

2748 at 10.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 378593 and 379592 with 100% identity.

2749_s_at 746.4 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 379593 and 379699 with 100% identity.

2750 at 10.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 677692 and 678691 with 100% identity.

2751 at 687.1 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 678692 and 679691 with 100% identity.

2752 at 34.5 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 679692 and 680691 with 100% identity.

2753 at 169.6 M

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in

NC_001145 between 680692 and 681691 with 100% identity.

2754 at -80.5 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 681692 and 682691 with 100% identity.

2755 at -81.9 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 682692 and 683691 with 100% identity.

2756 at -324.1 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 683692 and 684691 with 100% identity.

2757 g at 7882.9 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 683692 and 684691 with 100% identity.

2758_s_at 9328.4 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 684692 and 685297 with 100% identity.

2759 at -303.4 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 704078 and 705077 with 100% identity.

2760 at 807.3 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 705078 and 706077 with 100% identity.

2761 at 628.4 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 706078 and 707077 with 100% identity.

2762 at 29.1 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 707078 and 708077 with 100% identity.

2763 s at 15.9 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 708078 and 709077 with 100% identity.

2764_s_at 558.9 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 709078 and 710077 with 100% identity.

2765 s at -540.6 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 710078 and 711077 with 100% identity.

2766 s at 2533.9 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 711078 and 711608 with 100% identity.

2767 at 740.7 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 726433 and 727432 with 100% identity.

2768 at 480.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 727433 and 728432 with 100% identity.

2769 at -640.4 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 728433 and 729432 with 100% identity.

2770 at 105.9 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 729433 and 730432 with 100% identity.

2771 at 397.4 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 730433 and 731432 with 100% identity.

2772_at 701.1 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 731433 and 731964 with 100% identity.

2773 at -131.8 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 827528 and 828527 with 100% identity.

2774 at 468.0 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 828528 and 829527 with 100% identity.

2775 at 491.1 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 829528 and 830527 with 100% identity.

2776 at -944.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 830528 and 831527 with 100% identity.

2777 at 150.3

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 831528 and 832527 with 100% identity.

2778_g_at 841.0 P

Α

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 831528 and 832527 with 100% identity.

2779 s at 1664.5 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 832528 and 832753 with 100% identity.

2780_at 637.5 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 842936 and 843935 with 100% identity.

2781 at 345.4 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 843936 and 844935 with 100% identity.

2782 at 271.6 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 844936 and 845935 with 100% identity.

2783_g_at 884.2 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 844936 and 845935 with 100% identity.

2784 s at 418.2 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC 001145 between 845936 and 846935 with 100% identity.

2785 s at 1119.6 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 846936 and 847935 with 100% identity.

2786 s at 4021.7 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 847936 and 847986 with 100% identity.

2787 at 330.9 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 879563 and 880562 with 100% identity.

2788 at 335.6 F

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 880563 and 881562 with 100% identity.

2703_g_at -37.6 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 880563 and 881562 with 100% identity.

2704 s at 487.7 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in

NC_001145 between 881563 and 882562 with 100% identity.

2705 s at -608.3

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 882563 and 883562 with 100% identity.

2706 s at 394.7 A

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 883563 and 884562 with 100% identity.

2707 s at 407.9

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 884563 and 885562 with 100% identity.

2708_s_at 707.6 P

Saccharomyces cerevisiae chromosome XIII, complete chromosome sequence. Found forward in NC_001145 between 885563 and 886016 with 100% identity.

2709_s_at 1078.4 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 871 and 1870 with 100% identity.

2710 s at 569.9 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 1871 and 2870 with 100% identity.

2711_s_at 1110.1 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 2871 and 3870 with 100% identity.

2712 s at 512.9 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 3871 and 4870 with 100% identity.

2713 s at 495.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 4871 and 5870 with 100% identity.

2714 s at 6192.8 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 5871 and 6080 with 100% identity.

2715 at 87.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 130021 and 131020 with 100% identity.

2716 at 549.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 131021 and 132020 with 100% identity.

2717 at 1201.1 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 132021 and 133020 with 100% identity.

2718 at 1883.6 M

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 133021 and 134020 with 100% identity.

2719 at -670.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 134021 and 135020 with 100% identity.

2720 at 30.4 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 135021 and 135939 with 100% identity.

2721 at 385.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 147395 and 148394 with 100% identity.

2722 g at 326.1 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 147395 and 148394 with 100% identity.

2723_s_at -1645.8 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 148395 and 149394 with 100% identity.

2724_s_at 877.2 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 149395 and 150394 with 100% identity.

2725 s at -120.7

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 150395 and 151394 with 100% identity.

2726_s_at 501.3 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 151395 and 152394 with 100% identity.

2727 s at 1920.2 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 152395 and 153394 with 100% identity.

2728 s at 1348.6

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 153395 and 154379 with 100% identity.

2729 at 231.1 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 161130 and 162129 with 100% identity.

2730 at -78.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 162130 and 163129 with 100% identity.

2731_at 1439.5 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 163130 and 164129 with 100% identity.

2732_at 136.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 164130 and 165129 with 100% identity.

2733_g_at 1338.5 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 164130 and 165129 with 100% identity.

2734 s at 1090.0 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 165130 and 166129 with 100% identity.

2735 s at 3116.5 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 166130 and 166596 with 100% identity.

2736 at -131.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 173087 and 174086 with 100% identity.

2737_at 116.0 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 174087 and 175086 with 100% identity.

2738 at -947.6 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 175087 and 176086 with 100% identity.

2739_g_at 208.0 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 175087 and 176086 with 100% identity.

2740 s at 192.2 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 176087 and 177086 with 100% identity.

2741 s at 130.6 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 177087 and 178086 with 100% identity.

2742_s_at 349.9 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 178087 and 178847 with 100% identity.

2743_at -87.1 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 309454 and 310453 with 100% identity.

2744 at 436.8

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 310454 and 311453 with 100% identity.

2745_g_at 273.0 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 310454 and 311453 with 100% identity.

2660_s_at 230.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 311454 and 312453 with 100% identity.

2661 s at 86.5

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 312454 and 313453 with 100% identity.

2662 s at 1040.9 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 313454 and 314453 with 100% identity.

2663 s at 1708.5 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 314454 and 315379 with 100% identity.

2664 at 2297.4

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 524084 and 525083 with 100% identity.

2665 at 146.5 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 525084 and 526083 with 100% identity.

2666 s at -810.1 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 526084 and 527083 with 100% identity.

2667 s at 783.0 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 527084 and 528083 with 100% identity.

2668_s_at 1251.8 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 528084 and 529079 with 100% identity.

2669 at 3656.6 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 655170 and 656169 with 100% identity.

2670_at 318.8 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 656170 and 657169 with 100% identity.

2671 at -339.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 657170 and 658169 with 100% identity.

2672 at 209.8 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 658170 and 659169 with 100% identity.

2673 at 156.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 659170 and 660169 with 100% identity.

2674 at -137.3 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in

NC_001146 between 660170 and 661169 with 100% identity.

2675 at 752.4 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 661170 and 661997 with 100% identity.

2676 at 19.0 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 681191 and 682190 with 100% identity.

2677 at 55.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 682191 and 683190 with 100% identity.

2678 at -2089.4 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 683191 and 684190 with 100% identity.

2679_at 699.5 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 684191 and 685190 with 100% identity.

2680 at -29.9 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 685191 and 686190 with 100% identity.

2681_g_at 2554.3 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 685191 and 686190 with 100% identity.

2682 s at 1938.2 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC 001146 between 686191 and 686613 with 100% identity.

2683 at -813.9 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 761618 and 762617 with 100% identity.

2684 at -181.0 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 762618 and 763617 with 100% identity.

2685 at 1439.9 F

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 763618 and 764617 with 100% identity.

2686 at 1227.4 M

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 764618 and 765617 with 100% identity.

2687 g at 39.7 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 764618 and 765617 with 100% identity.

2688 s at 688.6 P

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 765618 and 766617 with 100% identity.

2689_s_at -651.9 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 766618 and 767617 with 100% identity.

2690 s at 773.6 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 767618 and 768617 with 100% identity.

2691 s at -45.9 A

Saccharomyces cerevisiae chromosome XIV, complete chromosome sequence. Found forward in NC_001146 between 768618 and 768871 with 100% identity.

2692 at 65.8 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 2078 and 3077 with 100% identity.

2693_at 291.1 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 3078 and 4077 with 100% identity.

2694 at 1625.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 4078 and 5077 with 100% identity.

2695 at -531.5 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 5078 and 6077 with 100% identity.

2696 at 601.8 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 6078 and 7077 with 100% identity.

2697 g at 165.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 6078 and 7077 with 100% identity.

2698 s at 672.5

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 7078 and 7615 with 100% identity.

2699 at 685.0 A

Ρ

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 169973 and 170972 with 100% identity.

2700 at 35.8 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 170973 and 171972 with 100% identity.

2701_g_at 361.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 170973 and 171972 with 100% identity.

2702 s at 1591.6 M

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 171973 and 172972 with 100% identity.

2618_s_at 424.3 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 172973 and 173972 with 100% identity.

2619 s at 79.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 173973 and 174972 with 100% identity.

2620 s at 294.6 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 174973 and 175972 with 100% identity.

2621 s at 911.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 175973 and 176972 with 100% identity.

2622_s_at 2296.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 176973 and 177972 with 100% identity.

2623 s at 3.1

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 177973 and 178972 with 100% identity.

2624_s_at 1819.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 178973 and 179808 with 100% identity.

2625 at 854.3 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 346694 and 347693 with 100% identity.

2626 at 1889.2 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 347694 and 348693 with 100% identity.

2627_at 1624.6 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 348694 and 349693 with 100% identity.

2628_s_at 777.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 349694 and 350693 with 100% identity.

2629 s at 1448.1 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 350694 and 351693 with 100% identity.

2630_s_at 888.4 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 351694 and 352693 with 100% identity.

2631_s_at 1348.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 352694 and 353362 with 100% identity.

2632_at 495.2 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 540261 and 541260 with 100% identity.

2633 at 516.6 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 541261 and 542260 with 100% identity.

2634 at 294.7 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 542261 and 543260 with 100% identity.

2635 at 57.1

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 543261 and 544260 with 100% identity.

2636 at 134.8 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 544261 and 545260 with 100% identity.

2637 g at 3948.9 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 544261 and 545260 with 100% identity.

2638_s_at 7345.7 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 545261 and 545831 with 100% identity.

2639 at -304.4 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 618016 and 619015 with 100% identity.

2640 at 1111.9 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 619016 and 620015 with 100% identity.

2641_g_at 6642.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 619016 and 620015 with 100% identity.

2642 s at 8141.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 620016 and 621015 with 100% identity.

2643_s_at 9406.4 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 621016 and 622015 with 100% identity.

2644 s at 12897.9 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 622016 and 623015 with 100% identity.

2645 s at 11104.7 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in

NC_001147 between 623016 and 623873 with 100% identity.

2646 at -1273.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 730506 and 731505 with 100% identity.

2647 at -581.6 *A*

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 731506 and 732505 with 100% identity.

2648 at 438.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 732506 and 733505 with 100% identity.

2649 at -907.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 733506 and 734505 with 100% identity.

2650_g_at 956.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 733506 and 734505 with 100% identity.

2651 s at 1352.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 734506 and 735505 with 100% identity.

2652_s_at 2515.6 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 735506 and 735675 with 100% identity.

2653_at 483.2 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 855642 and 856641 with 100% identity.

2654 at 218.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 856642 and 857641 with 100% identity.

2655 at 1705.2 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 857642 and 858641 with 100% identity.

2656_at 1227.6 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 858642 and 859641 with 100% identity.

2657 at 74.3 M

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 859642 and 860641 with 100% identity.

2658 at 107.6 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 860642 and 861641 with 100% identity.

2659 g at 346.9 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 860642 and 861641 with 100% identity.

2575_s_at 1836.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 861642 and 862641 with 100% identity.

2576 s at 1242.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 862642 and 863641 with 100% identity.

2577 s at 1429.3 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 863642 and 864641 with 100% identity.

2578 s at 3055.5 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 864642 and 865088 with 100% identity.

2579_at 1392.9 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 946724 and 947723 with 100% identity.

2580 at 235.5 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 947724 and 948723 with 100% identity.

2581 at 250.6 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 948724 and 949723 with 100% identity.

2582 at -1538.1 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 949724 and 950723 with 100% identity.

2583 g at 1529.1 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 949724 and 950723 with 100% identity.

2584 s at 1748.8 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC 001147 between 950724 and 951723 with 100% identity.

2585 s at 4599.1 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 951724 and 952723 with 100% identity.

2586 s at 2765.4 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 952724 and 953361 with 100% identity.

2587 at 819.7 A

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 959693 and 960692 with 100% identity.

2588 at 1241.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 960693 and 961692 with 100% identity.

2589 g at 2958.0 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 960693 and 961692 with 100% identity.

2590 s at 5064.7 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 961693 and 962692 with 100% identity.

2591 s at 2858.3 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 962693 and 963692 with 100% identity.

2592 s at 6788.8 P

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 963693 and 964692 with 100% identity.

2593_s_at 9431.3 F

Saccharomyces cerevisiae chromosome XV, complete chromosome sequence. Found forward in NC_001147 between 964693 and 965472 with 100% identity.

2594 at 480.6

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 19079 and 20078 with 100% identity.

2595_at 120.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 20079 and 21078 with 100% identity.

2596 at -1889.2 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 21079 and 22078 with 100% identity.

2597 at 97.5 *A*

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 22079 and 23078 with 100% identity.

2598_g_at -1117.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 22079 and 23078 with 100% identity.

2599_s_at 1831.6 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 23079 and 24078 with 100% identity.

2600 s at 25.0

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 24079 and 24201 with 100% identity.

2601_at 570.3 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 108147 and 109146 with 100% identity.

2602_g_at 4757.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 108147 and 109146 with 100% identity.

2603_s_at 4368.8 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 109147 and 110146 with 100% identity.

2604 s at 8995.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 110147 and 111146 with 100% identity.

2605 s at 12207.4 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 111147 and 112146 with 100% identity.

2606 s at 10723.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 112147 and 113146 with 100% identity.

2607 s at 12079.0 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 113147 and 113815 with 100% identity.

2608 at 589.5 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 140119 and 141118 with 100% identity.

2609 at 1700 7 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 141119 and 142118 with 100% identity.

2610 at 110.2 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 142119 and 143118 with 100% identity.

2611 at 153.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 143119 and 144118 with 100% identity.

2612_g_at 1017.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 143119 and 144118 with 100% identity.

2613 s at 481.6 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 144119 and 145118 with 100% identity.

2614 s at 525.1 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 145119 and 146118 with 100% identity.

2615 s at 318.9 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 146119 and 146628 with 100% identity.

2616 at 10.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in

NC_001148 between 385268 and 386267 with 100% identity.

2617 at 564.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 386268 and 387267 with 100% identity.

2532_g_at 166.4 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 386268 and 387267 with 100% identity.

2533 s at 347.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 387268 and 388267 with 100% identity.

2534 s at 1590.0 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 388268 and 389267 with 100% identity.

2535_s_at 1811.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 389268 and 390267 with 100% identity.

2536 s at 1563.6 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 390268 and 391267 with 100% identity.

2537 s at 4882.1 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 391268 and 392267 with 100% identity.

2538_s_at 4285.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 392268 and 393149 with 100% identity.

2539 at 689.5 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 398975 and 399974 with 100% identity.

2540 at 206.6 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 399975 and 400974 with 100% identity.

2541 at 108.5 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 400975 and 401974 with 100% identity.

2542 at -157.6 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 401975 and 402974 with 100% identity.

2543 at -1128.5 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 402975 and 403974 with 100% identity.

2544 at -5.4

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 403975 and 404451 with 100% identity.

2545 at 211.7 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 435759 and 436758 with 100% identity.

2546 at 167.4 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 436759 and 437758 with 100% identity.

2547 at 332.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 437759 and 438758 with 100% identity.

2548 at 226.5 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 438759 and 439758 with 100% identity.

2549_at 2.8 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 439759 and 440758 with 100% identity.

2550_at -31.5 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 440759 and 441758 with 100% identity.

2551 at -233.8

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 441759 and 442758 with 100% identity.

2552 at -199.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 442759 and 443758 with 100% identity.

2553 at 486.8 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 443759 and 444574 with 100% identity.

2554 at 488.4

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 446337 and 447336 with 100% identity.

2555_at 2441.8 P

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Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 447337 and 448336 with 100% identity.

2556_at -271.5 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 448337 and 449336 with 100% identity.

2557_at 373.5 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 449337 and 450336 with 100% identity.

2558 at 177.4

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 450337 and 451336 with 100% identity.

2559 at 670.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 451337 and 451904 with 100% identity.

2560 at 578.3 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 519230 and 520229 with 100% identity.

2561 at 1241.7 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 520230 and 521229 with 100% identity.

2562_g_at 25.8 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 520230 and 521229 with 100% identity.

2563_s_at 1935.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 521230 and 522229 with 100% identity.

2564 s at 3227.0 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 522230 and 523229 with 100% identity.

2565_s_at 1209.8 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 523230 and 524229 with 100% identity.

2566 s at -836.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 524230 and 524453 with 100% identity.

2567 at 686.4 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 536315 and 537314 with 100% identity.

2568 at 17.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 537315 and 538314 with 100% identity.

2569_at -892.8 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 538315 and 539314 with 100% identity.

2570_at 402.2

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 539315 and 540314 with 100% identity.

2571 s at 1036.4 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 540315 and 541314 with 100% identity.

2572_s_at 728.6 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 541315 and 541465 with 100% identity.

2573 at 157.1

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 542577 and 543576 with 100% identity.

2574 at 1103.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 543577 and 544576 with 100% identity.

2489 at 153.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 544577 and 545576 with 100% identity.

2490 s at 3272.2

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 545577 and 546576 with 100% identity.

2491 s at 3319.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 546577 and 547576 with 100% identity.

2492 f at 924.5 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 547577 and 547638 with 100% identity.

2493 at -122.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 624964 and 625963 with 100% identity.

2494_at 702.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 625964 and 626963 with 100% identity.

2495 at 104.1 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 626964 and 627963 with 100% identity.

2496 g at -934.7 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 626964 and 627963 with 100% identity.

2497 s at 281.9 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 627964 and 628963 with 100% identity.

2498 s at 739.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 628964 and 629963 with 100% identity.

2499_s_at 1872.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 629964 and 630740 with 100% identity.

2500 at 1184.9 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 759478 and 760477 with 100% identity.

2501_g_at 1500.1 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 759478 and 760477 with 100% identity.

2502_s_at -251.9 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 760478 and 761477 with 100% identity.

2503 s at 149.4

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 761478 and 762477 with 100% identity.

2504_s_at 831.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 762478 and 763477 with 100% identity.

2505_s_at 1100.7 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 763478 and 764477 with 100% identity.

2506_s_at 1775.0 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 764478 and 765477 with 100% identity.

2507 s at 732.3 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 765478 and 766477 with 100% identity.

2508 s at 2204.6 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 766478 and 766991 with 100% identity.

2509 at 1151.6 F

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 869140 and 870139 with 100% identity.

2510 at 104.6 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 870140 and 871139 with 100% identity.

2511_g_at 790.7 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 870140 and 871139 with 100% identity.

2512 s at 87.7

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 871140 and 872139 with 100% identity.

2513 s at 675.0 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC 001148 between 872140 and 873139 with 100% identity.

2514 s at 1010.2 P

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 873140 and 874139 with 100% identity.

2515 s at 1154.2 A

Saccharomyces cerevisiae chromosome XVI, complete chromosome sequence. Found forward in NC_001148 between 874140 and 874421 with 100% identity.

2516 at 370.5 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 25441 and 26440 with 100% identity.

2517 at 1174.7 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 26441 and 27440 with 100% identity.

2518_at 461.1 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 27441 and 28440 with 100% identity.

2519 at -2486.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in

NC_001134 between 28441 and 29440 with 100% identity.

2520 at -295.1

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 29441 and 30440 with 100% identity.

2521 f at 295.6

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 35441 and 35606 with 100% identity.

2522 at -428.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 51513 and 52512 with 100% identity.

2523 at 345.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 52513 and 53512 with 100% identity.

2524_at 78.3 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 53513 and 54512 with 100% identity.

2525 at 349.6 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 54513 and 55512 with 100% identity.

2526 at 118.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 55513 and 56512 with 100% identity.

2527 at 216.8 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 56513 and 57512 with 100% identity.

2528 at 534.3 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 57513 and 58512 with 100% identity.

2529 at -1458.0 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 58513 and 59512 with 100% identity.

2530 at 66.2 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 59513 and 59815 with 100% identity.

2531 at 721.4 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 73564 and 74563 with 100% identity.

2446 at -107.5 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 74564 and 75563 with 100% identity.

2447 g at 259.8 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 74564 and 75563 with 100% identity.

2448_s_at 1165.3 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 75564 and 76563 with 100% identity.

2449 s at 2203.9 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 76564 and 77563 with 100% identity.

2450 s at 1709.7 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 77564 and 78563 with 100% identity.

2451 s at 5465.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 78564 and 79261 with 100% identity.

2452_at 432.7 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 187307 and 188306 with 100% identity.

2453 at 168.3 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 188307 and 189306 with 100% identity.

2454 at -83.8

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 189307 and 190306 with 100% identity.

2455_at 1106.3 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 190307 and 191306 with 100% identity.

2456 at 26.3 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 191307 and 192306 with 100% identity.

2457 at 210.5

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 192307 and 192975 with 100% identity.

2458 g at 5649.4 P

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Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 192307 and 192975 with 100% identity.

2459 at 1994.9 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 220363 and 221362 with 100% identity.

2460 at 9.8 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 226363 and 227362 with 100% identity.

2461 at 746.2 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 227363 and 228362 with 100% identity.

2462 g at 1266.8 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 227363 and 228362 with 100% identity.

2463 s at 1176.5 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 228363 and 229362 with 100% identity.

2464 s at 3024.7 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 229363 and 230362 with 100% identity.

2465 s at 3065.9 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 230363 and 231362 with 100% identity.

2466_s_at 1431.0 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 231363 and 232362 with 100% identity.

2467 s at 2907.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 232363 and 233362 with 100% identity.

2468 s at 3670.9 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 233363 and 234362 with 100% identity.

2469 s at 4158.4 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 234363 and 234580 with 100% identity.

2470 at 1599.0 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 505265 and 506264 with 100% identity.

2471_g_at -301.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 505265 and 506264 with 100% identity.

2472_s_at -322.9 M

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 506265 and 507264 with 100% identity.

2473 s at 313.2

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 507265 and 508264 with 100% identity.

2474_s_at 145.8 F

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 508265 and 509264 with 100% identity.

2475_s_at 425.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 509265 and 510264 with 100% identity.

2476_s_at 752.1

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 510265 and 511264 with 100% identity.

2477 s at 820.3 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 511265 and 512233 with 100% identity.

2478 at -48.3 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 517809 and 518808 with 100% identity.

2479 at -50.3 N

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 518809 and 519808 with 100% identity.

2480 at 334.2 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 519809 and 520808 with 100% identity.

2481 at -26.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 520809 and 521808 with 100% identity.

2482 at 246.2 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 521809 and 522808 with 100% identity.

2483 at -108.6 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 522809 and 523808 with 100% identity.

2484 at -186.2 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 523809 and 524808 with 100% identity.

2485 at -357.8 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 524809 and 525808 with 100% identity.

2486 at 58.0 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 525809 and 526808 with 100% identity.

2487 at 467.5 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 526809 and 526984 with 100% identity.

2488 at 328.2 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 637162 and 638161 with 100% identity.

2421 at 68.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in

NC_001134 between 638162 and 639161 with 100% identity.

2422 at 196.7 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 639162 and 640161 with 100% identity.

2423_at 78.8

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 640162 and 641161 with 100% identity.

2424 at 120.1 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 641162 and 642161 with 100% identity.

2425 at 397.4 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 642162 and 642542 with 100% identity.

2426_at 650.1 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 751813 and 752812 with 100% identity.

2427 at 520.7 P

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 752813 and 753812 with 100% identity.

2428 at -218.8 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 753813 and 754812 with 100% identity.

2429 at -776.3 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 754813 and 755812 with 100% identity.

2430 at 557.9 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC 001134 between 755813 and 756812 with 100% identity.

2431 at 6.7 A

Saccharomyces cerevisiae chromosome II, complete chromosome sequence. Found forward in NC_001134 between 756813 and 757578 with 100% identity.

2432 at 5613.7 F

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 82220 and 83219 with 100% identity.

2433 at 3755.3 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 83220 and 84219 with 100% identity.

2434 at 1822.1 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 84220 and 85219 with 100% identity.

2435 at 265.1 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 90220 and 91219 with 100% identity.

2436_g_at 1358.8 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 90220 and 91219 with 100% identity.

2437 s at 4580.8 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 91220 and 91533 with 100% identity.

2438 at -216.2 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 177526 and 178525 with 100% identity.

2439 g at 199.9 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 177526 and 178525 with 100% identity.

2440_s_at 315.9 M

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 178526 and 179525 with 100% identity.

2441 s at 248.4 F

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 179526 and 180525 with 100% identity.

2442 s at 1633.4

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 180526 and 181525 with 100% identity.

2443 s at 747.7 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 181526 and 182525 with 100% identity.

2444 s at -986.8 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 182526 and 183525 with 100% identity.

2445 s at 1573.0

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC 001135 between 183526 and 184252 with 100% identity.

2395_at 413.0 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 275986 and 276985 with 100% identity.

2396 at 146.1 F

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 276986 and 277985 with 100% identity.

2397_at -694.5 A

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC 001135 between 277986 and 278985 with 100% identity.

2398 g at 1248.6 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC 001135 between 277986 and 278985 with 100% identity.

2399 s at 680.2 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 278986 and 279985 with 100% identity.

2400_s_at 1593.9 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 279986 and 280985 with 100% identity.

2401 s at 1305.9 F

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 280986 and 281985 with 100% identity.

2402 s at 1937.4 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 281986 and 282985 with 100% identity.

2403_s_at 5348.9 P

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC_001135 between 282986 and 283985 with 100% identity.

2404 s at 3833.8 F

Saccharomyces cerevisiae chromosome III, complete chromosome sequence. Found forward in NC 001135 between 283986 and 284665 with 100% identity.

2405 at 1082.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 79795 and 80794 with 100% identity.

2406 at 119.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 80795 and 81794 with 100% identity.

2407 at 1159.0 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 81795 and 82794 with 100% identity.

2408 at 492.9 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 82795 and 83794 with 100% identity.

2409_at 96.2 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 83795 and 84794 with 100% identity.

2410 g at 586.5

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 83795 and 84794 with 100% identity.

2411 s at 639.5 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 84795 and 85486 with 100% identity.

2412 at 488.5 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 149704 and 150703 with 100% identity.

2413_at 231.3

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 150704 and 151703 with 100% identity.

2414_at 205.0 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 151704 and 152703 with 100% identity.

2415 at -123.3 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 152704 and 153703 with 100% identity.

2416 at 230.9

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 153704 and 154703 with 100% identity.

2417 at 270.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 154704 and 155703 with 100% identity.

2418 at 29.7 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 155704 and 156703 with 100% identity.

2419_g_at 1119.7 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 155704 and 156703 with 100% identity.

2420_s_at 1415.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 156704 and 157405 with 100% identity.

2352 at 442.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 205861 and 206860 with 100% identity.

2353 at 867.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 206861 and 207860 with 100% identity.

2354 at -440.6 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 207861 and 208860 with 100% identity.

2355_at -142.4 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 208861 and 209860 with 100% identity.

2356_at 466.2 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 209861 and 210860 with 100% identity.

2357 at 726.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in

NC_001136 between 210861 and 211376 with 100% identity.

2358 at 70.9

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 257132 and 258131 with 100% identity.

2359 at -21.5

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 258132 and 259131 with 100% identity.

2360 g at 1342.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 258132 and 259131 with 100% identity.

2361 s at 2872.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 259132 and 260131 with 100% identity.

2362_s_at 2609.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 260132 and 261131 with 100% identity.

2363 s at 2293.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 261132 and 262131 with 100% identity.

2364_s_at 2534.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 262132 and 262724 with 100% identity.

2365 at 300.6 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 344736 and 345735 with 100% identity.

2366 s at -333.7 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 345736 and 346735 with 100% identity.

2367 s at 2958.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 346736 and 347735 with 100% identity.

2368 s at 497.8 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 347736 and 348735 with 100% identity.

2369_s_at 441.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 348736 and 349735 with 100% identity.

2370 s at 1052.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 349736 and 350536 with 100% identity.

2371 at 3.0 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 618990 and 619989 with 100% identity.

2372_at 1214.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 619990 and 620989 with 100% identity.

2373 at -1228.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC $_001136$ between 620990 and 621989 with 100% identity.

2374 at 1710.2 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 621990 and 622989 with 100% identity.

2375 s at 455.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 622990 and 623989 with 100% identity.

2376_s_at 1900.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 623990 and 624214 with 100% identity.

2377 at 1279.8 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 630598 and 631597 with 100% identity.

2378 g at 3991.7 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 630598 and 631597 with 100% identity.

2379 s at 1963.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 631598 and 632597 with 100% identity.

2380 s at 3357.3 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 632598 and 633597 with 100% identity.

2381_s_at 3495.4

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 633598 and 634597 with 100% identity.

2382_s_at 4811.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 634598 and 635597 with 100% identity.

2383_at 683.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 735394 and 736393 with 100% identity.

2384_at 588.9 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 736394 and 737393 with 100% identity.

2385_at -266.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 737394 and 738393 with 100% identity.

2386 at 267.1 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 738394 and 739393 with 100% identity.

2387 at -39.4 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 739394 and 740393 with 100% identity.

2388 s at 191.3 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 756048 and 757047 with 100% identity.

2389 s at 19.8 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 757048 and 758047 with 100% identity.

2390 s at 169.2 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 759048 and 760047 with 100% identity.

2391 s at 91.8 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 760048 and 761047 with 100% identity.

2392_s_at 867.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 761048 and 762047 with 100% identity.

2393 s at 2062.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 762048 and 763047 with 100% identity.

2394 s at 1623.9 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 763048 and 763367 with 100% identity.

2309 at 430.6 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 796686 and 797685 with 100% identity.

2310_at -196.0 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 797686 and 798685 with 100% identity.

2311 at 1030.3 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 798686 and 799685 with 100% identity.

2312 at 729.9 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 799686 and 800685 with 100% identity.

2313 at 795.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 800686 and 801685 with 100% identity.

2314_at 927.9 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 801686 and 802685 with 100% identity.

2315_at 810.9 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 802686 and 803685 with 100% identity.

2316 at 203.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 877250 and 878249 with 100% identity.

317 at 300.8

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 878250 and 879249 with 100% identity.

2319_f_at -250.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 647450 and 647656 with 100% identity.

2320 at -99.4 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1133751 and 1134750 with 100% identity.

2321 at 386.1 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1134751 and 1135750 with 100% identity.

2322 at 959.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1135751 and 1136750 with 100% identity.

2323 g at 767.0 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1135751 and 1136750 with 100% identity.

2324 s at 10.0 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1136751 and 1137750 with 100% identity.

2325 s at 1178.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1137751 and 1138750 with 100% identity.

2326 s at 1151.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1138751 and 1139750 with 100% identity.

2327_s_at 853.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1139751 and 1139967 with 100% identity.

2328 at 94.7 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in

NC_001136 between 1305061 and 1306060 with 100% identity.

2329 at 539.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1306061 and 1307060 with 100% identity.

2330_g_at 324.9

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1306061 and 1307060 with 100% identity.

2331 s at 1319.1 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1307061 and 1308060 with 100% identity.

2332 s at 2868.3 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1308061 and 1309060 with 100% identity.

2333_s_at 1915.5 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1309061 and 1310060 with 100% identity.

2334 s at 1199.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1310061 and 1311060 with 100% identity.

2335_s_at 1456.4 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1311061 and 1311164 with 100% identity.

2336_at 1545.0 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1346165 and 1347164 with 100% identity.

2337 at -275.7 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1347165 and 1348164 with 100% identity.

2338 at -293.5 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1348165 and 1349164 with 100% identity.

2339 at 606.0 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1349165 and 1350164 with 100% identity.

2340 at 264.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1350165 and 1351164 with 100% identity.

2341 g at 1150.0 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1350165 and 1351164 with 100% identity.

2342 s at 1062.9 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1351165 and 1351842 with 100% identity.

2343_at 2041.8 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1369375 and 1370374 with 100% identity.

2344 g at 3711.6 P

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1369375 and 1370374 with 100% identity.

2345 s at 686.3 F

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1370375 and 1371374 with 100% identity.

2346 s at 159.2 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1371375 and 1372374 with 100% identity.

2347_s_at 15.5 A

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1372375 and 1373374 with 100% identity.

2348 s at 1879.9

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1373375 and 1374374 with 100% identity.

2349 s at 229.4

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1374375 and 1375374 with 100% identity.

2350 s at 2426.8

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1375375 and 1376374 with 100% identity.

2351 s at 1296.4

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1376375 and 1377374 with 100% identity.

2266 s at 4635.3

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC 001136 between 1377375 and 1378374 with 100% identity.

2267 s at 2892.1

Saccharomyces cerevisiae chromosome IV, complete chromosome sequence. Found forward in NC_001136 between 1378375 and 1379085 with 100% identity.

284.8 2268 at

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 7553 and 8552 with 100% identity.

302.3 2269 at

Α Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 8553 and 9552 with 100% identity.

2270 at 270.1

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 9553 and 10552 with 100% identity.

2271 at -372.0

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 10553 and 11552 with 100% identity.

2272 at 416.6 Ρ

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 11553 and 12552 with 100% identity.

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 12553 and 13552 with 100% identity.

2274 at Α

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 13553 and 13915 with 100% identity.

2275 g at -1287.9

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 13553 and 13915 with 100% identity.

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 109004 and 110003 with 100% identity.

2277 at 57.9

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 110004 and 111003 with 100% identity.

2278 at 443.8

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 111004 and 112003 with 100% identity.

2279 g at 1845.5

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 111004 and 112003 with 100% identity.

2280_s_at 2050.9 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 112004 and 113003 with 100% identity.

2281_s_at 1970.7 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 113004 and 114003 with 100% identity.

2282 s at 5159.4 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 114004 and 115003 with 100% identity.

2283_s_at 3309.1 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 115004 and 115300 with 100% identity.

2284_at 109.5 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 425685 and 426684 with 100% identity.

.285_at -216.4

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 426685 and 427684 with 100% identity.

2286 at 928.8 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 427685 and 428684 with 100% identity.

2287 at 245.4 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 428685 and 429684 with 100% identity.

2288 at 1912.1

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 429685 and 430684 with 100% identity.

2289 at -537.6 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 430685 and 431126 with 100% identity.

2290 at 793.4 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 442412 and 443411 with 100% identity.

2291_g_at 2432.3 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 442412 and 443411 with 100% identity.

2294_f_at 3206.7 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 446412 and 447411 with 100% identity.

2295 at 697.4 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 476841 and 477840 with 100% identity.

2296 at 1243.6 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 477841 and 478840 with 100% identity.

2297 at 88.9 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 478841 and 479840 with 100% identity.

2298 at -10.0 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 479841 and 480840 with 100% identity.

2299_at -58.9 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 480841 and 481840 with 100% identity.

2300 at 976.1 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in

NC_001137 between 481841 and 482840 with 100% identity.

2301 at 75.9 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 482841 and 483321 with 100% identity.

2302 at 310.9

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 491954 and 492953 with 100% identity.

2303 f at 1177.1 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 492954 and 493953 with 100% identity.

2306 at 787.5 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 497954 and 498953 with 100% identity.

2307_at 157.8 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 498954 and 499172 with 100% identity.

2308 at -647.6 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 530026 and 531025 with 100% identity.

2223 at 74.0 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 531026 and 532025 with 100% identity.

2224 at 345.8 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC 001137 between 532026 and 533025 with 100% identity.

2225 at 377.4 F

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 533026 and 534025 with 100% identity.

2226 at 1099.8 P

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 534026 and 535025 with 100% identity.

2227 at -110.9 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 535026 and 536025 with 100% identity.

2228 at 94.7 A

Saccharomyces cerevisiae chromosome V, complete chromosome sequence. Found forward in NC_001137 between 536026 and 536271 with 100% identity.

2229 at 153.5 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 69614 and 70613 with 100% identity.

2230 at 599.8 P

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 70614 and 71613 with 100% identity.

2231 at -220.7 M

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 71614 and 72613 with 100% identity.

2232 at 265.7 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 72614 and 73613 with 100% identity.

2233 at 534.0 F

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 73614 and 74613 with 100% identity.

2234 at 220.8 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 74614 and 74871 with 100% identity.

2235_at 1090.1 P

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 136029 and 137028 with 100% identity.

2236 at -220.6 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 137029 and 138028 with 100% identity.

2237 at 36.0 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 143029 and 144028 with 100% identity.

2238 at -212.1 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 144029 and 145028 with 100% identity.

2239 at 1301.0 F

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 145029 and 145108 with 100% identity.

2240 at -643.8

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 184470 and 185469 with 100% identity.

2241 s at 590.5 P

Α

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 185470 and 186469 with 100% identity.

2242_s_at 537.4 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 186470 and 187469 with 100% identity.

2243_s_at 535.2 P

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 187470 and 188469 with 100% identity.

2244 s at 840.4 P

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC 001138 between 188470 and 189469 with 100% identity.

2245 s at 1581.9 A

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 189470 and 190469 with 100% identity.

2246 s at 2208.7 F

Saccharomyces cerevisiae chromosome VI, complete chromosome sequence. Found forward in NC_001138 between 190470 and 190825 with 100% identity.

2247 at 1185.6 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 16307 and 17306 with 100% identity.

2248 at 229.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 17307 and 18306 with 100% identity.

2249 at -68.6 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 18307 and 19306 with 100% identity.

2250 at 2971.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 19307 and 20306 with 100% identity.

2251_at 419.9 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 20307 and 21306 with 100% identity.

2252 g at 1355.7 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 20307 and 21306 with 100% identity.

2253 s at -139.6 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 21307 and 21608 with 100% identity.

2254 at 218.9 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 103045 and 104044 with 100% identity.

2255_at 294.3 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 104045 and 105044 with 100% identity.

2256 at -219.0 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 105045 and 106044 with 100% identity.

2257 at 1328.5 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 106045 and 107044 with 100% identity.

2258 at 243.4 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 107045 and 108044 with 100% identity.

2259_at 610.2

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 108045 and 109044 with 100% identity.

2260 g at 312.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 108045 and 109044 with 100% identity.

2261 s at 924.9 M

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 109045 and 109906 with 100% identity.

2262 at 1623.2 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 131050 and 132049 with 100% identity.

2263_g_at 1725.8 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 131050 and 132049 with 100% identity.

2264_s_at 2298.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 132050 and 133049 with 100% identity.

2265 s at 1482.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 133050 and 134049 with 100% identity.

2180 s at 2622.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 134050 and 135049 with 100% identity.

2181 s at 2989.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 135050 and 136049 with 100% identity.

2182 s at 6604.5 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 136050 and 137049 with 100% identity.

2183 s at 10632.8 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 137050 and 138049 with 100% identity.

2184 s at 7060.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 138050 and 139047 with 100% identity.

2185_at 987.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 176031 and 177030 with 100% identity.

2186 at 1035.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in

NC_001139 between 177031 and 178030 with 100% identity.

2187 at 641.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 178031 and 179030 with 100% identity.

2188_at 235.3

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 179031 and 180030 with 100% identity.

2189 at 338.3 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 180031 and 181030 with 100% identity.

2190 g at 2209.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 180031 and 181030 with 100% identity.

2191_s_at 2618.9 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 181031 and 181622 with 100% identity.

2192 at -308.8 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 241856 and 242855 with 100% identity.

2193 at 212.7 M

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 242856 and 243855 with 100% identity.

2194 at 3514.2 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 243856 and 244855 with 100% identity.

2195 at 800.1 M

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 244856 and 245855 with 100% identity.

2196 s at 1997.7 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 245856 and 246855 with 100% identity.

2197_s_at 3167.4 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 246856 and 247627 with 100% identity.

2198 at 309.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 331616 and 332615 with 100% identity.

2199 at -32.3 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 332616 and 333615 with 100% identity.

2200 at -215.5 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 333616 and 334615 with 100% identity.

2201 at -2783.4 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 334616 and 335615 with 100% identity.

2202 g at 713.6 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 334616 and 335615 with 100% identity.

2203 s at 1699.4 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 335616 and 336615 with 100% identity.

2204 s at 2590.7 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 336616 and 337137 with 100% identity.

2205_at 2515.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 547463 and 548462 with 100% identity.

2206 g at 739.7 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 547463 and 548462 with 100% identity.

2207 s at 1200.9 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 548463 and 549462 with 100% identity.

2208 s at 1423.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 549463 and 550462 with 100% identity.

2209 s at 2139.0 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 550463 and 551462 with 100% identity.

2210 s at 4923.7

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 551463 and 552462 with 100% identity.

2211 s at 4593.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 552463 and 553445 with 100% identity.

2212 at 960.2 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 659764 and 660763 with 100% identity.

2213 at -1419.0 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 660764 and 661763 with 100% identity.

2214 at -973.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 661764 and 662763 with 100% identity.

2215_g_at 3887.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 661764 and 662763 with 100% identity.

2216 s at 4334.0 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 662764 and 663763 with 100% identity.

2217 s at 3870.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 663764 and 664763 with 100% identity.

2218 s at 4024.6 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 664764 and 665565 with 100% identity.

2219 at -396.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 683060 and 684059 with 100% identity.

220 at -79.0

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 684060 and 685059 with 100% identity.

2221_at -202.5 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 685060 and 686059 with 100% identity.

2222 at 353.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 686060 and 687059 with 100% identity.

2138 at 319.9

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 687060 and 688059 with 100% identity.

2139_g_at 684.4 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 687060 and 688059 with 100% identity.

2140_s_at 448.7 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 688060 and 689059 with 100% identity.

2141 s at 2016.3 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 689060 and 689459 with 100% identity.

2142 at 1493.3 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 860395 and 861394 with 100% identity.

2143 at 114.1 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 861395 and 862394 with 100% identity.

2144 at 916.5

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 862395 and 863394 with 100% identity.

2145 at -125.6 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 863395 and 864394 with 100% identity.

2146 at 398.0 M

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 864395 and 865394 with 100% identity.

2147 at 824.0

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 865395 and 866330 with 100% identity.

2148 at 158.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 923127 and 924126 with 100% identity.

2149 at -45.6 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 924127 and 925126 with 100% identity.

2150 g at 895.9

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 924127 and 925126 with 100% identity.

2151_s_at -122.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 925127 and 926126 with 100% identity.

2152 s at 462.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 926127 and 927126 with 100% identity.

2153 s at 1114.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 927127 and 928126 with 100% identity.

2154 s at 1159.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 928127 and 929126 with 100% identity.

2155 s at 1273.0 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 929127 and 930126 with 100% identity.

2156_s_at 1181.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 930127 and 930307 with 100% identity.

2157 at 123.5 M

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in

NC_001139 between 955166 and 956165 with 100% identity.

2158 at 688.3 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 956166 and 957165 with 100% identity.

2159_at -1062.8 A

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 957166 and 958165 with 100% identity.

2160 at 464.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 958166 and 959165 with 100% identity.

2161 at 175.0 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 959166 and 960165 with 100% identity.

2162_g_at 11297.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 959166 and 960165 with 100% identity.

2163 s at 12984.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 960166 and 960596 with 100% identity.

2164 at 269.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1031505 and 1032504 with 100% identity.

2165 g at 272.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 1031505 and 1032504 with 100% identity.

2166 s at 585.2 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC 001139 between 1032505 and 1033504 with 100% identity.

2167 s at 664.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1033505 and 1034504 with 100% identity.

2168_s_at 373.9 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1034505 and 1035504 with 100% identity.

2169 s at 2491.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1035505 and 1036504 with 100% identity.

2170 s at 1744.5 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1036505 and 1037190 with 100% identity.

2171 at 147.6 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1051406 and 1052405 with 100% identity.

2172_at 4137.9 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1052406 and 1053405 with 100% identity.

2173 g at 5135.1 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1052406 and 1053405 with 100% identity.

2174 s at 9503.5 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1053406 and 1054405 with 100% identity.

2175 s at 8487.3

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1054406 and 1055405 with 100% identity.

2176_s_at 9544.4 P

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1055406 and 1056405 with 100% identity.

2177 s at 12082.3 F

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1056406 and 1056753 with 100% identity.

2178 at 735.6

Saccharomyces cerevisiae chromosome VII, complete chromosome sequence. Found forward in NC_001139 between 1084878 and 1085877 with 100% identity.

2179_at -169.6 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 39533 and 40532 with 100% identity.

2100 g at 2182.7 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 39533 and 40532 with 100% identity.

2101 s at 443.2

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 40533 and 41532 with 100% identity.

2102_s_at 1633.9 P

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Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 41533 and 42532 with 100% identity.

2103 s at 4179.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 42533 and 43532 with 100% identity.

2104 s at 7763.8 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 43533 and 44532 with 100% identity.

2105 s at 3007.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 44533 and 45188 with 100% identity.

2106 at 1239.7 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 84563 and 85562 with 100% identity.

2107 at 106.7 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 150066 and 151065 with 100% identity.

2108 at 165.6

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 151066 and 152065 with 100% identity.

2109 g at 493.2 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 151066 and 152065 with 100% identity.

2110_s_at 172.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 152066 and 153065 with 100% identity.

2111 s at 585.5 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 153066 and 154065 with 100% identity.

2112_s_at 529.5 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 154066 and 155065 with 100% identity.

2113 s at 640.7 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 155066 and 156065 with 100% identity.

2114 s at 1970.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 156066 and 156943 with 100% identity.

2115 at 127.5 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 299647 and 300646 with 100% identity.

2116_at 557.6 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 300647 and 301646 with 100% identity.

2117 at -774.4

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 301647 and 302646 with 100% identity.

2118 at 1676.3 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 302647 and 303646 with 100% identity.

2119_g_at 564.3 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 302647 and 303646 with 100% identity.

2120_s_at 67.2 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 303647 and 304646 with 100% identity.

2121 s at -1751.6 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 304647 and 305646 with 100% identity.

2122 s at 358.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 305647 and 306646 with 100% identity.

2123 s at 484.9

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 306647 and 307646 with 100% identity.

2124_s_at 559.5 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 307647 and 308646 with 100% identity.

2125 s at 907.4 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 308647 and 309646 with 100% identity.

2126_s_at 2333.7 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 309647 and 310646 with 100% identity.

2127 s at 977.5 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 310647 and 311646 with 100% identity.

2128 s at 1491.0 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 311647 and 312646 with 100% identity.

2129_s_at 4433.4 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 312647 and 313497 with 100% identity.

2130 at -19.8 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 430206 and 431205 with 100% identity.

2131 at -608.8 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 431206 and 432205 with 100% identity.

2132_at -492.4 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 432206 and 433205 with 100% identity.

2133 at -15.9 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in

NC_001140 between 433206 and 434205 with 100% identity.

2134 at 256.6 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 434206 and 435205 with 100% identity.

2135 at -918.1 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 435206 and 436205 with 100% identity.

2136 at 2383.2 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 436206 and 437169 with 100% identity.

2137 at 472.9 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 522872 and 523871 with 100% identity.

11394_at 469.0 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 523872 and 524871 with 100% identity.

11395 at 129.6 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 524872 and 525871 with 100% identity.

11396_g_at 461.6 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 524872 and 525871 with 100% identity.

11397 f at 667.8 M

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC 001140 between 525872 and 526871 with 100% identity.

11398 s at 281.4 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 526872 and 527871 with 100% identity.

11399 s at 4722.3 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 527872 and 528114 with 100% identity.

11400_s_at 165.1 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 532177 and 533176 with 100% identity.

11401 at -344.5 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 533177 and 534176 with 100% identity.

11402_at 143.8 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 534177 and 535176 with 100% identity.

11403 at 675.0 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 535177 and 536176 with 100% identity.

11404_at -17.0 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 537177 and 537754 with 100% identity.

11405 at 3850.2 P

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 543488 and 544487 with 100% identity.

11406 f at -17.5 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 544488 and 545487 with 100% identity.

11407 f at -62.4 A

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 546488 and 547487 with 100% identity.

11408_f_at 4611.7 F

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 547488 and 548487 with 100% identity.

11409 f at -16.3

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 548488 and 549487 with 100% identity.

11410 at -25.8

Saccharomyces cerevisiae chromosome VIII, complete chromosome sequence. Found forward in NC_001140 between 549488 and 549898 with 100% identity.

11411 at -34.6 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 9696 and 10695 with 100% identity.

11412 at -104.9 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 10696 and 11695 with 100% identity.

11413 s at 797.2

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 11696 and 12695 with 100% identity.

11414_s_at 88.8 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 12696 and 13695 with 100% identity.

11415_f_at 1308.6 F

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 13696 and 14695 with 100% identity.

11416_at 2035.5 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 106607 and 107606 with 100% identity.

11417 at -206.0

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 107607 and 108606 with 100% identity.

11418 at 216.4 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 108607 and 109606 with 100% identity.

11419 at 129.9 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 109607 and 110606 with 100% identity.

1420 at -660.0

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 110607 and 111606 with 100% identity.

11421 at 32.2 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 111607 and 112606 with 100% identity.

11422_at -35.5 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 112607 and 113606 with 100% identity.

11423 at 60.0

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 113607 and 114606 with 100% identity.

11424<u>g</u>at 1989.8 F

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 113607 and 114606 with 100% identity.

11425 s at 1699.2 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 114607 and 115606 with 100% identity.

11426 s at 1233.5 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 115607 and 116404 with 100% identity.

11427_at -1574.8 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 204053 and 205052 with 100% identity.

11428_at 199.1 M

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 205053 and 206052 with 100% identity.

11429 at 31.2 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 365963 and 366962 with 100% identity.

11430 at 2.4 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 366963 and 367962 with 100% identity.

11431 at -367.0 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 367963 and 368962 with 100% identity.

11432 at 4117.5 F

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 368963 and 369962 with 100% identity.

11433 at -277.3 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 369963 and 370962 with 100% identity.

11434 g at 412.5 A

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 369963 and 370962 with 100% identity.

11435 s at 1285.3

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC 001141 between 370963 and 371962 with 100% identity.

11436 s at 724.9 P

Saccharomyces cerevisiae chromosome IX, complete chromosome sequence. Found forward in NC_001141 between 371963 and 372495 with 100% identity.