

**Supplementary Table S7**  
Differentially expressed genes analysis

<i>P. antarctica</i> gene	p-val	kegg	annotation	<i>U. maydis</i> gene	p-val	kegg	annotation
5400026	9.32E-33	K01187	maltase glucoamylase and related hydrolases	um10632	1.56E-17	ni	related to ph-regulated antigen pra1 precursor
22200064	8.13E-32	ni	permease of the major facilitator superfamily	um01052	7.89E-16	ni	putative protein
7400295	4.27E-29	K00507	fatty acid desaturase	um03110	9.17E-16	K14709	related to ZRT2 - Zinc transporter II
13300320	3.33E-25	ni	synaptic vesicle transporter SVOP and related transporters	um00309	2.43E-15	ni	conserved hypothetical protein
8000044	1.77E-24	K07119	predicted NAD-dependent oxidoreductase	um02984	2.78E-15	ni	related to Dibenzothiohophene desulfurizing enzyme C
9000247	1.49E-23	ni	hypothetical protein	um00876	5.45E-15	ni	related to SPR1 - exo-1
8000029	8.06E-23	ni	hypothetical protein	um06042	6.62E-15	ni	conserved hypothetical protein
22200024	1.30E-22	ni	predicted transporter	um01187	9.08E-15	ni	conserved hypothetical protein
6400004	8.74E-22	K01187	alpha-amylase	um02215	9.42E-15	ni	related to dibenzothiohophene desulfurizing enzyme
7400178	2.16E-21	ni	hypothetical protein	um02626	1.10E-14	ni	conserved hypothetical protein
22200208	4.27E-21	ni	hypothetical protein	um03381	1.77E-14	ni	conserved hypothetical protein
22200094	6.08E-21	ni	hypothetical protein	um03475	2.49E-14	K14640	probable PHC89 - Na
7400360	1.02E-20	ni	predicted L-carnitine dehydratase	um12015	3.92E-14	ni	conserved hypothetical Ustilago-specific protein
9000397	4.12E-20	ni	hypothetical protein	um00529	4.78E-14	ni	probable carboxylic acid transport protein JEN1
24400054	5.99E-20	ni	hypothetical protein	um00027	5.21E-14	ni	putative protein
13400099	9.56E-20	K01178	hypothetical protein	um12238	7.61E-14	ni	conserved hypothetical Ustilago-specific protein
4900039	1.99E-19	ni	hypothetical protein	um03558	8.46E-14	ni	conserved hypothetical protein
22200300	5.32E-18	K13953	alkyl dehydrogenase	um02625	1.18E-13	ni	probable DUR3 - Urea permease
9000005	6.92E-18	ni	NADH, flavin oxidoreductase	um04309	1.40E-13	ni	probable Alpha-L-arabinofuranosidase precursor
7400359	8.04E-18	ni	3-Methylcrotonyl-CoA carboxylase, non-biotin containing subunit	um05253	1.63E-13	ni	related to ATP-binding multidrug cassette transport protein
19000005	9.19E-16	K14709	Fe <sup>2+</sup> /Zn <sup>2+</sup> regulated transporter	um00842	2.39E-13	ni	probable aflatoxin efflux pump AFLT
14400115	1.02E-15	ni	hypothetical protein	um05228	2.40E-13	ni	conserved hypothetical protein
27400022	1.39E-15	ni	hypothetical protein	um11465	2.51E-13	ni	putative protein
9400227	3.31E-15	ni	hypothetical protein	um05084	4.99E-13	ni	related to lignostilbene alpha
7400358	3.69E-15	ni	transcription factor	um03585	7.29E-13	ni	conserved hypothetical protein
9400256	3.75E-15	ni	hypothetical protein	um03560	7.83E-13	ni	related to beta-1
18400042	1.31E-14	ni	hypothetical protein	um03169	7.87E-13	K00819	probable CAR2 - ornithine aminotransferase
18400112	1.54E-14	ni	hypothetical protein	um05791	7.88E-13	ni	related to Cytochrome P450
1900045	1.61E-14	ni	predicted transporter	um05276	1.01E-12	ni	conserved hypothetical protein
4000035	2.81E-14	ni	hypothetical protein	um04358	1.28E-12	ni	conserved hypothetical protein
9400343	3.74E-14	ni	hypothetical protein	um10581	1.46E-12	ni	related to Alcohol dehydrogenase class III chi chain
25000020	1.07E-13	ni	hypothetical protein	um05252	1.46E-12	ni	probable nadp-dependent mannitol dehydrogenase K
15000002	1.07E-13	K00326	NADH-cytochrome b-5 reductase	um05038	1.61E-12	ni	related to glycosyl transferase
15000001	1.31E-13	ni	cytochrome P450 CYP4/CYP19/CYP26 subfamilies	um04353	1.70E-12	ni	putative protein
28000079	1.43E-13	ni	non-ribosomal peptide synthetase	um05222	1.85E-12	ni	conserved hypothetical protein
9000004	1.83E-13	K00012	UDP-glucose 4-epimerase	um03865	2.11E-12	K00128	probable aldehyde dehydrogenase family 7 member A1
3400086	2.77E-13	ni	hypothetical protein	um05812	2.33E-12	ni	related to Cyclohexanone monooxygenase
9400362	3.12E-13	ni	hypothetical protein	um03135	2.37E-12	ni	conserved hypothetical protein
22200247	3.17E-13	ni	hypothetical protein	um05421	2.58E-12	ni	related to Multidrug resistance protein
7400094	4.85E-13	ni	FOG, Zn-finger	um05598	2.89E-12	ni	conserved hypothetical protein
27400089	5.80E-13	ni	hypothetical protein	um11403	3.07E-12	ni	conserved hypothetical protein
4000041	5.90E-13	ni	hypothetical protein	um03402	3.07E-12	K00128	Indole-3-acetaldehyde dehydrogenase
2600011	6.61E-13	ni	hypothetical protein	um11554	3.34E-12	ni	related to Glucose oxidase
1000040	1.27E-12	ni	hypothetical protein	um00025	4.75E-12	ni	related to dehydroshikimate dehydratase
27000093	2.12E-12	ni	hypothetical protein	um12172	4.92E-12	ni	conserved hypothetical protein
5000035	2.72E-12	ni	synaptic vesicle transporter SVOP and related transporters	um04971	6.64E-12	ni	probable OSM1 - fumarate reductase
7400263	4.05E-12	ni	hypothetical protein	um11931	6.87E-12	ni	conserved hypothetical protein
3400076	5.08E-12	ni	predicted transporter	um01723	6.89E-12	ni	related to Cytochrome P450
15000016	5.73E-12	ni	hypothetical protein	um00742	8.45E-12	ni	probable DAL5 - Alaninate and ureidosuccinate permease
7400332	6.11E-12	ni	hypothetical protein	um00815	8.86E-12	ni	related to multidrug resistant protein
8400109	9.89E-12	K01175	hypothetical protein	um01165	9.44E-12	ni	related to Glucan 1
8000087	1.20E-11	ni	hypothetical protein	um04657	9.84E-12	ni	conserved hypothetical protein
11000030	1.27E-11	ni	hypothetical protein	um06085	1.02E-11	ni	conserved hypothetical protein
19000047	1.98E-11	ni	fatty acyl-CoA elongase	um04387	1.02E-11	ni	related to endo-1
22200088	2.05E-11	ni	hypothetical protein	um05076	1.11E-11	ni	related to 3-carboxy-cis
2400039	2.13E-11	ni	non-ribosomal peptide synthetase	um00465	1.13E-11	ni	hypothetical protein
25000028	2.79E-11	ni	hypothetical protein	um04379	1.26E-11	ni	related to gibberellin 20-oxidase
3400015	3.05E-11	ni	transcription factor	um05247	1.34E-11	ni	related to methylcrotonyl-CoA carboxylase beta chain
3400005	3.83E-11	ni	hypothetical protein	um10608	1.36E-11	ni	related to Quinate permease
22200260	4.09E-11	ni	predicted NAD-dependent oxidoreductase	um11179	1.39E-11	ni	conserved hypothetical protein
13400096	4.46E-11	ni	mitochondrial oxoglutarate/malate carrier proteins	um05079	1.56E-11	ni	probable CTP1 - Mitochondrial citrate transporter - member of the mitochondrial carrier
2800034	4.55E-11	ni	hypothetical protein	um11112	1.71E-11	ni	related to Versicolin B synthase
29400084	4.88E-11	ni	hypothetical protein	um02811	1.74E-11	ni	related to 2
7400257	4.98E-11	ni	hypothetical protein	um02585	1.79E-11	ni	related to TPO1 - Vacuolar polyamine-H antiporter
11400033	5.16E-11	ni	hypothetical protein	um05586	1.96E-11	K03381	related to hydroxyquinol-1
26400048	5.55E-11	ni	hypothetical protein	um05074	2.11E-11	ni	probable Cytochrome P450 monooxygenase
14000044	7.03E-11	ni	hypothetical protein	um00824	2.41E-11	ni	putative protein
22200308	7.29E-11	ni	hypothetical protein	um04575	2.52E-11	ni	conserved hypothetical protein
11000028	7.43E-11	ni	hypothetical protein	um06359	2.60E-11	ni	hypothetical protein
20000081	7.84E-11	ni	hypothetical protein	um02092	2.86E-11	ni	hypothetical protein
12000005	9.21E-11	ni	hypothetical protein	um05493	2.96E-11	ni	hypothetical protein
9400079	9.91E-11	ni	hypothetical protein	um10418	3.05E-11	K01183	chitinase
9000382	2.07E-10	ni	zinc-binding oxidoreductase	um04577	3.24E-11	ni	probable DUR3 - Urea permease
1000041	2.08E-10	ni	hypothetical protein	um01898	3.29E-11	ni	related to endo-1
6000094	2.18E-10	ni	hypothetical protein	um06453	3.99E-11	K00616	related to Transakolase B
4000028	2.24E-10	ni	hypothetical protein	um04510	3.55E-11	ni	conserved hypothetical protein
18400021	2.91E-10	ni	lipid phosphate phosphatase and related enzymes of the PAP2 fs	um06084	3.72E-11	ni	conserved hypothetical protein
9400174	3.00E-10	ni	hypothetical protein	um04335	3.92E-11	ni	conserved hypothetical protein
19400009	3.12E-10	K01808	hypothetical protein	um02169	4.26E-11	ni	related to aquaporin 3
9400388	3.69E-10	ni	multidrug resistance-associated protein	um01971	4.50E-11	ni	conserved hypothetical protein
16000029	4.05E-10	ni	hypothetical protein	um05528	4.73E-11	ni	conserved hypothetical protein
6400027	4.22E-10	ni	hypothetical protein	um03485	4.81E-11	ni	conserved hypothetical protein
26400075	5.38E-10	ni	hypothetical protein	um03177	5.12E-11	K03386	related to peroxisomal membrane protein 20
9400040	5.41E-10	ni	hypothetical protein	um11229	5.45E-11	ni	conserved hypothetical protein
24400051	7.74E-10	ni	predicted methyltransferase	um01614	5.50E-11	ni	conserved hypothetical protein
26000094	7.77E-10	ni	hypothetical protein	um06487	5.61E-11	ni	hypothetical protein
6400052	8.25E-10	ni	hypothetical protein	um00037	6.12E-11	ni	conserved hypothetical protein
9400088	9.36E-10	ni	N-acetylglucosaminyltransferase complex, subunit PIG-A/SPT14	um05170	6.32E-11	K00122	probable formate dehydrogenase
15000035	1.04E-09	ni	hypothetical protein	um11695	7.21E-11	ni	putative protein
18000027	1.06E-09	ni	hypothetical protein	um02323	8.23E-11	K01112	related to HOR2 - DL-glycerol phosphatase
6000042	1.13E-09	K00232	iron/ascorbate family oxidoreductases	um03040	9.74E-11	ni	hypothetical protein
7400078	1.17E-09	K03146	hypothetical protein	um05581	1.00E-10	K17069	probable O-acetylhomoserine
12000094	1.18E-09	ni	hypothetical protein	um11732	1.01E-10	ni	hypothetical protein
6000016	1.25E-09	ni	hypothetical protein	um11528	1.01E-10	ni	conserved hypothetical protein
24000071	1.35E-09	K00480	kyurenine 3-monooxygenase and related flavoprotein monooxygen	um10208	1.02E-10	ni	conserved hypothetical protein
7400183	1.44E-09	K00234	succinate dehydrogenase, flavoprotein subunit	um11118	1.04E-10	ni	ni
11000027	1.52E-09	ni	acyl-coa synthetase	um00968	1.06E-10	ni	hypothetical protein
9400028	1.67E-09	ni	hypothetical protein	um01804	1.10E-10	K14265	tytrophan amino transferase
9400055	2.43E-09	K00100	NAD dependent epimerase	um05589	1.11E-10	K00540	conserved hypothetical protein
9000085	3.10E-09	ni	hypothetical protein	um10444	1.22E-10	K01501	putative nitrilase
9000044	3.63E-09	ni	aspartyl protease	um01351	1.23E-10	ni	putative protein
25400047	3.81E-09	K05767	ras GTPase-activating protein family - IQGAP	um11781	1.25E-10	ni	ni
27400046	5.30E-09	ni	hypothetical protein	um04254	1.37E-10	ni	conserved hypothetical protein
14400052	5.65E-09	ni	hypothetical protein	um03556	1.38E-10	ni	conserved hypothetical protein
22400259	6.27E-09	ni	hypothetical protein	um11381	1.48E-10	ni	conserved hypothetical protein
10000037	6.46E-09	ni	hypothetical protein	um03158	1.57E-10	ni	related to enoyl-CoA hydratase
12000012	6.46E-09	ni	hypothetical protein	um02720.2	1.58E-10	ni	conserved hypothetical protein
25000012	7.92E-09	ni	hypothetical protein	um03319	1.63E-10	ni	conserved hypothetical protein
9400034	8.39E-09	ni	hypothetical protein	um11651	1.73E-10	K13621	related to Betaine lipid synthase
13000095	9.15E-09	ni	glucose dehydrogenase	um01947	1.77E-10	ni	related to cytochrome-c peroxidase precursor
13400087	1.06E-08	ni	predicted seven transmembrane receptor - rhodopsin family	um11129	1.82E-10	ni	conserved hypothetical protein
16400078	1.17E-08	K03381	hypothetical protein	um06400	1.96E-10	K00249	conserved hypothetical protein
7400181	1.35E-08	ni	C-3 sterol dehydrogenase	um02080	2.00E-10	ni	conserved hypothetical protein
7400276	1.47E-08	ni	hypothetical protein	um02701.2	2.07E-10	ni	hypothetical protein
9400084	1.47E-08	ni	long chain fatty acid elongase	um00115	2.16E-10	K00826	probable BAT2 - branched-chain-amino-acid transaminase
1200108	1.68E-08	ni	hypothetical protein	um05495	2.25E-10	ni	conserved hypothetical protein
8000040	1.72E-08	K00108	glucose dehydrogenase	um04737	2.27E-10	ni	hypothetical protein
7400288	2.00E-08	ni	beta, beta-carotene 15,15'-dioxygenase and related enzymes	um04629	2.33E-10	K11262	acetyl-CoA carboxylase
7400277	3.70E-08	ni	hypothetical protein	um01588	2.36E-10	ni	ni
22200320	3.75E-08	K01452	hypothetical protein	um00209.2	2.38E-10	ni	putative protein
18400011	3.76E-08	K01637	hypothetical protein	um01949	2.40E-10	ni	putative protein
27400011	3.94E-08	ni	putative alpha 1,2 mannosyltransferase	um03117.2	2.53E-		

24c0068	2.29E-07	ni	acyl-coa oxidase	um11708	7.24E-10	K07560	related to DTD1 - D-Tyr-tRNA
9600185	2.41E-07	ni	hypothetical protein	um00336	7.93E-10	ni	putative protein
27f00093	2.60E-07	ni	hypothetical protein	um10791	8.52E-10	ni	putative protein
12d00116	2.66E-07	ni	O-methyltransferase	um01789	8.56E-10	ni	putative protein
5e00073	2.83E-07	ni	predicted oxidoreductase	um06133	9.69E-10	ni	conserved hypothetical protein
6400070	3.21E-07	ni	hypothetical protein	um04807	1.01E-09	ni	conserved hypothetical protein
22d00016	3.35E-07	ni	hypothetical protein	um00182	1.02E-09	ni	related to Lipase 2 precursor
7c030235	3.40E-07	ni	hypothetical protein	um06470	1.02E-09	ni	conserved hypothetical protein
20d00038	3.59E-07	ni	hypothetical protein	um10339	1.03E-09	K00668	related to fatty acid synthase
12d00003	3.59E-07	ni	hypothetical protein	um04528	1.06E-09	ni	conserved hypothetical protein
9e000365	4.02E-07	ni	hypothetical protein	um01805	1.16E-09	ni	conserved hypothetical protein
27f00075	4.14E-07	ni	uncharacterized conserved protein	um11514	1.19E-09	ni	probable High-affinity glucose transporter
22d00236	4.14E-07	ni	enoyl-coa isomerase	um11388	1.27E-09	ni	probable cytochrome b5
25c00034	4.18E-07	ni	hypothetical protein	um02175	1.27E-09	ni	related to 3-phlyase A precursor
7f00292	4.69E-07	ni	hypothetical protein	um05967	1.28E-09	K00480	related to salicylate 1-monooxygenase
20c00080	4.89E-07	ni	multidrug resistance-associated protein	um00205	1.28E-09	ni	related to HSP12 - heat shock protein
9e000293	5.39E-07	ni	hypothetical protein	um03614	1.32E-09	ni	conserved hypothetical protein
20d00008	6.03E-07	ni	hypothetical protein	um00005	1.36E-09	K07824	probable Benzolate 4-monooxygenase cytochrome P450
22c00309	6.20E-07	ni	hypothetical protein	um12031	1.42E-09	ni	putative protein
9e00206	6.31E-07	K00698	chitin synthase/hyaluronan synthase	um04482	1.44E-09	ni	conserved hypothetical protein
22c00122	6.54E-07	ni	hypothetical protein	um19005	1.45E-09	K13953	probable ADH3 - alcohol dehydrogenase III
12d00013	6.66E-07	K03885	NADH-dehydrogenase	um06438	1.46E-09	ni	probable
14c00051	7.54E-07	ni	hypothetical protein	um02707	1.52E-09	ni	conserved hypothetical protein
7f00210	9.29E-07	ni	hypothetical protein	um11513	1.56E-09	ni	conserved hypothetical protein
7f00362	9.37E-07	ni	predicted esterase	um11116	1.56E-09	ni	conserved hypothetical Ustilago-specific protein
9e000390	9.53E-07	ni	hypothetical protein	um01466	1.60E-09	ni	related to acyl-coa dehydrogenase
9e000352	1.02E-06	ni	hypothetical protein	um03706.2	1.67E-09	ni	conserved hypothetical protein
8e00079	1.05E-06	ni	hypothetical protein	um03397	1.78E-09	ni	hypothetical protein
20d00033	1.08E-06	K13719	OTU-like cysteine protease	um04104	1.83E-09	ni	conserved hypothetical Ustilago-specific protein
9e000507	1.09E-06	ni	hypothetical protein	um00723	1.92E-09	ni	related to stress response protein rds1p
12d00256	1.12E-06	ni	hypothetical protein	um01107	1.98E-09	K04644	probable mitogen-activated protein kinase MpkA
7d00097	1.18E-06	K07404	hypothetical protein	um10120	2.04E-09	K00698	chitin synthase 3
11c00029	1.20E-06	K07431	cytochrome P450	um03690	2.08E-09	K03458	probable purine permease
16d00068	1.22E-06	K10365	F-actin capping protein, beta subunit	um11654	2.31E-09	ni	putative protein
22d00178	1.24E-06	K01488	adenine deaminase	um00371	2.32E-09	ni	related to Opiin-1
16d00017	1.27E-06	K00249	predicted acyl-CoA dehydrogenase	um10545	2.33E-09	ni	conserved hypothetical protein
20c00017	1.30E-06	ni	hypothetical protein	um03615	2.41E-09	ni	related to Glucose oxidase
6e000092	1.48E-06	ni	hypothetical protein	um02917	2.47E-09	ni	conserved hypothetical Ustilago-specific protein
22d00261	1.59E-06	K15532	hypothetical protein	um00738	2.59E-09	ni	conserved hypothetical protein
18d00128	1.60E-06	K08369	synaptic vesicle transporter SV2	um00451	2.61E-09	ni	conserved hypothetical protein
18d00028	1.60E-06	ni	hypothetical protein	um11020	2.90E-09	ni	conserved hypothetical protein
14c00004	1.64E-06	ni	multiple inositol polyphosphate phosphatase	um01812	3.01E-09	K01078	conserved hypothetical protein
9e000258	1.66E-06	ni	hypothetical protein	um04304	3.06E-09	ni	related to allantoate permease
9e000376	1.72E-06	K01192	predicted beta-mannosidase	um02865	3.16E-09	ni	hypothetical protein
10d00008	1.72E-06	K00161	pyruvate dehydrogenase E1, alpha subunit	um06367	3.19E-09	ni	putative protein
5e000132	1.83E-06	ni	sorting nexin SNX9/SH3PX1	um03576	3.23E-09	K00380	related to MET10 - sulfite reductase flavin-binding subunit
8e000007	2.02E-06	ni	hypothetical protein	um03506	3.28E-09	ni	conserved hypothetical protein
14d00060	2.04E-06	ni	sensory transduction histidine kinase	um02191	3.53E-09	ni	ni
5e000053	2.09E-06	ni	GTP-binding ADP-ribosylation factor-like protein ARL1	um01858	3.55E-09	K01480	conserved hypothetical protein
25d00002	2.10E-06	ni	hypothetical protein	um03909	3.70E-09	ni	hypothetical protein
20c00044	2.28E-06	K00122	glyoxylate/hydroxypyruvate reductase	um03116	3.72E-09	ni	conserved hypothetical protein
14d00106	2.30E-06	ni	enoyl-coa hydratase	um02747	3.81E-09	ni	conserved hypothetical protein
18d00023	2.31E-06	ni	hypothetical protein	um12303	3.89E-09	ni	hypothetical protein
9e000392	2.52E-06	ni	hypothetical protein	um00428	3.98E-09	ni	conserved hypothetical protein
6d00115	2.62E-06	ni	hypothetical protein	um06012	4.17E-09	K16261	probable general amino acid permease
22d00035	2.70E-06	K00223	sterol reductase	um01508	4.20E-09	K03441	related to Aquaporin 3
12d00011	2.75E-06	ni	hypothetical protein	um05538	4.94E-09	K06911	related to Pinn
12d000335	2.93E-06	ni	vesicle coat complex COPI, epsilon subunit	um00241	4.97E-09	ni	putative protein
7e00247	2.95E-06	ni	synaptic vesicle transporter SVOP and related transporters	um10864	5.13E-09	ni	related to GNA1 - essential acetyltransferase
6e00122	3.03E-06	ni	predicted transporter	um11580	5.17E-09	ni	retrotransposon HobS hobase
6e000008	3.12E-06	K00480	hypothetical protein	um11506	5.23E-09	ni	putative protein
9e000317	3.17E-06	ni	hypothetical protein	um02872	5.24E-09	K00108	related to gmc type oxidoreductase
16c00073	3.17E-06	ni	AAA-type ATPase	um02207	5.45E-09	ni	conserved hypothetical protein
14c00104	3.23E-06	ni	molybdenum cofactor sulfurase	um11068	5.52E-09	ni	related to Copper amine oxidase 1
7f00252	3.26E-06	K00249	medium-chain acyl-CoA dehydrogenase	um04145	5.68E-09	ni	conserved hypothetical Ustilago-specific protein
5e00132	3.56E-06	ni	vacuolar protein sorting-associated protein	um03978	5.80E-09	ni	hypothetical protein
22d00203	3.72E-06	ni	hypothetical protein	um12920	5.83E-09	ni	conserved hypothetical protein
9e000071	3.69E-06	ni	hypothetical protein	um02801	6.23E-09	K00262	probable NADP-specific glutamate dehydrogenase
6e000090	3.71E-06	ni	hypothetical protein	um00196	6.57E-09	K07034	probable FUN34 - transmembrane protein involved in ammonia production
16d00070	3.74E-06	ni	hypothetical protein	um00955	7.20E-09	K00507	probable stearyl-CoA desaturase
8e000001	3.85E-06	ni	hypothetical protein	um01951	7.35E-09	ni	related to RRP1 - involved in processing rRNA precursor species to mature rRNAs
13c00037	4.06E-06	ni	hypothetical protein	um10189	7.36E-09	ni	ferrichrome siderophore peptide synthetase
14d00041	4.08E-06	K09051	transcriptional activator FOSB/c-Fos	um03559	7.46E-09	ni	related to beta-1
8d000053	4.16E-06	ni	amino acid transporters	um03689	7.93E-09	ni	conserved hypothetical protein
18d00076	4.70E-06	ni	hypothetical protein	um11450	8.59E-09	ni	Hgl1p
16c00063	5.10E-06	K01338	mitochondrial ATP-dependent protease PIM1/LON	um04181	8.80E-09	ni	conserved hypothetical protein
22c00121	5.10E-06	ni	predicted transporter	um05507	8.84E-09	ni	conserved hypothetical protein
24c00011	5.10E-06	ni	hypothetical protein	um10464	1.00E-08	ni	putative protein
27c00005	5.20E-06	ni	hypothetical protein	um10518	1.06E-08	ni	ni
10c00070	5.25E-06	ni	hypothetical protein	um03821	1.10E-08	K03293	probable lysine-specific permease
15c00036	5.27E-06	K00637	sterol O-acyltransferase	um01171	1.12E-08	ni	related to 4-coumarate-CoA ligase
3d000095	5.35E-06	K00643	5-aminolevulinate synthase	um04347	1.14E-08	ni	probable isp4 - oligopeptide transporter
20d00069	5.41E-06	ni	hypothetical protein	um10816	1.14E-08	ni	conserved hypothetical protein
19c00002	5.59E-06	ni	hypothetical protein	um03415	1.19E-08	K03379	related to putative monooxygenase
14d00094	5.62E-06	ni	transporter ABC superfamily	um02704	1.28E-08	ni	related to allantoate permease
20d00043	5.79E-06	ni	hypothetical protein	um06456	1.29E-08	ni	related to aminopeptidase Y precursor
22d00239	5.92E-06	ni	hypothetical protein	um11448	1.35E-08	K03941	probable NADH-ubiquinone oxidoreductase 23 kDa subunit precursor
7f000041	6.09E-06	ni	mitochondrial ribosomal protein S10	um05550	1.38E-08	ni	related to EXG1 - exo-beta-1
12d00001	6.25E-06	K11611	hypothetical protein	um05019	1.46E-08	K00789	probable SAH2 - S-adenosylmethionine synthetase 2
5d000024	6.78E-06	ni	hypothetical protein	um05036	1.48E-08	ni	related to endo-1
7f000311	6.91E-06	ni	hypothetical protein	um01182	1.50E-08	ni	ni
7e000003	7.11E-06	ni	multicopper oxidases	um03398	1.51E-08	ni	related to transsterase
6d00046	7.67E-06	K01194	neutral trehalase	um02746	1.54E-08	ni	hypothetical protein
5e001159	7.87E-06	ni	hypothetical protein	um05309	1.71E-08	K14649	related to RRP1 - involved in processing rRNA precursor species to mature rRNAs
3c000057	7.90E-06	ni	hypothetical protein	um11815.2	1.80E-08	ni	hypothetical protein
9d00241	8.53E-06	ni	hypothetical protein	um03139	1.81E-08	ni	conserved hypothetical protein
27d00028	8.54E-06	ni	hypothetical protein	um01213	1.82E-08	ni	conserved hypothetical protein
26c00043	9.13E-06	ni	tyrosine kinase specific for activated	um03694.2	1.90E-08	ni	conserved hypothetical protein
9e000329	9.15E-06	K12795	suppressor of G2 allele of skp1	um00316	1.91E-08	ni	conserved hypothetical protein
13d00001	9.22E-06	ni	predicted transporter	um05972	1.94E-08	K08141	probable Maltose permease
8d000002	9.42E-06	ni	hypothetical protein	um01434	2.01E-08	ni	siderophore peptide synthetase involved in ferrichromeA biosynthesis
5e000004	9.51E-06	ni	glucose dehydrogenase	um02286	2.04E-08	ni	conserved hypothetical protein
24c00004	1.02E-05	ni	hypothetical protein	um04247	2.06E-08	ni	related to Chromiesterase precursor
3d00101	1.03E-05	ni	hypothetical protein	um02371	2.09E-08	ni	related to serine
9e002008	1.04E-05	ni	hypothetical protein	um03563	2.09E-08	ni	conserved hypothetical protein
20d00067	1.19E-05	ni	3-Methylcrotonyl-CoA carboxylase, non-biotin containing subunit	um10188	2.14E-08	ni	L-ornithine N5-oxygenase
3e000075	1.19E-05	ni	hypothetical protein	um06125	2.17E-08	ni	putative protein
7f001184	1.21E-05	ni	hypothetical protein	um11321	2.29E-08	ni	ni
6d000082	1.34E-05	K00006	sorbitol dehydrogenase	um11610	2.33E-08	ni	conserved hypothetical protein
26c00080	1.36E-05	ni	hypothetical protein	um04123	2.52E-08	ni	ni
22d00033	1.40E-05	ni	hypothetical protein	um02208	2.55E-08	K00232	probable acyl-CoA oxidase
9e000359	1.48E-05	ni	hypothetical protein	um00813	2.67E-08	ni	conserved hypothetical protein
6e000015	1.58E-05	K10578	non-canonical ubiquitin conjugating enzyme 1	um04107	2.79E-08	ni	related to Phenol 2-monooxygenase
22c00153	1.59E-05	ni	hypothetical protein	um11434	2.87E-08	ni	hypothetical protein
19d00036	1.61E-05	ni	multidrug resistance-associated protein	um05414	2.89E-08	ni	probable aflatoxin efflux pump AFLT
9e000117	1.62E-05	K01126	glucosyl-acyl diester phosphodiesterase	um05811	2.90E-08	K00873	probable pyruvate kinase
7d00206	1.64E-05	K01669	deoxyribopyrimidine photolase	um05811	3.08E-08	ni	related to KRE6 - glucan synthase subunit
8e00120	1.70E-05	ni	cytochrome P450 CYP3/CYP5/CYP6/CYP9 subfamilies	um02459	3.08E-08	ni	related to neutral amino acid permease
5d00135	1.72E-05	ni	hypothetical protein	um04696	3.09E-08	ni	putative protein
7d00359	1.76E-05	ni	synaptic vesicle transporter SVOP and related transporters	um01232	3.20E-08	K01372	related to LAF3 - member of the GAL regulon
27d00074	1.84E-05	ni	acetylcholinesterase	um03935	3.31E-08	K00309	related to fucose1 amino acid oxidase
25c00080	1.89E-05	ni	hypothetical protein	um06078	3.38E-08	K01210	conserved hypothetical protein
2d000014	1.97E-05	K02357	hypothetical protein	um02809	3.45E-08	K04618	probable galactose oxidase precursor
20d00016	2.02E-05	K07973	hypothetical protein	um05751	3.64E-08	ni	ni
12c00001	2.02E-05	ni	hypothetical protein	um11178	3.65E-08	ni	probable AYT1 - trichothecene 3-O-acetyltransferase
1d000007	2.07E-05	ni	hypothetical protein	um02023	3.77E-08	ni	related to long chain fatty alcohol oxidase
4d000042	2.09E-05	K01720	hypothetical protein	um11569	3.90E-08	ni	related to MKC7 - aspartyl protease of the periplasmic space
1e000017	2.10E-05	ni	hypothetical protein	um12080	3.92E-08	ni	related to PNS1 - Protein of unknown function
3d00016	2.13E-05	K00232	acyl-coa oxidase	um03325	3.95E-08	K16261	probable general amino acid permease
19c00099	2.23E-05	ni	component of vacuolar transporter chaperone	um03561	4.21E-08	ni	conserved hypothetical protein
8e000073	2.33E-05	ni	hypothetical protein	um06203	4.23E-08	ni	ni
5e000046	2.36E-05	ni	hypothetical protein	um03882	4.31E-08	ni	ni
27d00079	2.55E-05	ni	hypothetical protein	um06190	4.33E-08	ni	related to Chitinase
20c00026	2.62E-05	ni	hypothetical protein	um04445	4.44E-08	ni	related to ANT1 - Peroxisomal transporter of adenine nucleotides
10c00095	2.66E-05	K03800	lipote-protein ligase A	um06485	4.58E-08	ni	putative protein
9e000062	2.74E-05	K01423	hypothetical protein	um			

3c00063	3.84E-05	ni	glyoxylate/hydroxypruvate reductase	um11015	8.61E-08	ni	conserved hypothetical protein
7600165	3.67E-05	K04043	molecular chaperones mortalin/PBP74/GRP75	um10691.2	8.67E-08	K01897	related to Long-chain-fatty-acyl-CoA ligase
6600556	4.12E-05	ni	hypothetical protein	um02161	8.82E-08	ni	conserved hypothetical protein
6c00353	4.33E-05	K00020	predicted dehydrogenase	um33620	9.11E-08	ni	related to Regulatory protein acR
19d0046	4.40E-05	K12486	predicted GTPase-activating protein	um11775	9.49E-08	ni	putative protein
7c02729	4.42E-05	ni	predicted inosine-uridine preferring nucleoside hydrolase	um00079	9.70E-08	K00100	conserved hypothetical protein
9c00232	4.45E-05	K10589	E3 ubiquitin protein ligase	um10897	9.79E-08	ni	ni
14c00227	4.58E-05	ni	hypothetical protein	um01478	9.92E-08	ni	related to HXT1 - Low-affinity hexose facilitator
9c00270	4.68E-05	ni	hypothetical protein	um04912	1.01E-07	ni	putative protein
24c00071	4.79E-05	K13535	predicted hydrolase/acyltransferase	um01585	1.01E-07	ni	ni
16c00005	4.91E-05	ni	hypothetical protein	um10223	1.10E-07	ni	ni
14c00100	4.95E-05	K11273	helicase of DEAD superfamily	um01930	1.15E-07	ni	probable POT1 - acetyl-CoA C-acyltransferase
7c00046	5.17E-05	K11434	protein arginine N-methyltransferase PRMT1 and related enzyme	um10388	1.17E-07	ni	putative protein
8d00010	5.19E-05	K00380	NADP/FAD dependent oxidoreductase	um03470	1.21E-07	K01537	related to putative calcium P-type ATPase NCA-2
8d00019	5.21E-05	ni	cytochrome P450 CYP3/CYP5/CYP6/CYP9 subfamilies	um11744	1.22E-07	K00236	related to SDH3 - cytochrome b560 subunit of respiratory complex II
19d00057	5.40E-05	K03255	uncharacterized protein CLU1/cuA1/TF131	um04410	1.26E-07	ni	probable siderophore iron transporter mirC
16c00062	5.42E-05	K11756	chromatin remodeling complex RSC, subunit RSC1	um04106	1.29E-07	ni	related to O-methyltransferase B
3c00003	5.54E-05	K00026	NAD-dependent malate dehydrogenase	um01599	1.27E-07	ni	related to EC1 - delta3-cis-delta2-trans-enoyl-CoA isomerase
6c00089	5.57E-05	ni	hypothetical protein	um02508	1.28E-07	K00128	indole-3-acetaldehyde dehydrogenase
10c00045	5.57E-05	ni	glycosyl transferase	um11777	1.31E-07	ni	conserved hypothetical protein
6c00069	5.77E-05	ni	Ca2+-dependent lipid-binding protein CLB1	um05325	1.34E-07	ni	conserved hypothetical protein
18c00334	5.82E-05	ni	hypothetical protein	um03508	1.40E-07	ni	conserved hypothetical protein
9c00061	5.84E-05	ni	hypothetical protein	um00573	1.44E-07	ni	conserved hypothetical protein
6d00102	6.00E-05	ni	hypothetical protein	um01583	1.45E-07	ni	ni
10d00051	6.00E-05	ni	hypothetical protein	um03990	1.46E-07	ni	related to Short-chain dehydrogenase
3c00050	6.03E-05	ni	fumate reductase, flavoprotein subunit	um05025	1.47E-07	ni	conserved hypothetical protein
3c00008	6.28E-05	ni	synaptic vesicle transporter SVOP and related transporters	um01827	1.50E-07	K01078	related to acid phosphatase ACP2 precursor
9c00285	6.34E-05	K14573	nucleolar protein fibrillarin NOP77	um06500	1.58E-07	ni	conserved hypothetical Ustilago-specific protein
7d00015	6.45E-05	ni	hypothetical protein	um05766	1.62E-07	ni	probable YH2 - Protein of the mitochondrial carrier family
5d00096	6.63E-05	K01103	fructose-6-phosphate 2-kinase	um10540	1.69E-07	ni	related to blue-light-inducible Bli-3 protein
7d00006	6.74E-05	K02355	mitochondrial elongin factor	um16485	1.71E-07	ni	ni
14d00079	6.82E-05	K01743	hypothetical protein	um03372	1.75E-07	ni	conserved hypothetical protein
21c00001	6.93E-05	ni	hypothetical protein	um10083	1.77E-07	ni	ni
13d00014	7.17E-05	K05012	Cl- channel CLC-3 and related proteins	um04530	1.79E-07	ni	probable GGC1 - Protein of the mitochondrial carrier family
5c00060	7.48E-05	K01681	acetate acetyltransferase	um00229	1.84E-07	ni	hypothetical protein
6d00060	7.74E-05	ni	hypothetical protein	um00970	2.02E-07	ni	conserved hypothetical Ustilago-specific protein
2d00069	8.23E-05	ni	hypothetical protein	um05339	2.19E-07	K01834	probable 2
19d00126	8.25E-05	K00972	UDP-N-acetylglucosamine pyrophosphorylase	um11562	2.21E-07	ni	hydrophobin 2
9d00068	8.30E-05	ni	hypothetical protein	um11502	2.24E-07	K01520	probable DUTP pyrophosphatase
14d00119	8.52E-05	ni	uncharacterized conserved protein	um00164.2	2.32E-07	K13091	related to splicing factor HCC1
27d00097	8.69E-05	ni	hypothetical protein	um01726	2.36E-07	K00860	probable MET14 - ATP adenosine-5
15c00003	8.70E-05	ni	hypothetical protein	um12173	2.41E-07	ni	putative protein
8d00112	8.91E-05	ni	copper amine oxidase	um03977	2.44E-07	ni	conserved hypothetical protein
9c00105	8.95E-05	ni	hypothetical protein	um03693	2.54E-07	K03457	probable uracil permease
10d00013	9.26E-05	K10534	cytochrome b5	um02416	2.54E-07	ni	conserved hypothetical protein
8d00008	9.27E-05	K00626	acetyl-coa acetyltransferase	um04742	2.57E-07	ni	related to stomatin
14c00062	9.51E-05	K01493	deoxycytidylate deaminase	um12178	2.57E-07	K14333	related to 5-carboxyvanillate decarboxylase
9d00058	9.57E-05	K00863	dihydroxyacetone kinase	um02172	2.61E-07	ni	related to methylglyoxal reductase
7d00088	9.66E-05	ni	hypothetical protein	um04616	2.66E-07	ni	ni
9d00045	9.76E-05	ni	synaptic vesicle transporter SV2	um11940	2.80E-07	ni	putative protein
5c00074	9.91E-05	K16302	predicted membrane protein	um00825	2.83E-07	ni	conserved hypothetical Ustilago-specific protein
25c00060	0.0001	ni	sorbitol dehydrogenase	um04165	2.86E-07	K10740	related to single-stranded dna binding protein 12k chain
15c00028	0.0001	ni	hypothetical protein	um02198	2.89E-07	ni	conserved hypothetical protein
3c00033	0.0001	K00326	inositol polyphosphate multikinase, component of the ARGR trans	um01591	2.96E-07	ni	ni
12c00014	0.0001	ni	hypothetical protein	um03522	3.00E-07	ni	related to UGA4 - GABA permease - also involved in delta-aminolevulinatc transport
9c00118	0.0001	K02910	60S ribosomal protein L31	um00708	3.04E-07	ni	related to monoxygenase
22c00226	0.0001	ni	predicted hydrolases or acyltransferases	um10519	3.17E-07	ni	putative protein
9c00084	0.0001	ni	hypothetical protein	um01710	3.19E-07	ni	related to N-carbamoyl-L-amino acid hydrolase
7c00056	0.0001	K03661	vacuolar H+-ATPase VO sector, subunit c'	um11984	3.39E-07	ni	conserved hypothetical protein
24d00021	0.0001	K00257	short-chain acyl-CoA dehydrogenase	um02012	3.57E-07	ni	conserved hypothetical protein
9d00018	0.0001	ni	aldehyde reductase	um06098	3.58E-07	ni	related to extracellular elastolytic metalloproteinase precursor
9c00054	0.0001	ni	hypothetical protein	um03049	3.74E-07	K07119	related to ardo-polygalacturonase
18c00006	0.0001	ni	non-ribosomal peptide synthetase	um03228	3.76E-07	ni	related to 4-coumarate--CoA ligase 1
22c00214	0.0002	ni	hypothetical protein	um05514	3.77E-07	ni	conserved hypothetical protein
27c00066	0.0002	ni	hypothetical protein	um01335	3.78E-07	K00252	probable glutaryl-CoA dehydrogenase
20d00051	0.0002	ni	uncharacterized conserved protein HEN1/CORYMBOSA2	um01432	3.93E-07	ni	related to N6-hydroxylysine acetyl transferase
20d00030	0.0002	ni	hypothetical protein	um03989	3.94E-07	K01758	related to CYS3 - cystathionine gamma-lyase
27d00101	0.0003	ni	hypothetical protein	um01422	3.97E-07	ni	probable Lipase B precursor
9c00400	0.0003	K01679	fumarase	um06490	4.00E-07	K08176	probable PHO8 - Inorganic phosphate permease
9c00074	0.0003	ni	permease of the major facilitator superfamily	um05958	4.27E-07	ni	probable maltose permease
9d00197	0.0003	ni	hypothetical protein	um04615	4.42E-07	ni	ni
9c00281	0.0004	ni	hypothetical protein	um00479	4.78E-07	ni	related to 4-coumarate--CoA ligase
9c00100	0.0004	ni	predicted proline-serine-threonine phosphatase-interacting protein	um10888	4.92E-07	ni	putative protein
3c00001	0.0004	ni	hypothetical protein	um11531	4.98E-07	ni	ni
19d00020	0.0004	ni	predicted membrane protein	um05396.2	5.69E-07	ni	conserved hypothetical protein
11d00078	0.0005	ni	hypothetical protein	um04897	5.75E-07	ni	conserved hypothetical protein
11d00075	0.0005	ni	hypothetical protein	um03734	5.80E-07	K01251	probable adenosylhomocysteinase
5c00122	0.0005	ni	hypothetical protein	um12127	5.84E-07	ni	hypothetical protein
24d00012	0.0005	ni	acyl-coa synthetase	um01755	5.90E-07	ni	putative protein
9c00378	0.0005	ni	protein kinase	um05370	6.33E-07	ni	putative protein
11c00014	0.0005	K09510	molecular chaperone	um10861	6.34E-07	ni	related to Reticuline oxidase precursor
12d00012	0.0005	ni	GTP-binding protein	um00108	6.37E-07	ni	related to D-arabinol 2-dehydrogenase
3c00018	0.0005	ni	hypothetical protein	um02235	6.38E-07	ni	related to AMP-binding protein
7d00005	0.0005	ni	FOG, Zn-finger	um00330	6.50E-07	ni	related to UTR2 - cell wall protein
14d00036	0.0005	ni	polyubiquitin-binding protein	um05871	6.68E-07	K00818	related to acetylcholine aminotransferase precursor
18c00031	0.0006	ni	hypothetical protein	um03568	6.69E-07	ni	related to regulatory protein acR
16c00012	0.0006	K01897	long-chain acyl-CoA synthetases	um01859	6.73E-07	ni	related to ribitol kinase
9d00328	0.0006	ni	ATP-dependent RNA helicase pitchoune	um01192	6.85E-07	ni	conserved hypothetical protein
25c00043	0.0007	K00166	pyridine nucleotide alpha-keto acid dehydrogenase complex, alpha s	um00922	7.29E-07	ni	conserved hypothetical protein
18c00018	0.0007	ni	FOG, Zn-finger	um11038	7.34E-07	K03940	probable NADH-ubiquinone oxidoreductase 19
7c00106	0.0007	K04371	mitogen-activated protein kinase	um01747	7.56E-07	ni	ni
16d00050	0.0008	K12604	negative regulator of transcription	um12144	7.56E-07	ni	conserved hypothetical Ustilago-specific protein
22c00252	0.0008	K01637	isocitrate lyase	um05652	7.64E-07	ni	putative protein
9c00040	0.0008	ni	hypothetical protein	um11070	7.71E-07	K01175	probable lipase precursor
9d00152	0.0009	K10102	biotin synthase	um03032	7.84E-07	ni	conserved hypothetical protein
12c00120	0.0009	ni	hypothetical protein	um02201.2	7.92E-07	ni	conserved hypothetical protein
25c00002	0.0009	ni	dehydrogenases with different specificities	um01005	8.08E-07	K01648	probable ATP citrate lyase subunit 1
13c00043	0.0009	K03575	ATG-dependent RNA helicase	um11633	8.49E-07	ni	related to glucose 1-dehydrogenase
5c00163	0.0009	ni	hypothetical protein	um00802	8.69E-07	ni	putative protein
9c00076	0.0002	ni	cell division control protein	um04871	8.74E-07	K00927	probable PGK1 - phosphoglycerate kinase
7d00081	0.0002	ni	hypothetical protein	um11750	8.76E-07	K10807	probable RNR1 - ribonucleotide-diphosphate reductase large subunit
20c00066	0.0002	K16261	amino acid transporters	um04088	9.11E-07	ni	conserved hypothetical Ustilago-specific protein
19c00069	0.0002	K15424	protein phosphatase 2A regulatory subunit A and related proteins	um00330	9.17E-07	ni	putative protein
27c00012	0.0002	ni	hypothetical protein	um01647	9.20E-07	K03363	related to CDC20 - cell division control protein
16d00056	0.0002	K08838	serine/threonine protein kinase	um00397	9.28E-07	ni	putative protein
5c00035	0.0002	ni	hypothetical protein	um11007	9.38E-07	ni	related to GTP-binding protein Rab5c
22d00288	0.0002	ni	FOG, Reverse transcriptase	um00393	9.45E-07	ni	conserved hypothetical protein
7c00050	0.0002	ni	hypothetical protein	um10032	9.47E-07	ni	related to N-acetyltransferase
11c00035	0.0002	ni	hypothetical protein	um10904	9.49E-07	K00759	probable APT1 - adenine phosphoribosyltransferase
26c00021	0.0002	K08835	ste20-like serine/threonine protein kinase	um12024	9.54E-07	ni	putative protein
22d00260	0.0002	ni	hypothetical protein	um01792	9.59E-07	ni	conserved hypothetical protein
9c00051	0.0002	ni	hypothetical protein	um00111	1.00E-06	ni	related to membrane protein
9d00087	0.0002	ni	uncharacterized conserved protein WDR8	um11147	1.04E-06	ni	conserved hypothetical Ustilago-specific protein
11c00083	0.0002	K10082	lectin VIP3b	um02052	1.06E-06	ni	related to white collar 1 protein
2c00009	0.0002	ni	hypothetical protein	um00667	1.09E-06	ni	related to B2-aldehyde-forming enzyme
12c00114	0.0002	ni	ribosomal RNA adenosine dimethylase	um02623	1.10E-06	ni	probable FAT1 - Long-chain fatty acid transporter
9c00348	0.0002	ni	hypothetical protein	um06422	1.13E-06	ni	conserved hypothetical protein
22d00133	0.0002	ni	glucose dehydrogenase	um05997	1.16E-06	ni	putative protein
13c00070	0.0002	ni	predicted peptidyl-RNA hydrolase	um11870	1.18E-06	ni	putative protein
9d00012	0.0002	ni	hormone-sensitive lipase HSL	um05664	1.18E-06	ni	related to Cytochrome P450
22c00012	0.0002	ni	acyl-coa synthetase	um02095	1.20E-06	ni	putative protein
11c00077	0.0002	ni	myosin regulatory light chain	um12027	1.32E-06	ni	putative protein
20d00059	0.0003	K08794	Ca2+/calmodulin-dependent protein kinase	um05521	1.34E-06	ni	conserved hypothetical protein
7c00343	0.0003	ni	reductases with broad range of substrate specificities	um05953	1.34E-06	ni	putative protein
7c00197	0.0003	K00383	pyridine nucleotide-disulphide oxidoreductase	um11764	1.39E-06	ni	ni
15d00008	0.0003	K02896	60S ribosomal protein L30 isolog	um10815	1.41E-06	ni	conserved hypothetical protein
11d00061	0.0003	ni	protein containing adaptin N-terminal region	um06010	1.44E-06	K01702	alpha-isopropylmalate isomerase
8c00002	0.0003	ni	hypothetical protein	um04484	1.44E-06	ni	probable choline-sulfatase
18d00071	0.0003	ni	hypothetical protein	um00534	1.46E-06	K00549	probable MET6 - methionine synthase
10d00025	0.0003	ni	hypothetical protein	um04873	1.58E-06	K06824	probable LYS12 - homo-isocitrate dehydrogenase
6c00107	0.0003	ni	hypothetical protein	um03474	1.59E-06	ni	conserved hypothetical protein
26d00092	0.0003	K00618	acetylglutamate kinase	um01952	1.62E-06	K13281	related to UV-endonuclease UVE-1
6d00049	0.0003	ni	hypothetical protein	um10486	1.63E-06	ni	conserved hypothetical Ustilago-specific protein
22d00282	0.0003	ni	hypothetical protein	um01032	1.65E-06	ni	putative protein
13d00081	0.0003	ni	hypothetical protein	um05248	1.65E-06	ni	related to TPO3 - Polyamine transport protein
9d00156	0.0003	ni					

7c00348	0.0005	K00235	succinate dehydrogenase, Fe-S protein subunit	um11338	2.21E-06	ni	conserved hypothetical protein
20d0079	0.0005	ni	hypothetical protein	um03034	2.28E-06	ni	conserved hypothetical protein
22c00313	0.0053	ni	hydroxymethylglutaryl-coylase	um11921	2.29E-06	ni	related to metallothionein
9c00259	0.00053	ni	hypothetical protein	um01976	2.40E-06	ni	putative protein
7c00151	0.00053	K00729	glycosyltransferase	um00492	2.42E-06	ni	conserved hypothetical protein
14c00116	0.00053	ni	ni	um00122	2.43E-06	ni	conserved hypothetical protein
5c00021	0.00054	ni	hypothetical protein	um00343	2.47E-06	K16261	probable GAP1 - amino acid transport protein
9c00323	0.00058	ni	hypothetical protein	um00578	2.48E-06	ni	putative protein
7c00018	0.00054	K04077	mitochondrial chaperonin, Cpn60/Hsp60p	um12262	2.48E-06	ni	related to 4-coumarate-CoA ligase
12c01005	0.00055	ni	predicted Rho/Rac guanine nucleotide exchange factor	um02642	2.49E-06	K07078	conserved hypothetical protein
8c00054	0.00055	ni	predicted dehydrogenase	um05690	2.50E-06	ni	conserved hypothetical Ustilago-specific protein
9c00095	0.00055	ni	hypothetical protein	um02934	2.51E-06	ni	related to ELAV-like protein 2
19c00009	0.00055	K01803	triosphosphate isomerase	um12310	2.64E-06	ni	hypothetical protein
14c00069	0.00056	ni	hypothetical protein	um01722	2.64E-06	ni	conserved hypothetical protein
10c00053	0.00057	ni	hypothetical protein	um01043	2.66E-06	K03120	probable TATA-box-binding factor TBP
16c00050	0.00058	K03017	RNA polymerase II subunit 9	um03114	2.68E-06	ni	conserved hypothetical protein
22c00307	0.00058	ni	hypothetical protein	um01567	2.71E-06	ni	related to 2
16c00047	0.00059	K02138	mitochondrial F1F0-ATP synthase, subunit d/ATP7	um01911	2.78E-06	ni	related to alcohol dehydrogenase
3c00036	0.00059	ni	predicted E3 ubiquitin ligase	um06467	2.81E-06	ni	related to glucosyltransferase
5c00141	0.0006	ni	hypothetical protein	um02652	2.88E-06	ni	putative protein
9c00320	0.0006	K07943	GTP-binding ADP-ribosylation factor-like protein ARL2	um00506	2.95E-06	ni	putative protein
21d00003	0.00061	ni	hypothetical protein	um05982	3.00E-06	ni	hypothetical protein
10c00097	0.00061	ni	hypothetical protein	um10072	3.10E-06	K08139	probable monosaccharide transporter
10c00096	0.00061	ni	hypothetical protein	um15045	3.20E-06	K10413	cytoplasmic dynein heavy chain 1
12c00002	0.00061	K07124	17 beta-hydroxysteroid dehydrogenase type 3	um01989	3.25E-06	ni	conserved hypothetical protein
26d00085	0.00061	K10669	chickadee conserved protein	um01992	3.25E-06	K00101	probable CYB2 - lactate dehydrogenase
15c00019	0.00063	K04802	DNA polymerase delta processivity factor	um02197	3.26E-06	ni	conserved hypothetical protein
20d00023	0.00064	ni	hypothetical protein	um11111	3.27E-06	ni	related to Ascorbate oxidase precursor
5c00038	0.00065	ni	ferric reductase	um05951	3.32E-06	ni	conserved hypothetical protein
25c00034	0.00065	ni	hypothetical protein	um11166	3.33E-06	ni	conserved hypothetical protein
27d00049	0.00067	K10994	checkpoint 9-1-1 complex, RAD9 component	um00283	3.34E-06	K00681	related to gamma-glutamyltransferase
22d00206	0.00067	ni	2-enoyl-CoA hydratase	um00283	3.42E-06	K00077	conserved hypothetical protein
9c00053	0.00068	K03509	protein involved in establishing cohesion between sister chromatid	um04538	3.44E-06	ni	related to DAL5 - Allantoinase and ureidosuccinate permease
22c00013	0.00068	ni	short-chain acyl-CoA dehydrogenase	um01204	3.46E-06	ni	related to PRY1 - strong similarity to the plant PR-1 class of pathogen related proteins
18c00017	0.00068	K08736	minichaperon MCH5	um03016	3.50E-06	ni	conserved hypothetical protein
8c00022	0.0007	K16948	septin family protein	um11186	3.57E-06	ni	putative protein
27c00055	0.00072	ni	hypothetical protein	um01411	3.64E-06	ni	putative protein
22d00032	0.00072	K05355	geranylgeranyl pyrophosphate synthase	um10031	3.68E-06	ni	related to embryonic protein DC-8
14c00061	0.00074	ni	glucose dehydrogenase	um02753	3.71E-06	ni	conserved hypothetical protein
3c00041	0.00074	ni	hypothetical protein	um01868	3.77E-06	ni	related to GIT1 - Glycerolphosphoinositol transporter also able to mediate low-affinity phosphate transport
19d00094	0.00075	ni	hypothetical protein	um11185	3.78E-06	ni	conserved hypothetical protein
20c00003	0.00075	ni	permease of the major facilitator superfamily	um04060	3.85E-06	ni	probable DIC1 - mitochondrial dicarboxylate carrier
12c00112	0.00076	K03021	RNA polymerase III, second largest subunit	um15025	3.89E-06	ni	probable NADP-dependent alcohol dehydrogenase
3c00024	0.00076	K14401	RNA cleavage and polyadenylation factor II complex, subunit C	um04306	3.90E-06	ni	putative protein
7c00009	0.00077	ni	acyl-coa synthetase	um05966	3.90E-06	ni	conserved hypothetical protein
6c00064	0.00077	ni	flavonol reductase	um10443	3.95E-06	ni	conserved hypothetical protein
14c00067	0.00078	K01408	N-araline dibasic convertase NRD1 and related Zn2+-dependen	um02565	3.95E-06	ni	conserved hypothetical protein
8c00082	0.00078	ni	hypothetical protein	um04506	3.97E-06	ni	hypothetical protein
11c00069	0.00079	K03260	translation initiation factor 4F, ribosome/mRNA-bridging subunit	um12026	4.03E-06	ni	related to TMT1 - trans-acinilactate methyltransferase
16c00041	0.00079	ni	hypothetical protein	um00663	4.03E-06	K10591	probable Ubiquitin-protein ligase
26c00001	0.00079	ni	hypothetical protein	um05705	4.06E-06	ni	putative protein
9c00113	0.00079	K07734	hypothetical protein	um02978	4.21E-06	ni	conserved hypothetical protein
27c00024	0.0008	ni	hypothetical protein	um03056	4.22E-06	ni	putative protein
7c00158	0.0008	ni	inositol polyphosphate 5-phosphatase and related proteins	um02413	4.38E-06	ni	conserved hypothetical protein
19c00115	0.00081	K08508	SNAP-25 (synaptosome-associated protein) component of SNAR	um05046	4.51E-06	ni	conserved hypothetical protein
22d00037	0.00082	K09704	hypothetical protein	um02836	4.52E-06	ni	hypothetical protein
22d00063	0.00083	ni	hypothetical protein	um04553	4.61E-06	ni	related to growth hormone inducible transmembrane protein
19d00087	0.00083	K09531	molecular chaperone	um00116	4.64E-06	ni	related to nicotianamine monooxidase permease
7c00100	0.00088	K03008	RNA polymerase, subunit L	um00197	4.65E-06	K15441	related to TAD2 - tRNA-specific adenosine deaminase 2
22c00263	0.00089	K01489	cytidine deaminase	um11596	4.65E-06	ni	related to CSR1 - phosphatidylinositol transfer protein
13c00098	0.0009	ni	cation transport ATPase	um11683	4.69E-06	ni	conserved hypothetical protein
10c00033	0.00091	ni	hypothetical protein	um10009	4.69E-06	ni	related to acyl-CoA dehydrogenase
7c00185	0.00091	ni	acyl-coa synthetase	um11187	4.72E-06	ni	related to ROT1 - molecular chaperone in the endoplasmic reticulum
20d00031	0.00092	K01669	deoxyribodipyrimidine photolyase	um10186	4.83E-06	ni	putative protein
26c00010	0.00093	K01940	argininosuccinate synthase	um10782	4.87E-06	K16803	related to STU2 - Microtubule-associated protein
27c00038	0.00093	ni	hypothetical protein	um03681	4.87E-06	ni	related to Heat shock protein Hsp20
9c00003	0.00094	ni	hypothetical protein	um11598	4.89E-06	ni	related to oxoreductase
4d00041	0.00094	K13335	hypothetical protein	um03063	4.85E-06	K15331	related to TRM2 - tRNA
7c00201	0.00094	ni	hypothetical protein	um12295	5.26E-06	ni	putative protein
19d00073	0.00095	ni	hypothetical protein	um11391	5.53E-06	ni	conserved hypothetical protein
22d00010	0.00095	ni	uncharacterized conserved protein	um03026	5.61E-06	ni	putative protein
3c00085	0.001	K16196	eIF-2alpha kinase GCN2	um03417	5.73E-06	ni	putative acetylaminase
9c00089	0.00101	ni	hypothetical protein	um11817	5.91E-06	K13124	conserved hypothetical protein
9c00251	0.00102	K01280	tripeptidyl peptidase II	um01378	6.38E-06	ni	conserved hypothetical protein
9c00022	0.00102	ni	synaptic vesicle transporter SVOP and related transporters	um02430	6.42E-06	ni	conserved hypothetical protein
7c00174	0.00103	K05727	signaling protein DOCK180	um05802	6.52E-06	ni	related to cell surface ferroxidase
9c00132	0.00104	ni	hypothetical protein	um11296	6.54E-06	ni	related to calmodulin-dependent protein kinase
3c00018	0.00107	ni	hypothetical protein	um15048	6.56E-06	ni	related to 4-coumarate-CoA ligase 1
24c00051	0.00107	ni	component of vacuolar transporter chaperone	um00679	6.65E-06	ni	related to VBA1 - Vacuolar Basic Amino acid transporter
15c00091	0.00109	ni	reductases with broad range of substrate specificities	um11544	6.67E-06	ni	putative protein
4c00017	0.00111	ni	hypothetical protein	um01424	6.70E-06	K10437	probable Cytochrome P450 monooxygenase
13c00061	0.00112	ni	aldo/keto reductase family proteins	um11967	6.83E-06	ni	conserved hypothetical protein
3c00013	0.00116	ni	hypothetical protein	um03658	7.01E-06	ni	conserved hypothetical protein
18d00041	0.00117	K15192	SNF2 family DNA-dependent ATPase domain-containing protein	um06508	7.02E-06	ni	conserved hypothetical protein
12c00006	0.00118	K10437	cytochrome P450 CYP2 subfamily	um03092	7.13E-06	K1104	related to protein tyrosine phosphatase PPS1
22d00091	0.00121	ni	hypothetical protein	um05676	7.23E-06	ni	related to L-aminocyclopropane-1-carboxylate synthase 1
12c00005	0.00123	ni	hypothetical protein	um03067	7.32E-06	ni	related to CDC33 - translation initiation factor eIF4E
15d00076	0.00124	ni	hypothetical protein	um05549	7.41E-06	K01858	probable myo-inositol 1-phosphate synthase
14c00035	0.00124	ni	hypothetical protein	um10234	7.79E-06	ni	related to GLE1 - RNA export mediator
24d00013	0.00126	K12619	5'-3' exonuclease HKE1/RAT1	um06059	7.84E-06	ni	related to glutathione s-transferase 3
18c00065	0.00128	K07407	alpha-d-galactosidase	um11795	7.92E-06	K00799	conserved hypothetical protein
9c00423	0.00129	K00624	carbamoyl-O-acyltransferase CRAT	um04695	7.98E-06	ni	hypothetical protein
22c00111	0.0013	K03363	anaphase promoting complex, Cdc20, Cdh1, and Ama1 subunits	um05080	7.99E-06	ni	hypothetical protein
10c00059	0.0013	ni	beta tubulin	um03281	8.04E-06	ni	putative protein
10c00004	0.00131	K07901	GTP-binding protein SEC4	um10025	8.14E-06	ni	conserved hypothetical protein
15d00014	0.00134	ni	predicted transporter	um01787	8.27E-06	K00547	related to homocysteine S-methyltransferase
19d00098	0.00137	ni	hypothetical protein	um05286	8.48E-06	ni	related to GS1 protein
19d0127	0.00137	K01681	acetylcholinesterase	um10118	8.47E-06	ni	conserved hypothetical Ustilago-specific protein
9c00198	0.00138	K00006	sorbitol dehydrogenase	um15051	8.55E-06	ni	conserved hypothetical protein
10c00103	0.00139	ni	sphingolipid fatty acid hydroxylase	um06406	8.55E-06	K05770	related to Peripheral-type benzodiazepine receptor
13c00022	0.0014	ni	predicted membrane protein	um01970	8.66E-06	ni	hypothetical protein
5c00104	0.00142	K01166	ribonuclease	um02954	8.83E-06	ni	putative protein
22c00286	0.00142	K01230	mannosyl-oligosaccharide alpha-1,2-mannosidase	um04830	9.03E-06	K00036	probable ZWF1 - glucose-6-phosphate dehydrogenase
9c00135	0.00144	ni	flavin-containing monooxygenase	um11285	9.08E-06	ni	conserved hypothetical protein
25d00020	0.00145	ni	hypothetical protein	um00595	9.40E-06	K14455	probable aspartate aminotransferase
5c00070	0.00148	K10227	succinyl-coa, alpha-ketoacid-coa transferase	um04063	9.50E-06	K08726	related to soluble epoxide hydrolase
3c00051	0.00149	ni	hypothetical protein	um00396	9.65E-06	ni	conserved hypothetical protein
12d00133	0.0015	K07975	ras-related small GTPase	um11741	9.81E-06	ni	related to GCY1 - galactose-induced form of aldo
6c00105	0.0015	ni	predicted lipase	um00945	9.84E-06	K12659	probable ARG6 - n-acetyl-gamma-glutamyl-phosphate reductase
26d00033	0.00151	K02908	60S ribosomal protein L30	um02708	9.95E-06	K08738	conserved CYTOCHROME C
9c00021	0.00154	ni	hypothetical protein	um05251	1.01E-05	ni	conserved hypothetical protein
6c00022	0.00155	ni	alcohol dehydrogenase	um01889	1.03E-05	ni	related to multidrug resistance protein
7c00053	0.00155	K01669	deoxyribodipyrimidine photolyase	um11720	1.03E-05	ni	related to cystathionine beta-lyase
10d00096	0.00156	K01187	alpha-amylase	um03229	1.07E-05	ni	conserved hypothetical protein
6c00078	0.00157	ni	hypothetical protein	um01382	1.07E-05	ni	putative protein
20c00363	0.00158	K14654	hypothetical protein	um04114	1.07E-05	K101077	probable PHO8 - repressible alkaline phosphatase vacuolar
22c00243	0.00159	ni	hypothetical protein	um10494	1.09E-05	K01230	related to Mannosyl-oligosaccharide 1
10d00097	0.00159	K03293	amino acid transporters	um05344	1.09E-05	ni	conserved hypothetical protein
13c00054	0.00162	K14152	histidinol dehydrogenase	um11516	1.10E-05	ni	conserved hypothetical protein
22d0182	0.00167	ni	glyoxylase	um03713	1.12E-05	ni	putative protein
3c00017	0.00167	ni	COP1 vesicle protein	um00455	1.12E-05	ni	related to MIR1 - Phosphate transporter of the mitochondrial carrier
7d00004	0.00167	ni	ferredoxin	um12267	1.14E-05	ni	related to IST2 - Plasma membrane protein that may be involved in osmotolerance
8d00024	0.00168	ni	protein transporter	um03753	1.14E-05	ni	conserved hypothetical Ustilago-specific protein
14c00002	0.00171	ni	synaptic vesicle transporter SVOP and related transporters	um06266	1.15E-05	ni	putative protein
6c00113	0.00173	K02947	49S ribosomal protein s10	um00946	1.15E-05	ni	putative protein
10d00044	0.00174	K11362	hypothetical protein	um10912	1.17E-05	ni	conserved hypothetical protein
9c00406	0.00174	ni	hypothetical protein	um02641	1.19E-05	K13346	related to PEX10 - peroxisomal assembly protein - peroxin
19c00099	0.00176	K00381	sulfite reductase	um02097	1.20E-05	ni	related to enoyl-CoA hydratase
6c00106	0.00178	ni	hypothetical protein	um04738	1.21E-05	K01262	related to X-Pro aminopeptidase II
9c00384	0.0018	ni	hypothetical protein	um05362	1.21E-05	K01641	probable hydroxymethylglutaryl-CoA synthase
25d00006	0.0018	K12879	KEKE-like motif-containing transcription regulator	um05805	1.23E-05	ni	conserved hypothetical protein
13c00058	0.00182	K01810	glucose-6-phosphate isomerase	um11382	1.26E-05	ni	probable 2-Nitropropane dioxygenase
9c00056	0.00186	K01176	alpha-amylase	um04000	1.26E-05	ni	DNA binding protein Ncp1
7d00238	0.00189	K12618	5'-3' exonuclease XRN1/KEM1/SEP1	um00169	1.27E-05</		

5e00136	0.0023	ni	hypothetical protein	um01708	1.63E-05	K00003	probable HOM6 - homoserine dehydrogenase
22d00196	0.00231	ni	predicted hydrolase	um05346	1.64E-05	ni	conserved hypothetical protein
10d00003	0.00232	ni	multidrug resistance-associated protein	um04727	1.65E-05	K17387	related to Kinesin-like protein KIF23
7d00188	0.00233	ni	plasma membrane H <sup>+</sup> -transporting ATPase	um02283	1.66E-05	ni	conserved hypothetical protein
3d00029	0.00233	K14793	U3 snRNP-associated protein	um00797	1.70E-05	K00856	probable adenosine kinase
3d00054	0.00238	ni	uncharacterized conserved protein	um03246	1.70E-05	ni	related to versicolorin B synthase
22c00315	0.00239	ni	permease of the major facilitator superfamily	um00311	1.70E-05	K01953	probable asparagine synthase
14d00121	0.00243	ni	uncharacterized conserved protein	um02203	1.71E-05	ni	related to Ni
9e00154	0.00245	K15541	predicted E3 ubiquitin ligase	um011373	1.71E-05	ni	conserved hypothetical protein
22c00066	0.00246	ni	Ca <sup>2+</sup> /calmodulin-dependent protein kinase beta	um11374	1.72E-05	ni	ni
16d00025	0.00246	ni	hypothetical protein	um11859	1.74E-05	K01693	probable HIS3 - midazolamglycerol-phosphate dehydratase
8d00073	0.0025	K11275	hypothetical protein	um01665	1.75E-05	ni	hypothetical protein
7e00154	0.0025	ni	uncharacterized conserved protein	um10052	1.78E-05	ni	conserved hypothetical protein
5d00045	0.0025	K11644	histone deacetylase complex, SIN3 component	um02035	1.83E-05	ni	related to yellowish-green 1
20c00041	0.00251	ni	hypothetical protein	um03897	1.87E-05	ni	related to OCA1 - Putative protein tyrosine phosphatase
15c00086	0.00252	ni	pleiotropic drug resistance proteins	um05933	1.89E-05	K14708	probable Sulfate permease
7c000311	0.00252	ni	hypothetical protein	um01650	1.90E-05	ni	conserved hypothetical protein
16d00041	0.00255	ni	hypothetical protein	um01783	1.96E-05	ni	related to Inosine-uridine preferring nucleoside hydrolase
22c00222	0.00257	ni	hypothetical protein	um04834	1.97E-05	ni	conserved hypothetical protein
26d00012	0.00258	ni	hypothetical protein	um06476	2.03E-05	ni	conserved hypothetical protein
5c00030	0.0026	ni	NDR and related serine/threonine kinases	um01694	2.03E-05	ni	putative protein
22d00122	0.00263	K00002	alcohol dehydrogenase	um11034	2.12E-05	ni	putative protein
13c00025	0.00264	K04646	vesicle coat protein clathrin	um06278	2.15E-05	ni	conserved hypothetical protein
22d00065	0.00265	ni	hypothetical protein	um05961	2.18E-05	K01796	probable alpha-methylacyl-coa racemase
9d00171	0.00266	K11514	hypothetical protein	um00547	2.20E-05	K00286	probable PRC3 - delta 1-pyrroline-5-carboxylate reductase
14d00110	0.00267	K00819	crinialine aminotransferase	um01613	2.22E-05	ni	putative protein
9e00130	0.00267	ni	hypothetical protein	um12330	2.25E-05	ni	hypothetical protein
22c00196	0.00267	K14265	aromatic amino acid aminotransferase and related proteins	um05718	2.26E-05	ni	related to KRE6 - Beta-glucan synthase subunit
22d00212	0.00268	ni	hypothetical protein	um00486	2.26E-05	K01835	probable PGM2 - phosphoglucomutase
20c00052	0.00271	ni	hypothetical protein	um11022	2.27E-05	ni	related to SR Y1 - 3-hydroxyaspartate dehydratase
22c00164	0.00273	ni	hypothetical protein	um05476	2.28E-05	K01897	related to Long-chain-fatty-acyl-CoA ligase 6
12c00139	0.00277	ni	hypothetical protein	um02942	2.32E-05	K00390	probable MET16 - 3
16c00017	0.00279	K09554	cell division cycle 37 protein	um01626	2.33E-05	ni	conserved hypothetical protein
27c00036	0.0028	K00759	adenine phosphoribosyl transferases	um01771	2.34E-05	K06929	conserved hypothetical protein
27c00088	0.00282	ni	hypothetical protein	um05459	2.34E-05	K01610	probable phosphoenolpyruvate carboxykinase
9e00036	0.00283	ni	D-arabino-1, 4-lactone oxidase	um10413	2.36E-05	ni	hypothetical protein
16d00038	0.00284	ni	hypothetical protein	um04794	2.37E-05	K03124	probable SUA7 - TFIIIB subunit
12d00082	0.00285	K13501	phosphoribosylanthranilate isomerase	um00750	2.38E-05	ni	putative protein
19c00072	0.00287	ni	hypothetical protein	um00727	2.40E-05	ni	putative protein
7c000293	0.00287	ni	hypothetical protein	um02810	2.42E-05	ni	conserved hypothetical protein
7d00132	0.00291	ni	hypothetical protein	um03924	2.44E-05	ni	repellent protein 1 precursor
13d00006	0.00292	ni	hypothetical protein	um04014	2.47E-05	ni	putative protein
18d00013	0.00297	K03010	RNA polymerase II, second largest subunit	um10664	2.51E-05	ni	conserved hypothetical protein
3c00039	0.00298	ni	hypothetical protein	um04333	2.58E-05	ni	putative protein
11c00088	0.00301	ni	acyl-coa synthetase	um15014	2.61E-05	ni	related to KAP123 - Importin beta-4 subunit
5c00150	0.00302	K05841	UDP-glucuronosyl and UDP-glucosyl transferase	um00169	2.62E-05	K00143	probable LYS2 - L-aminoacidate-semialdehyde dehydrogenase
25c00019	0.00306	ni	hypothetical protein	um03860	2.62E-05	ni	related to pepsinogen precursor
9c00427	0.00306	K00856	possible pfkfb family carbohydrate kinase	um11266	2.65E-05	K13333	probable hypophosphatase
2d00063	0.00308	K03506	CCAAT-binding factor, subunit C	um06454	2.66E-05	ni	related to Mannose-6-phosphate isomerase
7d00095	0.0031	ni	uncharacterized conserved protein	um10801	2.68E-05	ni	conserved hypothetical protein
3c00012	0.00312	ni	hypothetical protein	um01425	2.69E-05	K00451	probable homogentisate 1
16d00022	0.00312	ni	hypothetical protein	um11345	2.72E-05	ni	ni
27c00085	0.00314	ni	AAA-type ATPase containing the bromodomain	um11170	2.72E-05	K03942	probable NADH2 dehydrogenase
5d00091	0.00317	ni	hypothetical protein	um01917	2.73E-05	ni	hypothetical protein
7c00316	0.00322	ni	hypothetical protein	um05944	2.74E-05	ni	hypothetical protein
22c00080	0.00324	ni	predicted membrane protein	um00545	2.77E-05	ni	conserved hypothetical protein
27c00054	0.00325	K10415	cytoplasmic dynein intermediate chain	um05249	2.83E-05	ni	conserved hypothetical protein
9c00346	0.00326	ni	hypothetical protein	um02108	2.85E-05	ni	conserved hypothetical protein
4d00001	0.00327	ni	diphthamide biosynthesis protein	um03199	2.90E-05	K00820	probable GFA1 - glucosamine-fructose-6-phosphate transaminase
25c00014	0.00329	ni	hypothetical protein	um04322	2.91E-05	ni	conserved hypothetical protein
24d00051	0.00329	ni	hypothetical protein	um11798	2.94E-05	ni	conserved hypothetical protein
16c00045	0.00331	K08504	hypothetical protein	um00391	2.99E-05	ni	ni
7e00136	0.00334	ni	glia maturation factor beta	um04154	3.06E-05	ni	conserved hypothetical protein
7e00140	0.00335	ni	hypothetical protein	um10721	3.13E-05	ni	putative protein
5e00020	0.00337	ni	aldehyde dehydrogenase	um11065	3.14E-05	ni	conserved hypothetical protein
6c00091	0.00338	ni	hypothetical protein	um10705	3.14E-05	K04563	cyclin-dependent kinase 1
24c00009	0.00338	ni	hypothetical protein	um12336.2	3.15E-05	K08740	related to meiosis-specific Mus81 homolog
6c00043	0.0034	ni	hypothetical protein	um02935.2	3.15E-05	K11270	hypothetical protein
7d00119	0.00341	K03109	hypothetical protein	um05183	3.19E-05	K03122	related to TOA1 - transcription factor TFIIA-L
22d00184	0.00351	ni	acyl-coa transporter	um01800	3.25E-05	K03635	related to myoblobin synthase large subunit
8c00067	0.00351	K02995	40S ribosomal protein S8	um05114	3.27E-05	ni	related to multidrug resistance protein 4
9e00046	0.00359	ni	inorganic phosphate transporter	um00672	3.30E-05	K00365	probable urate oxidase
5e00131	0.00362	ni	hypothetical protein	um01431	3.32E-05	ni	ni
9e00140	0.00363	K11233	senory transduction histidine kinase	um00636	3.35E-05	ni	hypothetical protein
11d00022	0.00364	K01531	Ca <sup>2+</sup> -transporting ATPase	um02835	3.37E-05	K00448	conserved hypothetical protein
8d00072	0.00366	ni	predicted ATPase	um00748	3.37E-05	K12832	probable Soling factor 3B subunit 5
9d00357	0.00368	K06698	proteasome activator subunit	um10263	3.45E-05	ni	related to 1-phosphatidylinositol-4
9d00013	0.00372	ni	hypothetical protein	um01640	3.53E-05	ni	related to GAS1 - glycospholipid-anchored surface glycoprotein
5d00118	0.00373	ni	zinc-binding oxidoreductase	um04671	3.54E-05	ni	conserved hypothetical protein
25c00005	0.00375	ni	hypothetical protein	um11121	3.64E-05	ni	related to phenylacetyl-CoA ligase
8c00051	0.00376	ni	hypothetical protein	um01933	3.67E-05	ni	putative protein
10d00102	0.00377	K01001	glycosyltransferase	um01136	3.67E-05	ni	conserved hypothetical protein
8d00021	0.00379	K01193	beta-fructofuranosidase	um01070	3.68E-05	ni	related to cyclopropane-fatty-acyl-phospholipid synthase
12d00097	0.0038	K01410	metalloendopeptidase family - mitochondrial intermediate peptidase	um10104	3.72E-05	ni	probable GCY1 - galactose-induced protein of aldo
9d00007	0.00385	K16330	predicted carbohydrate kinase	um01181	3.73E-05	ni	conserved hypothetical protein
12c00021	0.00387	ni	hypothetical protein	um12011	3.75E-05	ni	putative protein
16c00080	0.00389	ni	hypothetical protein	um02119	3.78E-05	ni	hypothetical protein
22c00292	0.00394	ni	predicted transporter	um11133	3.81E-05	ni	conserved hypothetical protein
14d00339	0.00395	K16572	hypothetical protein	um02592	3.85E-05	ni	conserved hypothetical protein
13d00046	0.00394	K09497	chaperonin complex component, TCP-1 epsilon subunit	um11251	3.83E-05	ni	putative protein
16d00064	0.00395	ni	hypothetical protein	um12169	3.90E-05	K03317	related to Sodium
7e00355	0.00402	ni	hypothetical protein	um10165	3.94E-05	ni	hypothetical protein
7e00220	0.00408	ni	uncharacterized conserved protein	um00011	4.00E-05	K01426	probable AMD2 - amidase
25d00049	0.00411	K15040	potassium-dependent anion-selective channel protein	um03356	4.02E-05	K01689	probable ENO1 - enolase I
6c00032	0.00414	ni	acyl-coa synthetase	um02791	4.09E-05	ni	related to GABA permease
9c00227	0.00415	ni	hypothetical protein	um03289	4.10E-05	ni	hypothetical protein
8c00059	0.00417	K00276	copper amine oxidase	um06440	4.11E-05	ni	conserved hypothetical protein
14d00082	0.00418	K12627	small Nuclear ribonucleoprotein splicing factor	um001292	4.12E-05	ni	putative protein
25d00058	0.00419	K00550	phospholipid methyltransferase	um04787	4.18E-05	K01620	related to GLY1 - L-threonine aldolase
11d00063	0.00419	ni	protein required for meiotic chromosome segregation	um02256	4.22E-05	ni	related to Cingulin
13c00084	0.00421	ni	hypothetical protein	um00913	4.26E-05	ni	glyoxaloxidase 2
3c00011	0.00423	ni	choline kinase	um12198	4.42E-05	ni	conserved hypothetical protein
8c00122	0.0043	ni	hypothetical protein	um10349	4.43E-05	ni	related to molybdenum cofactor sulfurase
2d00004	0.0043	ni	hypothetical protein	um10390	4.47E-05	ni	conserved hypothetical protein
14d00049	0.00431	ni	predicted esterase	um11346	4.50E-05	ni	conserved hypothetical protein
27d00040	0.00436	ni	hypothetical protein	um11337.2	4.56E-05	K01555	related to lumenaryalcooalcatate hydrolase
26d00006	0.00439	K14572	AAA ATPase containing von Willebrand factor type A	um05347	4.56E-05	ni	conserved hypothetical protein
9c00224	0.00439	ni	hypothetical protein	um00463	4.58E-05	K12597	conserved hypothetical protein
7d00234	0.0044	K09291	uncharacterized conserved colled-coil protein	um00783	4.58E-05	ni	related to Heme oxygenase
7c00285	0.00443	ni	predicted membrane protein	um00271	4.59E-05	ni	related to Lipase
3c00077	0.00444	ni	hypothetical protein	um00623	4.61E-05	ni	conserved hypothetical protein
7c00029	0.0045	ni	hypothetical protein	um03296	4.79E-05	ni	hypothetical protein
22c00009	0.00456	ni	uncharacterized conserved membrane protein	um11258	4.79E-05	K09250	related to GIS2 - Putative zinc finger protein
16c00072	0.00458	ni	soluble epoxide hydrolase	um04578	4.82E-05	ni	conserved hypothetical protein
20c0039	0.00459	K01952	phosphoribosylformylglycinamide synthase	um00117	4.82E-05	ni	related to amidase
8c00070	0.0046	ni	hypothetical protein	um00177	4.87E-05	ni	conserved hypothetical protein
19d00087	0.00463	K11315	histone acetyltransferases PCAF/SAGA/ADA, subunit TADA3L7	um04056	4.87E-05	ni	probable SNQ2 - ABC transporter involved in multidrug resistance
24d00022	0.00463	ni	chitinase	um00754	4.90E-05	ni	putative protein
15c00056	0.00464	ni	hypothetical protein	um00315	4.90E-05	K01012	probable biotin synthase
19c00029	0.00469	ni	hypothetical protein	um10876	5.02E-05	ni	conserved hypothetical protein
7d00175	0.0047	ni	hypothetical protein	um10473	5.13E-05	ni	conserved hypothetical protein
5d00022	0.00471	ni	protein kinase PCTAIRE and related kinases	um04109	5.14E-05	ni	related to Cytochrome P450
12c00076	0.00473	K06268	Ca <sup>2+</sup> /calmodulin-dependent protein phosphatase	um04876	5.24E-05	ni	hypothetical protein
14c00106	0.00474	ni	hypothetical protein	um02157	5.32E-05	K00309	conserved hypothetical protein
22d0166	0.00475	ni	predicted mitochondrial carrier protein	um10493	5.40E-05	ni	conserved hypothetical protein
27d00060	0.00475	K12274	molecular co-chaperone ST11	um10945	5.41E-05	ni	conserved hypothetical protein
7d00129	0.00476	K16055	trehalose 6-phosphate synthase component TPS1 and related su	um11207	5.42E-05	K03783	related to PNP1 - purine-nucleoside phosphorylase
24c00053	0.00479	K09494	chaperonin complex component, TCP-1 beta subunit	um00866	5.43E-05	ni	related to Endoglycanase
26d00030	0.00482	ni	FOG, RRM domain	um11271	5.56E-05	K13525	probable CDC48 - Microsomal protein of CDC48
9c00362	0.00485	K01179	hypothetical protein	um02160	5.72E-05	ni	conserved hypothetical protein
7d00200	0.00488	K03538	RNase MRP and P <sub>2</sub> subunit POP4/p29	um11031	5.86E-05	ni	conserved hypothetical protein
9c00333	0.00489	ni	predicted E3 ubiquitin ligase	um15063	5.87E-05	ni	conserved hypothetical protein
9e00115	0.00491	ni	hypothetical protein	um01922	5.87E-05	K00459	conserved hypothetical protein
24d00334	0.00492	ni	hypothetical protein	um01626	5.91E-05	ni	putative protein
22d00225	0.00495	ni	hypothetical protein	um11896	5.93E-05	K00396	probable NADH-ubiquinone oxidoreductase 30
9d00104	0.00496	ni	hypothetical protein	um04705</			

7c00091	0.00542	ni	RNA-binding protein SART3	um06404	7.58E-05	K03386	probable thioredoxin peroxidase
15d00007	0.00543	ni	hypothetical protein	um02640	7.59E-05	ni	conserved hypothetical protein
3d00047	0.00545	K00615	thymidylate synthase	um03854	7.63E-05	K00161	probable PDA1 - pyruvate dehydrogenase
10d00004	0.00548	ni	aspartyl protease	um06048	7.64E-05	K07170	conserved hypothetical protein
28c00034	0.00548	ni	hypothetical protein	um05230	7.70E-05	K00480	probable Salicylate hydroxylase
19c00127	0.0056	ni	hypothetical protein	um01850	7.70E-05	ni	conserved hypothetical protein
5d00054	0.00562	ni	hypothetical protein	um10342	7.75E-05	ni	putative protein
5d00092	0.00564	K02999	RNA polymerase I, large subunit	um01892	7.79E-05	ni	putative protein
10c00046	0.00567	ni	very-long-chain acyl-CoA dehydrogenase	um05082	7.85E-05	ni	conserved hypothetical protein
9d00020	0.00569	K10364	F-actin capping protein, alpha subunit	um00188	7.87E-05	ni	conserved hypothetical protein
27c00043	0.00572	ni	urea transporter	um02072	7.92E-05	ni	conserved hypothetical protein
12c00115	0.00577	K01756	adenylosuccinate lyase	um11596	8.03E-05	ni	putative protein
22d00075	0.00582	ni	hypothetical protein	um01574	8.17E-05	ni	conserved hypothetical protein
19c00098	0.00588	K02873	60S Ribosomal protein L13	um10080	8.25E-05	ni	probable theta class glutathione S-transferase
5d00015	0.00594	ni	hypothetical protein	um00138	8.26E-05	K02358	probable TUF1 - translation elongation factor TU
16c00019	0.006	ni	hypothetical protein	um01450	8.27E-05	ni	related to COD2 - para-hydroxybenzoate-poly(prenyl)transferase
15d00025	0.00602	ni	hypothetical protein	um11009	8.32E-05	ni	probable RSR1 - GTP-binding protein
12c00059	0.00609	ni	vacuolar assembly/sorting protein VPS41	um01163	8.39E-05	ni	conserved hypothetical protein
9d00141	0.00617	K01907	acyl-coa synthetase	um00045	8.41E-05	K00344	related to quinone reductase
13d00004	0.00619	ni	hypothetical protein	um00222.2	8.41E-05	ni	related to monocarboxylate transporter
28c00015	0.0062	K13025	predicted ATP-dependent RNA helicase FAL1	um10905	8.57E-05	ni	conserved hypothetical protein
19c00088	0.0062	K00390	phosphodensine phosphosulfate reductase	um02415	8.61E-05	K10753	related to aryl-silencing protein 1
16d00029	0.00625	ni	reductases with broad range of substrate specificities	um05593	8.88E-05	ni	hypothetical protein
4c00029	0.00629	K03252	hypothetical protein	um00388	9.20E-05	K01551	probable arsenite translocating ATPase
22c00310	0.0063	ni	hypothetical protein	um02001	9.30E-05	K01640	related to hydroxymethylglutaryl-CoA lyase
22d01010	0.00631	K15118	predicted mitochondrial carrier protein	um03692	9.38E-05	ni	conserved hypothetical protein
9d00041	0.00633	K02838	ribosome recycling factor	um02819	9.51E-05	ni	conserved hypothetical protein
11d00039	0.00642	K11648	integral membrane protein	um02273	9.58E-05	ni	putative protein
9c00087	0.00644	K02358	mitochondrial translation elongation factor Tu	um00859	9.60E-05	ni	conserved hypothetical protein
11c00061	0.00644	K09272	nucleosome-binding factor SPN, POB3 subunit	um01379	9.80E-05	K09647	related to IMP1 - protease
7d00073	0.00648	K08296	serine/threonine protein kinase	um05729	9.80E-05	ni	conserved hypothetical protein
18c00060	0.00648	K10424	hypothetical protein	um10414	9.94E-05	ni	conserved hypothetical protein
9c00322	0.0065	K04508	beta-transducin family protein	um05116.2	0.0001	K02357	conserved hypothetical protein
7c00188	0.00654	ni	signal recognition particle, subunit Srp68	um11055	0.0001	ni	conserved hypothetical protein
6d00017	0.00658	ni	FGC, Predicted E3 ubiquitin ligase	um04183	0.0001	K12846	conserved hypothetical protein
3c00001	0.00659	ni	hypothetical protein	um01724	0.0001	ni	conserved hypothetical protein
9c00176	0.00662	ni	hypothetical protein	um05202	0.0001	ni	conserved hypothetical protein
22c00015	0.00671	K03237	translation initiation factor 2, alpha subunit	um01627	0.0001	K01647	probable CIT1 - citrate
5d00137	0.00674	K13342	TPR repeat-containing protein	um03220	0.0001	K01743	conserved hypothetical protein
9d00316	0.00674	ni	hypothetical protein	um02548	0.0001	ni	related to Sorting nexin 5
13d00091	0.00677	K02180	mitotic spindle checkpoint protein BUB3	um01936	0.0001	ni	related to 4-coumarate-CoA ligase
20c00029	0.00693	K03258	FGC, RRM domain	um02741	0.0001	ni	related to CBK1 - Serine
13d00073	0.007	ni	exosomal 3'-5' exonucleolase complex, subunit Rrp44/Dis3	um10219	0.0001	ni	related to 3-dehydrocrotonate dehydratase
3d00043	0.00703	K02950	mitochondrial ribosomal protein S12	um10748.2	0.0001	K01253	conserved hypothetical protein
16c00076	0.00702	K17069	cystathionine beta-lyase	um10699	0.0001	ni	probable SRP1 - Imporin alpha
18d00087	0.00703	K14794	uncharacterized conserved protein	um01429	0.0001	ni	related to high-affinity nickel transport protein nic1
7c00142	0.00704	ni	zinc-binding oxidoreductase	um05936	0.0001	ni	conserved hypothetical protein
2d00042	0.00711	ni	nonsense-mediated mRNA decay protein	um03942	0.0001	ni	conserved hypothetical protein
6c00109	0.00712	ni	hypothetical protein	um02117	0.0001	ni	putative protein
7c00361	0.00718	ni	3-Methylcrotonyl-CoA carboxylase, non-biotin containing subunit	um03290	0.0001	K04482	DNA repair protein RADS1
2d00007	0.00718	ni	hypothetical protein	um03761	0.0001	ni	related to aldehyde dehydrogenase
19d00110	0.00719	K05543	RNA-dihydrouridine synthase	um06138	0.0001	K03305	probable PTR2 - Di- and tripeptide permease
25d00062	0.00712	ni	hypothetical protein	um02412	0.0001	ni	hypothetical protein
28c00035	0.00724	ni	chromatin remodeling complex WSTF-ISWI, large subunit	um10973	0.0001	K00121	probable glutathione-dependent formaldehyde dehydrogenase
5c00028	0.00728	K03165	DNA topoisomerase III alpha	um02063	0.0001	ni	conserved hypothetical protein
9c00003	0.00731	ni	hypothetical protein	um02915	0.0001	K00833	related to Adenosylmethionine-8-amino-7-oxononanoate aminotransferase
16c00093	0.00739	ni	C-3 sterol dehydrogenase	um11519	0.0001	K02913	probable Sds ribosomal protein L33
5d00052	0.00739	ni	hypothetical protein	um05324	0.0001	ni	related to ZNF1 - methyltransferase involved in zinc-responsive transcriptional regulation
13c00067	0.00744	K00236	succinate dehydrogenase, cytochrome b subunit	um05632	0.0001	ni	probable ISU1 - Iron-Sulfur cluster niU-like protein
18d00043	0.00752	ni	hypothetical protein	um02967	0.0001	K00940	probable YNK1 - nucleoside diphosphate kinase
9c00048	0.00754	K02155	vacuolar H <sup>+</sup> -ATPase V0 sector, subunits c/c'	um06378	0.0001	ni	putative protein
2d000716	0.00755	ni	hypothetical protein	um01951	0.0001	ni	putative protein
19d00041	0.00757	K03139	transcription initiation factor IIF, small subunit	um01224	0.0001	ni	MADS-box homolog Umc1
27d00020	0.00758	ni	mitochondrial solute carrier protein	um11574	0.0001	K01607	related to Carboxymuconolactone decarboxylase
27d00062	0.0076	K15174	putative RNA polymerase II regulator	um00411.2	0.0001	ni	related to metalloproteinase
24c00052	0.0076	ni	transcription factor of the Forkhead/HNF3 family	um10067	0.0001	ni	hypothetical protein
7d00316	0.00767	ni	hypothetical protein	um04744	0.0001	K01771	related to 1-phosphatidylinositol phosphodiesterase precursor
9d00238	0.00768	K15196	transcription initiation factor TFIIB, Brf1 subunit	um11595.2	0.0001	ni	conserved hypothetical protein
20c00230	0.0077	ni	galactokinase	um00412	0.0001	K00008	related to sorbitol dehydrogenase
20c00080	0.00773	ni	predicted membrane protein	um06427	0.0001	ni	related to Kinesin-like protein KIF2C
13d00031	0.00775	ni	hypothetical protein	um03242	0.0001	ni	related to SSZ1 - regulatory protein involved in pleiotropic drug resistance
10d00011	0.0078	K00264	glutamate synthase	um03749	0.0001	ni	conserved hypothetical Ustilago-specific protein
16d00061	0.00787	K10592	E3 ubiquitin-protein ligase	um01414	0.0001	ni	related to Ras-GTPase-activating protein binding protein 2
19d00024	0.0079	K05605	enoyl-coa hydratase	um02709	0.0001	K11253	probable HHT1 - histone H3
6d00002	0.00791	K00480	hypothetical protein	um10452	0.0001	K03441	related to channel protein
9d00021	0.00793	K01610	hypothetical protein	um00749	0.0001	ni	related to lipase
9d00077	0.00803	ni	hypothetical protein	um15043.2	0.0001	ni	probable ENA2 - Plasma membrane P-type ATPase
9c00372	0.00804	K14792	rRNA processing protein Rps5	um12111	0.0001	ni	related to small nuclear ribonucleoprotein snRNP U1A
5c00131	0.00827	ni	hypothetical protein	um00655	0.0001	K00006	probable glycerol-3-phosphate dehydrogenase
5c00133	0.00829	ni	hypothetical protein	um05058	0.0001	ni	conserved hypothetical protein
10c0016	0.0083	ni	enoyl-coa hydratase	um03817	0.0001	ni	putative protein
24c00047	0.00835	K03243	translation initiation factor 5B	um03068	0.0001	K00344	related to NADPH2
13d00043	0.00845	ni	hypothetical protein	um04805	0.0001	ni	hypothetical protein
6d00089	0.00846	K15634	phosphoglycerate mutase	um11215	0.0001	K02178	related to spindle assembly checkpoint protein
19c00098	0.00848	ni	ATP-dependent RNA helicase A	um03715	0.0001	ni	conserved hypothetical protein
20d00065	0.00856	K02893	60s ribosomal protein L23	um04612	0.0001	K00297	probable MET13 - putative methylene tetrahydrofolate reductase
7d00053	0.00856	ni	hypothetical protein	um04216	0.0001	K14416	related to translation elongation factor HBS1 protein
18c00011	0.00858	ni	flavonol reductase	um11013	0.0001	ni	putative protein
9d00066	0.00859	ni	predicted helicase	um03248	0.0001	ni	related to YnfK8 - putative mediator of drug efflux
19d00022	0.0086	ni	hypothetical protein	um02150	0.0001	K00008	probable xylitol dehydrogenase
12d00086	0.00862	ni	predicted transporter	um02411	0.0001	ni	glyoxalase 1
5d00078	0.00878	ni	hypothetical protein	um02921	0.0001	ni	conserved hypothetical protein
9d00351	0.00881	K04536	G-protein beta subunit	um01421	0.0001	ni	related to PHO80 - cyclin
13d00003	0.00881	K12189	uncharacterized conserved protein	um12271	0.0001	K00509	putative diacylglycerol 5-phosphatase
22c00149	0.00884	K00793	riboflavin synthase alpha chain	um05390	0.0001	K13350	related to peroxisomal membrane protein 4
7d00237	0.00887	K06890	N-methyl-D-aspartate receptor glutamate-binding subunit	um05132	0.0001	K07300	related to VCX1 - Vacuolar Ca
24d00006	0.00889	K03078	RNA polymerase III, large subunit	um05686	0.0001	ni	putative protein
8c00016	0.00893	ni	hypothetical protein	um11203	0.0001	ni	conserved hypothetical protein
9c00217	0.00907	K01906	acyl-coa synthetase	um10631	0.0001	ni	conserved hypothetical Ustilago-specific protein
22c00139	0.00912	ni	hypothetical protein	um00897	0.0001	ni	conserved hypothetical protein
7d00082	0.00912	ni	Na <sup>+</sup> /H <sup>+</sup> antiporter	um03204	0.0001	K00698	chitin synthase 8
9c00092	0.0092	ni	hypothetical protein	um04433	0.0001	ni	hypophobin 3
9c00124	0.00924	ni	hypothetical protein	um04898	0.0001	ni	related to RDS2 - Regulator of drug sensitivity
3c00016	0.00927	K08874	histone acetyltransferase SAGA, TRRAP/TRAI1 component	um03923	0.0001	ni	conserved hypothetical protein
12c00043	0.00929	ni	hypothetical protein	um10648	0.0001	ni	related to DNF2 - Non-essential P-type ATPase
6c00084	0.00938	K00598	hypothetical protein	um00736	0.0001	ni	conserved hypothetical protein
22d00017	0.00942	ni	cellular O-acetyltransferase CRAT	um01984	0.0001	K13953	probable ADH1 - alcohol dehydrogenase I
11c00042	0.00946	K06669	structural maintenance of chromosome protein 3	um10690	0.0001	ni	hypothetical protein
22c00034	0.00949	K12767	NDR and related serine/threonine kinases	um10070	0.0001	ni	related to Benzoate 4-monooxygenase
7d00237	0.00951	ni	hypothetical protein	um04384	0.0001	K11344	conserved hypothetical protein
3c00034	0.00953	ni	ankyrin repeat protein	um05328	0.0001	ni	conserved hypothetical protein
2c00070	0.00954	K08341	microtubule-associated anchor protein	um02974	0.0001	ni	related to monomer-sensitive lipase
26c00066	0.00958	K11290	DNA replication factor	um04496	0.0001	K00720	related to Ceramide glucosyltransferase
5d00120	0.00958	K09496	chaperonin complex component, TCP-1 delta subunit	um02528	0.0001	K13342	related to PEX5 - peroxisomal targeting signal receptor
14c00108	0.0096	ni	hypothetical protein	um03069	0.0001	K01895	probable acyl-CoA synthetase
9c00202	0.00967	ni	hypothetical protein	um01502	0.0001	K01580	related to GAD1 - glutamic decarboxylase
25c00012	0.00971	K00698	chitin synthase/hyaluronan synthase	um11947	0.0001	ni	conserved hypothetical protein
24c00049	0.00972	K01955	multifunctional pyrimidine synthesis protein CAD	um00103	0.0001	ni	related to ESBP6 - similarity to Monocarboxylate transporter
14d00047	0.00974	ni	hypothetical protein	um12236	0.0001	K16066	probable NADP
13d00063	0.00979	ni	predicted Zn <sup>2+</sup> -dependent endopeptidase	um04443	0.0001	ni	related to translation activator GCN1
12c00019	0.00982	ni	putative N2	um10254	0.0001	ni	conserved hypothetical protein
4c00008	0.00985	K03469	ribonuclease H	um01560	0.0001	K10401	related to kinesin
22d00146	0.00994	ni	hypothetical protein	um00063	0.0001	ni	putative protein
22c00255	0.01002	ni	hypothetical protein	um11848	0.0001	ni	probable Myosin regulatory light chain cdc4
2c00074	0.01004	ni	hypothetical protein	um02990	0.0001	ni	conserved hypothetical protein
9d00043	0.01007	ni	hypothetical protein	um02382	0.0001	ni	α1-specific pheromone
5c00061	0.01013	ni	RNA-directed RNA polymerase QDE-1	um10585	0.0001	ni	conserved hypothetical protein
22d00176	0.01013	ni	arylacamide deacetylase	um01986	0.0001	ni	probable sterol carrier protein
9d00439	0.01013	ni	hypothetical protein	um01179	0.0001	ni	putative protein
27c00089	0.01018	K14821	U1-like Zn-finger-containing protein	um03524	0.0001	K00276	related to peroxisomal amine oxidase
24c00042	0.01018	ni	protein required for meiosis	um02404	0.0001	K10751	conserved hypothetical protein
9c00283	0.01019	ni	predicted signal transduction protein	um00688	0.0001	ni	related to bacterial leucyl aminopeptidase precursor
12c00133	0.01025	ni	hypothetical protein	um06072	0.0001	K13719	conserved hypothetical protein
26c00036	0.01027	ni	serine/threonine protein phosphatase	um02024	0.0001	K00224	probable GCY2 - glycine decarboxylase P subunit
9c00136	0.0103	K10433	5'-phosphoribosylglycinamide formyltransferase	um15103	0.0001	K09051	related to transcription factor ATF4</

15d00067	0.01098	ni	hypothetical protein	um04972	0.00029	ni	related to NFU-1 protein
27d00071	0.01104	K02958	40S ribosomal protein S15	um03408	0.00029	K00480	related to Salicylate hydroxylase
20d0019	0.01105	K01886	glutamyl-tRNA synthetase	um10599	0.00029	K0167	probable branched-chain alpha-keto acid dehydrogenase e1-beta subunit
9c00358	0.01105	K02951	40S ribosomal protein S6	um00466	0.0003	ni	hypothetical protein
26c0037	0.01113	ni	Ca <sup>2+</sup> -dependent lipid-binding protein CLB1	um10170	0.00031	K05658	related to multidrug resistance protein 1
25c0052	0.01123	ni	predicted DNA-binding protein	um10718.2	0.00031	K00698	chitin synthase 1
12c0078	0.01123	ni	FOG, RRM domain	um01458	0.00031	K02327	probable DNA polymerase delta catalytic subunit
7c03212	0.01123	ni	FOG, RRM domain	um06392	0.00031	ni	conserved hypothetical protein
20d0026	0.01132	ni	hypothetical protein	um11269	0.00031	ni	conserved hypothetical protein
9c00414	0.01133	ni	hypothetical protein	um06426	0.00031	K13509	related to SLC1 - 1-acyl-sn-glycerol-3-phosphate acyltransferase
9000369	0.01133	K02258	cytochrome oxidase assembly factor COX11	um05984	0.00031	K15371	probable glutamate dehydrogenase
15c0063	0.01136	ni	possible phosphatase	um10763	0.00032	K01759	probable glyoxylase 1
13d00055	0.01137	K12818	DEAH-box RNA helicase	um02204	0.00032	ni	related to beta-galactosidase
22d00273	0.01159	K00020	fructose 1,6-bisphosphate aldolase	um11220	0.00033	K00728	related to dolichyl-phosphate-mannose-protein mannosyltransferase
90c0059	0.0116	ni	hypothetical protein	um00530	0.00033	ni	conserved hypothetical protein
20c0050	0.01164	K14820	RNA-binding protein required for biogenesis of the ribosomal 60S	um02481	0.00034	ni	conserved hypothetical protein
22d0160	0.01166	ni	hypothetical protein	um05059	0.00034	K00643	probable 5-aminolevulinic acid synthase
27c00003	0.01167	K00720	ceramide glucosyltransferase	um03890	0.00034	ni	hypothetical protein
22d00111	0.0117	K13577	mitochondrial oxoglutarate/malate carrier proteins	um10752	0.00034	ni	conserved hypothetical protein
8c00101	0.01172	K11558	uncharacterized conserved protein	um11951	0.00034	ni	putative protein
3c00049	0.01176	K12670	oligosaccharyltransferase, beta subunit	um00050	0.00034	ni	putative protein
27d00002	0.01177	ni	hypothetical protein	um04382	0.00035	ni	probable methylcrotonyl-CoA carboxylase biotin carboxylase chain
90c0027	0.01187	ni	hypothetical protein	um10676	0.00035	ni	conserved hypothetical protein
13d00036	0.01187	K00309	FAD-dependent oxidoreductase	um00430	0.00035	K00605	probable GCV1 - glycine decarboxylase
3c00026	0.01194	ni	mu-crystallin	um10318	0.00035	K10735	conserved hypothetical protein
13d00032	0.01199	ni	glucosylase	um11315	0.00036	ni	putative protein
22d00095	0.012	K00111	vacuolar H <sup>+</sup> -ATPase V1 sector, subunit B	um03806	0.00036	ni	hypothetical protein
14d00086	0.01213	K13348	peroxisomal membrane protein MPV17 and related proteins	um03740	0.00036	K11267	related to PDS5 - precocious dissociation of sister chromatids
26c00038	0.01216	K01870	isoleucyl-tRNA synthetase	um12325	0.00037	ni	hypothetical protein
25c00004	0.01222	ni	hypothetical protein	um10310	0.00037	K00868	related to pyridoxal kinase
13d00110	0.01222	ni	hypothetical protein	um12007	0.00037	ni	related to cellulase
26d00058	0.01228	ni	sensory transduction histidine kinase	um02005	0.00037	ni	conserved hypothetical protein
7c00081	0.01232	K02934	60S ribosomal protein L6	um12085	0.00037	ni	conserved hypothetical protein
7c00057	0.01235	K05544	uncharacterized conserved protein	um04224	0.00038	K11548	related to Myosin-like protein NUF2
26d00057	0.01241	ni	hypothetical protein	um03835	0.00038	ni	putative protein
6c00031	0.01242	ni	hypothetical protein	um00265	0.00039	ni	related to pyruvate dehydrogenase complex protein X precursor
5c00040	0.01243	ni	hypothetical protein	um05153	0.00039	ni	related to MNT4 - putative alpha-1
21c00005	0.01244	ni	hypothetical protein	um12331	0.00039	ni	conserved hypothetical protein
7c00100	0.01272	ni	lysophosphatidic acid acyltransferase endophilin/SH3GL	um00735	0.00039	ni	conserved hypothetical protein
22d0153	0.01273	ni	Ca <sup>2+</sup> transporting ATPase	um04288	0.00039	ni	conserved hypothetical protein
13c00082	0.01275	ni	hypothetical protein	um10985	0.0004	K00872	probable THR1 - homoserine kinase
20c00034	0.01278	K01210	hypothetical protein	um00385	0.0004	ni	putative protein
25d00037	0.01281	ni	hypothetical protein	um11963	0.00041	ni	conserved hypothetical protein
7c00094	0.01282	K00681	gamma-glutamyltransferase	um11714	0.00041	ni	putative protein
9c00160	0.01282	ni	hypothetical protein	um05429	0.00041	K14404	related to Cleavage and polyadenylation specificity factor
19d00159	0.01288	K09448	TEF-1 and related transcription factor	um01953	0.00041	ni	conserved hypothetical protein
18d00076	0.0129	K01890	phenylalanyl-tRNA synthetase beta subunit	um00028	0.00041	ni	conserved hypothetical protein
22c0249	0.01294	ni	hypothetical protein	um02158	0.00042	K15428	conserved hypothetical protein
24c0008	0.01296	K00958	ATP sulfurylase	um10097	0.00042	ni	conserved hypothetical protein
4c00036	0.01299	ni	hypothetical protein	um10851	0.00042	ni	conserved hypothetical protein
7c00175	0.01301	K01889	phenylalanyl-tRNA synthetase	um10370	0.00042	ni	conserved hypothetical protein
20d00012	0.01302	K12591	exosome 3'-5' exonuclease complex, subunit PM/SCL-100	um06163	0.00042	ni	conserved hypothetical protein
10c0001	0.01302	K00852	phosphoglucomutase and endoribonuclease ERN1/IRE	um00598	0.00042	ni	putative protein
7c00025	0.01317	K06053	recombination signal binding protein-J kappa	um10781	0.00042	K00799	related to glutathione S-transferase
13d00093	0.0132	ni	pleiotropic drug resistance proteins	um01172	0.00043	K00234	probable SDH1 - succinate dehydrogenase
22d00027	0.01323	ni	hypothetical protein	um03824	0.00043	K06215	probable Pyridoxine biosynthesis protein PDX1
4c00011	0.01326	ni	hormone-sensitive lipase HSL	um04420	0.00043	ni	related to ECM31 - 3-methyl-2-oxobutanate hydroxymethyltransferase
9c00020	0.01326	K00670	N-terminal acetyltransferase	um12334	0.00043	ni	conserved hypothetical protein
3c00068	0.01341	K17081	prohibitin-like protein	um10407	0.00043	ni	conserved hypothetical protein
22d00217	0.01366	K00108	glucose dehydrogenase	um04801.2	0.00044	ni	related to Glutathione S-transferase II
22c00244	0.01367	ni	predicted transporter	um05445	0.00044	ni	hypothetical protein
19d00063	0.01374	ni	hypothetical protein	um00044	0.00044	ni	related to multidrug resistance-associated protein
16d00073	0.0138	ni	hypothetical protein	um05985	0.00045	ni	putative protein
19c00139	0.0138	K05758	actin-related protein Arp2/3 complex, subunit ARPC2	um15074	0.00045	ni	related to ABC transporter
7d00157	0.01384	ni	predicted mitochondrial carrier protein	um12049	0.00045	ni	conserved hypothetical protein
18d00094	0.01384	ni	hypothetical protein	um03468	0.00046	ni	conserved hypothetical protein
14c00005	0.01385	ni	hypothetical protein	um01385	0.00046	K06127	probable CO-5 - ubiquinone biosynthesis
12d00134	0.01391	K07047	hypothetical protein	um15096	0.00046	ni	related to cAMP-independent regulatory protein pac2
26c00070	0.01393	ni	protein involved in high osmolarity signaling pathway	um03376	0.00046	K14550	conserved hypothetical protein
26c00074	0.01394	ni	hypothetical protein	um06082	0.00047	ni	related to NIP-SNAP protein
12c00002	0.01392	ni	hypothetical protein	um10723	0.00048	ni	related to cellulase
6c00104	0.01406	ni	hypothetical protein	um05663	0.00049	ni	conserved hypothetical protein
5c00137	0.01419	ni	hypothetical protein	um10641	0.00049	ni	related to SKT5 - protoplast regeneration and killer toxin resistance protein
18c00036	0.0142	K13179	ATP-dependent RNA helicase pitchoune	um02497	0.00049	ni	conserved hypothetical protein
22c01073	0.01422	ni	hypothetical protein	um06121	0.00049	ni	putative protein
7d000203	0.01435	ni	perthiolinosyl deaminase	um10439	0.00049	ni	conserved hypothetical protein
20d00041	0.01445	ni	lysophosphatidic acid acyltransferase LPAAT and related acyltr	um04771	0.0005	ni	related to KHA1 - Putative K
14c00133	0.01446	ni	arylacamidase deacetylase	um03120	0.0005	ni	conserved hypothetical protein
7d00020	0.01455	ni	hypothetical protein	um11033	0.0005	ni	putative protein
26c0006	0.01472	K14963	WD40 repeat-containing protein	um05156	0.0005	K07466	probable Replication factor-A protein 1
13d00097	0.01473	ni	hypothetical protein	um06381	0.00051	ni	putative protein
18c00080	0.01473	ni	hypothetical protein	um02959	0.00051	ni	conserved hypothetical protein
7d00246	0.01478	ni	hypothetical protein	um12106	0.00051	K01280	related to Tripeptidyl-peptidase II
12c00057	0.01482	K02951	40S ribosomal protein S12	um11383	0.00052	ni	conserved hypothetical protein
20c00075	0.01491	K06052	ras GTPase-activating protein RasGAP	um11534	0.00052	K00413	probable Cyt11 - cytochrome c1
18d00026	0.01494	ni	protein containing adaptin N-terminal region	um02517	0.00052	K04640	guanine nucleotide-binding protein alpha-2 subunit
14c00111	0.01496	K15275	UDP-galactose transporter related protein	um01390	0.00053	ni	hypothetical protein
22c00076	0.01501	ni	CCAAT-binding factor, subunit B	um04716	0.00053	K02148	probable VMAS - H <sup>+</sup> -ATPase V1 domain 42 KD subunit
9c00075	0.01502	K03125	transcription initiation factor TFIID, subunit TAF1	um10835	0.00053	ni	related to Cytochrome b561
24c0006	0.01512	ni	hypothetical protein	um06430	0.00053	ni	probable heat shock protein HSP104
20d00073	0.01512	K01412	mitochondrial processing peptidase, beta subunit, and related enu	um11121	0.00053	K07213	probable ATX1 - antioxidant protein and metal homeostasis factor
7d00099	0.01517	ni	hypothetical protein	um00562	0.00053	ni	conserved hypothetical protein
4c00014	0.01522	K00287	phospholipase	um06073	0.00053	ni	related to DCU11 - Mannosidase
9c00024	0.0153	ni	feric reductase	um02398	0.00054	K00511	related to squalene monooxygenase
26d00094	0.01534	K01840	phosphomannomutase	um02980	0.00054	ni	probable dihydroxy-acid dehydratase
26c00077	0.01547	ni	FOG, PPR repeat	um12091	0.00055	ni	conserved hypothetical protein
26c00033	0.01547	K01497	bifunctional GTP cyclohydrolase II	um11961	0.00055	ni	conserved hypothetical protein
13c00096	0.01547	K11800	WD40 repeat-containing protein	um11719	0.00055	ni	conserved hypothetical protein
22d00073	0.0155	K12385	cholesterol transport protein	um02712	0.00056	ni	related to PCL6 - cyclin like protein interacting with Pho85p
6c00086	0.01558	K00924	Ca <sup>2+</sup> /calmodulin-dependent protein kinase	um05678	0.00057	ni	related to Glutathione S-transferase
19d00023	0.01563	K01527	RNA polymerase II general transcription factor BTF3 and related	um10703	0.00058	K14264	related to BNA3 - Arylformamidase
9c00161	0.01569	ni	hypothetical protein	um01110	0.00058	K06640	related to serine-protein kinase atr
27d00059	0.01572	K11673	actin-related protein	um1089.2	0.00058	ni	putative protein
9c00411	0.01579	ni	hypothetical protein	um01135	0.00058	ni	ni
19d00103	0.01583	ni	hypothetical protein	um05574	0.0006	ni	conserved hypothetical protein
22d00044	0.01595	ni	hypothetical protein	um01656	0.0006	ni	probable sugar transporter
26c00060	0.01591	ni	hypothetical protein	um10394	0.00061	K00287	related to Dihydrodipicolinate reductase
6c00073	0.01602	ni	hypothetical protein	um01433	0.00061	ni	related to Enoyl-CoA hydratase
22c00067	0.01605	ni	hypothetical protein	um00459	0.00061	K06678	related to Condensin complex subunit 3
22c00305	0.01605	ni	DEAD box-containing helicase-like transcription factor	um00687	0.00062	K11801	conserved hypothetical protein
16c00052	0.01609	ni	synaptic vesicle protein EHS-1 and related EH domain proteins	um03418	0.00062	ni	putative protein
9c00062	0.01613	ni	monocarboxylate transporter	um15024	0.00062	ni	putative protein
10d00027	0.01622	ni	hypothetical protein	um02703	0.00062	K03841	probable FBP1 - fructose-1
9c00350	0.01628	ni	hypothetical protein	um02164	0.00063	K03885	probable NDE1 - mitochondrial cytosolically directed NADH dehydrogenase
8c00010	0.01631	ni	hypothetical protein	um10688	0.00063	ni	related to PET112 - putative glutamyl-tRNA
20c00332	0.01639	ni	hypothetical protein	um11558	0.00064	ni	related to neutral amino acid permease
24c00023	0.01639	ni	reductases with broad range of substrate specificities	um01813	0.00064	ni	related to putative acetyl-coenzyme A transporter
14c00048	0.01641	ni	hypothetical protein	um05442	0.00064	ni	related to monocarboxylate transporter 2
9c00105	0.01643	ni	hypothetical protein	um01142	0.00064	K17402	related to RSM25 - mitochondrial ribosomal protein
8d00066	0.0165	ni	hypothetical protein	um01515	0.00064	K07393	related to ECM4 - protein involved in cell wall biogenesis and architecture
14c00103	0.01654	K00287	glyoxylate reductase	um02266	0.00065	ni	putative protein
18d00038	0.01655	K00231	protoporphyrinogen oxidase	um00864	0.00065	K09522	probable ZUO1 - zuzin
18d00081	0.01656	K00281	glycine dehydrogenase	um11366	0.00066	ni	conserved hypothetical protein
6c00020	0.01664	ni	hypothetical protein	um10733	0.00066	ni	putative protein
13d00040	0.01675	K15628	peroxisomal long-chain acyl-CoA transporter	um03299	0.00066	K01803	probable TRH - triose-phosphate isomerase
27c00021	0.01696	ni	protein OS-9	um02006	0.00066	ni	conserved hypothetical protein
22c00137	0.01697	K02355	mitochondrial elongation factor	um04847	0.00067	ni	conserved hypothetical protein
27c00022	0.01699	ni	hypothetical protein	um03284	0.00067	ni	conserved hypothetical protein
6c00052	0.01707	ni	hypothetical protein	um00773	0.00067	ni	conserved hypothetical protein
8c00154	0.01709	K14521	predicted P-loop ATPase fused to an acetyltransferase	um05883	0.00067	K07006	conserved hypothetical protein
8d00014	0.01714	ni	hypothetical protein	um00308	0.00069	K10771	related to APN1 - AP endonuclease
14c00112	0.01717	ni	hypothetical protein	um10560	0.0007	K09263	conserved hypothetical protein
19d00140	0.01729	K12852	US snRNP-specific protein	um04096	0.0007	ni	hypothetical protein
2c00081	0.01743	K03857	N-acetylglucosaminyltransferase complex, subunit PIG-A/SPT14	um01101	0.0007	K01101	related to PDR16 - protein involved in lipid biosynthesis and multidrug resistance
22c00043	0.01759	ni	hypothetical protein	um05355	0.		

22d00119	0.01855	K01899	succinyl-coa synthetase, alpha subunit	um12250	0.00077	ni	conserved hypothetical protein
3d00069	0.01855	ni	hypothetical protein	um10637	0.00078	ni	conserved hypothetical protein
9d00270	0.01855	ni	FOG, Zn-finger	um10806	0.00078	ni	conserved hypothetical protein
6d00039	0.01855	ni	glutathione S-transferase	um11280	0.00078	ni	conserved hypothetical protein
12d00040	0.01863	ni	TFIIF-interacting CTD phosphatase, including NLI-interacting fac	um03382	0.00078	ni	related to 3-phytase A precursor
27c00096	0.01867	ni	hypothetical protein	um01904	0.00078	ni	related to succinyl-coa ligase
22d00041	0.01867	ni	hypothetical protein	um03845	0.00078	K00237	related to succinate dehydrogenase
16d00047	0.01873	K00826	histone H4 acetyltransferase BCAT1	um02438	0.00079	ni	conserved hypothetical protein
11d00012	0.01888	ni	hypothetical protein	um05570	0.00079	ni	conserved hypothetical protein
24c00007	0.01896	ni	predicted membrane protein	um10946	0.00079	ni	related to TNA1 - High affinity nicotinic acid plasma membrane permease
70d00255	0.01896	ni	hypothetical protein	um03105	0.00079	ni	hypothetical protein
18d00003	0.01914	K14857	putative 5'-3' dependent RNA methyltransferase SPB1	um06124	0.00079	ni	hypothetical protein
28d00089	0.01909	ni	hypothetical protein	um00935	0.0008	ni	probable MDR1 - Mac1p interacting protein
9c0d0435	0.01914	ni	hypothetical protein	um01205	0.0008	ni	cation-transporting ATPase
12c00024	0.01915	ni	hypothetical protein	um04614	0.0008	ni	conserved hypothetical Ustilago-specific protein
22d0186	0.01925	ni	hypothetical protein	um02710	0.00081	K11254	probable HPH1 - histone H4
22d00241	0.01925	ni	predicted L-carnitine dehydratase	um04885	0.00081	ni	conserved hypothetical protein
13c00056	0.01926	ni	uncharacterized conserved protein	um10181	0.00082	ni	conserved hypothetical protein
7c00215	0.01928	ni	molecular chaperone Prefoldin, subunit 5	um10051	0.00083	K02910	probable 60S ribosomal protein L31
22c00282	0.01937	ni	hypothetical protein	um10575	0.00084	ni	hypothetical protein
3d00024	0.01939	K10838	nucleotide excision repair complex XPC-HR23B, subunit XPC/D	um05198	0.00085	ni	ni
12c00146	0.01947	ni	predicted transporter	um01688	0.00085	K14284	related to mRNA export factor mex67
18c00128	0.01957	ni	acetylcholinesterase	um12124	0.00085	ni	hypothetical protein
14d00016	0.01959	K13172	Splicing coactivator SRm160/300, subunit SRm300	um00087	0.00086	ni	conserved hypothetical protein
8c000176	0.01967	K13126	polyadenylate-binding protein	um10476	0.00086	ni	hypothetical protein
19d00010	0.01985	ni	hypothetical protein	um00989	0.00089	ni	related to short-chain alcohol dehydrogenase
9c00231	0.01986	ni	hypothetical protein	um05403	0.0009	K04802	probable proliferating cell nuclear antigen
7d00215	0.01999	ni	hypothetical protein	um01699	0.00091	ni	conserved hypothetical protein
7d00117	0.02002	ni	hypothetical protein	um04939	0.00091	K01476	probable arginase
5c00005	0.02007	ni	nuclear architecture related protein	um05452.2	0.00091	ni	related to TPO3 - Polyamine transport protein
25c00003	0.02011	ni	hypothetical protein	um02152	0.00091	ni	conserved hypothetical Ustilago-specific protein
18d00033	0.02026	K17415	hypothetical protein	um10003	0.00092	ni	conserved hypothetical protein
24d00002	0.02026	K11367	chromodomain-helicase DNA-binding protein	um12048	0.00092	K01495	probable FOL2 - GTP cyclohydrolase I
1c00038	0.02027	ni	kinesin-like protein	um10077	0.00092	K11173	probable alcohol dehydrogenase
14c00055	0.02025	K00022	short-chain alcohol dehydrogenase	um00093	0.00093	K10866	probable RAD50 - DNA repair protein
18c00054	0.02052	ni	hypothetical protein	um06033	0.00094	ni	related to LRP16 protein
11c00008	0.02055	ni	hypothetical protein	um03888	0.00094	ni	related to multidrug resistant protein
14c00131	0.02062	K12603	glucose-repressible alcohol dehydrogenase transcriptional effector	um11438	0.00095	ni	conserved hypothetical protein
9d00098	0.02062	ni	uncharacterized conserved protein	um11807	0.00097	K00765	probable ATP phosphoribosyltransferase
9c001198	0.02084	K12599	cytoplasmic exosomal RNA helicase SKI2	um01782	0.00097	K13354	related to peroxisomal membrane protein PMP47B
6d00050	0.02084	K08139	predicted transporter	um11980	0.00097	ni	putative protein
5c00026	0.02084	K01092	inositol monophosphatase	um01711	0.00098	ni	related to Glucose dehydrogenase
15d00080	0.02086	ni	cation transport ATPase	um01643	0.00098	K07827	small G-protein Ras2
12c00332	0.02096	K15278	UDP-N-acetylglucosamine transporter	um10020	0.00098	K16330	conserved hypothetical protein
10d00085	0.02105	ni	hypothetical protein	um01997	0.00099	K01175	related to REX4 - strong similarity to X
12d00044	0.02107	ni	hypothetical protein	um00132	0.001	ni	hypothetical protein
5c00018	0.02112	ni	hypothetical protein	um10211	0.001	K01210	related to EXG1 - exo-beta-1
9d00174	0.02115	ni	hypothetical protein	um02878	0.001	ni	conserved hypothetical protein
9d00363	0.02119	ni	MEKK and related serine/threonine protein kinases	um05792	0.00101	ni	related to Chitin deacetylase precursor
3c00019	0.02123	ni	uncharacterized conserved protein	um10757	0.00101	ni	conserved hypothetical protein
24d0006	0.02125	K14050	protein geranylgeranyltransferase type II, alpha subunit	um03486	0.00103	ni	related to nucleotide binding protein
22c00250	0.02138	ni	predicted transporter	um02189	0.00103	K00020	probable 3-hydroxyisobutyrate dehydrogenase
2c00016	0.02144	ni	multisubunit glutamine exporter	um01371	0.00104	ni	ni
8d00078	0.02146	K14640	Nav/Pi symporter	um15085	0.00105	ni	related to peptide-n4-
7d00093	0.02162	ni	hypothetical protein	um04796	0.00106	ni	conserved hypothetical protein
22d00113	0.02164	ni	hypothetical protein	um00548	0.00106	ni	related to GDA1 - guanosine diphosphatase
3c00061	0.02167	ni	hypothetical protein	um03623	0.00107	ni	conserved hypothetical protein
7c000330	0.02171	ni	hypothetical protein with different specificities	um03088	0.00107	ni	conserved hypothetical protein
14d00050	0.02183	K10352	myosin class II heavy chain	um10738	0.00108	K11984	conserved hypothetical protein
10c00038	0.0219	K03321	sulfate/bicarbonate/oxalate exchanger SAT-1 and related transpo	um10252	0.00108	K00059	related to 3-oxoacyl-
2c00078	0.0219	K01768	serine/threonine phosphatase 2C	um01663	0.00108	ni	conserved hypothetical protein
6c00076	0.02191	ni	endoplasmic reticulum chaperones	um10140	0.00108	ni	conserved hypothetical protein
22c00245	0.02194	ni	hypothetical protein	um11051	0.0011	ni	putative protein
14d00099	0.02203	ni	endoplasmic reticulum protein EP58	um11362	0.0011	ni	putative protein
6d00083	0.02209	ni	hypothetical protein	um11219	0.00111	K08489	related to TLG2 - member of the syntaxin family of t-SNAREs
16c00032	0.02214	ni	oxysterol-binding protein	um11458.2	0.00111	ni	conserved hypothetical protein
1c000037	0.0223	ni	emp24/25/26/24 family of membrane trafficking proteins	um02847	0.00112	ni	conserved hypothetical Ustilago-specific protein
12d00100	0.02251	K03233	translation elongation factor EF-1 gamma	um03347	0.00112	ni	related to NUM1 - nuclear migration protein
14c00015	0.02258	K08737	mismatch repair ATPase MSH6	um02492	0.00112	ni	conserved hypothetical protein
18c00071	0.0227	ni	Ca2+-binding transmembrane protein LETM1/MRS7	um00634	0.00113	K03943	probable NADH-ubiquinone oxidoreductase 24 kDa subunit
7d000254	0.02285	K01958	endoplasmic chaperone	um00989	0.00113	K1692	related to zinc transporter
8c00024	0.02279	ni	hypothetical protein	um12273.2	0.00114	K12840	conserved hypothetical protein
22c00075	0.02279	ni	predicted RNA polymerase III subunit C17	um00255	0.00114	ni	conserved hypothetical protein
12d00092	0.02285	ni	predicted GTPase-activating protein	um11953	0.00115	K01408	related to STE23 - Metalloprotease involved in a-factor processing
16c00036	0.02298	K03283	molecular chaperones Hsp70/Hsc70	um04878	0.00115	K14572	related to MDN1 - Huge dynein-related AAA-type ATPase
27c00032	0.02298	ni	non-smc	um05240	0.00116	K13304	probable ESA1 - histone acetyltransferase
22c00258	0.02319	ni	hypothetical protein	um00490	0.00117	ni	related to Sorting nexin MVP1
7c00024	0.02352	K12826	splicing factor 3a, subunit 2	um00830	0.00117	ni	conserved hypothetical protein
7c00170	0.02355	ni	hypothetical protein	um15997	0.00118	ni	putative protein
11c00035	0.02355	ni	hypothetical protein	um00298	0.00119	K01580	related to glutamic acid decarboxylase
10d00007	0.02359	K11649	chromatin remodeling factor subunit and related transcription fact	um11162	0.00119	K03935	probable NADH dehydrogenase
3d00049	0.02361	ni	synaptic vesicle transporter SVOP and related transporters	um10685	0.00121	K03627	probable MBF1 - multiprotein bridging factor mediates GCN4-dependent transcriptional activation
7d00158	0.02362	ni	regulator of arginine metabolism and related MADS box-contains	um01714	0.00121	ni	probable monoxygenase
13d00020	0.02362	ni	hypothetical protein	um03351	0.00123	K06174	probable RLI1 - Protein promoting preinitiation complex assembly
9d001190	0.02372	ni	PHD Zn-finger proteins	um00385	0.00123	ni	conserved hypothetical protein
10d00017	0.02381	K12867	mRNA splicing factor	um05691	0.00123	ni	hypothetical protein
22d00101	0.02393	ni	predicted Yippee-type zinc-binding protein	um04055	0.00127	ni	ni
9d00225	0.02395	K00698	chitin synthase/hyaluronan synthase	um11753	0.00128	ni	conserved hypothetical protein
5c00041	0.02399	ni	hypothetical protein	um03807	0.0013	ni	conserved hypothetical protein
2d00016	0.02402	ni	hypothetical protein	um02115	0.00131	ni	conserved hypothetical protein
13c00048	0.02446	ni	hypothetical protein	um03262	0.00131	K02365	related to Separin
14c00073	0.02448	ni	hypothetical protein	um12299	0.00131	ni	conserved hypothetical protein
9d00277	0.02448	K07006	hypothetical protein	um02693	0.00131	ni	related to Endothelin-converting enzyme 1
9c00347	0.02449	ni	hypothetical protein	um04133	0.00132	ni	related to NAD
9c00175	0.02462	K12823	ATP-dependent RNA helicase	um11682	0.00132	K00587	related to STE14 - farnesyl cysteine carboxyl-methyltransferase
7c00034	0.02465	ni	ferric reductase	um03221	0.00132	ni	conserved hypothetical protein
12c00015	0.02492	ni	hypothetical protein	um05385	0.00135	ni	guanine nucleotide-binding protein alpha-4 subunit
22c00284	0.02492	ni	hypothetical protein	um03792	0.00137	ni	related to coenzyme a synthetase
2c00008	0.0251	K13342	TPR repeat-containing protein	um02105	0.00137	K00074	probable 3-hydroxybutyryl-CoA dehydrogenase
7c00040	0.02511	K11121	NAD-dependent histone deacetylases and class I sirtuins	um01037	0.00138	ni	conserved hypothetical protein
14d00075	0.02516	ni	hypothetical protein	um10253.2	0.00138	K01265	related to MAP1 - methionine aminopetidase
7c00240	0.02518	ni	predicted N-acetyltransferase	um10242	0.00139	ni	putative protein
22c00248	0.02526	K01288	serine carboxypeptidases	um01114	0.0014	ni	hypothetical protein
22c00079	0.02524	K16575	actin and related proteins	um03822	0.00141	ni	putative protein
13d00010	0.02562	ni	hypothetical protein	um01533	0.00143	ni	related to n-acetyltransferase
5d00079	0.02564	ni	hypothetical protein	um05420	0.00144	K12346	related to vacuolar transport protein ESP1
7d00169	0.02572	ni	defense-related protein containing SCP domain	um05922	0.00145	ni	related to COX10 - farnesyl transferase
28c00029	0.02581	ni	hypothetical protein	um00468	0.00145	K00601	related to glycylamide ribonucleotide transferase
18c00026	0.02584	K16489	hypothetical protein	um11966.2	0.00146	ni	related to Cullin-3
5d00105	0.02593	ni	chromatin remodeling complex WSTF-ISWI, small subunit	um04561	0.00147	K00852	conserved hypothetical protein
29c00023	0.02594	K00031	NADP-dependent isocitrate dehydrogenase	um03296	0.00147	ni	conserved hypothetical protein
25c00066	0.02596	ni	hypothetical protein	um11246	0.00145	ni	conserved hypothetical protein
9d00035	0.02612	K08869	predicted unusual protein kinase	um05977	0.00151	ni	conserved hypothetical protein
9d00119	0.02623	K14326	RNA helicase nonsense mRNA reducing factor	um12278	0.00151	K10418	probable Dynein light chain 1
6c00096	0.02627	ni	hypothetical protein	um05162	0.00152	K01952	probable ADE6 - phosphoribosylformyl glycylamide synthetase
13c00042	0.02629	ni	hypothetical protein	um10507	0.00153	K03411	probable ubiquinolipochrome-c reductase Rieske iron-sulfur protein
9c00097	0.02628	ni	hypothetical protein	um01164	0.00153	ni	conserved hypothetical protein
19d00049	0.02646	ni	predicted MutS-related protein	um00046	0.00154	ni	related to flavin oxidoreductase
10d00056	0.0265	ni	ras-related small GTPase	um10730	0.00155	K05767	related to Ras GTPase-activating-like protein IQGAP2
25c00078	0.0265	ni	hypothetical protein	um01428	0.00156	ni	conserved hypothetical protein
12c00123	0.02673	K07889	GTPase Rad53/YPT51	um04867	0.00157	ni	ni
3c00028	0.02674	ni	hypothetical protein	um02131	0.0016	ni	putative protein
6c00024	0.0268	K06911	hypothetical protein	um11079	0.00161	ni	putative protein
22c00304	0.02686	ni	hypothetical protein	um12288	0.00164	ni	conserved hypothetical protein
15d00063	0.02692	ni	hypothetical protein	um02170	0.00165	ni	conserved hypothetical protein
6d00054	0.02701	K07019	alpha/beta hydrolase	um11746	0.00168	ni	related to Guanine nucleotide-binding protein beta 5
7d00008	0.02711	ni	hypothetical protein	um10529.2	0.00168	ni	conserved hypothetical protein
10d00111	0.02713	K03457	uridine permease	um10616	0.00169	K16466	probable CDC31 - spindle pole body component
25d00052	0.02718	ni	hypothetical protein	um11849	0.00169	ni	conserved hypothetical protein
8c00110	0.02721	K12824	hypothetical protein	um02580	0.0017	ni	putative protein
16d00086	0.02723	K11095	U1 snRNP-specific protein C	um11267	0.00171	K00993	related to EPT1 - sn-
7d00035	0.02731	K12625	small nuclear ribonucleoprotein F	um03126	0.00173	ni	related to retinal short-chain dehydrogenase
25d00079	0.02733	ni	hypothetical protein	um01977	0.00173	ni	hypothetical protein
18d00044	0.02734	ni	ras GTPase-activator GAPCa6 and related TBC domain prote	um00295	0.00175	K04393	GTP binding protein Cdc42
9d00105	0.02755	ni	mitochondrial carrier protein CGI-69	um04091	0.00175	ni	conserved hypothetical protein
9c00363	0.02778	K05293	major facilitator superfamily permease - Cdc91p	um01332	0.00177	ni	related to coenzyme A diphosphatase



12c00144	0.02952	K04618	hypothetical protein	um11497	0.00193	K00972	probable UDP-N-acetylglucosamine pyrophosphorylase
8000105	0.02963	ni	hypothetical protein	um04922	0.00193	ni	related to 2
9c00353	0.02967	ni	FOG, LIM domain	um12240	0.00193	ni	putative protein
2200015	0.02969	ni	hypothetical protein	um00712	0.00196	ni	probable YOR1 - ABC transporter
22c00132	0.02988	K12861	spliceosome-associated coiled-coil protein	um12047	0.00197	ni	conserved hypothetical protein
7400264	0.02994	ni	cytosolic sorting protein GGA2/TOM1	um10053	0.00199	K01673	related to carbonic anhydrase
9c00184	0.03007	ni	hypothetical protein	um04253	0.00201	ni	probable mima export factor eif1
24c00057	0.03012	ni	hypothetical protein	um00237	0.00201	K15084	probable LEU5 - mitochondrial coenzyme A transporter- member of the mitochondrial carrier
9c00097	0.03023	ni	uncharacterized conserved protein	um06368	0.00203	K10808	probable small subunit of ribonucleotide reductase
9000364	0.03028	K11375	hypothetical protein	um00770	0.00205	K01937	probable URA7 - CTP synthase 1
18c00029	0.03033	ni	carboxylesterase and related proteins	um11080	0.00211	ni	putative protein
27c00040	0.03031	ni	hypothetical protein	um06489	0.00212	ni	conserved hypothetical protein
22c00016	0.03037	ni	hypothetical protein	um10094	0.00213	ni	putative protein
22c00144	0.03053	ni	predicted short chain-type dehydrogenase	um04535	0.00213	ni	conserved hypothetical protein
8c00108	0.03053	ni	translational repressor MPT5/PUF4 and related RNA-binding pro	um11105	0.00213	K02575	related to nitrate transporter
2000031	0.03057	ni	hypothetical protein	um04819	0.00214	ni	related to protein phosphatase 2c
2c00056	0.03061	ni	hypothetical protein	um00179	0.00215	ni	conserved hypothetical protein
16c00024	0.03065	ni	hypothetical protein	um02765	0.00215	ni	conserved hypothetical protein
12c00125	0.03065	ni	nuclear transport receptor exportin 4	um02165	0.00216	ni	conserved hypothetical protein
10c00024	0.03067	ni	hypothetical protein	um10450	0.00217	ni	related to transcriptional regulator rds2
7400118	0.03111	ni	HMC box-containing protein	um05218	0.00217	K00293	probable chimeric spermidine synthase
14c00011	0.03127	ni	hypothetical protein	um00166	0.00217	ni	conserved hypothetical protein
10c00101	0.03128	ni	hypothetical protein	um06130	0.00217	K12827	related to RNA splicing factor PRP9
9c00076	0.03128	K09481	hypothetical protein	um05840	0.00221	ni	conserved hypothetical protein
20c00045	0.03129	K13941	dihydropterate synthase	um02460	0.00225	ni	putative protein
7c00138	0.03137	ni	predicted dehydrogenase	um10939	0.00227	ni	ni
9c00038	0.03147	K11971	predicted E3 ubiquitin ligase	um02236	0.00228	ni	conserved hypothetical protein
19c00074	0.03153	K00668	hypothetical protein	um06047	0.00228	K00641	related to homoserine O-acetyltransferase
19c00063	0.03163	ni	FOG, RRM domain	um05131	0.00229	K01907	probable Acetoacetyl-CoA synthetase
22c00064	0.03176	K10401	kinesin-like protein	um10509	0.0023	ni	related to DNA repair protein Rad52
9c00338	0.03192	K02145	vacuolar H+-ATPase V1 sector, subunit A	um00237	0.00232	K08139	probable HKT5 - Hecose transporter
26c00057	0.03182	K03032	26S proteasome regulatory complex, subunit RPN2/PSMD1	um02185	0.00232	K12734	probable peptidylprolyl isomerase
3c00042	0.03185	K08286	NDR and related serine/threonine kinases	um06103	0.00232	K00888	related to phosphatidylinositol-4-kinase
12c00062	0.03188	ni	hypothetical protein	um05897	0.00233	K01293	probable CPS1 - Gly-X carboxypeptidase YSC5 precursor
7400328	0.03189	ni	hypothetical protein	um00236	0.00236	ni	related to Intersectin 1
9c00034	0.03191	ni	hypothetical protein	um10695	0.00237	K03934	probable NADH dehydrogenase
7c00027	0.03191	ni	translocase of outer mitochondrial membrane complex, subunit T	um04991	0.00238	K08286	related to Serine
22c00053	0.03192	K03134	transcription initiation factor TFIID, subunit TAF10	um11790	0.00239	K16536	related to Hook protein
7c00006	0.03192	ni	hypothetical protein	um01208	0.0024	K04043	probable SSC1 - mitochondrial HSP70 member
3c00047	0.032	K10873	DNA repair and recombination protein RADS2/RAD22	um02428	0.00242	ni	hypothetical protein
22c00265	0.03243	ni	Na+/H+ antiporter	um10041.2	0.00242	ni	conserved hypothetical protein
18c00083	0.03256	K10740	hypothetical protein	um03025	0.00244	K08735	probable DNA mismatch repair protein MSH2
15c00045	0.03273	ni	hypothetical protein	um03649	0.00244	ni	hypothetical protein
9c00340	0.03276	K00999	phosphatidylesterase	um01037	0.00245	K01808	probable ribose-5-phosphate isomerase
9c00109	0.03283	K00140	methylmalonate semialdehyde dehydrogenase	um04555	0.00245	ni	myosin V
9c00172	0.03302	K10771	major apurinic/apyrimidinic endonuclease	um02611	0.00246	K01166	related to ribonuclease M
18c00046	0.03304	ni	hypothetical protein	um10611	0.00247	K12625	probable U6 snRNA-associated Sm-like protein LSM6
84c00063	0.03308	ni	asparaginase synthase	um11873	0.00247	ni	hypothetical protein
5c00012	0.03314	ni	branched chain alpha-keto acid dehydrogenase E1, beta subunit	um03436	0.00249	ni	related to triacylglycerol lipase
11c00026	0.03324	ni	beta-glucosyltransferase	um10289	0.00252	ni	hypothetical protein
16c00022	0.03338	K00698	chitin synthase/hyaluronan synthase	um11483	0.00252	K00573	probable Isoaspartyl protein carboxyl methyltransferase
13c00062	0.03342	ni	hypothetical protein	um03234.2	0.00252	K06631	related to CDC5 - Serine
12c00066	0.03353	ni	hypothetical protein	um01721	0.00253	ni	conserved hypothetical protein
22c00242	0.03358	K00540	dehydrogenases with different specificities	um10521	0.00256	ni	ni
10c00090	0.03369	K03885	NADH-dehydrogenase	um00124	0.00256	ni	hypothetical protein
9c00196	0.0337	K09831	cytochrome P450 CYP4/CYP19/CYP26 subfamilies	um05988	0.00259	ni	conserved hypothetical protein
20c00064	0.03389	ni	hypothetical protein	um05138	0.0026	ni	conserved hypothetical protein
9c00350	0.03391	ni	uncharacterized conserved protein	um01084	0.00261	K01178	related to Glucosylase precursor
25c00044	0.03392	ni	hypothetical protein	um03945	0.00262	K15628	probable peroxisomal half ABC transporter
22c00233	0.03393	ni	NADH-dehydrogenase	um11731	0.00262	ni	related to nadh-ubiquinone oxidoreductase 9
22c00006	0.03396	K01764	holocytochrome c synthase	um11164	0.00262	ni	conserved hypothetical protein
2c00040	0.03402	ni	hypothetical protein	um00262	0.00262	ni	conserved hypothetical protein
22c00288	0.03413	ni	hypothetical protein	um05787	0.00263	ni	conserved hypothetical protein
7c00098	0.03446	K00228	coproporphyrinogen III oxidase CPO/HEM13	um03910	0.00263	K02183	probable Calmodulin
20c00067	0.03448	K11314	GTPase Rab2	um02220	0.00264	K03515	related to DNA repair protein MUS-42
9c00303	0.0345	K11518	translocase of outer mitochondrial membrane complex, subunit T	um04786	0.00265	K03032	probable RPN2 - 26S proteasome regulatory subunit
7c00033	0.0346	K08817	synaptobrevin clamp-like protein SEC22	um02778	0.00265	ni	related to GCY1 - galactose-induced protein of aldo
4c00022	0.0346	ni	lipoyltransferase	um03256	0.00267	K03574	conserved hypothetical protein
13c00089	0.03463	K02537	spindle assembly checkpoint protein	um05275	0.00267	K00898	related to pyruvate dehydrogenase kinase isoform 2
7400024	0.03464	K11505	mitochondrial aspartate/glutamate carrier protein Aralar/Citrin	um02040	0.00267	ni	conserved hypothetical protein
7c00335	0.03479	K14679	hypothetical protein	um01014	0.00268	ni	related to SOT1 - glycerol 3-phosphate
16c00006	0.03476	K01607	hypothetical protein	um10196	0.00272	K15151	conserved hypothetical protein
13c00015	0.0349	ni	hypothetical protein	um05889	0.00272	K03320	high affinity ammonium transporter
9c00033	0.03492	K00809	deoxyhypusine synthase	um01282	0.00274	K008052	related to neurofibromin
12c00121	0.03499	ni	hypothetical protein	um02887	0.00275	ni	conserved hypothetical protein
8c00114	0.03503	K01068	acyl-coa thioesterase	um00442	0.00276	ni	hypothetical protein
9c00032	0.03506	ni	amidases	um11394	0.00277	ni	conserved hypothetical protein
25c00036	0.03508	K00365	uricase	um15049	0.00277	ni	related to PUF3 - transcript-specific regulator of mRNA degradation
19c00059	0.03515	ni	heme A farnesyltransferase	um10131	0.00277	K01613	related to phosphatidylserine decarboxylase proenzyme 2 precursor
7c00023	0.03516	ni	Cyclin-dependent tyrosine-binding protein CLB1	um04068	0.00278	ni	hypothetical protein
7400250	0.03533	K08675	mitochondrial ATP-dependent protease PIM1/LON	um02363	0.00281	ni	related to protein
74c00025	0.03533	K13525	AAA-type ATPase	um05072	0.00282	ni	conserved hypothetical protein
26c00025	0.03535	K00604	methionyl-tRNA formyltransferase	um03210	0.00282	K02219	probable CKS1 - cyclin-dependent kinases regulatory subunit
13c00085	0.03544	ni	hypothetical protein	um11621	0.00282	K02936	probable RPLB8 - 60s large subunit ribosomal protein L7a
14c00035	0.03544	ni	serine/threonine-specific protein phosphatase PP1, catalytic subu	um01082	0.00285	K03809	probable 1
7c00021	0.03556	ni	serine/threonine protein kinase	um10622	0.00285	ni	hypothetical protein
7400044	0.03568	ni	polynucleotide kinase 3' phosphatase	um00386	0.00286	ni	conserved hypothetical protein
25c00029	0.03595	ni	hypothetical protein	um03166	0.00287	ni	hypothetical protein
2c00062	0.03597	ni	putative N2	um04481	0.00289	ni	related to ADH2 - Alcohol dehydrogenase II
12c00075	0.03612	ni	sucrose transporter and related proteins	um10248	0.00293	ni	conserved hypothetical protein
20c00010	0.03624	K02948	hypothetical protein	um00789	0.00295	K00624	probable carnitine O-acetyltransferase
7400304	0.03636	ni	tuberin - Rap/ran-GTPase-activating protein	um10528	0.00297	K05688	related to STE6 - ABC transporter
19c00081	0.03641	ni	hypothetical protein	um10788.2	0.00301	K13721	probable AAP1 - alanine
15c00011	0.03691	ni	pentafunctional AROM protein	um11504	0.00304	ni	putative protein
12c00042	0.03713	K03360	leucine rich repeat proteins	um00448	0.00305	ni	ni
7400180	0.03713	K11786	chromatin remodeling complex SWI/SNF, component SWI2	um03373	0.00305	ni	ni
10c00005	0.03719	K07555	mitochondrial F1-ATPase assembly protein	um05900	0.00307	K11434	probable HMT1 - hnRNP arginine N-methyltransferase
22c00069	0.03727	ni	hypothetical protein	um00043	0.00307	ni	conserved hypothetical protein
9c00347	0.03751	K12373	beta-n-acetylthiosaminidase	um01730	0.00308	ni	conserved hypothetical protein
9c00049	0.03772	ni	vacuolar H+-ATPase V1 sector, subunit F	um01004	0.00308	ni	conserved hypothetical protein
6c00120	0.03786	K02151	hypothetical protein	um00219	0.00308	K15122	conserved hypothetical protein
13c00019	0.03802	ni	hypothetical protein	um10466.2	0.00311	K00772	related to MIEU1 - multiple enhancer of UAS2
22c00018	0.03815	ni	yeast GTPase activating protein	um01122	0.00312	ni	related to Hc51 - DNA helicase A
27c00042	0.03818	K00509	hypothetical protein	um05687	0.00317	K02725	probable PRE5 - 20S proteasome subunit 3
24c00027	0.03822	ni	hypothetical protein	um00245.2	0.00318	ni	related to mitochondrial uncoupling protein 3
5c00086	0.03837	K07870	predicted Ras related Rac-GTP binding protein	um01679	0.00332	K02541	probable MCM3 - subunit of pre-replication complex
25c00022	0.03865	ni	hypothetical protein	um02665	0.00332	K10863	conserved hypothetical protein
8c00102	0.03847	ni	hypothetical protein	um10469	0.00332	K02989	probable 40S ribosomal protein S5
9c00436	0.03849	ni	synaptic vesicle transporter SVOP and related transporters	um11783	0.00322	K10990	conserved hypothetical protein
5c00106	0.03859	K01412	mitochondrial processing peptidase, alpha subunit	um11797	0.00322	K06126	related to Ubiquinone biosynthesis protein COQ6 and COQ7
9c00142	0.03864	K14805	RNA helicase	um01969	0.00324	ni	putative protein
8c00332	0.03866	ni	hypothetical protein	um00783	0.00327	ni	hypothetical protein
8c00109	0.03867	ni	hypothetical protein	um01671	0.00329	ni	related to YSC84 - protein involved in the organization of actin cytoskeleton
20c00072	0.03891	K01702	3-isopropylmalate dehydratase	um06474	0.0033	ni	conserved hypothetical protein
25c00030	0.03899	ni	iron/sulfur family oxidoreductases	um12030	0.0033	ni	putative protein
26c00024	0.03904	ni	hypothetical protein	um04203	0.0033	K03975	RhoG GTP binding protein
18c00095	0.03914	K01655	alpha-isopropylmalate synthase/homocitrate synthase	um11010	0.00331	ni	conserved hypothetical protein
2c00043	0.03918	K14439	SNF2 family DNA-dependent ATPase	um05559	0.00332	K03262	probable TIF5 - translation initiation factor eIF5
27c00030	0.03939	ni	predicted mechanosensitive ion channel	um02213	0.00333	ni	conserved hypothetical protein
7400286	0.03941	ni	hypothetical protein	um11892	0.00335	K06655	probable PHO85 - cyclin-dependent protein kinase
6c00063	0.03955	ni	hypothetical protein	um03818	0.00336	ni	conserved hypothetical protein
14c00118	0.03969	ni	FOG, Predicted E3 ubiquitin ligase	um15040	0.0034	K01887	probable arginyl-tRNA synthetase
14c00002	0.0397	ni	hypothetical protein	um03513	0.00341	ni	conserved hypothetical protein
9c00415	0.03996	ni	hypothetical protein	um01062	0.00344	K15356	probable VRG4 - Golgi GDP-mannose transporter
12c00109	0.03920	K09104	helix loop helix transcription factor EB	um10520	0.00346	K13298	related to HcE2 - Oligonucleoside
2c00075	0.04	K11304	histone acetyltransferase	um10038	0.00347	K14729	probable multifunctional beta-oxidation protein
22c00091	0.04001	ni	uncharacterized conserved protein	um01194	0.00348	ni	putative protein
7c00083	0.04007	ni	hypothetical protein	um00578	0.00349	ni	putative protein
18c00082	0.04018	K02149	vacuolar H+-ATPase V1 sector, subunit D	um00827	0.00353	ni	hypothetical protein
16c00014	0.04033	K01253	sialic acid hydrolase	um01781	0.00354	ni	conserved hypothetical protein
22c00138	0.04044	K02564	glucosamine-6-phosphate isomerase	um02950	0.00356	ni	putative protein
9c00249	0.04046	ni	multidrug resistance-associated protein	um04270	0.00356	K01876	probable DPS1 - aspartyl-tRNA synthetase
3c00084	0.04077	ni	hypothetical protein	um05333	0.00357	K14530	putative protein
9c00012	0.04094	ni	hypothetical protein	um04294	0.00356	K09140	

14d00067	0.0432	K15083	nucleotide excision repair protein RAD16	um02114	0.00393	ni	conserved hypothetical protein
18d00020	0.04324	ni	hypothetical protein	um05206	0.00396	ni	ni
25c0010	0.04341	K01074	palmitoyl protein thioesterase	um10871	0.00396	K09966	conserved hypothetical protein
12c00125	0.04384	ni	hypothetical protein	um00072	0.00397	ni	conserved hypothetical protein
4d00013	0.04358	ni	recombination signal binding protein-J kappa	um12204	0.00398	ni	putative protein
9c00114	0.04359	ni	hypothetical protein	um11339	0.00402	ni	related to Siderophore iron transporter 3
9c00410	0.04373	ni	hypothetical protein	um01051	0.00403	ni	related to mls-mulidrug-resistance transporter
14d00007	0.04384	ni	hypothetical protein	um11087	0.00404	K02216	related to checkpoint kinase chk1
11c00079	0.04387	K00164	2-oxoglutarate dehydrogenase, E1 subunit	um05410	0.00407	K15178	conserved hypothetical protein
25d00041	0.0439	K14567	uncharacterized conserved protein	um02694	0.00407	ni	conserved hypothetical protein
9c00194	0.04401	ni	methyltransferases	um02396	0.00408	ni	conserved hypothetical protein
3d00083	0.04425	ni	ras GTP-activating protein	um04726	0.00411	K01923	activator ADE1 - phosphoribosylamidimidazole-succinocarboxamide synthase
22c00191	0.04424	ni	hypothetical protein	um05398.2	0.00414	ni	putative protein
18d00086	0.0446	ni	hypothetical protein	um01558	0.00414	ni	hypothetical protein
8c00038	0.04504	ni	hypothetical protein	um01623	0.00416	ni	ni
13c00013	0.04507	ni	predicted transporter	um02655	0.00417	ni	related to RNA binding motif protein
15c00053	0.04509	ni	hypothetical protein	um04497	0.00417	K01755	probable ARG4 - arginosuccinate lyase
12c00110	0.04515	K03263	translation initiation factor 5A	um02586	0.00418	ni	related to clef lip and palate transmembrane protein 1
9c00305	0.04521	K00006	glycerol-3-phosphate dehydrogenase	um03200	0.00418	K08775	Rad51-associated protein Bhr2
18d00070	0.04527	K04728	protein kinase ATM/Trf1	um06346	0.00421	ni	conserved hypothetical protein
22c00118	0.04533	ni	hypothetical protein	um12218	0.00422	K06636	probable SMC1 - chromosome segregation protein
24d00025	0.04547	K03178	ubiquitin activating enzyme UBA1	um12280	0.00424	ni	conserved hypothetical protein
18d00093	0.04557	ni	predicted small molecule transporter	um04190	0.00424	ni	conserved hypothetical protein
9c00094	0.04578	K11292	transcription elongation factor SPT6	um10396.2	0.00425	K10848	related to RAD1 - component of the nucleotide excision repairosome
9c00079	0.04597	ni	hypothetical protein	um04772	0.00426	ni	hypothetical protein
12c00013	0.046	ni	cofactor of Mda Rho GTPase	um06167	0.00428	K07095	related to VPS29 - involved in vacuolar protein sorting
27d00055	0.04611	ni	mitochondrial import inner membrane translocase, subunit TIM44	um05184	0.00429	ni	conserved hypothetical protein
21d00004	0.04619	ni	hypothetical protein	um03166	0.00433	ni	related to DCR2 - dosage-dependent cell cycle regulator
16d00002	0.04621	ni	hypothetical protein	um05300	0.00435	ni	conserved hypothetical Ustilago-specific protein
6d00124	0.04648	K14408	mRNA cleavage and polyadenylation factor I complex, subunit R1	um10893	0.00435	ni	conserved hypothetical protein
28d00084	0.04656	K02148	vacuolar H <sup>+</sup> -ATPase V1 sector, subunit C	um06181	0.00436	K00031	probable IPF2 - isocitrate dehydrogenase
10d00079	0.04667	K01802	cyclophilin type peptidyl-prolyl cis-trans isomerase	um05341	0.00438	ni	hypothetical protein
10d00074	0.04696	K12854	RNA helicase BRR2	um02285	0.00438	ni	related to Na
9c00015	0.04705	ni	hypothetical protein	um00869	0.00443	ni	conserved hypothetical protein
25c0006	0.04717	K03522	electronic transfer flavoprotein, alpha subunit	um06717	0.00443	K01809	probable Pfl00 - menaenase-6-phosphate isomerase
9c00035	0.04733	ni	predicted small molecule transporter	um15001	0.00445	K16369	related to CHO2 - phosphatidylethanolamine N-methyltransferase
22c00186	0.04745	ni	hypothetical protein	um10953	0.00447	K03671	probable TRX2 - thioredoxin II
10c00062	0.04754	ni	hypothetical protein	um05908	0.00451	ni	conserved hypothetical protein
5c00007	0.04785	ni	hypothetical protein	um06285	0.00452	K01956	related to carbamoyl-phosphate synthase small chain
4d00023	0.04788	ni	dual-specificity tyrosine-phosphorylation regulated kinase	um00721	0.00453	ni	related to MAPKK kinase
3c00037	0.04802	K08869	predicted unusual protein kinase	um11210	0.00453	K00031	probable IDP1 - isocitrate dehydrogenase
7c00229	0.04803	ni	golgi reassembly stacking protein GRASP65	um10659	0.00455	K00814	probable ait1 - alanine aminotransferase
12c00141	0.0483	K12572	poly(A) ribonuclease subunit	um00706	0.00456	ni	hypothetical protein
18c00079	0.04848	K01807	vacuolar H <sup>+</sup> -ATPase V1 sector, subunit C	um02825	0.00456	ni	putative protein
24c00005	0.04863	K01599	uroporphyrinogen decarboxylase	um05925	0.00457	ni	related to TOK1 - Voltage-gated
18d00070	0.04869	ni	hypothetical protein	um10446	0.00458	ni	putative protein
7c00051	0.04872	K06126	monooxygenase	um03487	0.00466	ni	putative protein
9d00150	0.04875	ni	hypothetical protein	um02592	0.00479	ni	conserved hypothetical protein
9c00261	0.04877	ni	FOG, WD40 repeat	um02903	0.00482	K03022	related to RPC25 - DNA-directed RNA polymerase III
7c00276	0.04889	K03678	exosomal 3'-5' exonuclease complex, subunit Rpl45	um03278	0.00486	K15620	probable VPS74 - protein involved in protein-vacuolar targeting
10c00083	0.04895	ni	predicted phospholipase	um02465	0.00488	ni	0.00488 ni
19d00089	0.04896	K11650	SWI/SNF transcription activation complex subunit	um11054	0.00489	K09568	probable FPR1 - peptidyl-prolyl cis-trans isomerase
5d00073	0.04912	ni	uncharacterized conserved protein	um06103	0.00493	K01507	probable RPH1 - inorganic pyrophosphatase
12c00045	0.04913	K11885	DNA damage inducible protein	um02905	0.00504	K03028	probable RPN1 - 26S proteasome regulatory subunit
9c00294	0.04951	ni	WD40 repeat-containing protein	um04076	0.00505	ni	ni
7c00090	0.04983	ni	hypothetical protein	um04427	0.00507	ni	hypothetical protein
7c00034	0.04991	ni	hypothetical protein	um11363	0.00507	K00793	related to RIB5 - riboflavin synthase
14d00051	0.04994	ni	hypothetical protein	um06543	0.00509	K08638	Ste20-like kinase Dor3
20d00020	0.04995	K00888	phosphatidylinositol 4-kinase	um11800	0.00509	ni	probable heat shock protein Hsp88
9c00195	0.04996	ni	hypothetical protein	um01831	0.00511	ni	conserved hypothetical protein
8d00098	0.04997	K11684	transcription initiation factor TFIID, subunit BDF1 and related bro	um10239	0.00512	K12897	related to Transformer-2 protein
5c00281	0.05001	ni	FOG, Leucine rich repeat	um06205	0.00514	ni	related to
16d00009	0.05005	ni	FOG, Zn-finger	um04305	0.00514	ni	probable AMS1 - alpha-mannosidase
5c00086	0.05008	ni	hypothetical protein	um11458	0.00514	ni	related to trimethyllysine hydroxylase
25c00041	0.05009	ni	predicted membrane protein	um10157	0.00516	K01756	probable adenylylsuccinate lyase
22c00152	0.0501	ni	hypothetical protein	um04414	0.00517	ni	putative protein
11d00011	0.05012	K01733	pyridoxal phosphate-dependent enzyme	um05835	0.00518	K06674	probable SMC2 - chromosome segregation protein
9c00430	0.05019	ni	typtophan-rich basic nuclear protein	um05122	0.00525	K08178	related to carboxylic acid transport protein JEN1
22d00276	0.0504	ni	predicted transporter	um11353	0.00527	K01900	probable beta-succinyl CoA synthetase precursor
15d00019	0.05054	ni	hypothetical protein	um03521	0.00527	ni	putative protein
5c00012	0.05057	K10706	rRNA-binding endonuclease positive effector	um02832	0.00528	K02685	related to PRI2 - DNA-directed DNA polymerase alpha
9c00026	0.05068	ni	monohydroxycarboxylate/ferrodoxin reductase	um11823	0.00528	ni	hypothetical protein
13d00025	0.05084	K00418	ubiquitin cytochrome c reductase, subunit QCR8	um00125	0.0053	ni	conserved hypothetical protein
7c00055	0.05097	K03661	vacuolar H <sup>+</sup> -ATPase V0 sector, subunit c"	um15101	0.00533	ni	putative protein
10c00008	0.05102	K14312	nuclear pore complex, Nup155 component c"	um02254	0.00538	ni	0.00538 ni
22d00088	0.05119	ni	hypothetical protein	um04244	0.00538	K17415	conserved hypothetical protein
7d00090	0.05137	ni	hypothetical protein	um00647	0.00538	ni	conserved hypothetical protein
22d00019	0.05152	K07393	predicted glutathione S-transferase	um05160	0.00538	K01870	probable ILS1 - isoleucyl-tRNA synthetase
22c00203	0.05153	K01078	lysosomal & prostatic acid phosphatases	um00211	0.00541	K11557	conserved hypothetical protein
9c00133	0.05171	ni	hypothetical protein	um12126	0.00545	ni	putative protein
9c00243	0.05177	ni	hypothetical protein	um04688	0.00546	ni	conserved hypothetical protein
9c00243	0.05187	ni	hypothetical protein	um11941	0.00547	K12190	related to VPS36 protein
8c00023	0.0519	K15455	uncharacterized conserved protein	um00026	0.00547	K14826	related to FK506-binding protein
22d00175	0.05192	ni	hypothetical protein	um00361	0.0055	ni	conserved hypothetical protein
8c00038	0.05207	K06110	exonuclease subunit SEC6	um01905	0.0055	K05609	probable ubiquitin thioesterase L3
10d00005	0.05217	ni	hypothetical protein	um10797	0.00554	K01103	related to 6-phosphofructo-2-kinase
16c00011	0.05221	ni	FOG, TPR repeat	um04954.2	0.00554	ni	putative protein
11c00063	0.05244	ni	phosphatidylinositol transfer protein PDR16 and related proteins	um04171	0.00558	ni	related to ROT1 - molecular chaperone in the endoplasmic reticulum
5c00100	0.05251	ni	vacuolar sorting protein VPS1	um02811	0.00558	ni	conserved hypothetical protein
10c00067	0.05257	K08838	serine/threonine protein kinase	um03543	0.0056	ni	related to YNG2 - component of NuA4 histone acetyltransferase complex
5c00056	0.05303	ni	uncharacterized conserved protein	um12009	0.00561	ni	conserved hypothetical protein
2d00025	0.05313	ni	hypothetical protein	um04307	0.00564	ni	putative protein
26d00004	0.05316	K00987	mRNA capping enzyme, guanlyltransferase	um06027.2	0.00567	K01892	probable HTS1 - histidine-tRNA ligase
13d00086	0.05323	ni	hypothetical protein	um12050	0.00568	K02138	probable ATP7 - F1F0-ATPase complex
9c00148	0.05359	ni	fascilin and related adhesion glycoproteins	um02133	0.00568	K15634	conserved hypothetical protein
2d00011	0.05384	K01869	leucyl-tRNA synthetase	um03081	0.00569	K08853	related to ARK1 - Actin Regulating Kinase
12c00039	0.05389	K06067	histone deacetylase complex, catalytic component RPD3	um06105	0.00567	K00162	probable PDB1 - pyruvate dehydrogenase
15d00039	0.05393	K12637	splicing factor U2AF, large subunit	um02529	0.00575	ni	conserved hypothetical protein
9c00111	0.05412	ni	hypothetical protein	um11359	0.00575	ni	related to BOR1 - boron efflux transporter
11c00033	0.05432	K11713	protein geranylgeranyltransferase Type I, beta subunit	um01597	0.00578	ni	hypothetical protein
10d00107	0.05475	ni	golgi proteins involved in ER retention	um10088	0.00579	K01907	related to Acebaocetyl-CoA synthetase
20d00082	0.05485	ni	hypothetical protein	um06497	0.00581	ni	putative protein
7d00145	0.05488	ni	hypothetical protein	um10656	0.00588	K02684	related to DNA primase 48K protein PR11
4d00045	0.05492	ni	hypothetical protein	um05764	0.00588	ni	related to Malic acid transport protein
16d00006	0.05494	ni	PHD finger protein BR140/LIN-49	um04193.2	0.0059	K17053	probable ABP140 - actin filament-binding protein
11d00035	0.05507	K11436	protein arginine N-methyltransferase PRMT1 and related enzyme	um01462	0.00593	ni	hypothetical protein
12d00069	0.05514	ni	WD40 repeat-containing protein	um11246	0.00597	ni	related to BZZ1 - Myc3
9c00054	0.05518	K12493	predicted F1F0-ATPase-activating protein	um06002	0.00599	ni	hypothetical protein
26c00011	0.05522	K00927	3-phosphoglycerate kinase	um01737.2	0.00599	K07036	related to Adiponectin receptor 1
22d00140	0.05529	ni	predicted lipase	um00526	0.00601	K06883	conserved hypothetical protein
7d00127	0.05558	ni	hypothetical protein	um11957	0.00601	ni	related to histidine kinase
7d00052	0.05559	K17408	mitochondrial ribosome small subunit component	um00755	0.00603	ni	putative protein
11d00065	0.05567	ni	hypothetical protein	um01050	0.00604	ni	siderophore biosynthesis regulatory protein URBS1
9c00139	0.05582	ni	glutaminyl cyclase	um11238	0.00606	ni	conserved hypothetical protein
22d00249	0.056	K03441	aquaporin	um02929	0.00608	K04709	related to longevity-assurance protein LAG1
2c00040	0.05601	ni	flavin-containing monooxygenase	um11712	0.0061	ni	putative protein
9c00102	0.05605	ni	acetylcholinesterase	um02843	0.00614	K01341	probable KEX2 - endoprotease of late golgi compartment
2c00052	0.05619	ni	hypothetical protein	um04406	0.00625	K00586	probable DPH5 - diphthamide methyltransferase
5c00057	0.05624	ni	hypothetical protein	um02425	0.00626	K12581	probable CCR4-NOT transcription complex
22c00254	0.05627	ni	synaptic vesicle transporter SVOP and related transporters	um11161	0.00626	K00026	probable MDH11 - malate dehydrogenase precursor
10c00063	0.05632	K00463	exosomal 3'-5' exonuclease complex, subunit Rpl44/DiS3	um04851	0.00627	K03564	conserved hypothetical protein
7d00066	0.05649	ni	vacuolar sorting protein VPS45/Stt10	um06018.2	0.00632	ni	conserved hypothetical protein
14c00031	0.05657	K00288	C1-tetrahydrofolate synthase	um00078	0.00635	ni	phenylalanine ammonia-lyase
9c000250	0.05664	ni	hypothetical protein	um03165	0.00636	ni	ni
7c00014	0.05679	K12761	serine/threonine protein kinase	um15047	0.00638	ni	probable VPS1 - member of the dynamin family of GTPases
10c00084	0.05667	ni	hypothetical protein	um02046	0.00644	K02728	probable PRE9 - 20S proteasome subunit Y13
18d00064	0.05669	K12815	mRNA splicing factor ATP-dependent RNA helicase	um11084.2	0.00644	K05012	probable voltage-gated chloride channel
10c00034	0.05691	ni	hypothetical protein	um00833	0.00649	K03066	probable RPT6 - 26S proteasome regulatory subunit
3c00014	0.05694	ni	hypothetical protein	um10493	0.00655	ni	related to aminopeptidase
7d00156	0.05697	ni	uncharacterized conserved protein	um04194	0.00656	K13120	conserved hypothetical protein
26d00026	0.05708	ni	uncharacterized conserved protein	um00481	0.00657	K13280	probable signal peptidase
18c00008	0.05708	ni	uncharacterized conserved protein	um04740	0.00661	ni	conserved hypothetical protein
22d0169	0.05715	ni	hypothetical protein	um04191	0.00661	K13338	probable PEX1 - peroxis

27d00064	0.05905	ni	flavohemoprotein b5+b5R	um01293	0.0071	K03510	related to DNA Polymerase Iota
12d20137	0.05919	K10908	mitochondrial/chloroplast DNA-directed RNA polymerase RPO41	um01184	0.00711	K03020	related to Rpo19 - DNA-directed RNA polymerases I and III
16d00060	0.05923	K03262	translational initiation factor 5	um03789	0.00711	ni	putative protein
9c000339	0.05924	ni	hypothetical protein	um10620	0.00714	K03132	related to TAF7 - TFIID subunit
8a00013	0.05935	ni	hypothetical protein	um11349	0.0072	ni	conserved hypothetical protein
9c000290	0.05938	K03505	hypothetical protein	um10940	0.00721	ni	related to ROT1 - molecular chaperone in the endoplasmic reticulum
14c00007	0.05939	K14550	uncharacterized conserved protein	um04329.2	0.00721	ni	conserved hypothetical protein
16d00063	0.05959	ni	global brain transcript regulator	um00721	K00327	ni	probable NAD(P)-cytochrome P450 reductase
25c00033	0.05976	K12272	signal recognition particle receptor, beta subunit	um05104	0.00723	ni	putative protein
5c000084	0.05986	K14962	histone H3 (Lys4) methyltransferase complex and RNA cleavage	um00883	0.00726	ni	related to KCS1 - potential transcription factor of the BZIP type
12d00059	0.05988	ni	uncharacterized conserved protein	um01048	0.0073	K01581	ornithine decarboxylase
9a000342	0.05993	K07573	ori23-3' 5' ori23-nucleosome complex, subunit sk4	um02142	0.00731	ni	related to musc2142
1c00028	0.05996	ni	uncharacterized conserved protein, AMMECR1	um02976.2	0.00737	ni	conserved hypothetical protein
27d00052	0.06011	K12571	PAB-dependent poly(A) ribonuclease, subunit PAN2	um10524	0.00743	K03260	related to TIF4631 - mRNA cap-binding protein
6c00034	0.06016	ni	hypothetical protein	um12297	0.00744	ni	conserved hypothetical protein
7c00216	0.06035	K00022	3-hydroxyacyl-CoA dehydrogenase	um00081	0.00745	ni	putative protein
19d00117	0.06056	ni	vascular sorting protein VPS1	um03496	0.00749	K02213	related to Cell division control protein 18
18c00069	0.06057	K11559	hypothetical protein	um00297	0.00753	K13345	related to Peroxisome assembly protein 12
8a000083	0.06063	K01537	calcium transporting ATPase	um03597	0.00755	ni	conserved hypothetical protein
4c00015	0.06072	ni	predicted hydrolases or acyltransferases	um03853	0.00759	K14312	related to NUP170 - nuclear pore protein
15c00017	0.06123	ni	hypothetical protein	um05399	0.00761	ni	hypothetical protein
19d00047	0.06129	ni	hypothetical protein	um02542	0.00761	ni	hypothetical protein
12c00027	0.06131	ni	hypothetical protein	um11769	0.00764	K12812	probable SUB2 - mRNA export protein
6c00129	0.06152	ni	hypothetical protein	um11263	0.00764	ni	putative protein
3a000067	0.06152	ni	hypothetical protein	um00083	0.00765	K02598	related to formate
24c00016	0.06162	K01809	adenosine-5-phosphate isomerase	um05692	0.0077	ni	hypothetical protein
22d00231	0.06169	K15151	transcription factor, subunit of SRB subcomplex of RNA polymerase	um10515	0.0077	ni	conserved hypothetical protein
7a00219	0.06169	ni	exocyst protein Sec3	um02763	0.00774	ni	conserved hypothetical protein
22d00072	0.06186	ni	GPI transamidase complex, GPI17/PIG-S component	um04542	0.00777	K10577	probable ubiquitin-protein ligase hus5
22d00012	0.06191	K14835	RNA and RNA cytosine-C5-methylase	um02154	0.00784	ni	related to amino-acid permease 2
25d00077	0.06193	ni	ATP-dependent RNA helicase A	um04914	0.00784	K11271	conserved hypothetical protein
9c00250	0.06199	ni	ubiquitin-conjugating enzyme-related protein F11	um11588	0.00794	K14686	related to copper transport protein
22d00272	0.06205	K02350	DNA polymerase zeta, catalytic subunit	um06040	0.00795	ni	conserved hypothetical protein
26d00044	0.0621	K14823	nucleoid protein-like/EbNA1-binding protein	um10980	0.00798	ni	conserved hypothetical Ustilago-specific protein
7c00190	0.06221	K14556	WD40-repeat-containing subunit of the 18S rRNA processing complex	um02024	0.00801	K03327	related to E3
1c00027	0.06224	ni	GTPase Rab5/YPT51	um01445.2	0.00804	K02540	probable DNA replication licensing factor
25c00036	0.06236	K07565	ribosome biogenesis protein NIP7	um04268	0.00805	K00290	probable saccharopine hydroxylase
16c00065	0.0624	K00729	hypothetical protein	um11427	0.00808	K12868	related to SYF2 - pre-mRNA-splicing factor
12c00058	0.06242	K15423	serine/threonine specific protein phosphatase	um00549	0.00809	ni	related to UTR1
22d00224	0.06243	ni	putative N2	um04150	0.0081	ni	related to DOP1 - strong similarity to developmental regulatory gene
13c00065	0.06256	K00589	uroporphyrin III methyltransferase	um02457	0.0081	K03217	related to OXA1 - cytochrome oxidase biogenesis protein
12d00116	0.06288	ni	uncharacterized conserved protein	um01823	0.00813	ni	hypothetical protein
3a00030	0.06296	ni	hypothetical protein	um04352	0.00813	K06685	probable M081 protein
11d00033	0.06302	ni	uncharacterized conserved protein	um00616	0.00816	ni	related to Exocyst complex component Sec5
9c00334	0.06307	K14566	predicted nucleic-acid-binding protein	um01532	0.0082	ni	putative protein
22d00122	0.06309	ni	hypothetical protein	um03714	0.00825	ni	related to lactose regulatory protein
12d00067	0.06328	ni	diadenosine and diphosphoinositol polyphosphate phosphohydrolase	um10417	0.00825	K09184	related to transcription factor SGATA-6
13d00041	0.06333	ni	hypothetical protein	um03864	0.00828	ni	conserved hypothetical protein
6d00096	0.06357	ni	hypothetical protein	um11970	0.00832	ni	putative protein
6c00126	0.06363	ni	hypothetical protein	um04019	0.00844	ni	putative protein
14d00043	0.06382	ni	hypothetical protein	um11456	0.00848	K05293	related to GPI - transamidase subunit
7d00239	0.06386	K02516	protein kinase inhibitor	um00304	0.00848	K01657	probable TRP2 - anthranilate synthase component I
8a00116	0.0639	ni	component of vacuolar transporter chaperone	um02649	0.00849	ni	conserved hypothetical protein
16d00074	0.064	ni	component of vacuolar transporter chaperone	um12122	0.0085	K15687	related to makorin ring zinc finger protein
4c00009	0.06401	K03469	hypothetical protein	um04126	0.00853	ni	conserved hypothetical protein
25d00063	0.06407	ni	aspartyl protease	um03864	0.00854	ni	related to GTPase-activating protein beta-chimerin
19c00112	0.0641	K02930	ribosomal protein RPL1/RPL20L4/L4	um04308	0.00854	ni	conserved hypothetical protein
19d00029	0.06415	K06215	steirain cytochrome b5 reductase	um01738	0.00856	ni	putative protein
7a00155	0.06411	ni	hypothetical protein	um02577	0.00862	K00033	probable 6-phosphogluconate dehydrogenase
5c00062	0.06417	ni	hypothetical protein	um04988	0.00862	K15110	probable ODC2 - Mitochondrial 2-oxodicarboxylate carrier
7a00088	0.06423	ni	hypothetical protein	um02068	0.00865	ni	hypothetical protein
9a00146	0.06432	ni	hypothetical protein	um00542	0.00867	K10259	related to TSC3 - Enoyl reductase involved in very long chain fatty acid elongation
22d00077	0.06433	ni	enoyl-CoA hydratase	um05365	0.00867	K04354	probable protein phosphatase 2A regulatory B subunit
2c00086	0.0645	ni	hypothetical protein	um04666	0.00869	K17362	conserved hypothetical protein
7a00176	0.0646	ni	hypothetical protein	um05731	0.00871	ni	conserved hypothetical protein
16d00055	0.06474	ni	hypothetical protein	um05644	0.00873	ni	related to alcohol dehydrogenase
7a00122	0.06475	ni	predicted N6-adenine methylase involved in transcription regulation	um10348	0.00882	K00620	related to ECOM2 - acetylornithine acetyltransferase
7a00260	0.06486	ni	hypothetical protein	um02246	0.00885	ni	putative protein
9c00138	0.06497	ni	hypothetical protein	um11687	0.00885	ni	putative protein
13d00015	0.06508	K10846	5'-3' exonuclease	um00576	0.00889	K12592	conserved hypothetical protein
27d00033	0.06511	ni	muslin class V heavy chain	um15027	0.00899	ni	putative protein
27c00027	0.06572	K16576	hypothetical protein	um11231	0.00905	K01814	probable bifunctional protein
26c00055	0.06584	ni	cyclin B and related kinase-activating proteins	um04362	0.00905	K07431	related to Cytochrome P450 8B1
22d00170	0.06588	K01785	predicted mutarotase	um02491	0.00907	K00134	glyceraldehyde 3-phosphate dehydrogenase
9a00099	0.06592	K13106	uncharacterized conserved protein	um00676	0.00909	K08869	conserved hypothetical protein
3a00045	0.06593	K03104	hypothetical protein	um10870	0.00913	K01792	hypothetical protein
6a00044	0.06599	ni	transferrin receptor and related proteins	um11192	0.00915	ni	hypothetical protein
4d00040	0.06611	ni	phosphatidylinositol 4-kinase	um03726.2	0.00916	K01802	probable CPR1 - cyclophilin
9c00120	0.06641	K00490	cytochrome P450 CYP4/CYP19/CYP26 subfamilies	um06391	0.00919	ni	related to multidrug resistant protein
9c00401	0.0664	K14774	uncharacterized conserved protein	um11071	0.00921	ni	conserved hypothetical protein
25d00084	0.06657	ni	hypothetical protein	um10633	0.00921	ni	conserved hypothetical protein
18c00013	0.06661	ni	hypothetical protein	um01968	0.00922	ni	conserved hypothetical protein
7d00171	0.06668	K03097	casein kinase II, alpha subunit	um03304	0.00923	ni	conserved hypothetical protein
7c00223	0.06707	K10866	DNA repair protein RAD50	um02632	0.00927	ni	probable nucP protein
14d00064	0.06711	ni	hypothetical protein	um04138	0.00929	K00616	probable TAL1 - transaldolase
14c00032	0.06743	ni	hypothetical protein	um10436	0.0093	ni	conserved hypothetical protein
3a00077	0.06763	K11805	conserved WD40 repeat-containing protein AN11	um04394	0.00934	K14802	probable P-type ATPase
9c00007	0.06769	ni	hypothetical protein	um01228	0.00935	K15029	related to eIF3 - translation initiation factor 3 subunit L
9c00030	0.06772	K14729	peroxisomal multifunctional beta-oxidation protein and related enzymes	um10823	0.00937	ni	conserved hypothetical protein
27d00092	0.06782	ni	hypothetical protein	um11575	0.00936	K01607	conserved hypothetical protein
19d00018	0.06786	ni	hypothetical protein	um11946	0.00937	ni	probable UDP-galactose 4-epimerase
6a00107	0.06811	K03350	DNA-binding cell division cycle control protein	um04423	0.00945	ni	related to potassium transporter TRK-1
25c00055	0.06813	K01090	serine/threonine specific protein phosphatase	um10327	0.00953	ni	putative protein
9a00028	0.06836	K02960	40S ribosomal protein S16	um10765	0.00955	ni	conserved hypothetical protein
5c00098	0.06839	K03128	TATA binding protein associated factor	um05756.2	0.00962	K10885	related to ATP-dependent DNA helicase II
2a00010	0.06841	K05755	actin-related protein Arp2/3 complex, subunit ARP4	um05755.2	0.00965	ni	conserved hypothetical protein
12d00108	0.06848	ni	hypothetical protein	um05113.2	0.00966	K01754	probable ILV1 - anabolic serine and threonine dehydratase precursor
5c00006	0.06858	K03948	hypothetical protein	um12038	0.00967	ni	related to COT1 - Mitochondrial protein required for ER to Golgi transport
14d00045	0.06865	K04482	DNA repair protein RAD51/RHP55	um00776	0.00967	ni	conserved hypothetical Ustilago-specific protein
6a00075	0.06882	K03885	NADH-dehydrogenase	um01948	0.00975	ni	hypothetical protein
16c00033	0.06888	ni	FOG, TPR repeat	um01996	0.00975	ni	probable mfs-multidrug-resistance transporter
15d00056	0.06893	ni	hypothetical protein	um11451	0.00976	K12179	related to COP9 - signalosome complex subunit 6
3a00068	0.06895	ni	hypothetical protein	um11724	0.00979	K10847	related to DNA repair protein RAD14
13d00092	0.06896	K14400	mRNA cleavage and polyadenylation factor I/II complex, subunit f	um03842	0.0098	K12867	conserved hypothetical protein
12c00090	0.06896	ni	hypothetical protein	um02318.2	0.0098	ni	conserved hypothetical protein
3a00057	0.06903	K14799	uncharacterized conserved protein	um05604	0.00981	ni	putative protein
22c00026	0.06906	ni	protein phosphatase 1 regulatory subunit, and related proteins	um04267	0.00981	ni	related to importin beta-2 subunit
8c00054	0.0694	K01874	methionyl-tRNA synthetase	um11452	0.00982	ni	conserved hypothetical protein
19d00125	0.06941	ni	hypothetical protein	um10016	0.00987	ni	conserved hypothetical protein
11d00003	0.06946	ni	hypothetical protein	um03473	0.00991	ni	conserved hypothetical protein
9c00258	0.06956	ni	predicted coiled-coil protein	um01306	0.00998	ni	hypothetical protein
27d00043	0.06962	ni	sexual differentiation process protein ISP4	um02768	0.01008	ni	conserved hypothetical protein
18d00009	0.06984	K03014	RNA polymerase subunit K	um05971	0.01009	K01915	probable glutamine synthetase
2c00021	0.07004	ni	hypothetical protein	um04149	0.01012	ni	conserved hypothetical protein
14d00030	0.07023	K12614	ATP-dependent RNA helicase	um11500	0.01024	K14688	related to COT1 - Vacuolar zinc
13c00073	0.07025	ni	hypothetical protein	um11638	0.01025	K00621	related to glucosamine 6-phosphate n-acetyltransferase
18c00106	0.07041	ni	hypothetical protein	um00884	0.01027	ni	related to RalG protein
14d00021	0.0705	ni	hypothetical protein	um04474	0.0103	K04640	guanine nucleotide-binding protein alpha-3 subunit
9a00100	0.07081	ni	hypothetical protein	um10669	0.0103	ni	conserved hypothetical protein
14d00055	0.07118	ni	hypothetical protein	um00322	0.01031	K03143	related to TFIIB basal transcription factor complex p34 subunit
2c00041	0.07137	ni	clathrin assembly protein AP180 and related proteins	um11624.2			

18d00101	0.07547	ni	chromatin remodeling complex WSTF-ISWI, small subunit	um10790	0.01115	K11808	probable phosphoribosyl-5-aminoimidazole carboxylase
2d00031	0.07581	K13237	reduces with broad range of substrate specificities	um01116	0.01116	ni	related to G1
11d00002	0.07628	K12736	cyclophilin-related peptidyl-prolyl cis-trans isomerase	um02783	0.01116	K00826	related to branched-chain amino acid aminotransferase
8d00055	0.07641	ni	hypothetical protein	um01877	0.01117	ni	putative protein
6c00051	0.07649	ni	cytochrome P450 CYP3/CYP5/CYP6/CYP subfamilies	um01191	0.01118	K02607	conserved hypothetical protein
10d00070	0.07657	ni	hypothetical protein	um06079	0.01119	K01669	related to deoxyribodipyrimidine photo-lyase PHR
16d00072	0.07671	ni	hypothetical protein	um00379	0.01124	ni	conserved hypothetical protein
14c00123	0.07702	ni	hypothetical protein	um011752	0.01131	ni	conserved hypothetical protein
19d00001	0.07702	ni	hypothetical protein	um10359	0.01132	K03017	probable DNA-directed RNA polymerase II 14
19d00007	0.07716	ni	hypothetical protein	um12154	0.01133	K12600	related to SKI3 - protein involved in exosome mediated 3
19d00040	0.07748	K09419	heat shock transcription factor	um00375	0.01134	ni	putative protein
22c00020	0.07797	K01987	arginine synthetase	um02558	0.01135	K01338	related to ATP-dependent protease La
19d00027	0.07819	K00344	predicted quinine oxidoreductase	um11669	0.01137	ni	related to syntaxin family member TLG1
9d00324	0.07821	ni	predicted exonuclease	um01720	0.01138	ni	probable phosphomannosylase
19c00124	0.0783	K15378	sucrose transporter and related proteins	um10534	0.01139	ni	related to Protein-tyrosine phosphatase
12c0145	0.07837	ni	hypothetical protein	um01265	0.01141	ni	related to RNA-binding protein
7d00135	0.07857	ni	hypothetical protein	um00329	0.01145	ni	conserved hypothetical protein
7d00127	0.0787	K03120	TATA-box binding protein	um00328	0.01148	K07508	probable ERG10 - acetyl-CoA C-acetyltransferase
7d00114	0.07885	K02997	ribosomal protein S4	um11384	0.01167	ni	probable pterin-4-alpha-carbinolamine dehydratase
24d00048	0.07894	ni	hypothetical protein	um10081	0.01175	ni	conserved hypothetical Ustilago-specific protein
16c00079	0.0792	ni	hypothetical protein	um01403	0.01175	ni	conserved hypothetical protein
19d00139	0.07933	K14801	hypothetical protein	um00565	0.01183	K09499	probable CCT7 - component of chaperonin-containing T-complex
6c00036	0.07979	ni	amino acid transporter protein	um03994	0.01199	K01568	probable PDC1 - pyruvate decarboxylase
19d00005	0.07988	ni	hypothetical protein	um05504	0.012	K01920	related to glutathione synthase
22c00319	0.08006	ni	phosphoinositide phosphatase SAC1	um02007	0.012	K01519	probable HAM1 - protein involved in DNA repair
20c00013	0.08033	ni	hypothetical protein	um11986	0.012	K10405	c-terminal kinase
18d00078	0.08042	K03424	tand-related DNase	um10636	0.01213	ni	conserved hypothetical protein
19c00049	0.08051	ni	hypothetical protein	um01407	0.01216	K13519	conserved hypothetical protein
9d00253	0.08053	ni	hypothetical protein	um00560	0.01217	K03083	probable glycogen synthase kinase 3 alpha
13c00008	0.08055	K12881	RRM motif-containing protein	um10479	0.01219	ni	conserved hypothetical protein
3c00043	0.08071	ni	hypothetical protein	um01561	0.01222	K06965	probable Fnltsa protein
7d00010	0.08089	K00293	lysine-methylglutamate reductase	um01736	0.01221	ni	conserved hypothetical protein
16d00008	0.08091	ni	uncharacterized integral membrane protein	um05652	0.01227	K02726	probable PRE8 - 20S proteasome subunit Y7
4d00032	0.08095	K00721	dolichol-phosphate mannosyltransferase	um05653.2	0.01235	ni	conserved hypothetical protein
9c00101	0.08114	ni	hypothetical protein	0.01236	K00223	ni	probable ERG4 - sterol C-24 reductase
16c00053	0.08129	ni	hypothetical protein	um11475	0.01239	ni	putative protein
6d00030	0.08142	ni	hypothetical protein	um02581	0.01239	K01535	probable PMA1 - H - transporting P-type ATPase
9c00381	0.08186	ni	hypothetical protein	um04282	0.01246	ni	related to 3-phlyase A precursor
7d00037	0.08209	K03357	angaphase-promoting complex (APC), subunit 10	um12488	0.01247	K00418	probable heat-shock protein hsp60
15c00068	0.08227	K07151	oligosaccharyltransferase, STT3 subunit	um10627	0.0125	ni	conserved hypothetical protein
9c00266	0.08231	K01835	phosphoglucomutase	um00319	0.01251	K06072	conserved hypothetical protein
20d00013	0.08273	ni	hypothetical protein	um11019	0.01255	K12826	related to PRP11 - pre-mRNA splicing factor
13c00044	0.08274	ni	hypothetical protein	um10649	0.01258	ni	conserved hypothetical protein
13c00103	0.0828	ni	hypothetical protein	um10238	0.01261	K02883	probable GOS ribosomal protein L18
5d00007	0.08296	K00620	putative glutamate/ornithine acetyltransferase	um04030	0.01274	ni	conserved hypothetical protein
7d00131	0.08305	K15322	tRNA splicing endonuclease SEN2	um10167	0.01278	K00134	glyceraldehyde 3-phosphate dehydrogenase
5d00084	0.08321	K13346	hypothetical protein	um15006	0.01281	ni	conserved hypothetical protein
7d00026	0.08323	ni	hypothetical protein	um05631	0.0129	K04077	probable heat-shock protein hsp60
1c00033	0.08334	ni	DEAH-box RNA helicase	um11585	0.01291	ni	related to capsular associated protein
9c00233	0.08338	ni	DEAH-box RNA helicase	um05942	0.01301	ni	related to monocarboxylate permease
18c00035	0.08339	ni	hypothetical protein	um11634	0.01307	ni	related to KAP114 - Member of the karyopherin-beta family
22c00237	0.08352	ni	methyltransferase	um05412	0.01311	ni	related to quininate 5-dehydrogenase
22c00157	0.08355	ni	hypothetical protein	um11923	0.01314	K17450	probable mitochondrial acylate hydratase
9c00429	0.08356	K14848	ribosome Assembly protein	um03392.2	0.01318	ni	putative protein
19d00068	0.08368	ni	hypothetical protein	um12230.2	0.01322	ni	putative protein
9d00397	0.08369	ni	hypothetical protein	um05028	0.01326	K10742	related to DNA2 - DNA helicase
2d00059	0.08402	K14808	ATP-dependent RNA helicase	um02101	0.0134	ni	putative protein
16c00109	0.08422	ni	hypothetical protein	um02304	0.01351	ni	putative protein
6c00013	0.08426	ni	hypothetical protein	um01943	0.01362	ni	related to alpha-glucosidase
9d00292	0.08436	ni	hypothetical protein	um00599	0.01363	K03512	related to DNA polymerase mu
7d00152	0.08437	K14676	predicted esterase of the alpha-beta hydrolase superfamily	um00924	0.01365	K03231	probable translation elongation factor eEF-1 alpha chain
1c00026	0.08443	ni	hypothetical protein	um00923	0.01365	K00737	related to N-acetylglucosaminyltransferase
7d00019	0.08453	K16576	actin and related proteins	um10009	0.01375	ni	related to ARO80 - positive transcription regulator of ARO9 and ARO10
13d00016	0.08455	ni	cutinins	um01926	0.01375	K01477	related to DAL2 - allantoinase
22c00171	0.08467	K06901	hypothetical protein	um10166	0.01377	K03027	probable Rpo40 - 40 kD subunit of DNA-directed RNA polymerases I and III
22d00123	0.08467	ni	uncharacterized conserved protein	um00919	0.01377	K05863	probable ADP
7d00052	0.08492	ni	hypothetical protein	um02436	0.01378	K01530	probable NE01 - P-type ATPase
9d00185	0.085	ni	hypothetical protein	um04043	0.01383	ni	conserved hypothetical protein
6c00116	0.08502	K08827	U4/U6-associated splicing factor PRP4	um01758	0.01387	ni	related to ABC transporter
20d00025	0.08504	ni	hypothetical protein	um11603	0.01387	ni	related to RPS08 - 40S ribosomal protein p40 homolog B
20d00027	0.08505	K03846	hypothetical protein	um12550	0.01387	ni	probable ribosomal protein L41
14d00086	0.08538	K11826	adaptor complexes medium subunit family	um03552.2	0.01395	ni	hypothetical protein
9c00126	0.08558	ni	vacuolar import and degradation protein	um02316	0.01396	ni	conserved hypothetical protein
10d00040	0.08571	K01867	cytoplasmic tryptophanyl-tRNA synthetase	um02377	0.01409	K00428	probable cytochrome c peroxidase precursor
9c00238	0.08572	K00697	trichothiallen-6-phosphate synthase component TPS1 and related su	um10678	0.01411	K10398	related to KIP1 - kinesin-related protein
22c00113	0.0858	ni	hypothetical protein	um1223	0.01414	ni	putative protein
22d00113	0.08581	K11229	MEKK and related serine/threonine protein kinases	um02383	0.01414	K04627	alpha2-pherrnone receptor Pra1
8c00096	0.08586	K13035	carbon-nitrogen hydrolase	um11891	0.01418	ni	conserved hypothetical protein
16d00020	0.08591	ni	hypothetical protein	um01821	0.01422	ni	probable KRE2 - alpha-1
9d00093	0.08594	K14768	WD40-repeat-containing subunit of the 18S rRNA processing co	um10018	0.01429	ni	related to ERD18 protein
7d00001	0.086	ni	metalloprotease	um00247	0.01433	ni	conserved hypothetical protein
22c00054	0.086	ni	hypothetical protein	um05032	0.01434	ni	related to NIT3 - nitrilase
9d00107	0.08603	ni	hypothetical protein	um10378	0.01442	K16261	related to DIP5 - glutamate and aspartate permease
9c00399	0.08607	ni	Kelch repeat-containing proteins	um00965	0.01454	ni	related to cardenitol cleavage dioxygenase 1
12c00038	0.08633	ni	hypothetical protein	um01117	0.01454	K00698	chitin Synthase 4
12d00007	0.08644	K01555	fumarylacetoacetase	um03908	0.01458	ni	hypothetical protein
5c00017	0.0865	K02915	60S ribosomal protein L34	um01860	0.01463	K04794	related to PTH2 - aminoacyl-tRNA hydrolase
13c00026	0.08674	ni	hypothetical protein	um11511	0.01467	K12981	related to YRA1 - RNA annealing protein
10d00065	0.08677	ni	carbon-nitrogen hydrolase	um00848	0.01479	K14751	probable caseinase 1 hsp1
20d0040	0.08683	ni	hypothetical protein	um11270	0.01511	K10256	related to Delta-12 fatty acid desaturase
22c00170	0.08687	K01792	uncharacterized enzymes related to aldose 1-epimerase	um04508	0.01514	K14782	related to BFR2 - involved in protein transport steps at the Brefeldin A blocks
22c00306	0.08688	ni	hypothetical protein	um06004	0.01515	ni	probable HNT1 - Adenosine 5
7d00240	0.08718	ni	hypothetical protein	um10514	0.01517	ni	conserved hypothetical protein
9d00386	0.08744	ni	mitochondrial import inner membrane translocase, subunit TIM17	um12155.2	0.01519	K08741	related to MtuS protein homolog 5
5d00130	0.08776	ni	FOG, RRM domain	um11686	0.01519	ni	ni
7d00073	0.08786	ni	hypothetical protein	um00589	0.01522	K01069	related to GLO4 - glyoxalase II
16d00054	0.08811	K03850	alpha-1,2 glucosyltransferase	um02449	0.01525	K09104	related to centromere binding factor 1
12c00019	0.08813	K15223	RNA polymerase I transcription factor UAF	um12002	0.01528	K11415	related to NAD-dependent deacetylase Siruin 5
22c00215	0.08868	ni	hypothetical protein	um10698	0.01531	ni	related to NEFA-interacting nuclear protein NIP30
12c00053	0.08882	K00030	isocitrate dehydrogenase, gamma subunit	um10484	0.01533	K10101	related to ALG7 - UDP-N-acetylglucosamine-1-phosphate transferase
14d00093	0.08892	ni	hypothetical protein	um02219	0.01545	ni	putative protein
8c00103	0.08895	K10689	ubiquitin conjugating enzyme	um01632	0.01547	ni	conserved hypothetical protein
27d00073	0.08901	K12198	RNA polymerase II transcription factor complex subunit	um01642	0.01549	ni	related to NAD-dependent deacetylase Siruin 5
12c00004	0.08901	ni	hypothetical protein	um06157	0.01557	ni	related to Spherulin 4 precursor
11c00023	0.08901	ni	guanine nucleotide exchange factor	um03547.2	0.01565	ni	putative protein
22c00194	0.08906	K03635	molybdopterin converting factor subunit 2	um01981	0.01574	ni	related to Malonyl CoA-acyl carrier protein transacylase
27c00087	0.08915	K02966	40S ribosomal protein S19	um01755	0.01575	K09503	related to Chai1 homolog subfamily A member 2
7d00172	0.08916	ni	hypothetical protein	um03073	0.01581	ni	related to GTT1 - glutathione S-transferase
5c00042	0.0892	K11996	molybdopterin synthase sulfurylase	um05345	0.01585	ni	conserved hypothetical protein
9c00169	0.08931	K15429	tRNA modification enzyme	um15091	0.01588	ni	conserved hypothetical protein
3d00020	0.08934	K00916	cod2-related protein kinase	um04499	0.01592	ni	conserved hypothetical protein
19d00064	0.08936	ni	acyltransferase required for palmitoylation	um03458	0.01604	ni	hypothetical protein
2c00046	0.08959	K09523	dsRNA-activated protein kinase inhibitor P58	um12235	0.01606	ni	hypothetical protein
8c00033	0.0896	K05302	uncharacterized conserved protein	um10164	0.01606	K10583	related to E2 ubiquitin-conjugating enzyme
9d00070	0.08964	K12830	splicing factor 3b, subunit 3	um11793	0.01616	K07950	probable ARL1 - ADP-ribosylation factor
9c00259	0.08971	K08741	mitochondrial ATPase MSH5	um01893	0.01621	K01836	probable PCN11 - phosphocystadylglucosamine mutase
9c00163	0.08997	K03507	nucleotide excision repair factor NEF2, RAD4/CUT5 component	um02618.2	0.01625	K08063	probable transcriptional coregulator Swr1
19c00034	0.09002	ni	hypothetical protein	um11327	0.01636	K17302	probable SEC27 - coatomer complex beta subunit
8d00031	0.09011	K00877	phosphomethylpyrimidine kinase	um11241	0.0164	ni	related to aldehyde dehydrogenase
6d00037	0.09011	K01230	1, 2-alpha-mannosidase	um10463	0.0165		

12c00132	0.09434	K12897	hsp27-ere-tata-binding protein/Scaffold attachment factor	um10448.2	0.01804	ni	conserved hypothetical protein
3c00010	0.09462	ni	protein kinase PCTAIRE and related kinases	um10974.2	0.01816	ni	related to tetrahydrofolylpolyglutamate synthase
6d00079	0.09465	ni	predicted membrane protein	um002360	0.01818	K01247	conserved hypothetical protein
8d00034	0.09481	K10258	steroid reductase required for elongation of the very long chain fat	um11438	0.0183	ni	conserved hypothetical protein
18c00077	0.095	K15071	exocyst subunit - Sec10p	um10046	0.01836	ni	conserved hypothetical protein
7b00026	0.09503	ni	hypothetical protein	um05401	0.01844	ni	conserved hypothetical protein
3a00032	0.09521	K12812	ATP-dependent RNA helicase	um04992.2	0.01851	ni	conserved hypothetical protein
25c00045	0.09529	ni	hypothetical protein	um02574	0.01863	ni	related to nucleotide-binding factor
7c00072	0.09541	K02021	peptide exporter	um11824	0.01873	ni	hypothetical protein
2c00069	0.09546	ni	hypothetical protein	um05490	0.01873	ni	hypothetical protein
15d00012	0.09561	K03361	cdc4 and related F-box and WD-40 proteins	um01327	0.01873	ni	related to Acetylcholinesterase precursor
8d00006	0.09598	ni	hypothetical protein	um006932	0.01875	ni	conserved hypothetical protein
12c00083	0.09601	K14007	vesicle coat complex COPII, subunit SFB3	um01111	0.01883	ni	putative protein
9d00021	0.09627	ni	hypothetical protein	um10751	0.01885	K03141	related to TFB1 - subunit of RNA polymerase II transcription initiation factor TFIIF
16d00046	0.09628	ni	hypothetical protein	um04945	0.01887	ni	putative protein
22d00118	0.09663	K14546	hypothetical protein	um02267	0.01889	ni	putative protein
6d00014	0.09639	K01797	hypothetical protein	um12101	0.01893	ni	conserved hypothetical protein
13c00052	0.09669	ni	TFIIF-interacting CTD phosphatase, including NLI-interacting fac	um04312	0.01894	ni	related to alpha-actinin
16d00005	0.09675	ni	hypothetical protein	um02345	0.01897	ni	putative protein
22c00066	0.09681	K03946	NADH, ubiquinone oxidoreductase NDUF2A/B2 subunit	um00350	0.01899	K09831	probable ERG5 - C-22 sterol desaturase
9c00275	0.09683	ni	hypothetical protein	um04852	0.019	ni	hypothetical protein
7b00209	0.09696	ni	hypothetical protein	um01672	0.01906	K01899	probable succinyl-coa synthetase alpha chain
26c00067	0.09708	K14430	Nav/dicarboxylate	um11304	0.0191	ni	conserved hypothetical protein
5a00062	0.09729	ni	heavy metal exporter HMT1	um01790	0.01912	ni	related to DNA ligase
25c00006	0.09777	ni	hypothetical protein	um02010	0.01919	K01626	related to family II 2-keto-3-deoxy-D-arabino-heptulosonate 7-phosphate synthase
24c00043	0.09785	I0849	structurally specific endonuclease ERCC1-XPF, ERCC1 component	um01211	0.01924	ni	conserved hypothetical protein
13c00035	0.09792	ni	hypothetical protein	um03775	0.01932	K00326	related to MCR1 - cytochrome-b5 reductase
15c00015	0.09828	K11839	ubiquitin C-terminal hydrolase	um01264	0.01934	ni	conserved hypothetical protein
19d00017	0.09839	ni	predicted membrane protein	um10672.2	0.01941	ni	hypothetical protein
22d00076	0.09861	K00587	farnesyl cysteine-carboxyl methyltransferase	um10151	0.01963	ni	conserved hypothetical protein
10c00004	0.09884	K15111	mitochondrial carrier protein PETa	um11302	0.01983	ni	conserved hypothetical protein
12c00089	0.0988	ni	hypothetical protein	um02258	0.01989	K02021	probable ATP-binding cassette
10d00092	0.09903	ni	dual specificity phosphatase	um02071	0.01997	ni	conserved hypothetical protein
13d00111	0.09905	K11594	ATP-dependent RNA helicase	um03377	0.01997	ni	hypothetical protein
9c00282	0.0991	K15128	RNA polymerase II transcriptional regulation mediator	um01729	0.01999	K10755	probable RFC4 - DNA replication factor C
6d00119	0.09942	ni	GYF domain containing protein	um02886.2	0.02003	ni	related to ATM1 - Mitochondrial inner membrane ABC transporter involved in the maturation of cytosolic iron-sulfur
10d00081	0.09952	ni	low density lipoprotein receptor	um02899	0.02004	K01681	probable acronitase
25d00061	0.09982	ni	hypothetical protein	um11097	0.02004	K00420	related to QCR10 - ubiquinol--cytochrome-c reductase 8
22c00176	0.10016	K09503	molecular chaperone	um02463	0.02015	K09602	conserved hypothetical protein
14d00103	0.10025	ni	molecular chaperone	um12265.2	0.02015	ni	conserved hypothetical protein
7d00199	0.10049	K08332	armadillo repeat protein VAC8	um02578	0.02017	ni	related to Het-c heterokaryon incompatibility protein
9d00176	0.10058	K03250	transcription initiation factor 3, subunit e	um00223	0.02018	K09885	related to aquaporin
9c00134	0.10061	K01533	cation transport ATPase	um00896	0.02032	K11498	Kinesin-7a motor protein
4c000203	0.10078	ni	hypothetical protein	um05480	0.02033	K00369	chitin Synthase 7
7d00229	0.10092	K03347	culmins	um02380	0.02035	K15325	hypothetical protein
22c00065	0.10121	K06965	meiotic cell division protein Pelota/DOM34	um05776	0.02043	K04487	probable Cysteine desulfurase
7d00076	0.10128	ni	hypothetical protein	um00366	0.02047	K02542	probable MCM6 - involved in replication
9c00212	0.1013	K01115	phospholipase D1	um11906	0.02068	ni	probable MRS11 - subunit of the Tim22-complex
22d00279	0.10131	ni	dimeric dihydrodipicolinate dehydrogenase	um10892	0.0207	K03424	conserved hypothetical protein
5c00117	0.10156	ni	synaptic vesicle transporter SVOP and related transporters	um05892	0.02082	K11121	related to NAD-dependent histone deacetylase
19d00111	0.10156	ni	vacuolar assembly/sorting proteins VPS39/VAM6/VPS3	um00499	0.02083	ni	conserved hypothetical protein
22c00200	0.10158	ni	hypothetical protein	um11181	0.02086	ni	probable LEU2 - beta-isopropyl-malate dehydrogenase
14d00025	0.10169	ni	hypothetical protein	um06293	0.02087	ni	conserved hypothetical protein
22c00162	0.10201	K07880	GTPase Rab4	um02862	0.02088	ni	conserved hypothetical protein
7c00077	0.10225	ni	hypothetical protein	um12222	0.02091	ni	putative protein
19d00013	0.10241	ni	hypothetical protein	um03308	0.02092	K11142	related to Cytosol aminopeptidase
25d00055	0.1025	K11096	small nuclear ribonucleoprotein	um02760	0.02092	K02325	related to DNA polymerase epsilon subunit B
22c00022	0.10261	I0659	genotoxin complex, DGRIP84/SPC97 component	um02113	0.02093	ni	conserved hypothetical protein
7d00023	0.10263	ni	hypothetical protein	um05042.2	0.02094	ni	conserved hypothetical protein
7d00253	0.10263	ni	hypothetical protein	um00206.2	0.02096	ni	conserved hypothetical protein
24c00022	0.10272	K01881	prolyl-tRNA synthetase	um05785	0.02103	ni	acyl transferase-like protein
9c00223	0.10292	K02304	hypothetical protein	um05362	0.02103	ni	conserved hypothetical protein
6c00021	0.10311	ni	hypothetical protein	um00512	0.02109	K03937	probable NADH-ubiquinone oxidoreductase 21 kDa subunit
15c00062	0.10327	ni	predicted transporter	um05628.2	0.0211	ni	conserved hypothetical protein
3a00098	0.10381	ni	ras 1 guanine nucleotide exchange factor	um03396	0.02117	ni	conserved hypothetical protein
8d00007	0.10386	ni	FOG, Zn-finger	um11009	0.02121	K08737	related to MSH6 - DNA mismatch repair protein
26c00005	0.10409	ni	hypothetical protein	um01521	0.02123	K01465	dihydrorase
9d00285	0.10429	ni	hypothetical protein	um04169	0.02128	ni	related to leucine zipper-EF-hand containing transmembrane protein 1
10d00061	0.1044	K14238	glutamate decarboxylase and related proteins	um00381	0.02132	K03953	probable NADH2 dehydrogenase
6c00083	0.10443	K01580	glutamate decarboxylase and related proteins	um06268	0.02134	K16302	related to MAM3 - Protein required for normal mitochondrial morphology
9c00311	0.10445	ni	actin-binding protein SLAZ	um11053	0.0214	ni	conserved hypothetical protein
9c00033	0.10446	ni	hypothetical protein	um00610	0.02146	ni	conserved hypothetical protein
7c00117	0.10446	K14684	mitochondrial solute carrier protein	um01011	0.02147	ni	related to lariat-debranching enzyme
9c00177	0.10447	ni	hypothetical protein	um11907.2	0.02156	ni	conserved hypothetical protein
15d00044	0.10514	ni	molecular chaperones HSP70/HSC70	um04622	0.02163	K01490	probable AMD1 - AMP deaminase
9c00112	0.10532	ni	hypothetical protein	um04783	0.02173	K13116	probable DEAD-box ATP-dependent RNA helicase 35
15c00075	0.10565	K14840	cellular protein	um10654	0.02179	K10845	related to TFB5 - component of general transcription and DNA repair factor TFIIF
9d00296	0.10579	ni	hypothetical protein	um03793	0.02185	K11362	putative protein
7d00017	0.10635	ni	hypothetical protein	um02628	0.02186	K02999	related to DNA-directed RNA polymerase I
5c00029	0.10636	ni	cytochrome beta-synthase and related enzymes	um06234	0.02188	K03243	probable GTPase
14d00104	0.10639	ni	CDK kinase-activating protein cyclin T	um12309	0.0219	ni	conserved hypothetical protein
26d00003	0.10643	K11415	sirtuin 5 and related class III sirtuins	um04378	0.0219	ni	related to phenylacetaldehyde dehydrogenase
7d00173	0.10672	K17218	sulfide, quinone oxidoreductase	um02401	0.02191	K14396	related to poly
5d00147	0.10689	K00850	pyrophosphate-dependent phosphofructo-1-kinase	um11631	0.02199	ni	hypothetical protein
7c00029	0.10707	ni	hypothetical protein	um04943	0.02207	ni	conserved hypothetical protein
16d00056	0.10725	ni	hypothetical protein	um06478	0.02209	ni	conserved hypothetical protein
7d00028	0.10742	ni	amine oxidase	um01189	0.02216	K03232	probable EFB1 - translation elongation factor eEF1beta
16d00071	0.10743	K00963	UDP-glucose pyrophosphorylase	um10319	0.02218	ni	putative protein
12c00099	0.10749	ni	hypothetical protein	um06222	0.02219	K14654	related to RUB7 - HTP reductase
7d00280	0.10782	ni	nuclear receptor coregulator SMRT/SMRTER	um03085	0.02225	K04564	probable manganese superoxide dismutase precursor
9c00287	0.10786	K03521	electron transfer flavoprotein, beta subunit	um02495	0.02226	K03039	related to 26S proteasome regulatory particle chain RPN9
6c00050	0.10816	ni	hypothetical protein	um05911	0.0223	ni	conserved hypothetical protein
16c00075	0.10838	ni	hypothetical protein	um01689	0.0223	ni	putative protein
16c00010	0.10839	K12346	mn2+ and Fe2+ transporters of the NRAMP family	um02223	0.02233	K10178	related to acid phosphatase
12c00054	0.10851	K12870	mRNA splicing factor	um06091	0.02234	ni	ni
15c00037	0.1086	ni	hypothetical protein	um11248	0.02241	ni	conserved hypothetical protein
18c00024	0.10861	K14549	conserved WD40 repeat-containing protein	um05545	0.02248	K11427	related to protein-lysine N-methyltransferase
18d00056	0.1087	ni	hypothetical protein	um06268	0.02249	ni	related to CCO-17-cisposed vacuolar iron transport protein
10c00051	0.10871	ni	betaine aldehyde repeat-containing protein	um04781	0.02265	K11096	probable small nuclear ribonucleoprotein chain D2
9d00159	0.10875	K10734	uncharacterized conserved protein	um11541	0.02277	K17338	conserved hypothetical protein
14c00095	0.10878	K14007	vesicle coat complex COPII, subunit SEC24/subunit SFB2	um10332	0.02279	ni	conserved hypothetical protein
24c00061	0.10881	ni	hypothetical protein	um10061	0.02285	ni	conserved hypothetical protein
18c00063	0.10891	K01568	thiamine pyrophosphate-requiring enzyme	um02472	0.02304	ni	conserved hypothetical protein
8d00069	0.10922	K12393	adaptor complexes medium subunit family	um00208	0.02307	ni	related to SRC1 - involved in sister chromatid segregation
20c00111	0.10922	K01279	hypothetical protein	um12034	0.02307	K12158	probable NEDD8 precursor - Ubiquitin-like protein
13d00056	0.1097	ni	HMG box-containing protein	um02331	0.02307	K04371	MAP Kinase
10d0035	0.10985	K03264	transcription initiation factor 6	um03184	0.02315	ni	conserved hypothetical protein
26d00020	0.10992	K03564	alkyl hydroperoxide reductase	um10778	0.02318	K15156	related to RNA polymerase II mediator complex protein pmc1
5c00087	0.10998	K09506	molecular chaperone	um00812	0.0232	K11788	probable bifunctional purine biosynthetic protein ade1
26d00070	0.11005	K12816	mRNA splicing factor	um11637	0.02321	ni	conserved hypothetical protein
26c00014	0.11008	K12191	vacuolar assembly/sorting protein DID4	um01329	0.02322	K00030	probable IDH1 - isocitrate dehydrogenase
7c00350	0.11009	ni	hypothetical protein	um11032	0.02325	ni	conserved hypothetical protein
22c00184	0.11016	ni	hypothetical protein	um01967	0.02325	ni	conserved hypothetical protein
9d00249	0.11019	ni	hypothetical protein	um01903	0.02339	ni	related to succinyl-coa ligase
14d00034	0.11022	ni	uncharacterized conserved protein	um10922	0.02341	ni	conserved hypothetical protein
25d00062	0.11023	ni	hypothetical protein	um04323	0.02357	ni	conserved hypothetical protein
5c00149	0.11026	ni	hypothetical protein	um03412	0.02359	ni	conserved hypothetical protein
3a00031	0.11037	K12812	ATP-dependent RNA helicase	um04997	0.02364	ni	related to SUV3 - ATP-dependent RNA helicase
4d00035	0.11046	K03025	RNA polymerase III, subunit C34	um03266	0.02367	ni	conserved hypothetical protein
19d00143	0.1105	K14290	nuclear transport receptor CRM1/MSNS	um06009	0.02371	K05658	probable Leptomycin B resistance protein pmf1
9c00228	0.11109	K11251	SAM-dependent methyltransferases	um02573	0.02372	ni	hypothetical protein
27c00001	0.11109	ni	hypothetical protein	um05393	0.02372	ni	ni
25c00042	0.11127	K01173	mitochondrial endonuclease	um02291	0.02378	K00681	related to gamma-glutamyltransferase
9c00288	0.11131	ni	Ca2+ sensor	um04466	0.02386	ni	related to NADPH-dependent beta-ketoacyl reductase
12c00096	0.11159	ni	hypothetical protein	um11597	0.02401	ni	hypothetical protein
22d00139	0.11184	ni	phosphoglucomutase	um02884	0.02405	ni	conserved hypothetical protein
10c0043	0.11185	ni	protein kinase C substrate, 80 KD protein, heavy chain	um01979	0.02419	ni	related to MTO2 - Putative S-adenosylmethionine-dependent methyltransferase
10d00210	0.11245	ni	hypothetical protein	um04010	0.02444	K15745	probable phytoene dehydrogenase
16c00001	0.11246	ni	non-ribosomal peptide synthetase	um10477	0.02458	K12842	conserved hypothetical protein
25d00032	0.11261	ni	hypothetical protein	um12185	0.0246	ni	conserved hypothetical protein
15d00074	0.11255	ni	dephosphoryl aminopeptidase	um02557	0.02461	K02321	related to DNA polymerase alpha 70 kDa subunit
7d00171	0.11278	K01619	deoxyribose-phosphate aldolase	um11413	0.02469	ni	putative protein
14d00084	0.11303	ni	P-type ATPase	um02366	0.02471	K03109	related to signal recognition particle 9 protein
7d00144	0.11313	K06943	GTP-binding protein CRFG/NOG1	um11033	0.02476	ni	related to 2-hydroxyacid dehydrogenase
19d00144	0.11314	ni					

11d00068	0.11682	ni	protein tyrosine phosphatase	um01128	0.02578	K11341	related to YAF9 - Component of a chromatin modifying complex
15c00039	0.11683	ni	predicted Zn-dependent hydrolase	um00796	0.02587	ni	putative protein
27c00037	0.11707	ni	hypothetical protein	um01237	0.02588	ni	conserved hypothetical Ustilago-specific protein
14c00054	0.11716	ni	hypothetical protein	um01702	0.02588	ni	conserved hypothetical protein
7400286	0.11766	ni	uncharacterized Zn ribbon-containing protein	um10544	0.02591	ni	conserved hypothetical protein
22d00255	0.11788	ni	predicted hydrolases or acyltransferases	um04442	0.02609	K01893	probable DEDB1 - asparaginyl-RNA-synthetase
9c000025	0.11806	K09780	hypothetical protein	um02104.2	0.02613	ni	probable Regulator of G-Protein Signaling Protein
22c00022	0.11823	K12820	predicted component of NuA3 histone acetyltransferase complex	um01864	0.02614	K15340	conserved hypothetical protein
70c00204	0.11825	ni	mRNA splicing factor ATP-dependent RNA helicase	um11522	0.02616	ni	putative protein
16d00062	0.11826	K01120	60S ribosomal protein L14/L17/L23	um10311	0.02617	ni	putative protein
15c00072	0.11831	K04460	hypothetical protein	um12328	0.02637	ni	conserved hypothetical Ustilago-specific protein
12d00072	0.11836	K11855	serine-threonine phosphatase-2A, catalytic subunit	um10101	0.02653	ni	hypothetical protein
7c00267	0.11837	ni	ubiquitin carboxyl-terminal hydrolase	um01168	0.02663	ni	conserved hypothetical protein
18d00018	0.11877	K01876	hypothetical protein	um10749	0.02668	K00728	probable dolichyl-phosphate-mannose-6-phospho-1-mannosyltransferase
70c0291	0.11965	K00416	asparnyl-trna synthetase	um06213	0.02676	ni	conserved hypothetical protein
22c00193	0.11986	ni	hypothetical protein	um01547	0.02677	ni	conserved hypothetical protein
22c00130	0.12012	ni	hypothetical protein	um04977	0.02684	ni	putative protein
7400003	0.12017	ni	hypothetical protein	um11641	0.02685	ni	conserved hypothetical protein
40d00022	0.12019	ni	hypothetical protein	um03974	0.02687	K14152	probable histidine biosynthesis trifunctional protein
26c00071	0.12028	K14852	regulator of ribosome synthesis	um10364	0.02691	ni	related to KRE6 - glucan synthase subunit
6c000071	0.12039	ni	hypothetical protein	um11914	0.02694	K02983	probable 40S ribosomal protein S30
3a000052	0.12051	ni	hypothetical protein	um00673	0.027	ni	probable het-c2 protein
3c000073	0.12066	ni	hypothetical protein	um00053	0.02713	K03786	probable 3-dehydroquinate dehydratase
5a000087	0.1209	ni	protein interacting with poly(A)-binding protein	um01773	0.0272	ni	conserved hypothetical protein
1c000018	0.12098	ni	hypothetical protein	um03013	0.02729	K03255	related to CU11 - translation initiation factor eIF3
7400105	0.12141	ni	hypothetical protein	um06258	0.02733	ni	conserved hypothetical protein
7c00302	0.12144	K07976	GTPase Rab5/YPT51	um02802	0.02733	ni	related to NAR1 - similarity to human nuclear prelamin A recognition factor
4c000001	0.12179	ni	hypothetical protein	um04162	0.02737	ni	related to mitochondrial amino acid transporter ARG-13
20d00022	0.1219	ni	hypothetical protein	um00226	0.02739	K11364	conserved hypothetical protein
26c00075	0.12293	ni	hypothetical protein	0.0274	K03800	ni	related to lipovitelliferase
14d000004	0.12236	K00616	transaldolase	um11376	0.0275	ni	putative protein
13c00062	0.12247	K01568	thiamine pyrophosphate-requiring enzyme	um10635	0.02759	ni	hypothetical protein
8c000009	0.12255	ni	hypothetical protein	um03180	0.02763	ni	related to white collar 1 protein
12c00102	0.1226	K03348	anaphase-promoting complex (APC), subunit 1	um11520	0.02763	K02150	probable vacuolar ATP synthase subunit E
11c000074	0.12309	K01893	asparaginyl-trna synthetase	um12318	0.02764	ni	hypothetical protein
26d00081	0.12314	ni	hypothetical protein	um02290	0.02769	ni	conserved hypothetical protein
27d00007	0.12314	ni	glyoxylate oxidase	um02654	0.02774	ni	conserved hypothetical protein
20d00021	0.12326	K10686	NEDD8-activating complex, catalytic component UBA3	um02520	0.02783	K15206	related to TIF1C subunit
7400198	0.12347	ni	hypothetical protein	um01869	0.02785	ni	conserved hypothetical protein
9c00355	0.12361	ni	hypothetical protein	um02199	0.02792	ni	hypothetical protein
22d00290	0.12379	ni	hypothetical protein	um03292	0.02803	K11979	related to Protein mto2
27d00068	0.12383	ni	hypothetical protein	um03144	0.02807	K11826	probable clathrin-associated adaptor complex medium chain
26c00042	0.12386	K03023	RNA telomerase II (C) subunit	um12150	0.02816	ni	related to YKT1 - SNARE protein for Endoplasmic Reticulum-Golgi transport
8c000045	0.12391	ni	hypothetical protein	um11688	0.02821	ni	conserved hypothetical protein
22d000257	0.12398	K01273	renal dipeptidase	um10091	0.02828	ni	conserved hypothetical protein
11c00006	0.12409	ni	predicted Kv/Hh-antiporter	um10467	0.02831	ni	related to RAD16 - nucleotide excision repair protein
5d00036	0.12436	ni	uncharacterized high-glucose-regulated protein	um11107	0.02845	ni	conserved hypothetical protein
9a000063	0.12448	K00826	branched chain aminotransferase BCAT1	um01540	0.0285	ni	conserved hypothetical protein
25c00077	0.12471	ni	ras 1 guanine nucleotide exchange factor	um04004	0.02886	K11204	probable gamma-glutamylcysteine synthetase
24d00038	0.12479	K13127	predicted E3 ubiquitin ligase	um04398	0.02889	ni	related to RNA binding protein Nrd1
26c00087	0.12481	K13107	predicted RNA-binding protein	um05349	0.02909	ni	conserved hypothetical protein
7c00271	0.12493	ni	calmodulin and related proteins	um03861	0.02913	ni	putative protein
13d00074	0.12507	K11676	hypothetical protein	um00572	0.02916	ni	conserved hypothetical protein
7c00192	0.12512	K02266	cytochrome c oxidase, subunit Vlb/COX13	um00768	0.02919	K17267	probable coatomer gamma-2 subunit
3c000038	0.12517	ni	nfl-like domain-containing proteins	um02247	0.02939	ni	conserved hypothetical protein
26d00101	0.1253	K09780	hypothetical protein	um04796	0.02939	ni	hypothetical protein
8c000021	0.12543	K12471	cytosolic nucleoside transporter protein	um02945	0.02945	K13106	conserved hypothetical protein
19c00084	0.12558	K11564	hypothetical protein	um04969	0.0295	ni	conserved hypothetical protein
2c000012	0.1256	K15163	hypothetical protein	um03631	0.02954	ni	related to MIA40 - mitochondrial intermembrane space protein
10c00050	0.12563	K03504	hypothetical protein	um11178	0.02955	ni	related to U2 small nuclear ribonucleoprotein B
13c00057	0.12597	ni	uncharacterized conserved protein	0.02971	K03233	ni	related to translation elongation factor eEF1
22d00090	0.12597	K14775	uncharacterized conserved protein	um02859	0.0298	K14290	probable CRM1 - nuclear export factor
11d00077	0.12601	ni	hypothetical protein	um11974	0.02981	ni	ni
8a000015	0.12621	K16066	predicted dehydrogenase	um03537	0.03002	K00611	probable ornithine carbamoyltransferase precursor
9a000318	0.12631	ni	ubiquitin-protein ligase	um10961	0.03003	K02437	probable Glycine cleavage system H protein
14c00027	0.12645	K10845	hypothetical protein	0.03017	ni	ni	related to positive transcription factor GCN20
27d00096	0.12652	ni	hypothetical protein	um03756	0.03025	K10300	related to DNA helicase Fdhp
9a000204	0.12655	ni	hypothetical protein	um06259	0.03029	K05864	probable U-snrNP-associated cyclophilin
5c000027	0.12679	ni	hypothetical protein	um04703	0.03035	K01840	probable phosphoanionomutase
9c00110	0.12705	ni	hypothetical protein	um11300	0.03047	ni	conserved hypothetical protein
12d00030	0.1272	ni	hypothetical protein	um00780	0.03047	ni	putative protein
5c000055	0.12747	K10643	MOT2 transcription factor	um02435	0.03048	K01410	related to mitochondrial intermediate peptidase precursor
27c00070	0.12758	ni	hypothetical protein	um11355	0.03051	K11569	related to DAD4 - outer kinetochore protein
25d00049	0.12759	K01597	mevalonate pyrophosphate decarboxylase	um11041.2	0.03053	ni	related to serine
18d00030	0.12775	ni	ankyrin repeat and DHHC-type Zn-finger domain containing prote	um01881	0.03054	K00540	related to Oxidoreductase
12c00033	0.12786	ni	hypothetical protein	um02325.2	0.03067	ni	conserved hypothetical protein
7400279	0.12799	K06689	ubiquitin-protein ligase	um02596	0.03074	ni	hypothetical protein
18c00070	0.128	ni	hypothetical protein	um02501	0.0308	K12572	related to Pab1 dependent poly
22c00047	0.12852	ni	dihydroisomerase succinyltransferase	um05206	0.03083	K00452	probable DNA 1, 3-hydroxyanthranilic acid dioxygenase
3a000068	0.1286	ni	hypothetical protein	um03760	0.03083	ni	related to Phosphatidylinositol-3
27d00010	0.12876	K14306	nuclear porin	um12282	0.03084	K15028	related to eIF3k - translation initiation factor 3 subunit K
14d00037	0.12895	ni	hypothetical protein	um05694	0.03091	ni	hypothetical protein
3a000059	0.1293	K08286	serine/threonine protein kinase	um12339	0.03096	ni	hypothetical protein
9c003318	0.12954	ni	hypothetical protein	um01478	0.03097	K00415	conserved hypothetical protein
7400040	0.12958	K02946	hypothetical protein	um02300	0.03102	K01176	probable alpha-amylose
22d000225	0.12974	ni	hypothetical protein	um04623	0.03102	K10756	probable RFC3 - DNA replication factor C
25d00046	0.12982	K13337	40 kDa frameshifted protein associated with peroxisomes	um06038	0.03106	ni	conserved hypothetical protein
13d00048	0.12978	ni	hypothetical protein	um04196	0.03108	K12343	steroid 5alpha-reductase
11c00059	0.12995	ni	ER-Golgi vesicle-tethering protein p115	um04944	0.03111	K14401	related to cleavage and polyadenylation specificity factor
6d000051	0.13022	ni	hypothetical protein	um11564	0.03113	ni	hypothetical protein
3a000023	0.13036	K00036	glucose-6-phosphate 1-dehydrogenase	um11358	0.0312	K02355	related to MEF2 - translation elongation factor
16c00036	0.13046	ni	aldohyde dehydrogenase	um01112	0.0315	K03417	related to carboxyphosphonopyruvate phosphonmutase
21c00006	0.13083	ni	hypothetical protein	um05423	0.03151	ni	related to Monooxygenase A
18c00074	0.13066	ni	hypothetical protein	um05746	0.03154	K00685	related to arginine-RNA-protein transferase
19c00059	0.13111	ni	clathrin adaptor complex, small subunit	um05777	0.03155	ni	conserved hypothetical protein
13c00034	0.13141	ni	hypothetical protein	um04650	0.03164	ni	conserved hypothetical protein
22d00069	0.13205	ni	disposylase	um01696	0.0317	ni	conserved hypothetical protein
6c00136	0.13214	K00565	mRNA cap methyltransferase	um11773	0.03172	ni	conserved hypothetical protein
14c00003	0.13216	ni	predicted transporter	um11696	0.03176	ni	related to SCS2 - required for inositol metabolism
11c00081	0.13219	K04345	cAMP-dependent protein kinase catalytic subunit	um04290	0.03181	K00698	chiin synthase 2
22c00049	0.13234	ni	permease of the major facilitator superfamily	um03253	0.03193	ni	putative protein
9a000016	0.13243	ni	hypothetical protein	um03843	0.03205	K10862	conserved hypothetical protein
8c000052	0.13245	ni	hypothetical protein	um12051	0.03206	ni	related to Glutamate decarboxylase 1
14c00045	0.13249	K01530	P-type ATPase	um10875	0.03206	ni	conserved hypothetical protein
20c00045	0.13254	ni	hypothetical protein	um06119	0.03207	ni	conserved hypothetical protein
3c000042	0.1327	K01101	p-Nitrophenyl phosphatase	um03294	0.03211	ni	conserved hypothetical protein
5c000002	0.13281	ni	hypothetical protein	um10060.2	0.03231	ni	related to YIH1
18d00015	0.13287	ni	hypothetical protein	um10196	0.03232	K02901	probable 60S large subunit ribosomal protein L27
24d00060	0.13287	ni	hypothetical protein	um04285	0.03233	K01637	probable isocitrate lyase
14d00033	0.13306	ni	ribosomal protein S6 kinase and related proteins	um12093	0.03257	ni	putative protein
22c00167	0.13323	ni	hypothetical protein	um15362	0.03261	ni	conserved hypothetical protein
5d00142	0.1333	ni	gamma-tubulin ring complex protein	um01012	0.03267	ni	conserved hypothetical protein
22d00214	0.13334	ni	hypothetical protein	um00916	0.03275	ni	conserved hypothetical protein
70c00322	0.13352	ni	hypothetical protein	um11422	0.03276	ni	conserved hypothetical protein
22c00085	0.1337	ni	VAMP-associated protein	um05625	0.03285	ni	related to curved dna-binding protein
9c00149	0.13373	K07739	RNA polymerase II elongator complex, subunit ELP3	um10588	0.03286	K12613	related to decapping enzyme
25d00071	0.1339	ni	uncharacterized conserved protein	um10975.2	0.03287	ni	conserved hypothetical protein
9a000405	0.13416	K15505	helicase-like transcription factor HLTf	um06076	0.03289	ni	related to quinate transport protein
9a000154	0.13437	ni	hypothetical protein	um06151	0.03294	ni	conserved hypothetical protein
9a000095	0.13442	ni	hypothetical protein	um03209	0.03292	K14007	probable SEC24 - COP1 coated vesicle component
5a00125	0.13466	K14545	rRNA processing protein RRP7	um05546	0.03306	K15109	conserved hypothetical protein
7c00308	0.13477	ni	hypothetical protein	um01607	0.0332	ni	related to Translin
15c00047	0.13508	ni	drebins and related actin binding proteins	um10277.2	0.03321	K00698	chitin synthase 5
22c00218	0.13513	K07304	peptide methionine sulfoxide reductase	um10172	0.03327	K13542	related to peroxisomal targeting signal receptor
9c00162	0.13548	K00566	RNA (5-methylaminomethyl-2-thiouridylyl)-methyltransferase	um11700.2	0.03328	K07404	conserved hypothetical protein
8c000013	0.13569	ni	molecular chaperone Prefoldin, subunit 3	um11047	0.03336	ni	conserved hypothetical protein
24d00048	0.13589	K10956	transport protein SecE1, alpha subunit	um10858	0.03337	K03000	probable RPA12 - 13
14d00043	0.13623	ni	hypothetical protein	um12324	0.03342	ni	hypothetical protein
9a000055	0.13623	ni	monocarboxylate transporter	um03065	0.03348	ni	hypothetical protein
9c002071	0.13625	ni	diadenosine polyphosphate hydrolase and related proteins	um10462	0.03351	ni	conserved hypothetical protein
9c00376	0.13628	ni	transferrin receptor and related proteins	um02232	0.03355	ni	putative protein
9a000326	0.13633	K10591	ubiquitin protein ligase RSP5/NEDD4	um02477	0.03357	K02264	probable cytochrome-c oxidase chain VI precursor
1c000051	0.13635	ni	hypothetical protein	um01928	0.03363	ni	putative protein
15c00050	0.13652	ni	hypothetical protein	um05992	0.03367	ni	related to ENT3 - cytoskeletal adaptor
5a00029	0.13671	ni	hypothetical protein	um00407	0.03367	ni	probable Tartrate dehydrogenase
2c000037	0.13674	K14297	nuclear pore complex, Nup98 component	um01115	0		

15d00055	0.13939	K03015	DNA-directed RNA polymerase subunit E'	um04173	0.03536	K05236	probable COP1 - coatomer complex alpha chain of secretory pathway vesicles
7400177	0.13941	ni	hypothetical protein	um03914	0.03542	ni	related to Lactaldehyde reductase
14c00046	0.13951	K11979	uncharacterized conserved protein	um12005	0.03545	K02737	probable PRE2 - 20S core proteasome subunit
15d00045	0.13924	ni	methytransferase	um03555	0.03555	K08336	probable Autocytin-related protein 12
19c00087	0.13978	K01487	atrazine chlorohydrolase	um04529	0.03555	K02320	related to POL1 - DNA-directed DNA polymerase alpha
19c00107	0.13986	ni	predicted cell surface protein homologous to bacterial outer mem	um02162	0.03551	ni	conserved hypothetical protein
26d00001	0.14002	ni	synaptic vesicle transporter SVOP and related transporters	um06188	0.03556	K03178	probable UBA1 - ubiquitin-protein ligase
19c00001	0.14022	ni	hypothetical protein	um00933	0.03573	ni	probable thiamine biosynthesis protein nmt1
3000014	0.14022	K00133	aspartate-semialdehyde dehydrogenase	um00333	0.03598	ni	conserved hypothetical protein
3400027	0.14025	ni	hypothetical protein	um02324	0.03598	K03008	related to DNA-directed RNA polymerase 13
19c00066	0.14038	ni	2-oxoyl-CoA hydratase	um03958	0.03598	K01663	probable HIST - glutamine amidotransferase
7c000295	0.1405	ni	hypothetical protein	um05146	0.03607	ni	putative protein
7c000290	0.14053	ni	hypothetical protein	um03303	0.03614	K16572	related to gamma-tubulin complex component 5
9c00261	0.1406	ni	hypothetical protein	um10008	0.03618	ni	conserved hypothetical protein
8c00123	0.1409	K03782	hypothetical protein	um04902	0.03619	K02202	probable KIN28 - cyclin-dependent ser
9c00068	0.14101	ni	hypothetical protein	um11757.2	0.0363	ni	conserved hypothetical protein
13c00027	0.14102	K03364	anaphase promoting complex, Cdc20, Cdh1, and Ama1 subunits	um03807	0.03632	K13830	probable ARC1 - Pentafunctional AROM polypeptide
7400274	0.14144	ni	hypothetical protein	um05225	0.03638	ni	conserved hypothetical protein
26d00069	0.14169	K14779	ATP-dependent RNA helicase	um10849	0.03667	ni	putative protein
5c00139	0.14169	ni	uncharacterized conserved protein	um12337	0.0367	K17361	related to acyl-coa thioester hydrolase
6d00056	0.14186	ni	hypothetical protein	um01312	0.03672	ni	related to Vacuolar assembly protein VPS41
19c00122	0.14191	K07160	hypothetical protein	um01646	0.03682	K02212	probable replication licensing factor MCM4
20c00032	0.14207	ni	NIPSNAP1 protein	um04799	0.03699	K14294	conserved hypothetical protein
11c00022	0.14209	K03380	monooxygenase	um01170	0.03703	ni	conserved hypothetical protein
25c00067	0.14223	ni	hypothetical protein	um11835	0.03721	ni	conserved hypothetical protein
13c00064	0.14235	ni	hypothetical protein	um03249	0.0373	ni	ni
5000042	0.14239	ni	cyclin	um12184	0.03731	ni	conserved hypothetical protein
7c00039	0.1424	K17413	mitochondrial ribosomal protein S28	um05590	0.03731	ni	related to NAD
7400188	0.14262	ni	cell cycle control protein	um10435	0.03741	K14319	probable ran GTPase activating protein 1
13c00039	0.1428	K01288	serine carboxypeptidases	um10840	0.03743	K02288	probable MIS1 - C1-tetrahydrofolate synthase
9c000232	0.1384	ni	hypothetical protein	um03743	0.03743	K02627	related to TDB - Component of small nuclear ribonucleoprotein complexes involved in RNA processing and splicing
22d00103	0.14389	K02976	40s ribosomal protein S27	um05861	0.03756	K05909	related to FET5 - multicopper oxidase
18d00028	0.14417	K09184	GATA-4/5/6 transcription factors	um00202	0.03757	K00490	related to Cytochrome P450 4F8
10d00099	0.14428	ni	iron/sulfur cluster family oxidoreductases	um03963	0.03763	ni	nuclear pore membrane protein
4c00039	0.14434	ni	phosphotyrosine kinase gamma subunit	um05232	0.03765	ni	related to flavin-containing monooxygenase
7c00086	0.14436	K13989	predicted membrane protein	um03343	0.03766	ni	putative protein
12c00072	0.14436	ni	protein phosphatase 2C	um10693	0.03797	ni	conserved hypothetical protein
6d00032	0.1444	ni	hypothetical protein	um00995	0.038	K11566	conserved hypothetical protein
22d00215	0.14463	ni	inorganic phosphate transporter	um04573	0.03801	K11128	probable nuclear RNA processing protein GAR1
11d00026	0.14471	ni	hypothetical protein	um00842	0.0381	ni	conserved hypothetical protein
9c00281	0.14511	K02735	20S proteasome, regulatory subunit beta type PSMB3/PUP3	um10844	0.03813	ni	conserved hypothetical protein
9c00291	0.14524	K01069	glyoxylase	um00418	0.03816	ni	probable xylitol dehydrogenase
9c00386	0.14562	ni	hypothetical protein	um06389	0.03821	ni	conserved hypothetical protein
6c00059	0.14568	ni	reductases with broad range of substrate specificities	um04332.2	0.03822	K06316	related to nuclear division protein Rtt1
20d0023	0.14592	ni	hypothetical protein	um06396	0.0383	ni	putative protein
7c00274	0.14614	ni	nucleoside phosphatase	um05740	0.03834	K01687	probable LLV3 - dihydroxy-acid dehydratase
7c00268	0.14658	K10685	SMT3/SUMO-activating complex, catalytic component UBA2	um04512	0.03838	ni	related to DnaJ protein
14d00012	0.14659	K14544	nuclear RNA-associated protein	um01462	0.03841	ni	hypothetical protein
5d00134	0.14669	ni	hypothetical protein	um02134	0.0385	ni	related to mixed-linked glucanase precursor MLG1
13c00088	0.14674	ni	hypothetical protein	um03232	0.03852	ni	conserved hypothetical Ustilago-specific protein
7c00035	0.14688	K07750	C-4 sterol methyl oxidase	um11981	0.03853	ni	putative protein
6c00061	0.14691	ni	RNA pseudouridylylase	um00060	0.03867	ni	conserved hypothetical Ustilago-specific protein
9c00082	0.14703	ni	hypothetical protein	um05242	0.03869	ni	ni
7400012	0.14701	ni	hypothetical protein	um02797	0.03871	ni	conserved hypothetical protein
9c00230	0.1473	ni	hypothetical protein	um15088	0.03891	ni	conserved hypothetical protein
20c00008	0.14732	K03305	H+-oligopeptide symporter	um10634	0.03892	ni	conserved hypothetical protein
14c00018	0.14761	K13103	tubulin-interacting protein TIP39	um00400	0.03898	K06101	conserved hypothetical protein
7400145	0.14762	ni	hypothetical protein	um05415	0.039	K09527	related to tetraoctapeptide repeat protein 2
14d00042	0.14812	K01803	triosephosphate isomerase	um01279	0.03906	K09493	probable TCP1 - component of chaperonin-containing T-complex
22d00115	0.14824	ni	hypothetical protein	um01934	0.03908	K09829	C-8 sterol isomerase
2c00085	0.1485	K12828	splicing factor 3b, subunit 1	um12133	0.03917	ni	conserved hypothetical protein
13c00079	0.14859	ni	hypothetical protein	um10597	0.03918	ni	conserved hypothetical Ustilago-specific protein
14c00090	0.14865	ni	chromatin remodeling complex SWI/SNF, component SWI2	um05825	0.03921	K07300	probable VCX1 - Vacuolar Ca
19d00079	0.1489	ni	ribonuclease inhibitor type leucine-rich repeat proteins	um10880	0.03923	ni	related to Graves disease carrier protein
7400123	0.14903	ni	hypothetical protein	um11515	0.0393	ni	putative protein
22d00209	0.14916	ni	mitochondrial carrier protein PET8	um03553	0.03934	ni	putative protein
5c00044	0.14916	ni	hypothetical protein	um12208	0.03942	K06675	related to SMC4 - Stable Maintenance of Chromosomes
19c00036	0.14942	ni	ER to golgi transport protein	um05894	0.03944	ni	conserved hypothetical protein
26d00072	0.14944	K00101	glyoxylate oxidase	um01941	0.03945	ni	conserved hypothetical protein
6d00062	0.14957	ni	hypothetical protein	um03333	0.03947	ni	conserved hypothetical protein
14c00119	0.14991	K13344	peroxisomal beta-oxidation protein peroxin	um03729	0.03954	K13950	related to para-aminobenzoic acid synthetase
22c00014	0.14963	ni	hypothetical protein	um01116	0.03955	ni	conserved hypothetical protein
24c00058	0.14998	K01144	oxysterol-binding protein	um05069	0.03959	ni	related to short-chain dehydrogenase
19d00123	0.15014	K03956	hypothetical protein	um05192	0.03966	ni	conserved hypothetical protein
18d00063	0.15033	ni	hypothetical protein	um01653	0.03989	ni	related to VPS73 - protein involved in vacuolar protein sorting
15c00016	0.15038	K03648	uncial DNA glycosylase	um02388	0.03989	K05754	related to subunit 1 of the Apg2
7c00034	0.15065	K12177	COP9 signalosome, subunit CSN3	um04005	0.03993	ni	conserved hypothetical protein
7c00245	0.15078	K13123	predicted RNA binding protein	um02635	0.04004	ni	conserved hypothetical protein
7c00234	0.15082	ni	hypothetical protein	um10440.2	0.04006	K01772	related to HEM15 - ferrochelatase precursor
7c00023	0.15085	K01866	putative protein	um10050	0.04012	ni	putative protein
9c00030	0.15088	ni	hypothetical protein	um11557	0.04015	ni	related to YJU2 - Essential nuclear protein
11c00038	0.15105	K13344	uncharacterized AROM protein	um12199	0.04018	ni	related to decapping enzyme
7c00255	0.15121	ni	hypothetical protein	um03465	0.04021	K01288	related to KEX1 protein precursor
8c00027	0.15147	K13830	pentafunctional AROM protein	um11899	0.04027	ni	conserved hypothetical protein
19d00138	0.15147	ni	hypothetical protein	um05798	0.04038	ni	hypothetical protein
11c00071	0.15159	ni	molecular chaperones HSP70/HSC70	um10019	0.04047	K03639	related to Molybdopterin biosynthesis CNX2 protein
16c00007	0.15168	K01607	hypothetical protein	um00141	0.04067	K11563	hypothetical protein
22d00086	0.15171	ni	hypothetical protein	um03495	0.04067	K11894	probable PNO1 protein
9c00075	0.15193	ni	amidases	um06156	0.04083	K03018	probable FPO31 - DNA-directed RNA polymerase III
19d00015	0.15201	K00002	aldoketo reductase family proteins	um05770	0.04086	K06628	TS2D protein
24c00056	0.15238	ni	phosphatidylinositol-4-phosphate 5-kinase	um11174	0.04088	ni	conserved hypothetical protein
5c00078	0.1524	ni	predicted regulator of the ubiquitin pathway	um01402	0.04093	K01736	probable ARO2 - chorismate synthase
22c00277	0.15255	K14022	hypothetical protein	um06174	0.04098	ni	related to VEH1 - steryl ester hydrolase
26d00010	0.15276	ni	uncharacterized conserved protein	um10095	0.04104	K12823	probable RNA helicase dhp2
18c00053	0.15283	ni	HGG motif-containing thioesterase	um04277	0.04114	K00670	probable N-acetyltransferase 5
15c00051	0.15283	ni	hypothetical protein	um04417	0.04118	ni	probable CRN1 - a coronin
8c00020	0.15289	K13341	peroxisomal targeting signal type 2 receptor	um10576	0.04127	ni	related to SWI14 - Tyrosine phosphatase involved in actin filament organization
5d00083	0.1531	K12817	U5 snRNP-associated RNA splicing factor	um12302	0.04138	ni	conserved hypothetical protein
25d00050	0.15358	K11232	two-component phosphorelay intermediate	um06261.2	0.04158	K13535	conserved hypothetical protein
11d00020	0.15358	K06100	mRNA cleavage and polyadenylation factor II complex, subunit P	um03642	0.0416	ni	conserved hypothetical protein
10c00003	0.15365	ni	FOG, LIM domain	um10814	0.04164	ni	conserved hypothetical protein
19c00143	0.15367	ni	dTPD-glucose 4-6-dehydratase	um02723.2	0.04177	ni	probable mfs-mulidrug-resistance transporter
19c00023	0.15391	ni	hypothetical protein	um01162	0.04184	ni	related to golgi-specific proteinin a-resistance guanine nucleotide exchange factor 1
7c00228	0.15404	ni	hypothetical protein	um11771	0.04198	K07441	conserved hypothetical protein
6d00015	0.15432	ni	hypothetical protein	um11698	0.04198	K02147	probable VMA2 - H-ATPase V1 domain 60 KD subunit
11c00050	0.15436	K15100	mitochondrial tricarboxylate/dicarboxylate carrier proteins	um05426	0.04211	ni	conserved hypothetical Ustilago-specific protein
16c00040	0.1543	ni	hypothetical protein	um11802	0.04217	K13661	probable TFP11 - H-ATPase 23 KD subunit
9c00155	0.1547	ni	RNA-binding protein	um00963	0.0423	K11121	related to HST1 - silencing protein
12c00029	0.1547	K03671	thioesterin	um10926	0.04234	K02145	probable TFP1p - H-ATPase V1 domain 69 KD catalytic subunit
3c00077	0.15473	ni	uncharacterized conserved protein	um00875	0.04237	ni	hypothetical protein
9c00183	0.15493	ni	hypothetical protein	um01662	0.04245	K11229	related to BCK1 ser
22c00063	0.15498	ni	hypothetical protein	um04560	0.04245	ni	putative protein
9c00280	0.15507	K02735	20S proteasome, regulatory subunit beta type PSMB3/PUP3	um10159	0.04255	ni	related to transcription activator amyR
9c00308	0.15515	ni	ypf1ab GTPase activating protein	um00558	0.04279	ni	conserved hypothetical Ustilago-specific protein
22c00261	0.1552	ni	hypothetical protein	um12219	0.04281	ni	conserved hypothetical protein
12c00147	0.1553	ni	hypothetical protein	um03526	0.04282	ni	probable neutral amino acid permease
5d00103	0.15545	ni	vacuolar sorting protein VPS33/sp1	um11277	0.04297	ni	conserved hypothetical protein
12d00138	0.15545	ni	arylcacetamide deacetylase	um03529	0.04312	K02906	related to MRPL9 - mitochondrial ribosomal protein
26d00037	0.15547	ni	karyophilin (importin) alpha	um02476	0.04322	ni	related to coatomer delta subunit
25c00007	0.15555	ni	predicted transporter	um06302	0.04328	ni	putative protein
13d00057	0.15567	ni	hypothetical protein	um00635	0.04334	ni	conserved hypothetical protein
6c00038	0.15575	K01738	cysteine synthase	um02179			

8c00097	0.16009	K01501	carbon-nitrogen hydrolase	um11491	0.04645	ni	putative protein
22c00204	0.16018	ni	peptidase family M48	um12192	0.04646	ni	related to Tim22
13c00308	0.16026	ni	hypothetical protein	um00620	0.04652	K11567	conserved hypothetical protein
6a00110	0.16035	K05853	Ca <sup>2+</sup> -transporting ATPase	um10886.2	0.04658	ni	conserved hypothetical protein
28c00075	0.1605	ni	hypothetical protein	um11319	0.04661	ni	probable SEC14 - phosphatidylinositol
22c00112	0.16074	ni	hypothetical protein	um01033.2	0.04664	K08333	related to VPS15 - ser
7a00216	0.16153	K03417	isocitrate lyase	um002817	0.04676	ni	conserved hypothetical Ustilago-specific protein
10c00010	0.16166	K02975	hypothetical protein	um01668	0.04687	ni	putative protein
12a00025	0.16174	ni	hypothetical protein	um10190.2	0.04704	K06062	putative histone acetylase
9c00252	0.16187	K12600	TPR repeat-containing protein	um01637	0.04738	K08516	probable YKT6 - SNARE protein for Endoplasmic Reticulum-Golgi transport
19a00056	0.16189	ni	hypothetical protein	um01195	0.04744	K17218	related to sulfite
11a00080	0.16216	ni	hypothetical protein	um02002	0.04748	ni	putative protein
5a00033	0.16218	K03841	fructose-1,6-bisphosphate aldolase	um00987	0.04752	ni	conserved hypothetical protein
7a00164	0.16244	ni	translocase of outer mitochondrial membrane complex, subunit T	um04977	0.0477	ni	putative protein
7c00059	0.16244	ni	oxidoqualene-lanosterol cyclase and related proteins	um05641	0.04778	K01074	related to palmitoyl-protein thioesterase 1
22a00050	0.16256	ni	small Nuclear ribonucleoprotein G	um10541	0.04787	ni	conserved hypothetical protein
22c00271	0.16276	ni	hypothetical protein	um03728	0.04792	K00463	conserved hypothetical protein
11c00041	0.16276	K10949	ER lumen protein retaining receptor	um11858	0.04804	ni	conserved hypothetical protein
3a00100	0.16298	ni	HLH transcription factor EBF/IOI-1	um12163	0.0481	ni	conserved hypothetical protein
14c00070	0.16309	ni	hypothetical protein	um02605.2	0.0481	ni	putative protein
25a00022	0.1634	K05290	GPI-anchor transamidase	um05449	0.04811	ni	related to RPH1 - Transcriptional repressor of PHR1
7c00102	0.16348	ni	hypothetical protein	um10148	0.04834	ni	putative protein
19c00051	0.16358	ni	hypothetical protein	um03007	0.04867	K06944	probable RBG1 - ribosome interacting GTPase
11c00005	0.16366	K05765	actin depolymerizing factor	um03630	0.04868	ni	related to metalloprotease MEP1
27c00053	0.16376	ni	hypothetical protein	um01692	0.0488	ni	related to CHA1 - L-serine
11a00081	0.16376	ni	conserved W/D40 repeat-containing protein	um05533	0.04894	ni	related to PRK1 - transcription factor regulating pyrimidine pathway
20a00018	0.16387	ni	glutamate decarboxylase	um11488	0.04893	ni	probable ERV14 - ER-derived vesicles
11a00087	0.16394	ni	hypothetical protein	um04875	0.04906	ni	conserved hypothetical protein
8c00125	0.16399	K00128	aldehyde dehydrogenase	um02530	0.04908	K11372	conserved hypothetical protein
14c00048	0.16411	ni	uncharacterized conserved protein	um10098	0.0491	ni	related to TAO3 - Transcriptional Activator of OCH1
9c00419	0.16416	K03955	cyf carrier protein	um11018	0.04916	ni	putative protein
10c00010	0.16453	K08269	serine/threonine-protein kinase	um11131	0.04917	ni	putative protein
27a00039	0.16468	K03037	26S proteasome regulatory complex, subunit RPN7/PSMD6	um04426	0.04921	ni	conserved hypothetical protein
3a00087	0.16481	ni	hypothetical protein	um02514.2	0.04921	ni	related to UPF3 - Nonsense-mediated mRNA decay protein
16c00046	0.16481	ni	hypothetical protein	um03638	0.04926	ni	hypothetical protein
6c00018	0.16506	K01624	fructose 1,6-bisphosphate aldolase	um11445	0.04927	ni	putative protein
3c00020	0.16517	ni	hypothetical protein	um10445	0.04931	ni	conserved hypothetical protein
20a00044	0.16521	ni	hypothetical protein	um11193	0.04965	ni	putative protein
11a00052	0.16543	K06006	ketopantoate hydroxymethyltransferase	um04049	0.04974	ni	conserved hypothetical protein
25a00051	0.16543	ni	uncharacterized conserved protein	um01518	0.04977	ni	putative protein
12c00020	0.16562	ni	phosphatidylinositol transfer protein SEC14 and related proteins	um01391	0.04997	K01090	related to phosphoprotein phosphatase 2C
7a00102	0.16563	K15900	predicted metalloprotease with chaperone activity	um03632	0.05002	K06110	related to SEC6 - protein transport protein
26a00047	0.16569	K14294	hypothetical protein	um11001	0.05011	ni	related to enoyl-coa hydratase protein 3
22c00151	0.1657	K01433	N-acetylglucosamine-6-phosphate deacetylase	um02749	0.05016	K11838	probable ubiquitin-specific processing protease 21
5c00110	0.166	ni	hypothetical protein	um15021	0.0502	ni	conserved hypothetical protein
22c00232	0.16626	ni	cytochrome P450 CYP4/CYP19/CYP26 subfamilies	um10574	0.05039	K01077	related to PHO8 - repressible alkaline phosphatase vacuolar
9c00391	0.1664	K15303	hypothetical protein	um00766	0.05063	ni	putative protein
15c00009	0.16646	ni	acyl-coa reductase	um06455	0.05078	ni	conserved hypothetical protein
22c00105	0.1665	ni	hypothetical protein	um10886	0.05084	ni	putative protein
9c00330	0.16663	ni	hypothetical protein	um03283	0.05118	ni	conserved hypothetical protein
26c00059	0.16686	K01885	glutamy-tRNA synthetase	um03497	0.05119	ni	conserved hypothetical protein
6a00071	0.16707	ni	N-methyltransferase	um12277	0.05133	K09550	probable GIM3 - Gim complex component
9c00042	0.16719	K14327	uncharacterized conserved protein	um05137	0.05137	ni	conserved hypothetical protein
9c00215	0.1672	K02542	DNA replication licensing factor, MCM6 component	um03657	0.05139	ni	conserved hypothetical protein
7a00303	0.16749	ni	serine palmitoyltransferase	um06347	0.05141	ni	hypothetical protein
13a00026	0.16756	ni	alcohol dehydrogenase	um01251	0.05143	ni	hypothetical protein
20a00080	0.16765	K02880	60S ribosomal protein L22	um00163	0.05156	K17262	related to Tubulin-specific chaperone B
6a00045	0.16837	ni	hypothetical protein	um01637	0.05182	ni	related to RGS2 - Regulator of drug sensitivity
16c00058	0.16841	K16536	hypothetical protein	um05844	0.05168	ni	conserved hypothetical protein
9c00324	0.16844	K06627	dihydropyrimidine acetyltransferase	um01851	0.05178	ni	conserved hypothetical protein
9a00317	0.16854	K00326	NADH-cytochrome b-5 reductase	um10845	0.05182	K03649	conserved hypothetical protein
12c00140	0.16855	K13076	delta-aminolevulinic desaturase	um02655	0.05185	K05111	related to UCG3 - protein transport protein
15a00094	0.16858	ni	hypothetical protein	um15026	0.05198	K01187	probable maltase
16c00082	0.16876	ni	hypothetical protein	um00581	0.052	ni	conserved hypothetical protein
9a00218	0.16885	K05285	glycosylphosphatidylinositol anchor synthesis protein	um03020	0.05206	ni	conserved hypothetical protein
25a00023	0.16896	K11237	NADPH oxidase	um11100	0.05209	ni	putative protein
27a00088	0.16899	K14780	DEAF-Hox RNA helicase	um05181	0.05211	ni	related to Phocudin
10a00045	0.16977	ni	ni	um10759	0.05227	ni	hypothetical protein
13a00029	0.16979	ni	membrane coat complex Retromer, subunit VPS5/SNX1	um05554	0.05229	ni	conserved hypothetical protein
14a00068	0.16984	K00106	xanthine dehydrogenase	um01366	0.05257	K06630	probable BMH1 - 14-3-3 protein epsilon
20a00049	0.16986	K01427	hypothetical protein	um12108	0.05264	K08490	probable syntaxin
16a00037	0.16989	ni	hypothetical protein	um05274	0.05307	ni	ni
9c00098	0.1699	K13091	transcriptional coactivator CAPER	um04128	0.05315	ni	related to isopenicillin N epimerase
20a00055	0.16996	K11380	PHD finger protein BR140/LIN-49	um11772	0.05319	ni	ni
22a00183	0.16998	ni	mitochondrial sulfhydryl oxidase	um02191	0.05331	ni	hypothetical protein
24c00031	0.17001	ni	acyl-coa-binding protein	um04715	0.05338	ni	conserved hypothetical protein
22a00102	0.17003	ni	hypothetical protein	um03023	0.05346	K01166	related to Ribonuclease Trv
9c00344	0.17025	K02154	vacuolar H <sup>+</sup> -ATPase V0 sector, subunit a	um02081	0.0536	K05853	endoplasmic reticulum calcium transporter
18c00007	0.1703	K00698	chitin synthase/hyaluronan synthase	um06397	0.05365	ni	conserved hypothetical protein
27a00002	0.17037	ni	hypothetical protein	um03733	0.05371	ni	conserved hypothetical protein
18c00008	0.1704	ni	17 beta-hydroxysteroid dehydrogenase type 3	um03680	0.05373	K03136	related to TFA1 - TFIIe subunit
7a00292	0.17045	ni	hypothetical protein	um03816	0.05376	ni	related to PRP12 - involved in early maturation of pre-rRNA
22a00046	0.17054	K07393	predicted glutathione S-transferase	um05050	0.05389	ni	hypothetical protein
22a00171	0.17077	K01557	predicted fumarylacetoacetate hydrolase	um01549	0.05393	ni	related to mitochondrial inheritance component mdm12
15c00082	0.17097	ni	inorganic phosphate transporter	um02742	0.05395	ni	conserved hypothetical protein
7c00108	0.17121	ni	hypothetical protein	um15082	0.05396	ni	conserved hypothetical protein
14a00014	0.17139	K12580	CCR4-NOT transcriptional regulation complex, NOT5 subunit	um04734	0.05397	ni	putative protein
26a00032	0.17141	K15177	uncharacterized conserved protein	um02568	0.05404	ni	probable YCF1 - Vacuolar ABC transporter responsible for vacuolar sequestration of glutathione-S-conjugates
9a00053	0.17193	K00873	hypothetical protein	um03043	0.05411	ni	related to DDR1 - heat shock protein
7c00200	0.17142	K14553	WD40 repeat protein	um00878	0.05411	K11321	conserved hypothetical protein
20c00017	0.17144	K06942	predicted GTP-binding protein	um03404	0.05412	ni	hypothetical protein
13a00030	0.17149	K03064	26S proteasome regulatory complex	um04830	0.05418	K15177	conserved hypothetical protein
7a00327	0.17149	K02732	20S proteasome, regulatory subunit beta type PSMB1/PRE7	um04212	0.05422	ni	putative protein
15a00031	0.17157	ni	hypothetical protein	um04084	0.05443	ni	conserved hypothetical Ustilago-specific protein
15c00092	0.17172	K08157	synaptic vesicle transporter SVOP and related transporters	um02140	0.05443	ni	ni
18c00061	0.17176	K13800	uridylylase	um10221	0.05446	ni	conserved hypothetical protein
16a00015	0.17207	ni	hypothetical protein	um05626	0.05447	ni	conserved hypothetical protein
7c00251	0.17211	ni	GAT-4-like transcription factors	um00515	0.05465	ni	putative protein
22a00043	0.17215	ni	hypothetical protein	um02550	0.05459	ni	putative protein
9a00114	0.17225	K11364	histone acetyltransferase SAGA associated factor SGF29	um04182	0.05474	K00211	probable TYR1 - prephenate dehydrogenase
12a00085	0.17235	ni	hypothetical protein	um05118	0.05475	ni	putative protein
9a00062	0.17257	ni	zinc-binding oxidoreductase	um06335	0.05475	ni	putative protein
7a00349	0.17268	ni	hypothetical protein	um01077	0.05477	ni	conserved hypothetical protein
6c00080	0.17267	ni	uncharacterized conserved protein	um01885	0.05482	ni	probable Alcohol dehydrogenase
7a00217	0.1727	K06640	protein kinase of the Pl-3 kinase family	um04400	0.05497	ni	probable PRB1 - protease B
22a00291	0.17276	K01519	inosine triphosphate pyrophosphatase	um03352	0.05498	ni	probable RAS GTPase-activating protein sar1
10c00017	0.17291	K04648	microtubule-associated protein dynein DCTN1/Glued	um03540	0.05499	ni	conserved hypothetical protein
19c00105	0.17296	K14688	Zn <sup>2+</sup> transporter ZNT1 and related Cd <sup>2+</sup> /Zn <sup>2+</sup> transporters	um12107	0.0552	ni	conserved hypothetical protein
5a00005	0.17298	ni	amino acid transporters	um03340	0.05542	K11129	probable NHP2 - nucleolar rRNA processing protein
18c00039	0.17301	K08486	SNARE protein Syntaxin 1 and related proteins	um00670	0.05548	ni	conserved hypothetical protein
7a00344	0.17327	ni	hypothetical protein	um00795	0.05555	ni	hypothetical protein
19a00063	0.1733	K09613	COP9 signalosome, subunit CSN5	um05740	0.05552	K01187	probable Alpha-glucosidase precursor
12a00032	0.17332	ni	predicted membrane protein	um10412	0.05563	ni	conserved hypothetical protein
27a00091	0.17333	ni	serine/threonine protein kinase	um12312	0.05571	ni	conserved hypothetical protein
15c00016	0.1734	ni	aldehyde dehydrogenase	um01550	0.05572	ni	conserved hypothetical protein
22c00191	0.17350	ni	predicted alpha-beta hydrolase	um11590	0.05585	K14142	conserved hypothetical protein
11a00025	0.17365	K14772	DRIM (Down-regulated in metastasis)-like proteins	um11306	0.0564	ni	putative protein
8c00100	0.17377	K00784	septin family protein	um03129	0.05666	ni	hypothetical protein
13c00005	0.17404	ni	hypothetical protein	um02653	0.05674	K03843	related to alpha-1
25c00051	0.17416	ni	phosphatidic acid-prefering phospholipase A1	um02333	0.05679	ni	putative protein
18a00110	0.17418	ni	hypothetical protein	um05503	0.05692	K02144	related to vacuolar ATP synthase subunit H
22a00048	0.17451	ni	hypothetical protein	um06276	0.05698	ni	putative protein
15c00007	0.17459	ni	hypothetical protein	um11061	0.05706	ni	hypothetical protein
6a00040	0.17459	ni	DHHC-type Zn-finger proteins	um05382	0.05707	ni	conserved hypothetical protein
7c00112	0.17461	ni	WD40 repeat protein	um10474.2	0.05716	ni	conserved hypothetical protein
13c00038	0.17463	ni	hypothetical protein	um01728.2	0.05717	ni	conserved hypothetical protein
9a00142	0.1748	ni	hypothetical protein	um00597	0.05719	ni	ni
10a00083	0.17484	ni	putative cargo transport protein ERV29	um11499	0.05731	K02980	probable RPS29B - ribosomal protein S29
20c00024	0.17492	ni	hypothetical protein	um05331	0.05734	K02865	probable ribosomal protein L10a
16a00019	0.17496	K03626	transcription factor containing NAC and TS-N domains	um11213	0.0574	ni	conserved hypothetical protein
26a00076	0.17514	K12195	uncharacterized conserved protein	um04097	0.05767	ni	related to polyketide synthase
8c00050	0.1752	ni	putative transcriptional repressor regulating G2/M transition	um03959	0.05773	K09497	probable t-complex-type molecular chaperone
27a00050	0.17526	K13116	DEAD-box protein abstract	um10527.2	0.05773	K02967	related to MRP4 - mitochondrial ribosomal protein
7c00138	0.17528	ni	predicted coiled-coil protein	um03577	0.05777	ni	conserved hypothetical Ustilago-specific protein
22a00150	0.17534	ni	cytochrome b5	um10320.2	0.05779	K14790	related to CWH43 - putative sensor
13c00075	0.1757	ni	carbon-nitrogen hydrolase	um00473	0.		



20c0044	0.17825	ni	mitochondrial inheritance and actin cytoskeleton organization prot	um11577	0.06078	K03254	probable eukaryotic translation initiation factor eIF-3
12d00112	0.17826	ni	vesicle coat complex AP-1/AP-2/AP-4, beta subunit	um01144	0.06080	K03538	related to POP4 - protein involved in processing of tRNAs and rRNAs
7d00218	0.17844	ni	glycosyl transferase	um00227	0.06095	K01533	probable CCC-2 - P-type ATPase
28d00387	0.17845	ni	membrane protein	um02249	0.06113	ni	putative protein
13c00100	0.17876	ni	hypothetical protein	um11057	0.06128	ni	related to OPT1 - High-affinity glutathione transporter
4d00018	0.17895	ni	hypothetical protein	um11171	0.06142	ni	related to sugar transport protein
9c00125	0.17916	ni	hypothetical protein	um10852	0.06146	K10259	related to MET30 - involved in regulation of sulfur assimilation genes and cell cycle progression
22d0068	0.17947	ni	hypothetical protein	um10913	0.06176	ni	related to AHA1 - stress-regulated cochaperone
5c00058	0.1796	ni	hypothetical protein	um10696	0.06182	ni	conserved hypothetical protein
13d00100	0.17978	ni	hypothetical protein	um02998	0.06189	ni	conserved hypothetical protein
9d00402	0.17998	K13721	puromycin-sensitive aminopeptidase and related aminopeptidase	um03704	0.0619	ni	conserved hypothetical protein
22d0000	0.18001	K04564	manganese(II)-dependent superfamily manganese superoxide dismutase	um10332	0.06191	ni	conserved hypothetical protein
12c00116	0.18001	K04564	manganese superoxide dismutase	um10732	0.06205	ni	related to dimeric dihydrolid dehydrogenase
7d00235	0.18004	ni	hypothetical protein	um00003	0.06239	ni	conserved hypothetical protein
25d00066	0.18018	ni	hypothetical protein	um12097	0.06254	ni	conserved hypothetical protein
8c00090	0.18022	ni	hypothetical protein	um12242.2	0.06261	K03321	conserved hypothetical protein
14d00009	0.18036	ni	hypothetical protein	um10536	0.06262	ni	conserved hypothetical protein
9d00086	0.18037	K17262	alpha-tubulin folding cofactor B	um03443	0.0631	K10688	related to ubiquitin-conjugating enzyme
20c00043	0.18042	ni	hypothetical protein	um00148	0.06314	ni	hypothetical protein
19c00038	0.18057	ni	hypothetical protein	um04292	0.06318	ni	conserved hypothetical protein
20c00078	0.18057	K14376	poly(A) polymerase and related nucleotidyltransferases	um12074	0.06326	K06210	probable NMA2 - nicotinate-nucleotide adenyllyltransferase
10d00021	0.18069	K01551	putative arsenite-translocating ATPase	um11462	0.06356	ni	putative protein
9c00408	0.18072	ni	hypothetical protein	um11340	0.06366	K04555	probable QR18 - E2 ubiquitin-conjugating enzyme
14d00114	0.18084	ni	hypothetical protein	um02412	0.06368	K13195	related to glycine-rich RNA-binding protein
10c00055	0.18094	K00814	alanine aminotransferase	um00461	0.06371	ni	conserved hypothetical protein
22d00098	0.18101	K14006	vesicle coat complex COP1I, subunit SEC23	um02478	0.06388	K13192	conserved hypothetical protein
16c00066	0.18109	ni	hypothetical protein	um12100	0.06402	ni	putative protein
13d00090	0.18117	K01951	GMP synthase	um04139	0.06409	ni	conserved hypothetical protein
7d00034	0.18119	ni	putative signal transduction protein involved in RNA splicing	um10380	0.06412	ni	conserved hypothetical protein
6d00026	0.18126	K00100	aldoketo reductase family proteins	um05475	0.06427	ni	conserved hypothetical protein
28c00032	0.18134	ni	hypothetical protein	um05915	0.06428	K07008	conserved hypothetical protein
7d00041	0.18141	ni	hypothetical protein	um02028	0.06434	ni	related to acyl-coenzyme A oxidase 1
13c00093	0.18165	ni	hypothetical protein	um05939	0.06451	ni	conserved hypothetical protein
16c00034	0.1817	K15153	transcriptional regulator SOH1	um02286	0.06462	ni	conserved hypothetical protein
16c00059	0.18189	K07950	predicted aminotransferase	um05177	0.06468	K17086	related to endosomal protein EMP70 precursor
26c00030	0.18194	ni	hypothetical protein	um05185	0.06472	ni	conserved hypothetical protein
15d00059	0.18194	ni	predicted mechanosensitive ion channel	um01073	0.06475	ni	putative protein
7d00319	0.18232	K00549	methionine synthase II	um00113	0.06478	ni	related to transcriptional activator acu-15
10c00086	0.18243	K01230	mannosyl-oligosaccharide alpha-1,2-mannosidase	um04743	0.06481	K01514	related to PPK1 - exopolyphosphatase
9c00284	0.18261	K15289	signal peptidase I	um00127	0.06486	ni	putative protein
14d00107	0.18324	ni	hypothetical protein	um03770	0.06512	ni	conserved hypothetical protein
9d00237	0.18327	ni	membrane coat complex Retromer, subunit VPS5/SNX1	um05070	0.06544	ni	conserved hypothetical protein
8c00046	0.18338	ni	chromatin remodeling protein	um10028	0.06547	ni	conserved hypothetical protein
7d00143	0.18384	K14536	transcriptional activator factor 2	um05915	0.06548	K07008	conserved hypothetical protein
20c00061	0.18391	K12158	ubiquitin-like protein	um05496	0.06574	ni	related to cystathionine beta-lyase
19c00060	0.18393	ni	hypothetical protein	um01221	0.06591	K07374	alpha tubulin
9d00379	0.18394	K12832	uncharacterized conserved protein	um02972	0.06593	ni	putative protein
24c00073	0.18397	ni	hypothetical protein	um06234	0.06586	K01265	probable methionyl aminopeptidase
11d00053	0.18403	K04711	alkaline ceramidase	um05612	0.0663	ni	related to proline transport helper PTH1
12d00070	0.18407	K02952	ribosomal protein S18	um04667	0.06646	ni	conserved hypothetical protein
26d00043	0.18408	ni	transporter, ABC superfamily	um00354	0.06659	ni	related to Sml1-specific protease 1
16c00039	0.18414	ni	hypothetical protein	um05608	0.06687	K11095	related to U1 small nuclear ribonucleoprotein C
5d00020	0.18429	K07936	GTP-binding protein C4/GSP1	um01829	0.06696	ni	related to SOD1 protein
7d00315	0.18431	K13122	predicted actin-binding protein	um11761	0.06704	K03679	related to RRP4 - 3
15c00090	0.18434	ni	hypothetical protein	um15066	0.06707	ni	conserved hypothetical protein
16c00037	0.18448	ni	hypothetical protein	um05960	0.06707	ni	conserved hypothetical protein
7d00168	0.18462	K03020	DNA-directed RNA polymerase, subunit L	um06506	0.0671	ni	conserved hypothetical protein
11d00071	0.18463	ni	hypothetical protein	um10826	0.06716	ni	conserved hypothetical protein
12d00084	0.18491	ni	hypothetical protein	um11237	0.06716	ni	putative protein
5c00147	0.18513	ni	predicted hydrolase related to diene lactone hydrolase	um10033	0.06717	K15172	related to SPT5 - transcription elongation protein
9c00286	0.18523	K00766	anthranilate phosphoribosyltransferase	um11578	0.0673	K02731	probable PRE6 - 20S proteasome subunit
25d00074	0.18529	K00766	anthranilate phosphoribosyltransferase	um06204	0.06732	K03632	related to PPK1 - exopolyphosphatase
8c00062	0.18531	K11501	hypothetical protein	um10237	0.06753	K02214	related to CDC7 - protein kinase
7d00313	0.18567	K03132	transcription initiation factor TFIID, subunit TAF7	um04795	0.06754	K14301	nucleoprotein
10c00011	0.18571	K12845	60S ribosomal protein 15.5kD/SMU13	um03469	0.06757	K05288	related to GPI13 - protein involved in glycosylphosphatidylinositol biosynthesis
14c00001	0.18586	ni	hypothetical protein	um05293	0.06779	K07151	probable oligosaccharyltransferase
28c00040	0.18619	ni	DNA-binding proteins Brigh1/BRCAA1/RBP1	um05282	0.06779	ni	conserved hypothetical protein
15d00092	0.18622	ni	hypothetical protein	um05231	0.06806	ni	related to YIP3 protein - proposed to be involved in ER to Golgi transport
5d00055	0.18627	ni	uncharacterized conserved protein	um03801	0.06813	ni	ni
1c00031	0.18646	ni	adaptor protein Enigma and related PDZ-LIM proteins	um12298	0.06831	ni	conserved hypothetical protein
24c00040	0.18649	ni	replication factor C, subunit RFC1	um00291	0.06836	ni	conserved hypothetical protein
18d00074	0.18678	ni	hypothetical protein	um03779	0.06841	ni	related to galactinol synthase
6d00080	0.18683	ni	acyl-coa thioesterase	um00872	0.06846	K00928	probable HOM3 - L-aspartate 4-P-transferase
9c00093	0.18695	ni	carboxylesterase and related proteins	um10406	0.06847	ni	conserved hypothetical protein
9c00377	0.18702	K14798	uncharacterized conserved protein	um02732	0.06888	ni	conserved hypothetical protein
9d00155	0.18704	ni	try-like conserved proteins	um11428	0.06901	K14326	probable NAM7 - nonsense-mediated mRNA decay protein
18c00064	0.1872	ni	uncharacterized conserved protein	um10062	0.0691	ni	related to monoxygenase
8d00020	0.18726	K07910	GTPase Rab18	um03648	0.06911	ni	ni
7d00336	0.18732	K05931	thioreonine N-methyltransferase CARM1	um12157	0.06915	ni	conserved hypothetical protein
12d01020	0.18747	K10583	ubiquitin-protein ligase	um05973	0.06928	ni	conserved hypothetical protein
15d00046	0.18756	K09584	thioredoxin/protein disulfide isomerase	um01824	0.06942	K15918	conserved hypothetical protein
20c00067	0.18768	ni	hypothetical protein	um00929	0.06964	K13122	conserved hypothetical protein
19d00030	0.18828	ni	hypothetical protein	um02750	0.06965	K01092	related to quinic acid utilisation protein QUTG
22c00033	0.18844	ni	hypothetical protein	um10174	0.06972	ni	conserved hypothetical protein
13c00078	0.18852	K06682	ras GTPase	um00272	0.06988	ni	conserved hypothetical protein
14c00025	0.18887	K09537	hypothetical protein	um11808	0.06996	K04718	related to LCB5 - sphingolipid long chain base kinase
22d00080	0.1889	ni	G-protein beta subunit-like protein GNB1L	um06411	0.07002	K01876	related to aspartate-tRNA ligase
24d00035	0.18896	ni	mannosyltransferase	um05351	0.07029	ni	conserved hypothetical protein
12c00071	0.18925	K02738	ZnS-finger, regulatory subunit beta type PSMB6/PSMB9/PI	um05699	0.07079	ni	hypothetical protein
7c00265	0.1891	ni	serine/threonine kinase TIP30/C33	um04179	0.07099	K02734	probable multicatalytic endopeptidase complex chain PRE1
12d00087	0.18911	K14293	karyopherin (importin) beta 1	um02845.2	0.07099	ni	conserved hypothetical protein
7d00063	0.1892	ni	hypothetical protein	um12259	0.07109	K15111	related to PET8 - Protein of the mitochondrial carrier family
22d00073	0.18921	ni	predicted membrane protein	um00480	0.07109	ni	transmembrane mucin involved in surface sensing via MAP-kinase cascade
18d00028	0.18922	ni	hypothetical protein	um00907	0.07111	K10704	probable MMS2 - part of the error-free postreplication repair pathway
9d00196	0.1893	K02871	mitochondrial/chloroplast ribosomal protein L13	um00928	0.07115	ni	putative protein
4c00024	0.18935	ni	hypothetical protein	um01173	0.07116	K15456	related to KTI12 - Elongator associated protein
12c00126	0.18935	K00382	dihydropyrimidine dehydrogenase	um05602	0.07119	ni	probable sugar transporter
10c00060	0.18946	ni	cystine desulfase FCY1 and related enzymes	um01598	0.07124	ni	ni
22d00074	0.1896	ni	hypothetical protein	um03613	0.07141	ni	putative protein
20c00035	0.18976	ni	hypothetical protein	um10481	0.07151	K05687	conserved hypothetical protein
4c00011	0.18989	ni	hypothetical protein	um00328	0.07154	ni	putative protein
19d00105	0.18995	K10735	predicted alpha-helical protein	um05134	0.07164	ni	conserved hypothetical protein
18c00132	0.19009	ni	hypothetical protein	um12045	0.07164	ni	related to alpha-glucosidase II beta subunit
9d00216	0.19033	K05349	hypothetical protein	um00948	0.07169	K11324	related to SWC4 - component of the Swr1 complex
24d00039	0.19034	K15161	CDK8 kinase-activating protein cyclin C	um02314	0.07175	ni	putative protein
8d00095	0.19039	ni	hypothetical protein	um03590	0.07183	ni	putative protein
9d00279	0.19059	ni	hypothetical protein	um03078	0.07196	ni	conserved hypothetical protein
19d00065	0.1906	ni	hypothetical protein	um01190	0.07198	ni	conserved hypothetical protein
7d00222	0.19064	ni	hypothetical protein	um02533	0.07198	ni	hypothetical protein
22d00267	0.1907	K00232	acyl-coa oxidase	um11827	0.072	K02991	probable RPS6B - 40s ribosomal protein S6
26c00088	0.19076	ni	hypothetical protein	um05143	0.07225	K11279	probable nucleosome assembly protein I
27c00072	0.19086	K11262	acyl-coa oxidase	um04151	0.07231	K10844	probable RAD3 - DNA helicase
25d00013	0.19091	ni	serine/threonine protein kinase	um11098	0.07251	K01915	probable GLN1 - glutamate-ammonia ligase
14d00006	0.19104	K08740	mismatch repair ATPase MSH4	um00785	0.07253	ni	conserved hypothetical protein
15c00005	0.19116	ni	glutaredoxin and related proteins	um00909	0.07261	ni	conserved hypothetical protein
27d00118	0.19131	ni	hypothetical protein	um10451	0.07274	ni	conserved hypothetical protein
19c00035	0.19136	ni	WD40 repeat protein	um11221	0.07307	ni	hypothetical protein
22c00097	0.19137	ni	hypothetical protein	um04682	0.07313	ni	conserved hypothetical protein
7d00338	0.19144	ni	hypothetical protein	um11956	0.07322	ni	conserved hypothetical protein
21c00004	0.19159	ni	hypothetical protein	um04017	0.07324	ni	conserved hypothetical protein
10c00016	0.19161	ni	hypothetical protein	um04189	0.07345	ni	related to Cytochrome P450
12d00110	0.19175	ni	hypothetical protein	um04160	0.07355	ni	Dkh6
3d00088	0.1919	ni	hypothetical protein				

9400126	0.19486	ni	hypothetical protein	um05852	0.07755	ni	hypothetical protein
9400336	0.19501	ni	predicted transporter	um04376	0.07778	ni	conserved hypothetical protein
12c00309	0.19513	ni	hypothetical protein	um01875	0.07784	ni	conserved hypothetical protein
9400148	0.19532	ni	hypothetical protein	um01810	0.07802	ni	hypothetical protein
1400009	0.19538	ni	M-phase inducer phosphatase	um02360	0.07808	K02141	conserved hypothetical protein
20c00050	0.19538	ni	hypothetical protein	um10030	0.07813	ni	putative protein
20d00036	0.1957	K09495	chaperonin-class protein, TCP-1 gamma subunit	um11023	0.07818	ni	conserved hypothetical protein
26d00017	0.19614	K10259	signal transduction factor box and WD-40 proteins	um01127	0.07829	K00602	conserved hypothetical protein
19c00078	0.19622	ni	oxysterol-binding protein	um03989.2	0.07847	K03615	putative protein
22d00099	0.19643	ni	O-linked N-acetylglucosamine transferase CGT	um02682	0.07848	K16302	conserved hypothetical protein
14d00091	0.19683	ni	intermediate filament-like protein, sorting nexins, and related prot	um10344	0.07849	ni	conserved hypothetical protein
26c00028	0.19691	K01823	isopentenyl diphosphate, dimethylallyl pyrophosphate isomeras	um02855	0.07855	ni	related to FES1 - Hsp70 nucleotide exchange factor
6d00106	0.19689	ni	hypothetical protein	um10081	0.07889	ni	conserved hypothetical protein
2c00070	0.197	ni	hypothetical protein	um10331	0.07889	K14171	related to peroxisomal membrane protein
7d00308	0.19704	ni	hypothetical protein	um12296	0.07889	ni	conserved hypothetical protein
19c00124	0.19705	K00573	protein-L-homocysteine(4-aspartate) O-methyltransferase	um02993	0.07897	ni	ni
13c00107	0.19708	K04554	ubiquitin-protein ligase	um05540	0.07908	ni	probable RET3 - coatomer complex zeta chain
5d00049	0.1971	ni	M13 family peptidase	um06218	0.0791	ni	conserved hypothetical protein
8d00089	0.19735	ni	hypothetical protein	um02878.2	0.07915	ni	conserved hypothetical protein
20c0014	0.19736	K01866	tyrosyl-tRNA synthetase	um12305	0.07917	ni	probable GTP-binding protein 1
5d00058	0.19769	K07095	membrane coat complex Retromer, subunit VPS23/PEP11	um01470	0.0794	K14403	related to YSH1 - component of pre-mRNA polyadenylation factor PF I
7d00051	0.19777	ni	signal transduction serine/threonine kinase	um11728	0.07946	ni	related to Ygopee protein
10c00054	0.19794	ni	actin-related protein - Arp6p	um10025	0.07964	ni	conserved hypothetical protein
9d00178	0.19801	K11872	ubiquitin-specific protease	um02981	0.07983	ni	conserved hypothetical protein
16d00039	0.19807	ni	hypothetical protein	um12084	0.07986	ni	related to Molybdopterin synthase small subunit
18c00076	0.19823	ni	mitochondrial carnitine-acylcarnitine carrier protein	um01919	0.0799	K16794	probable platelet-activating factor acetylhydrolase Ib alpha subunit
15d00005	0.19834	K14574	predicted exosome subunit	um11205	0.08002	K07893	probable YPT6 - GTP-binding protein of the rab family
9c00191	0.19838	ni	hypothetical protein	um03379	0.08003	ni	conserved hypothetical protein
5d00076	0.19846	ni	RNA-binding protein RBM5 and related proteins	um05270	0.08028	ni	conserved hypothetical protein
22d0173	0.19865	K00547	homocysteine S-methyltransferase	um06019	0.08037	K08794	probable CMK1 - Ca <sup>2+</sup>
9c00091	0.19868	K03352	hypothetical protein	um02947	0.08043	K01128	related to SC11 - fructosyl phosphoSphingolipid phospholipase
9c00274	0.19885	ni	hypothetical protein	um00049	0.08116	ni	conserved hypothetical protein
14c00115	0.19887	ni	hypothetical protein	um11454	0.08125	ni	conserved hypothetical protein
24c00086	0.1991	ni	uncharacterized conserved protein	um11726	0.08126	ni	conserved hypothetical protein
18d00077	0.19918	K11360	hypothetical protein	um03859	0.08129	ni	hypothetical protein
7d00027	0.19948	ni	hypothetical protein	um05619	0.08139	ni	conserved hypothetical protein
13d00038	0.19955	K11552	predicted DNA methylase	um05946	0.08141	ni	ni
14d00013	0.19968	ni	synaptic vesicle transporter SVOP and related transporters	um04877	0.08146	ni	hypothetical protein
4d00012	0.19981	K12948	signal peptidase complex subunit	um12132	0.08153	ni	conserved hypothetical protein
5d00115	0.19983	ni	very long-chain acyl-CoA synthetase	um11988	0.08157	ni	putative protein
13d00109	0.19984	ni	hypothetical protein	um11922	0.08201	ni	related to Chitin deacetylase precursor
7c00165	0.19989	K02607	hypothetical protein	um10023	0.08205	K07243	high-affinity iron permease
7d00232	0.19995	K02959	mitochondrial/chloroplast ribosomal protein S16	um01670	0.08211	K15436	related to MTR10 - involved in nuclear protein import
9d00028	0.20005	ni	hypothetical protein	um01198	0.08216	K10109	probable PEP1 - phosphoprotein phosphatase PPG catalytic chain
7d00196	0.2002	ni	D-aspartate oxidase	um00996.2	0.08236	ni	conserved hypothetical protein
7d00302	0.20028	K02896	60s ribosomal protein L24	um05893	0.08262	ni	conserved hypothetical protein
7d00048	0.20031	ni	beta-glucuronidase GUSB	um11190	0.08263	ni	putative protein
13c00060	0.20033	K11204	gamma-glutamylcysteine synthetase	um05976	0.08277	ni	hypothetical protein
10c00073	0.20034	ni	hypothetical protein	um02126	0.08289	ni	conserved hypothetical protein
14d00059	0.20034	K14763	uncharacterized conserved protein	um15065	0.08296	ni	conserved hypothetical protein
14d00111	0.20054	K01880	glycyl-tRNA synthetase and related class II tRNA synthetase	um03140	0.08297	ni	ni
24d00002	0.20064	ni	multidrug resistance-associated protein	um00092	0.08318	ni	related to levodopa reductase
26c00093	0.20095	ni	kufs-binding protein	um05503	0.08322	ni	putative protein
5d00051	0.20131	ni	hypothetical protein	um10715	0.08343	K14850	related to RRP6 - nucleolar protein required for efficient processing of pre-rRNA at site A2
18c00094	0.2015	K07252	RNA pseudouridylylase synthetases	um01695	0.08356	ni	hypothetical protein
6d00057	0.20151	ni	hypothetical protein	um11734	0.08411	K14563	probable NOP1 - fibrillar
16d0046	0.20156	K00615	transketolase	um12316	0.08431	ni	conserved hypothetical protein
8d00040	0.20168	ni	hypothetical protein	um06030	0.08441	K08030	GTP-binding protein
22d0089	0.20166	ni	nuclear transport receptor RANBP7/RANBP8	um10127	0.08448	K02889	probable 60s ribosomal protein L21-A
22c00041	0.20177	K12193	vacuolar sorting protein VPS24	um11397	0.08452	ni	putative protein
22d00200	0.20218	K03317	concentrative Na <sup>+</sup> -nucleoside cotransporter CNT1/CNT2	um03669	0.08458	K03885	probable NADH dehydrogenase
3d00007	0.20247	K09467	hypothetical protein	um04194	0.08465	ni	probable LYS20 - homocitrate synthase
20c00006	0.20286	ni	Ca <sup>2+</sup> -binding protein	um02490	0.08473	K08158	probable FLR1 - Putative H. antipateri involved in multidrug resistance
9c00370	0.20293	ni	WD40 protein	um10218	0.08522	ni	hypothetical protein
22d0142	0.20299	ni	WD40 repeat-containing protein LD2LT	um00793	0.08533	ni	conserved hypothetical Ustilago-specific protein
9d00414	0.20291	K01267	aminopeptidase 1 zinc metalloproteinase	um10652	0.08535	K01493	related to DCD1 - deoxyxylate deaminase
22d0143	0.20322	K14811	ATP-dependent RNA helicase	0.0855	K14309	ni	related to NIC96 - nuclear pore protein
9d00234	0.20227	ni	hypothetical protein	um10886	0.08555	ni	conserved hypothetical protein
27c00017	0.20235	K10590	E3 ubiquitin protein ligase	um11509	0.08556	K14800	conserved hypothetical protein
7d00326	0.20243	ni	acyl-coA synthetase	um02496	0.08566	K07047	conserved hypothetical protein
22d0168	0.20237	ni	hypothetical protein	um02947	0.08578	ni	related to SPO1 - BEH1 protein-binding protein
9d00382	0.20288	ni	hypothetical protein	um10968	0.08591	ni	probable VTC4 - Vacuolar Transporter Chaperone
18d00034	0.20291	ni	hypothetical protein	um03602	0.08601	K07910	probable Ras-related protein Rab-18
18c00087	0.20291	K00616	transaldolase	um02955	0.08625	K13199	related to RAV38 protein
24d00055	0.20312	ni	protein disulfide isomerase	um02275	0.0864	ni	related to PET127 - component of mitochondrial translation system
4d00025	0.20321	K03680	translation initiation factor 2B, delta subunit	um11027	0.08681	K08517	probable SEC22 - synaptobrevin
9c00182	0.20337	K06664	predicted E3 ubiquitin ligase	um15068	0.08691	ni	conserved hypothetical protein
16d00084	0.20373	ni	predicted transporter	um03504	0.08704	ni	related to Purine-nucleoside phosphorylase
14d00092	0.20382	K00226	dihydroorotate dehydrogenase	um10361	0.08713	K02923	probable 60S ribosomal protein L38
5c00152	0.20395	K14310	uncharacterized conserved protein	um02373	0.08719	ni	putative protein
19c0109	0.20401	ni	hypothetical protein	um11308	0.08736	K06067	histone deacetylase
9c00039	0.20405	K10134	p53-mediated apoptosis protein EI24/PIG8	um10366.2	0.08743	ni	hypothetical protein
10c00003	0.20411	ni	flavonol reductase	um03997	0.08757	K00589	related to MET1 - siroheme synthase
9c00119	0.20448	K03247	translocation initiation factor 3, subunit h	um11816	0.08763	K16569	related to gamma-tubulin complex component 2
22c00096	0.20455	K09539	nucleolar ribonucleoprotein	um10193	0.08785	ni	conserved hypothetical protein
24d00030	0.20473	K13336	peroxisomal assembly factor PEX3	um11132	0.08788	K10773	related to NTG1 - DNA repair protein
8c00047	0.20488	ni	hypothetical protein	um10565	0.08802	ni	hypothetical protein
3d00011	0.20493	ni	hypothetical protein	um01418	0.08807	K14307	related to NUP49 - nuclear pore protein
22d00220	0.20505	ni	uncharacterized conserved protein	um04299	0.08808	K15100	probable succinyl-tRNA-ligase transporter
9d00287	0.20513	K15732	TFIIJ-interacting CTD phosphatases	um04286	0.08818	ni	hypothetical protein
7c00163	0.20517	K00652	5-aminolevulinic synthase	um00760	0.08824	K00938	related to ERG8 - phosphohomocysteine kinase
10c00041	0.20518	ni	mRNA cleavage and polyadenylation factor I complex, subunit Rb	um01735	0.08828	K07890	GTP-binding protein
8d00049	0.20533	ni	hypothetical protein	um00604	0.08852	K12795	related to SGT1 - subunit of SCF ubiquitin ligase complex
7d00058	0.20537	K07008	glucosamine 6-phosphate synthetase	um06402	0.08855	K02210	probable DNA replication licensing factor
26c00054	0.20554	K01705	aconitase/homoaconitase	um11998	0.08856	K14430	probable PHO91 - similarity to Pho87p and Pho90p
22c00280	0.2056	K01193	beta-fructofuranosidase	um03603	0.08859	ni	hypothetical protein
9c00128	0.20561	K00931	gamma-glutamyl kinase	um05139	0.0886	K02981	probable 40S ribosomal protein S2
9c00129	0.20567	K10755	transcription factor C, subunit RFC4	um12190	0.08865	ni	conserved hypothetical protein
3c00036	0.20568	ni	hypothetical protein	um00216	0.08881	K10755	probable RFC2 - DNA replication factor
4c00006	0.20571	ni	membrane coat complex Retromer, subunit VPS26	um10895	0.08895	K11584	related to B56-delta regulatory subunit of protein phosphatase 2A
8c00078	0.20575	K12180	COP9 signalosome, subunit CSN7	um10201	0.08898	ni	hypothetical protein
20c0075	0.20585	ni	hypothetical protein	um11385	0.08931	ni	putative protein
22d0197	0.20601	ni	DHHC-type Zn-finger proteins	um10392	0.0895	ni	conserved hypothetical protein
16d00055	0.20609	ni	multicopper oxidases	um11763	0.08991	ni	related to acetylglucosylase
27d00075	0.20611	K17338	HVA22/DP1 gene product-related proteins	um04958	0.09058	ni	related to polyketide synthase
9c00123	0.20612	ni	hypothetical protein	um04918.2	0.09077	ni	conserved hypothetical protein
12c00308	0.20651	ni	predicted tubulin-tyrosine ligase	0.09101	K00108	ni	related to Glucosyl transferase
12c00079	0.20646	K11098	small nuclear ribonucleoprotein	um03993	0.09114	K12836	related to splicing factor U2AF 35 kd subunit
7d00258	0.20658	K01103	fructose-6-phosphate 2-kinase	um01304	0.0912	K03660	related to 8-oxoguanine DNA-glycosylase
14d00081	0.20666	K16938	septin CDC10 and related P-loop GTPases	um06165	0.09122	ni	hypothetical protein
22d0104	0.20669	ni	hypothetical protein	um00714	0.09132	K14015	probable NPL4 - nuclear protein localization factor and ER translocation component
22d0067	0.20671	ni	predicted A1Pase	um02948	0.09137	K11564	conserved hypothetical protein
26d00009	0.20676	ni	DNA-directed RNA polymerase III subunit	um02326	0.09141	ni	conserved hypothetical protein
6d00132	0.20701	K08139	predicted transporter	um06293	0.09153	ni	hypothetical protein
19c00069	0.20714	ni	hypothetical protein	um05745	0.09154	K11374	related to ELP2 - 29 kDa subunit of elongator and elongating RNA polymerase II holoenzyme
4d00006	0.20723	ni	WD40 repeat-containing protein	um05927	0.09154	ni	putative protein
7d00078	0.2073	ni	molecular chaperone	um04211	0.09155	ni	conserved hypothetical protein
9c00104	0.20731	ni	uncharacterized conserved protein	um02493	0.09157	K10908	related to RPO41 - DNA-directed RNA polymerase
7d00032	0.20752	K14812	transcriptional effector CCR4-related protein	um06480	0.09158	ni	putative protein
25d00015	0.20754	K04488	iron binding protein involved in Fe-S cluster formation	um11526	0.09159	ni	conserved hypothetical protein
7c00014	0.20763	K02134	mitochondrial F1F0-ATP synthase, subunit delta/ATP16	um00958	0.0916	ni	conserved hypothetical protein
27d00057	0.20781	K14429	amino acid transporters	um01985	0.09163	ni	hypothetical protein
5c00107	0.20784	ni	hypothetical protein	um05159	0.09218	K12848	conserved hypothetical protein
6c00068	0.2081	ni	hypothetical protein	um02985	0.09249	ni	conserved hypothetical protein
9c00098	0.20819	K05542	tRNA-dihydroxylation synthase	um06219	0.0925	K10849	related to dna excision repair protein ercc-1
8c00063	0.20833	K17279	protein involved in membrane traffic	um12317	0.09252	ni	conserved hypothetical protein
9c00343	0.20834	ni	hypothetical protein	um10498	0.09258	ni	putative protein
27c00046	0.20856	ni	hypothetical protein	um00235	0.09291	K01210	probable EXG1 - exo-beta-1
5d00001	0.20865	ni	hypothetical protein	um12244	0.09294	K11086	related to small nuclear ribonucleoprotein associated protein b
25c00028	0.20871	ni	hypothetical protein	um05747	0.09299	K10005	related to SEC91 - component of the COP1I coat of ER-go golgi vesicles
22d00283	0.20877	ni	hypothetical protein	um01634	0.09359	K02885	probable RPL19B - 60S large subunit ribosomal protein L19
6c00002	0.209	ni	hypothetical protein	um06460	0.09365	ni	probable fatty acid synthase
5d00072	0.20908	K14558	WD40-repeat-containing subunit of the 18S rRNA processing co	um02786	0.09386	ni	hypothetical protein
12c00041	0.20919	ni	multicopper oxidases	um04413	0.0939		

22d00152	0.21155	ni	hypothetical protein	um06000	0.09718	ni	conserved hypothetical protein
22c00106	0.21159	K00706	1,3-beta-glucan synthase	um03196	0.09728	ni	hypothetical protein
8c00031	0.21163	K14861	uncharacterized conserved protein	um00332	0.09753	K15201	related to transcription factor TFIIC subunit
1c00032	0.21168	ni	hypothetical protein	um02854	0.09807	ni	putative protein
22c00057	0.21166	K11230	MAPKKK (MAP kinase kinase kinase) SSK2	um02854	0.09809	ni	hypothetical protein
3c00055	0.21187	ni	predicted mitochondrial/chloroplast ribosomal protein S17	um03886	0.09816	ni	conserved hypothetical protein
18d00096	0.212	K16075	magnesium transporters, CorA family	um01091	0.0986	K14767	related to SAS10 - involved in silencing
16c00026	0.21205	ni	hypothetical protein	um00865	0.09865	ni	hypothetical protein
22d00066	0.2121	ni	protein DRE2	um00292	0.0987	K14791	related to WD repeat protein PWP1
7d00019	0.21211	K04532	NEDD8-activating complex, APP-BP1/UBA5 component	um01722.2	0.09909	K11375	probable PCS50 - AMP-binding protein
6c00117	0.21245	K10413	cytoskeletal heavy chain	um02552	0.09911	ni	putative protein
22d00264	0.21258	ni	predicted member of the intramitochondrial sorting protein family	um00159	0.09912	ni	conserved hypothetical protein
13c00021	0.21265	K15116	mitochondrial carrier protein - Rim2p/Mrs12p	um01246	0.09943	K05756	probable ARC18 - subunit of the Arp2
6c00128	0.2128	ni	aldoketo reductase family proteins	um12058	0.09943	ni	conserved hypothetical Ustilago-specific protein
1c00014	0.21282	ni	hypothetical protein	um11400	0.09946	K03146	probable Thiamin biosynthetic enzyme
12d00041	0.21284	K03259	translational initiation factor 4F, cap-binding subunit	um10289	0.09968	K02153	related to vacuolar ATP synthase subunit H
10d00023	0.21289	ni	cell cycle-associated protein Mob1-1	um15080	0.09978	ni	conserved hypothetical protein
11d00062	0.21301	K03013	RNA polymerase, 25-kDa subunit	um03662	0.10003	K05917	sterol 14 alpha-demethylase
16d00013	0.2131	ni	predicted mitochondrial rRNA	um02468	0.10016	ni	conserved hypothetical protein
19d00080	0.21315	ni	voltage-gated Ca2+ channels, alpha1 subunits	um00594	0.10016	ni	conserved hypothetical Ustilago-specific protein
27d00029	0.21327	ni	hypothetical protein	um05856.2	0.10021	ni	putative protein
22d00107	0.21345	ni	uncharacterized conserved protein	um10399	0.10024	ni	related to C-type cyclin
7d000278	0.21351	ni	CCCH-type Zn-finger protein	um11008	0.10025	K15271	related to HFM1 - DNA
9d00017	0.21353	ni	hypothetical protein	um02846.2	0.10041	ni	related to WD40 repeat protein CreC
24d00029	0.21356	K01426	amidase	um03486	0.10058	ni	putative protein
10c00082	0.2136	ni	hypothetical protein	um05654	0.10062	K07208	probable ras-related GTP-binding protein
20d00042	0.21376	ni	hypothetical protein	um01705	0.10066	ni	conserved hypothetical protein
27d00078	0.21376	K01784	UDP-glucose 4-epimerase	um03206	0.10071	K00943	related to thymidylate kinase
20d00058	0.21394	ni	hypothetical protein	um11787	0.10082	K14842	probable NSA2 - involved in biogenesis of ribosomal large subunit
19d00118	0.21408	ni	17-beta-hydroxysteroid dehydrogenase type 3	um11423	0.10081	ni	conserved hypothetical protein
5d00039	0.21417	K03026	26S proteasome regulatory complex, subunit RPN1/PSMD2	um00444	0.10106	ni	conserved hypothetical protein
18c00033	0.21418	ni	cystathionine beta-lyases	um05436	0.10113	ni	conserved hypothetical Ustilago-specific protein
15c00076	0.21427	K00417	ubiquitin cytochrome c reductase, subunit QCR7	um11766	0.1012	ni	conserved hypothetical protein
9c00150	0.21438	K02127	mitochondrial F1FO-ATP synthase, subunit b/ATP4	um11052	0.10121	K06875	conserved hypothetical protein
9c00150	0.21447	K09008	uncharacterized conserved nuclear protein	um05299	0.10149	ni	conserved hypothetical Ustilago-specific protein
18d00113	0.21451	ni	hypothetical protein	um11375	0.10156	ni	hypothetical protein
19d00071	0.21463	ni	hypothetical protein	um05163	0.10159	K13127	conserved hypothetical protein
5d00146	0.21474	ni	hypothetical protein	um06401	0.1016	ni	conserved hypothetical protein
9d00198	0.21485	ni	hypothetical protein	um02296	0.10186	ni	conserved hypothetical Ustilago-specific protein
22d00219	0.21517	ni	hypothetical protein	um02624	0.10193	ni	related to Alpha-1
24d00057	0.21526	ni	RNA-directed RNA polymerase QDE-1	um02124	0.10207	K00598	conserved hypothetical protein
19c00006	0.21541	ni	non-ribosomal peptide synthetase	um10391	0.10218	ni	related to SK15 - protoplasm regeneration and killer toxin resistance protein
7c00271	0.21546	ni	hypothetical protein	um02274	0.10224	ni	conserved hypothetical protein
20d00047	0.2155	K10696	E3 ubiquitin ligase involved in syntaxin degradation	um10701	0.10273	K02922	probable RPL37A - ribosomal protein L37
12d00064	0.21555	K03510	DNA polymerase Iota	um05979	0.10298	K00521	related to ferric reductase
10d00059	0.21556	K01529	ATP-dependent RNA helicase	um10283	0.10304	K00295	related to MTD1 - methyleneretahydrofolate dehydrogenase
7c00320	0.21558	ni	hypothetical protein	um02528	0.10307	ni	conserved hypothetical protein
9d00210	0.21561	K02960	40S ribosomal protein S16	um10740	0.10327	K12668	related to apoptotic cell death regulator DAD1
18c00056	0.21572	K11835	ubiquitin C-terminal hydrolase	um00794	0.10338	ni	conserved hypothetical Ustilago-specific protein
9d00050	0.21573	ni	hypothetical protein	um05853	0.10344	ni	conserved hypothetical protein
7d00294	0.21576	ni	hypothetical protein	um10866	0.10355	K12858	probable U5 snRNP 100 kD protein
13c00033	0.21581	K03949	NAD-dependent oxidoreductase, NDUFA5/B13 subunit	um10192.2	0.10367	ni	related to U5 snRNP
8d00028	0.21592	ni	hypothetical protein	um04327	0.10376	K10597	related to UFD2 - ubiquitin fusion degradation protein
18d00026	0.21598	K01895	acyl-coa synthetase	um04134	0.10377	ni	probable methionine synthase
22c00291	0.2161	ni	multifunctional protein	um05832	0.10382	K04078	probable heat shock protein 10
4d00016	0.21628	K01956	multifunctional pyrimidine synthesis protein CAD	um00669	0.10384	K10842	related to TFB3 - TFIIB subunit
27c00067	0.21639	K10756	replicator C, subunit RFC5	um04348	0.10387	K14660	conserved hypothetical protein
9c00431	0.21649	ni	spliceosomal protein snRNP-U1A/U2B	um03985	0.10405	ni	related to SIW14 - protein involved in actin filament organization
10d00067	0.21663	ni	hypothetical protein	um05473	0.10405	K15289	conserved hypothetical protein
11d00006	0.21676	K05906	hypothetical protein	um03017	0.10407	ni	putative protein
3c00060	0.21683	ni	hypothetical protein	um04683	0.10423	K08991	related to NMD5 - endonuclease involved in DNA repair and replication fork stability
8c00107	0.21699	ni	hypothetical protein	um01606	0.10423	ni	related to NMD5 - Nam7p interacting protein
20d00047	0.21705	ni	hypothetical protein	um11024	0.1044	ni	putative protein
5c00103	0.21711	K01883	cysteinyl-tRNA synthetase	um12306	0.10465	K15148	related to MED7 - member of RNA Polymerase II transcriptional regulation mediator complex
26c00017	0.21737	ni	predicted membrane protein	um11768	0.10507	ni	hypothetical protein
9c00022	0.21745	ni	uncharacterized conserved protein	um10711	0.10515	K02984	probable ribosomal protein S3aE
14c00029	0.21746	K11968	predicted E3 ubiquitin ligase	um11441	0.10542	ni	hypothetical protein
15c00013	0.21764	K06173	pseudouridylate synthase	um01677	0.10543	ni	hypothetical protein
22d00216	0.21767	ni	hypothetical protein	um11479	0.10548	K05758	probable ARC35 - subunit of the Arp2
15c00064	0.21774	ni	hypothetical protein	um05656	0.10566	ni	conserved hypothetical Ustilago-specific protein
22c00179	0.21786	K07127	transferrin and related proteins	um10990	0.10566	K01855	related to DEG1 - pseudouridine synthase
15d00049	0.21786	ni	hypothetical protein	um02252	0.10632	K03241	conserved hypothetical protein
7d00333	0.21806	ni	hypothetical protein	um02730	0.10663	ni	conserved hypothetical protein
27d00041	0.21847	ni	hypothetical protein	um01995	0.10676	ni	conserved hypothetical protein
11d00163	0.21849	ni	hypothetical protein	um10271	0.1073	ni	conserved hypothetical protein
11c00016	0.21856	K00135	aldehyde dehydrogenase	um10118	0.10735	ni	conserved hypothetical protein
24d00014	0.21865	K15901	hypothetical protein	um01830	0.1074	ni	related to alpha-aminoadipate reductase
11c00053	0.21871	ni	hypothetical protein	um001274	0.10743	K15305	conserved hypothetical protein
6c00121	0.21874	ni	hypothetical protein	um03488	0.10772	ni	related to SNF1-related protein kinase KIN10
18d00066	0.21881	ni	hypothetical protein	um15073	0.10778	ni	conserved hypothetical protein
24d00027	0.21888	ni	hypothetical protein	um10570	0.10793	ni	conserved hypothetical protein
22d00028	0.21889	K12598	nuclear exosomal RNA helicase MTR4	um03645	0.10804	ni	related to beta-1
12d00141	0.21909	ni	hypothetical protein	um10356	0.10819	K02739	probable 20S proteasome beta2 subunit
7d00354	0.21922	ni	hypothetical protein	um11933.2	0.10821	ni	putative protein
22c00213	0.21937	ni	hypothetical protein	um05959	0.10821	ni	conserved hypothetical protein
9d00407	0.21953	K07204	guanine nucleotide binding protein MIP1	um10014	0.10848	ni	related to HMF1 - Heat-shock inducible inhibitor of cell Growth
7d00133	0.21963	ni	hypothetical protein	um12128	0.10849	ni	conserved hypothetical protein
24d00011	0.21969	ni	thiosulfonate-like protein	um10452	0.10861	K01322	related to Prolyl endopeptidase
9d00300	0.21986	ni	hypothetical protein	um00966	0.10868	ni	related to RAD26 - DNA repair and recombination protein
22c00039	0.22	ni	low density lipoprotein B-like protein	um04269	0.109	ni	conserved hypothetical protein
6d00028	0.22003	K11173	alcohol dehydrogenase	um05949	0.10912	ni	probable actin interacting protein 1
22d00263	0.22005	ni	uncharacterized conserved protein	um03617	0.10914	K14861	conserved hypothetical protein
22d00269	0.22006	ni	hypothetical protein	um02091	0.10942	K02935	related to MRP1 - peptide chain release factor
3d00041	0.2202	K06679	mitotic checkpoint protein MAD1	um15017	0.10944	ni	conserved hypothetical protein
7d00110	0.22023	K14833	predicted protein involved in nuclear export of pre-ribosomes	um11570	0.10969	ni	conserved hypothetical protein
11d00034	0.22027	ni	aminopyridases of the M20 family	um03024	0.10971	ni	related to subtilisin-like serine protease
15c00031	0.22037	ni	centromere-associated protein zw10	um03622	0.10982	K01802	conserved hypothetical protein
22c00138	0.22041	ni	Na+-independent Cl/HCO3 exchanger AE1	um01849	0.10992	ni	related to subtilisin-like protein
7d00086	0.22049	ni	hypothetical protein	um02716	0.11014	ni	putative protein
9c00383	0.22057	ni	hypothetical protein	um04239	0.11025	K03236	probable TIF11 - translation initiation factor eIF1a
9d00179	0.22083	ni	hypothetical protein	um06191	0.11025	ni	conserved hypothetical protein
5d00071	0.22083	ni	WD40-repeat-containing subunit of the 18S rRNA processing complex	um03798	0.11037	ni	conserved hypothetical protein
27d00024	0.22101	ni	predicted sugar kinase	um02323	0.11037	K13343	related to PEX14 - peroxisomal protein involved in import - peroxin
2d00030	0.22114	ni	FOG, Zn-finger	um00080	0.11042	ni	related to 5-oxoprolinase
22d00080	0.22142	K07955	GTP-binding ADP-ribosylation factor-like protein	um00174	0.1106	K11292	related to transcriptional regulator protein SPT6
15c00039	0.2215	K14399	RNA cleavage and polyadenylation factor (A)II complex, subunit 1	um02471	0.11077	ni	related to Exportin 4
8d00110	0.22152	ni	hypothetical protein	um10767	0.11088	ni	related to DPH2 - diphtheria toxin resistance protein
25d00039	0.22157	K02725	20S proteasome, regulatory subunit alpha type PSMA1/PRES	um00507	0.11125	K15128	conserved hypothetical protein
19d00145	0.22162	K14300	nuclear pore complex, Nup133 component	um12110	0.11154	K02258	probable COX11 - cytochrome-c oxidase assembly protein
7d00254	0.2217	ni	hypothetical protein	um12442	0.11188	ni	conserved hypothetical protein
24d00036	0.22175	K01814	phosphoribosyltransferase-5-aminimidazole carboxamide ribonucleoside	um03798	0.11201	K01867	probable hypoxanthine-URA ligase
9d00092	0.22183	ni	hypothetical protein	um03905	0.11202	ni	conserved hypothetical protein
22d00036	0.22206	ni	hypothetical protein	um02403.2	0.11269	K15322	related to RNA splicing endonuclease beta subunit
5d00093	0.22208	ni	hypothetical protein	um06374	0.11272	ni	related to GRE2 - methylglyoxal reductase
18d00034	0.22215	ni	hypothetical protein	um04405	0.11286	K02546	alpha-glucosidase II precursor
1d00039	0.2222	K04739	cAMP-dependent protein kinase types I and II, regulatory subunit	um11579	0.11296	ni	conserved hypothetical Ustilago-specific protein
2c00002	0.22234	ni	hypothetical protein	um03403.2	0.11297	ni	conserved hypothetical protein
7d00351	0.22253	ni	predicted transporter	um11653	0.11298	K01764	related to CYC3 - holocytochrome-c synthase
8c00014	0.22256	ni	hypothetical protein	um11204	0.11319	K10686	related to ubiquitin-activating enzyme
22c00126	0.2226	K06655	protein kinase PCTAIRE and related kinases	um10850	0.11348	ni	putative protein
9c00040	0.22274	ni	hypothetical protein	um03676	0.11354	K10877	related to RAD54 - DNA-dependent ATPase of the Snf2p family
8c00106	0.22304	ni	uncharacterized conserved protein	um11722	0.11363	ni	probable YDJ1 - mitochondrial and ER import protein
7d00265	0.22307	K12881	RRM motif-containing protein	um15004	0.11384	K01638	probable maleate synthase
15c00096	0.22318	K04709	protein transporter	um10330	0.11393	K14209	related to AV13 - Vacuolar transporter
6d00008	0.2233	ni	acetylcholinesterase	um11883.2	0.11401	ni	putative protein
14c00107	0.22346	K11087	small nuclear ribonucleoprotein SMD1 and related snRNPs	um01405	0.11409	ni	conserved hypothetical protein
25c00058	0.22351	K04513	ras-related small GTPase	um02384	0.1142	ni	a1-mating type protein Rba1
7d00025	0.22367	K03115	casein kinase II, beta subunit	um05649	0.11438	ni	conserved hypothetical protein
9d00377	0.22372	K14539	predicted GTP-binding protein MMR1	um04344	0.11439	ni	conserved hypothetical protein
18d00060	0.22388	K12669	oligosaccharyltransferase, gamma subunit	um10113	0.1149	ni	conserved hypothetical protein
9c00020	0.22392	ni	phytoene/squalene synthetase	um02690	0.11491	ni	hypothetical protein
9d00306	0.22406	ni	FOG, RCC1 domain	um04428	0.11494	ni	conserved hypothetical protein
22d00118	0.22407	K01194	ribosome	um02967	0.11501	K12617	related to PAT1 - topoisomerase II-associated protein
9c00291	0.22407	ni	hypothetical protein	um10013.2	0.11547	ni	related to Iglulonolactone oxidase
2c00023	0.22432	K					

10c00032	0.22785	K12621	predicted snRNP core protein	um02295	0.11925	ni	conserved hypothetical Ustilago-specific protein
5000126	0.22869	K14565	ribosome biogenesis protein - Nop58p/Nop5p	um04498	0.11925	ni	putative protein
15000020	0.22875	ni	predicted oxidoreductase	um11742	0.11941	ni	putative protein
70000381	0.22889	K02914	mitochondrial ribosomal protein L34	um07766	0.11949	ni	hypothetical protein
18c00142	0.22895	K12183	vacuolar sorting protein	um05572	0.11957	ni	related to PCH2 - putative ATPase
7000293	0.22901	K01514	oxopolyposphatases and related proteins	um02276	0.11979	K02934	probable 60S large subunit ribosomal protein L6
1600032	0.22902	K01078	multiple inositol polyphosphate phosphatase	um10811	0.12003	K07955	related to ARL1 - ADP-ribosylation factor
7000073	0.22905	ni	hypothetical protein	um05243	0.1201	ni	hypothetical protein
12c00070	0.2291	ni	transport protein particle TRAPP complex subunit	um00543	0.12018	K11429	conserved hypothetical protein
6000065	0.2293	ni	hypothetical protein	um05675	0.12036	ni	conserved hypothetical protein
18c00004	0.22931	K14319	ran GTPase-activating protein	um10241	0.12044	K14778	related to DBP8 - ATP-dependent RNA helicase
22c00223	0.22944	K13289	serine oxidoreductase	um05105	0.12061	K15105	probable sulphate transport protein MtrI
9000298	0.22963	ni	translational repressor Pumilio/PUF3	um02833	0.12073	K12273	related to SEC6B - ER protein-translocation complex chain
7000210	0.22966	K00995	phosphatidylglycerolphosphate synthase	um04471	0.12077	ni	conserved hypothetical protein
20c00030	0.22966	K02603	origin recognition complex, subunit 1, and related proteins	um01100	0.12091	ni	hypothetical protein
14000070	0.2297	K16055	trehalose-6-phosphate synthase component TPS1 and related su	um05459	0.12104	ni	conserved hypothetical Ustilago-specific protein
7000187	0.22974	ni	hypothetical protein	um00589	0.12111	K14798	related to LTV1 - low-temperature viability protein
19d00053	0.22979	K08735	mismatch repair ATPase MSH2	um06407	0.12147	ni	probable VIP1 - actin cytoskeleton organization and biogenesis-related protein
05000227	0.2298	ni	hypothetical protein	um12208	0.12158	K02208	related to SSN3 - cyclin-dependent CTD kinase
7000327	0.22983	ni	hypothetical protein	um05708	0.1216	ni	conserved hypothetical protein
11d00044	0.22986	ni	hypothetical protein	um10523	0.12161	ni	conserved hypothetical protein
9c00077	0.23001	ni	very-long-chain acyl-CoA dehydrogenase	um05869	0.12199	K15109	probable carnitine
12c00011	0.23005	ni	hypothetical protein	um05358	0.12215	ni	hypothetical protein
5000064	0.23021	ni	hypothetical protein	um04177.2	0.12222	ni	conserved hypothetical protein
1300103	0.23032	K10843	RNA pRNA polymerase II transcription initiation/nucleotide excisi	um02292	0.12283	ni	conserved hypothetical protein
9c00251	0.23051	ni	mRNA biogenesis protein	um01576	0.12295	ni	conserved hypothetical protein
7000322	0.2304	ni	GTPase-activating protein VRP	um01105	0.12298	K15628	related to adrenoleukodystrophy protein
5000008	0.23076	K02146	vacuolar H <sup>+</sup> -ATPase V0 sector, subunit d	um03362	0.12339	ni	conserved hypothetical protein
18c00026	0.23079	ni	glutathione S-transferase	um11759	0.12386	K16578	conserved hypothetical protein
22c00257	0.23088	K06009	ubiquitin C-terminal hydrolase UCHL1	um11511	0.1239	ni	putative protein
18d00002	0.23096	ni	hypothetical protein	um02181	0.12411	ni	conserved hypothetical protein
27d00047	0.23133	K04409	p21-activated serine/threonine protein kinase	um00800	0.12415	ni	probable PHO84 - Inorganic phosphate permease
70c00211	0.23141	ni	uncharacterized conserved protein	um02864	0.12454	ni	related to Acetylcholinesterase precursor
10d00105	0.23146	K05687	putative transcriptional regulator DJ-1	um11830	0.1246	ni	conserved hypothetical protein
6000020	0.23157	ni	hypothetical protein	um11218	0.12467	K17417	conserved hypothetical protein
9c00332	0.2317	ni	uncharacterized conserved protein	um01435	0.12469	ni	related to MCH4 - monocarboxylate transporter
9c00424	0.23186	ni	hypothetical protein	um03371	0.12473	ni	conserved hypothetical protein
22d00147	0.23193	K07036	predicted membrane proteins	um04584	0.12479	K01694	probable tytophan synthase
5c00023	0.23197	ni	hypothetical protein	um00739	0.12482	ni	related to DNA repair protein rad18
18c00145	0.23201	ni	hypothetical protein	um03937	0.12504	ni	KH domain protein
14c00016	0.23205	ni	emp24(gp25L) family of membrane trafficking proteins	um03424	0.1251	ni	conserved hypothetical protein
6000081	0.23222	ni	ATPase component of ABC transporters with duplicated ATPase	um10583	0.12521	ni	hypothetical protein
9c00081	0.23247	ni	hypothetical protein	um12016	0.12525	ni	conserved hypothetical Ustilago-specific protein
70c01190	0.23251	ni	predicted membrane protein	um01743	0.12526	K13728	related to mitotic spindle assembly checkpoint protein mad2b
27c00058	0.23265	K11827	clathrin adaptor complex, small subunit	um04057	0.12534	ni	related to dihydroflavonol reductase
7000301	0.23273	ni	FOG, Zn-finger	um11813	0.12564	ni	putative protein
15d00010	0.23278	ni	amine oxidase	um11608.2	0.12571	ni	hypothetical protein
16d00057	0.23283	ni	transport protein particle TRAPP complex subunit	um00522	0.12586	ni	putative protein
19c00090	0.23288	K02919	mitochondrial/chloroplast ribosomal protein L36	um03771	0.12588	ni	conserved hypothetical protein
13d00064	0.23293	ni	guanine nucleotide-binding protein	um10426	0.12594	ni	transcription factor pacC
7000236	0.233	ni	hypothetical protein	um00168	0.12602	ni	related to Cell division control protein 15
27c00061	0.23301	ni	hypothetical protein	um05141	0.12618	K03511	related to DNA polymerase kappa
5c00095	0.23304	ni	histidine pyrophosphokinase	um05453	0.1262	K15628	related to Tyrosine specific protein phosphatase and dual specificity protein phosphatase
14d00113	0.23316	K03386	alkyl hydroperoxide reductase	um11576	0.12642	K02142	probable ATP1B - subunit I
3c00046	0.23322	K15110	mitochondrial oxidocarboxylate carrier protein	um03448	0.12658	K00784	related to Ribonuclease Z
3c00009	0.23327	K02202	cdk activating kinase	um11136	0.12663	ni	related to PFA4 - Palmitoyltransferase
9c00373	0.23339	ni	mitochondrial import inner membrane translocase, subunit TIM13	um02280	0.12665	ni	putative protein
27d00030	0.23364	K12587	exosomal 3' 5' exonuclease complex, subunit Rrp41	um01273	0.12686	K07252	related to CAH4 - required for full levels of dolichol-linked oligosaccharides
7000192	0.23344	ni	iron/ascorbate family oxidoreductases	um00052	0.12708	ni	putative protein
7000309	0.23346	ni	FOG, WD40 repeat	um03987	0.12713	K06676	related to BRN1 - protein required for chromosome condensation
9c00256	0.23369	K16342	lysophospholipase	um12021	0.12717	ni	conserved hypothetical protein
10c00057	0.23385	ni	hypothetical protein	um11862	0.12737	ni	putative protein
14d00040	0.2341	ni	PHD Zn-finger proteins	um10035	0.12742	K09481	probable protein transport protein sec61 beta subunit
7000296	0.23432	K00653	histone acetyltransferase	um10341	0.12773	ni	conserved hypothetical protein
7000296	0.23458	K13102	protein containing a U1-type Zn-finger and implicated in RNA spli	um05022	0.12775	ni	related to PKH1 - ser
14d00084	0.23464	ni	alkyl hydroperoxide reductase	um05526	0.12784	ni	conserved hypothetical protein
24c00018	0.23473	K03963	NADH:ubiquinone oxidoreductase	um11388	0.12814	K11670	related to UBR1 - ubiquitin-specific protease
8000091	0.23497	ni	hypothetical protein	um01138.2	0.12842	K02427	conserved hypothetical protein
9c00016	0.23529	K06916	predicted ATPase	um04800	0.12856	ni	conserved hypothetical protein
18d00002	0.23532	ni	hypothetical protein	um00325	0.12858	K06664	related to peroxisome assembly protein cart1
18d00095	0.23539	K11238	rixa GTPase effector DIA/Diaphanous	um12167	0.1286	ni	conserved hypothetical protein
9c00409	0.23545	ni	hypothetical protein	um02599	0.12859	ni	related to lysophospholipase
8000052	0.23552	K00420	hypothetical protein	um02498	0.12867	K13076	related to delta-6 fatty acid desaturase
19c00070	0.23562	ni	hypothetical protein	um00907	0.12871	K12177	related to cop2 complex subunit 3
7000121	0.23574	K10768	hypothetical protein	um05600	0.12877	ni	probable UGA2 - succinate semialdehyde dehydrogenase
8c00058	0.23575	ni	hypothetical protein	um10173	0.12915	K05755	probable ARP2
6c00027	0.23587	ni	uncharacterized conserved protein	um02454	0.12917	ni	conserved hypothetical protein
7000050	0.23593	ni	hypothetical protein	um05182	0.12921	ni	hypothetical protein
12d00077	0.23616	K01262	xaa-pro aminopeptidase	um02674	0.12934	ni	conserved hypothetical protein
21c00002	0.23623	ni	hypothetical protein	um04568	0.12946	ni	putative protein
9c00015	0.23634	ni	permease of the major facilitator superfamily	um02789	0.12965	ni	hypothetical protein
9c00415	0.23652	ni	hypothetical protein	um11326	0.13008	ni	conserved hypothetical protein
7000010	0.23653	K03135	transcription initiation factor TFIID, subunit TAF11	um05265	0.13026	ni	hypothetical protein
26d00016	0.2366	K02898	60S ribosomal protein L26	um04259	0.13034	ni	conserved hypothetical protein
26d00104	0.23666	ni	hypothetical protein	um05800	0.13036	K17413	conserved hypothetical protein
13d00024	0.23695	ni	rhogel GTPase	um01374	0.13039	ni	hypothetical protein
26d00035	0.23704	ni	hypothetical protein	um02779	0.13052	ni	conserved hypothetical protein
16c00054	0.23745	K15205	hypothetical protein	um10530	0.1307	ni	hypothetical protein
5d00033	0.23748	K05212	GPI transamidase complex, GP116-PIG-T component	um05268	0.13086	K14951	conserved hypothetical protein
16d00024	0.23754	K11681	SNF2 family DNA-dependent ATPase	um11464	0.13094	ni	conserved hypothetical protein
8c00030	0.23787	ni	glucose dehydrogenase	um05829	0.13095	K12877	probable mago nashi protein
15c00052	0.23794	ni	hypothetical protein	um02128	0.13128	ni	conserved hypothetical protein
16c00085	0.23827	K00452	3-hydroxyanthranilate oxygenase HAAO	um01367	0.1317	K11624	probable alpha-adaptin C
29d00032	0.23828	ni	hypothetical protein	um10101	0.13177	K10734	putative protein
14d00108	0.2383	K16794	WD40 repeat-containing protein	um00290	0.13189	K03507	related to DNA topoisomerase II binding protein
9c00416	0.23835	ni	hypothetical protein	um02758	0.132	ni	related to Chitinase A precursor
11d00072	0.23878	K03016	RNA polymerase subunit 8	um06491	0.13203	K00565	related to RNA
6c00023	0.23888	ni	hypothetical protein	um04941	0.13208	ni	conserved hypothetical Ustilago-specific protein
24c00067	0.23896	ni	hypothetical protein	um12130	0.13214	K11098	probable Small nuclear ribonucleoprotein F
70c0126	0.23896	ni	uncharacterized conserved protein	um05533	0.13227	ni	related to EDE1 protein involved in endocytosis
70c0349	0.23897	ni	cdc42-interacting protein CIP4	um00435	0.13244	K02926	related to 50S ribosomal protein L4
19c00032	0.239	ni	diphthamide biosynthesis protein	um11026	0.13273	K16342	related to phospholipase A2
26d00002	0.2391	ni	hypothetical protein	um00917	0.13288	K12176	putative protein
27c00028	0.23924	K03065	26S proteasome regulatory complex	um02541	0.13299	ni	putative protein
22c00136	0.23926	ni	hypothetical protein	um00225	0.13304	ni	putative protein
24d00033	0.23938	K08658	prenyl protein protease	um12013	0.13309	K14799	related to TSR1 - protein involved in 20S rRNA accumulation
6d00019	0.23946	ni	hydroxysteroid 17-beta dehydrogenase 11	um05564	0.13311	K10352	related to E3-ubiquitin protein ligase TOM1
9c00197	0.23964	K05284	mannosyltransferase	um00695	0.13314	K12373	putative exochitinase
18d00047	0.23976	ni	kinesin	um02239	0.13328	ni	hypothetical protein
9000182	0.23977	K01900	sucinyl-coa synthetase, beta subunit	um04370	0.13329	ni	conserved hypothetical protein
18c00102	0.23982	ni	alpha-D-galactosidase	um11847	0.13336	ni	conserved hypothetical Ustilago-specific protein
18d00099	0.23983	ni	UV radiation resistance associated protein	um04298	0.13343	K03253	related to PR1 - transition initiation factor eIF3 subunit
12d00121	0.23998	K13192	proteins containing the RNA recognition motif	um03481	0.13355	ni	related to MLH3 - insertion and deletion mismatch repair protein
70c00077	0.24001	ni	hypothetical protein	um10962	0.13393	ni	conserved hypothetical protein
27c00081	0.24002	K09550	molecular chaperone Prefoldin, subunit 4	um11733.2	0.13395	K12621	related to LSM2 - Sm-like
3d00066	0.24006	K02903	60S ribosomal protein L28	um02149	0.13402	ni	putative protein
6000035	0.24008	ni	hypothetical protein	um04627	0.13404	ni	putative protein
5c00101	0.24031	ni	uncharacterized conserved protein	um10885.2	0.13425	ni	putative protein
9c00313	0.24032	ni	hypothetical protein	um02771	0.13429	ni	putative protein
9000244	0.24045	ni	transcription initiation factor IID subunit	um04768	0.13433	ni	probable SAC6 - actin filament bundling protein
20d00001	0.24045	ni	dehydrogenases with different specificities	um10112	0.13442	ni	conserved hypothetical protein
10d00058	0.24059	ni	hypothetical protein	um10775	0.13463	ni	conserved hypothetical protein
8c00086	0.24075	ni	hypothetical protein	um10937	0.13466	ni	conserved hypothetical protein
16c00025	0.24082	ni	predicted small membrane protein	um02645	0.13484	K12859	probable DIB1 - 17-kDa component of the U4
9c00073	0.24128	ni	hypothetical protein	um01216	0.13494	ni	conserved hypothetical protein
9c00209	0.24129	ni	permease of the major facilitator superfamily	um11048	0.13516	ni	conserved hypothetical protein
24d00062	0.24134	K08493	V-SNARE	um00447	0.13534	ni	conserved hypothetical protein
22d00207	0.24142	K00641	hypothetical protein	um01853	0.13549	ni	related to antibiotic biosynthesis protein
11c00046	0.24146	K14802	P-type ATPase	um03442	0.13555	K10592	related to ubiquitin-protein ligase 1
7000023	0.24164	ni	hypothetical protein	um11273	0.13566	K08676	probable PFM1 - ATP-dependent protease
27c00093	0.24183	ni	predicted phosphatase	um10965.2	0.13559	ni	putative protein
5000124	0.24191	K00088	IMP dehydrogenase	um04372	0.13564	K10413	cytoplasmic dynein heavy chain 2
24c00006	0.24202	ni	Ca2+/calmodulin-dependent protein kinase	um02312	0.13593	ni	ni
70c0012	0.24215	ni	hypothetical protein	um15083.2	0.13594	ni	conserved hypothetical protein
7000350	0.24216	ni	hypothetical protein	um00133	0.13599	K01062	related to acetylhydrolase
22d00031	0.24219	K05955	protein farnesyltransferase, alpha subunit	um04421	0.13608		

5c00063	0.24432	ni	hypothetical protein	um03083	0.13861	ni	conserved hypothetical protein	
15c00066	0.24436	K00728	dolichyl-phosphate-mannose, protein O-mannosyl transferase	um01181	0.1387	ni	conserved hypothetical protein	
12c0134	0.24438	ni	hypothetical protein	um10742	0.13889	ni	conserved hypothetical protein	
16c0027	0.24452	K04564	manganese peroxidase dismutase	um06504	0.1389	ni	conserved hypothetical protein	
26c00042	0.24459	ni	hypothetical protein	um15056	0.13894	K01533	related to CCC2 - copper resistance-associated P-type ATPase	
19c0024	0.24487	ni	5' nucleotidase	um03720	0.13914	K15117	related to OAC1 - similarity to mitochondrial uncoupling proteins	
26c00091	0.24496	K01424	asparaginase	um15029	0.1395	K12948	related to SPC3 - signal peptidase subunit	
7c00306	0.24529	ni	hypothetical protein	um03199	0.13967	ni	related to VP53 - subunit of VP51-54 complex	
9c00002	0.24531	ni	hypothetical protein	um04044	0.13962	ni	related to Glucose oxidase	
4c00012	0.24537	ni	hypothetical protein	um02375	0.13964	K14293	probable karyopherin beta-1 subunit	
22c00172	0.24548	K00432	glutathione peroxidase	um11233	0.13973	K02938	probable RPL2A - ribosomal protein L8	
13c00054	0.24525	ni	serine carboxypeptidase	um10925	0.13973	K11365	conserved hypothetical protein	
16c00019	0.24556	K15289	predicted membrane protein	um12134	0.13979	ni	hypothetical protein	
14c00028	0.24558	ni	spindle pole body protein	um05910	0.13994	ni	related to GRD19 protein	
22c00082	0.24562	ni	hypothetical protein	um04317	0.1402	ni	conserved hypothetical protein	
6c00078	0.24564	ni	hypothetical protein	um01577	0.14027	ni	conserved hypothetical protein	
20c00048	0.24568	ni	hypothetical protein	um05213	0.14027	K11314	related to ADA2 - general transcriptional adaptor or co-activator	
13c00078	0.24569	ni	hypothetical protein	um01153	0.14035	K14556	related to DIP2 - Dom34p-interacting protein	
14c00038	0.24598	ni	bola (bacterial stress-induced morphogen)-related protein	um04048	0.1404	ni	conserved hypothetical protein	
27c00082	0.24606	K03842	beta-1,4-mannosyltransferase	um06395	0.14074	K12580	related to NOT3 - general negative regulator of transcription	
9c00272	0.24613	ni	phosphatidylinositol transfer protein PDR16 and related proteins	um06348	0.14075	ni	related to SCP160 - involved in control of mitotic chromosome transmission	
16c00006	0.24626	ni	monocarboxylate transporter	um06031	0.14084	ni	conserved hypothetical protein	
25c00019	0.24626	ni	hypothetical protein	um00059	0.14091	K01011	related to 3-mercaptopyruvate sulfurtransferase	
20c00033	0.24626	K00948	ribose-phosphate pyrophosphokinase	um06107	0.14102	K03115	related to casein kinase II beta subunit	
7c00162	0.24639	ni	hypothetical protein	um11880	0.14104	K02905	probable RPL29 - 60S large subunit ribosomal protein	
3c00071	0.24665	K00789	S-adenosylmethionine synthetase	um02444	0.14117	K01911	conserved hypothetical protein	
9c00325	0.24712	ni	hypothetical protein	um02444	0.14123	K14191	probable rRNA	
8c00004	0.24717	ni	hypothetical protein	um03687	0.14129	K05747	related to Neural Wiskott-Aldrich syndrome protein	
25c00018	0.24719	K07208	ras-related GTPase	um05555	0.14162	ni	conserved hypothetical protein	
7c00261	0.24737	ni	hypothetical protein	um11533	0.14169	K02917	probable RPL35B - ribosomal protein L35a	
7c00189	0.24738	K02427	cell division protein FisJ	um02789	0.1417	K15147	putative protein	
16c00055	0.24742	ni	Ca2/calmodulin-dependent protein kinase	um05724	0.1418	ni	putative protein	
7c00197	0.24786	K06287	hydroxyindole-O-methyltransferase	um00427	0.14181	ni	hypothetical protein	
19c00012	0.24805	ni	nuclear export receptor CSE1/CAS	um05387	0.14197	K14831	probable MAK16 protein	
24c00007	0.24806	ni	predicted fumarylacetoacetate hydratase	um01241	0.14197	ni	putative protein	
3c00080	0.24817	ni	hypothetical protein	um04510	0.14212	ni	hypothetical protein	
9c00364	0.24824	ni	hypothetical protein	um05125	0.14218	K01886	probable glutamine-tRNA ligase	
22c00252	0.24835	K05607	enoyl-coa hydratase	um06493	0.1422	ni	conserved hypothetical protein	
20c00083	0.24842	K02729	26S proteasome, regulatory subunit alpha type PSMA5/PUP2	um10530	0.14228	ni	putative protein	
6c00098	0.24845	ni	hypothetical protein	um04478	0.14229	K08150	probable TR2 - myo-inositol transporter	
16c00087	0.24846	ni	hypothetical protein	um05541	0.1423	ni	conserved hypothetical protein	
2c00002	0.24856	K02136	FOF1-type ATP synthase, gamma subunit	um00369	0.14259	ni	conserved hypothetical protein	
25c00046	0.24863	ni	hypothetical protein	um06029	0.14278	K11380	related to Perigrin	
9c00355	0.24869	ni	flavin-containing monooxygenase	um12249	0.14281	ni	putative protein	
6c00130	0.24885	ni	aspartyl protease	um11406	0.14291	ni	conserved hypothetical protein	
13c00089	0.24895	ni	FOG, Predicted E3 ubiquitin ligase	um03805	0.14293	ni	conserved hypothetical protein	
22c00226	0.24907	ni	hypothetical protein	um04125	0.14321	ni	related to YRO2 - strong similarity to HSP30 heat shock protein Yro1p	
20c00053	0.2492	ni	iron-sulfurase family oxidoreductases	um01022	0.14333	ni	conserved hypothetical protein	
25c00076	0.24929	ni	mitochondrial tricarboxylate/dicarboxylate carrier proteins	um05834	0.14372	K04532	related to aux-resistance protein	
20c00011	0.24935	K12827	splicing factor 3a, subunit 3	um01556	0.1443	ni	related to transcriptional activator Mut3p	
14c00014	0.2494	K11246	hypothetical protein	um10149	0.14431	ni	related to CIRBP - glycine-rich RNA-binding protein	
10c00078	0.24945	K13950	para-aminobenzoate (PABA) synthase ABZ1	um00263.2	0.14454	ni	related to carnitine	
9c00157	0.24982	ni	zinc finger and related molecular chaperones	um10935	0.14489	ni	probable DUB1 - RNA helicase of the DEAD box family	
12c00113	0.24986	K14191	ribosomal RNA adenine dimethylase	um02883	0.14463	ni	conserved hypothetical protein	
22c00274	0.24994	ni	hypothetical protein	um03294	0.14469	ni	hypothetical protein	
22c00087	0.25002	ni	protein containing repeated kelch motifs	um03327	0.14471	ni	conserved hypothetical protein	
12c00068	0.25002	K03031	26S proteasome regulatory complex, subunit RPN12/PSMD8	um05799	0.14482	ni	hypothetical protein	
7c00102	0.25002	ni	putative transmembrane protein	um02777	0.14502	ni	conserved hypothetical protein	
7c00139	0.25027	ni	ovarian tumor-like cysteine protease	um05739	0.14511	ni	conserved hypothetical protein	
19c00141	0.25041	ni	hypothetical protein	um10712	0.14522	ni	conserved hypothetical protein	
4c00023	0.25044	ni	uncharacterized membrane protein	um03539	0.14542	ni	conserved hypothetical protein	
5c00028	0.25068	K00830	alanine aminotransferase AGT1	um14554	0.14542	K02979	probable ribosomal protein s28	
14c00058	0.25068	K03671	thioredoxin	um10351	0.14578	K04082	related to Co-chaperone protein HscB	
25c00037	0.25077	ni	rho-gpase activating protein	um03872	0.14583	K12189	related to VPS25 - vacuolar protein sorting	
6c00069	0.25083	K00844	hexokinase	um00123	0.14589	ni	related to L-lactate dehydrogenase	
5c00010	0.25102	K13953	alcohol dehydrogenase	um10640	0.14589	ni	0.14589	ni
7c00074	0.25106	K11870	ubiquitin-specific protease	um00885	0.14591	K01881	probable proline-RNA ligase	
7c00096	0.25119	ni	hypothetical protein	um02284	0.14594	K11309	conserved hypothetical protein	
10c00039	0.2512	K03131	transcription initiation factor TFIID, subunit TAF6	um06053	0.14608	ni	related to TAP42 - component of the Tor signaling pathway	
7c00030	0.25128	ni	inositol polyphosphate multikinase, component of the ARGIR trans	um03850	0.14615	K00264	probable glutamate synthase	
12c00091	0.25131	ni	axial filamentation process protein ISF4	um03850	0.14615	K00264	related to HSS116 - RNA helicase of the DEAD box family	
7c00011	0.25167	K02519	mitochondrial translation initiation factor 2	um11655	0.14645	ni	conserved hypothetical protein	
16c00019	0.25179	ni	translational regions of low-complexity	um03288	0.14665	ni	related to dna polymerase epsilon p17 subunit	
7c00114	0.25189	ni	hypothetical protein	um03802	0.1468	K03131	related to TAF6 - Subunit	
6c00115	0.25198	ni	cytosolic Ca2+-dependent cysteine protease (calpain), large sub	um11560	0.14683	ni	putative protein	
16c00025	0.25202	ni	hypothetical protein	um01454	0.14688	ni	conserved hypothetical protein	
9c00156	0.25206	ni	hypothetical protein	um05772	0.14692	ni	hypothetical protein	
9c00219	0.25216	ni	hypothetical protein	um03574	0.14716	ni	putative protein	
9c00029	0.25226	ni	uncharacterized membrane protein	um04859	0.14737	ni	related to PER1 protein	
22c00073	0.25236	K17292	beta-tubulin folding cofactor A	um01816	0.14743	K14864	related to TRM7 - rRNA 2	
13c00017	0.25248	K01469	xenopuslase	um10873	0.14755	K12584	conserved hypothetical protein	
27c00091	0.25249	ni	hypothetical protein	um03317	0.14759	ni	related to PRM1 - Pheromone-regulated multispanning membrane protein	
18c00075	0.25281	ni	transition initiation factor 2C	um00134	0.14762	ni	hypothetical protein	
16c00034	0.25294	ni	animal-type fatty acid synthase and related proteins	um10784	0.14775	K14262	conserved hypothetical protein	
9c00162	0.25294	ni	vesicle trafficking protein Sly1	um10834	0.14788	K14779	conserved hypothetical protein	
11c00073	0.25298	K01537	Ca2+-transporting ATPase	um00622	0.14801	K03061	probable RPT1 - 26S proteasome regulatory subunit	
27c00034	0.25302	ni	ubiquitin and ubiquitin-like proteins	um12141	0.14805	ni	hypothetical protein	
25c00057	0.25304	ni	hypothetical protein	um04592	0.14826	ni	conserved hypothetical protein	
6c00129	0.25315	K02728	ZnS proteasome, subunit Slt1	um11785	0.14833	K03857	conserved hypothetical protein	
9c00353	0.25326	ni	hypothetical protein	um03472	0.14835	ni	hypothetical protein	
9c00145	0.25331	K17261	centromere-associated protein HEC1	um02077	0.14852	K15053	conserved hypothetical protein	
22c00135	0.25331	ni	hypothetical protein	um04761	0.14858	K11290	related to SET protein	
16c00081	0.25343	ni	hypothetical protein	um03154	0.14887	ni	hypothetical protein	
15c00054	0.25345	ni	hypothetical protein	um10804	0.14889	K10610	related to LIV-damaged DNA-binding protein	
10c00071	0.25363	K12585	exosome 3'-5' exoribonuclease complex, subunit Rpl44/Dis3	um11110	0.14892	ni	conserved hypothetical protein	
15c00035	0.25371	ni	vacuolar assembly/sorting protein VPS9	um06337	0.1494	K03114	wee1 kinase	
25c00025	0.25374	ni	hypothetical protein	um04989	0.1495	K10973	related to RAD52 - recombination and DNA repair protein	
10c00027	0.25381	K00889	phosphatidylinositol-4-phosphate 5-kinase	um03471	0.14961	K15458	related to CAP155 - GTP- $\gamma$ -S-associating protein	
18c00068	0.25381	ni	hypothetical protein	um05470	0.14976	K08554	related to Hsp90 co-chaperone Cdc37	
4c00030	0.25385	K08876	protein kinase	um00109	0.15006	K00863	probable DAK2 - dihydroxyacetone kinase	
19c00011	0.2541	ni	hypothetical protein	um10770	0.15014	K15109	probable YMC1 - Protein of the mitochondrial carrier family	
16c00010	0.25419	ni	predicted translation elongation factor	um01645	0.15016	K07195	related to Exocyst complex component Exo70	
22c00181	0.25437	ni	hypothetical protein	um11058	0.15021	ni	conserved hypothetical protein	
20c00069	0.2546	ni	hypothetical protein	um01966	0.15029	K00232	related to Acyl-coenzyme A oxidase	
22c00209	0.2546	ni	hypothetical protein	um00475	0.15041	ni	conserved hypothetical protein	
9c00255	0.25461	K06883	predicted GTPase	um00527	0.15068	K03505	related to DNA polymerase delta subunit 4	
2c00001	0.2547	K10627	postreplicative repair protein RAD18	um11820	0.15086	K04345	CAMP-dependent protein kinase catalytic subunit	
19c00094	0.25487	K14790	FGF receptor activating protein 1	um01725	0.15093	ni	conserved hypothetical protein	
8c00115	0.25495	K06978	hypothetical protein	um04172.2	0.15103	ni	putative protein	
6c00122	0.25499	ni	hypothetical protein	um04714	0.15105	K10689	related to TPT1 - tRNA 2	
10c00117	0.25499	ni	hypothetical protein	um03330	0.15116	ni	conserved hypothetical protein	
12c00015	0.25522	ni	hypothetical protein	um11289	0.15138	ni	putative protein	
9c00101	0.25534	ni	hypothetical protein	um04163	0.15142	ni	conserved hypothetical protein	
19c00165	0.25537	ni	Zn2+-binding protein Melusin/RAR1	um05373	0.15149	ni	related to REG1 - regulatory subunit for protein phosphatase Glc7p	
7c00092	0.25541	ni	hypothetical protein	um03517	0.15154	ni	0.15154	ni
10c00013	0.25543	K07874	GTPase RalGAP2	um15000.2	0.15155	ni	related to Ynm6	
13c00040	0.25562	K15304	ran-binding protein RANBP1 and related RanBP domain proteins	um11681	0.15172	ni	conserved hypothetical protein	
27c00079	0.25568	K01771	hypothetical protein	um11138	0.15187	ni	hypothetical protein	
27c00048	0.25572	K10661	protein involved in mRNA turnover and stability	um11430	0.15208	ni	conserved hypothetical protein	
7c00075	0.25585	K16912	nuclear protein	um01328	0.15221	K00030	probable IDH2 - isocitrate dehydrogenase	
8c00062	0.25588	K03164	DNA topoisomerase type II	um02556	0.15226	ni	conserved hypothetical protein	
18c00089	0.25592	ni	hypothetical protein	um11261	0.15237	K02962	probable RPS17B - ribosomal protein S17	
9c00236	0.25618	ni	hypothetical protein	um11272	0.15238	ni	conserved hypothetical protein	
9c00428	0.25636	ni	phosphatidylserine-specific receptor PtdSerR	um06344	0.1525	K01720	probable 2-methylcitrate dehydratase	
24c00042	0.2564	ni	hypothetical protein	um01267	0.15256	ni	putative protein	
9c00305	0.25645	K11365	nuclear protein Ataxin-7	um03796	0.15259	K08832	related to dis1-suppressing protein kinase dsk1	
15c00064	0.25662	K01322	predicted serine protease	um03336	0.15261	K13137	related to UNR-interacting protein STRAP	
16c00027	0.25671	K14285	RNA export factor NXT1	um05624	0.15262	ni	putative protein	
5c00021	0.25671	ni	hypothetical protein	um00990	0.15262	ni	conserved hypothetical protein	
25c00064	0.25681	K16261	amino acid transporters	um00309	0.15266	K07575	related to TMA20 - Protein putative involved in cytoplasmic ribosome function	
25c00038	0.25683	K00540	hypothetical protein	um05261	0.15275	ni	MAP kinase pathway-interacting protein	
9c00053	0.25685	ni	hypothetical protein	um00288	0.1528	K00566	related to trna methyltransferase	
22c00190	0.25715	K01265	putative methionine aminopeptidase	um00146	0.1529	ni	conserved hypothetical protein	
15c00070	0.25722	ni	FOC, Arkylin repeat	um02722	0.15293	ni	related to zinc finger protein white collar 2	
9c00158	0.25747	ni	exocyst subunit - Sec1					

2c00020	0.25932	K08178	hypothetical protein	um05033	0.15527	ni	related to glucose
8c00037	0.25937	ni	hypothetical protein	um04184	0.15562	ni	putative protein
19c0025	0.25942	ni	hypothetical protein	um06159	0.15564	K01599	probable HEM12 - uroporphyrinogen decarboxylase
11c0023	0.25947	ni	hypothetical protein	um05331	0.15578	K15267	putative protein
26c0065	0.26018	ni	hypothetical protein	um11099	0.15579	K01874	probable MES1 - methionyl-tRNA synthetase
22c0056	0.26027	K03030	26S proteasome regulatory complex, subunit RPN11	um02111	0.15595	ni	related to triacylglycerol lipase precursor
19c0034	0.26042	ni	hypothetical protein	um12210	0.15617	K15275	related to HUT1 - involved in UDP-galactose transport to the Golgi lumen
18c0010	0.26049	K03014	RNA-directed RNA polymerase, subunit K	um10178	0.15628	ni	conserved hypothetical protein
5000027	0.26056	ni	hypothetical protein	um01523	0.1564	ni	conserved hypothetical protein
12c0060	0.26063	K11353	NADH:ubiquinone oxidoreductase, B16.6 subunit	um05267	0.15649	ni	putative protein
27c0059	0.26073	ni	hypothetical protein	um01999	0.15654	ni	conserved hypothetical protein
9c00299	0.26078	ni	conserved protein	um04475	0.15663	ni	conserved hypothetical protein
6k00047	0.26096	K08073	polynucleotide kinase 3' phosphatase	um04657	0.15676	ni	related to YTA7 - 26S proteasome subunit
11c00009	0.26104	ni	hypothetical protein	um04543	0.15688	K08287	related to Protein kinase Ikh1
14c00083	0.26106	ni	hypothetical protein	um06069	0.15689	K15264	conserved hypothetical protein
6c00105	0.26113	K00074	3-hydroxyacyl-CoA dehydrogenase	um11809	0.157	ni	putative protein
2c00053	0.26114	K03007	DNA-directed RNA polymerase, subunit RPB10	um02821	0.15705	ni	hypothetical protein
22c0028	0.26116	ni	hypothetical protein	um00861	0.15708	ni	conserved hypothetical protein
11c00555	0.26119	K05546	glucosylase II catalytic (alpha) subunit	um11127	0.1572	K14168	conserved hypothetical protein
9k00042	0.26148	K01950	predicted NAD synthase	um10004	0.1573	ni	related to a retinal short-chain dehydrogenase
7c00017	0.26173	K12877	exon-exon junction complex, Magoh component	um01469	0.15738	ni	conserved hypothetical protein
24k0044	0.26188	K14856	protein required for actin cytoskeleton organization and cell cycle	um03261	0.15771	ni	conserved hypothetical protein
10c0069	0.26206	ni	hypothetical protein	um10259	0.15784	ni	conserved hypothetical protein
13c00017	0.26215	ni	rho-associated	um03323	0.15788	K11968	probable Ariadne-1 protein
7k00357	0.26222	ni	hypothetical protein	um04516.2	0.1583	ni	conserved hypothetical protein
3c00045	0.26231	K01836	phosphoglucomutase	um03985	0.15832	K08294	related to Ikk1 - MAP kinase kinase
6k00109	0.2624	K10875	DNA repair protein	um01552	0.15853	ni	related to ATPase family protein
14c00002	0.26252	ni	predicted transporter	um04374	0.15865	K00801	farnesyl-diphosphate farnesyltransferase
24c00026	0.26257	ni	hypothetical protein	um11042	0.15873	K13162	related to PBP2 - PAB1 binding protein
8c00077	0.26266	K03687	molecular chaperone of the GrpE family	um05794	0.1588	ni	probable YCF1 - Vacuolar full-size ABC transporter
14c00066	0.26268	K02365	regulator of spindle pole body duplication	um04641	0.15884	ni	ni
22c00092	0.26308	ni	hypothetical protein	um11317	0.15892	K11778	related to RER2 - cis-prenyltransferase
7c00002	0.26309	ni	FOG, Zn-finger	um05715	0.15904	ni	related to ACT1 - actin
9c00228	0.26313	ni	hypothetical protein	um10938	0.15913	ni	related to RPC10 - DNA-directed RNA polymerase I
19c0134	0.26314	ni	hypothetical protein	um03513	0.15913	ni	conserved hypothetical protein
10c00035	0.26328	K11274	WD40 repeat protein	um04389	0.15923	K06669	probable SMC3 - required for structural maintenance of chromosomes
9c00051	0.26331	K00147	gamma-glutamyl phosphate reductase	um02954	0.15939	K10997	related to TOF1 - topoisomerase I interacting factor 1
9k00189	0.26339	ni	cytoskeletal protein Adducin	um10244	0.15949	ni	conserved hypothetical protein
14c00054	0.26347	K01164	ribonucleoside triphosphate (NTP) protein subunit	um02427	0.1595	K03348	related to negative regulator of mitosis
9c00335	0.26349	ni	hypothetical protein	um03572	0.15951	ni	putative protein
14c00113	0.26379	ni	hypothetical protein	um01138	0.15953	ni	conserved hypothetical protein
19c00073	0.26386	ni	hypothetical protein	um00867	0.15954	K02957	probable RPS22A - ribosomal protein S16a
7c00347	0.26396	K00574	hypothetical protein	um00675	0.15977	K12496	conserved hypothetical protein
22c00206	0.26409	K16219	hydroxy-methyltransferase	um11537	0.15978	K02957	probable RPL15A 60S large subunit ribosomal protein L15
19c00129	0.26412	ni	predicted esterase	um12105	0.1598	K02735	probable PUP3 - 20S proteasome subunit beta3
15c00038	0.26418	K04354	serine/threonine protein phosphatase 2A, regulatory subunit	um06037	0.15982	K11664	conserved hypothetical protein
22d0106	0.26421	K07827	ras-related GTPase	um01063	0.15983	K06890	conserved hypothetical protein
10c00043	0.26423	ni	hypothetical protein	um12128	0.15996	ni	conserved hypothetical protein
19c0147	0.26444	K11269	DNA replication checkpoint protein CHL12/CTF18	um00674	0.15997	K01624	probable FBA1 - fructose-bisphosphate aldolase
6k00131	0.26446	ni	hypothetical protein	um05562	0.16	ni	related to stress response protein rds1p
5c00083	0.26461	K04712	fatty acid desaturase	um00371	0.16014	ni	putative protein
9k00218	0.26468	ni	hypothetical protein	um00646	0.1602	K00326	related to cytochrome-b5 reductase
12c00030	0.26502	K11824	vesicle-binding protein alpha-AP-2, alpha subunit	um10378	0.16038	K12603	related to CCR4 - component of the major cytoplasmic deadenylase
24c00014	0.26521	ni	hypothetical protein	um03570	0.16042	ni	conserved hypothetical protein
18k00001	0.26536	ni	hypothetical protein	um03132	0.16044	ni	conserved hypothetical protein
16d00033	0.26541	ni	GTP-binding protein GP-1	um11977	0.16073	K15109	hypothetical protein
25d00073	0.26551	K00053	hypothetical protein	um04850	0.16075	ni	related to RRD1 - Resistant to Rapamycin Deletion
22d0165	0.2656	ni	hypothetical protein	um05194	0.16087	ni	conserved hypothetical protein
26c0047	0.26561	ni	hypothetical protein	um11890	0.16101	K13577	probable DIC1 - Mitochondrial dicarboxylate carrier protein
9k00079	0.26565	ni	guanine nucleotide exchange factor	um06465	0.16106	ni	putative protein
6c00074	0.26569	ni	hypothetical protein	um11828	0.16112	K11404	probable HOS2 - putative histone deacetylase
12c00036	0.26575	ni	hypothetical protein	um11155	0.16114	ni	conserved hypothetical protein
22c00294	0.26575	ni	thioredoxin binding protein TBP-2/DUP1	um04219.2	0.16143	ni	conserved hypothetical protein
9k00266	0.26576	K03063	26S proteasome regulatory complex	um00349.2	0.16154	ni	hypothetical protein
26c00041	0.26588	ni	hypothetical protein	um02282	0.16171	ni	conserved hypothetical protein
9k00392	0.26589	K04392	ras-related small GTPase	um10082	0.16177	K10427	probable dynactin Arp1 p25 subunit RO12
26d00085	0.26591	K01764	polycytochrome c synthase	um10322	0.162	ni	conserved hypothetical protein
8c00093	0.26601	ni	hypothetical protein	um00353	0.16216	ni	conserved hypothetical protein
4k00031	0.26656	K02137	mitochondrial F1FO-ATP synthase, subunit OSCP/ATP5	um11973	0.16221	ni	probable NIT2 - nitriase
19c0058	0.26662	ni	voltage-gated shaker-like K+ channel, subunit beta/KCNAB	um00464	0.16236	ni	putative protein
27c0039	0.26674	K10704	ubiquitin-conjugating enzyme E2	um15125	0.1624	ni	putative protein
27c00045	0.26709	ni	hypothetical protein	um05693	0.16243	K12462	probable rho GDP dissociation inhibitor
14k00087	0.2671	K03138	hypothetical protein	um00806	0.16249	ni	conserved hypothetical protein
8c00011	0.26724	K08336	protein conjugation factor	um11819	0.16267	K04713	related to SUR2 - sphingosine hydroxylase
3c00078	0.26728	ni	predicted FAD-dependent oxidoreductase	um03395	0.16271	ni	hypothetical protein
10k00115	0.26731	ni	poly-binding proteins alphaCP-1 and related KH domain proteins	um10022	0.16288	ni	conserved hypothetical protein
14c00064	0.26731	K03033	26S proteasome regulatory complex, subunit RPN3/PSMD3	um06055	0.16299	K02941	probable RPP0 - acidic ribosomal protein L10
14c00122	0.26734	ni	FOG, Zn-finger	um11416	0.16314	ni	conserved hypothetical Ustilago-specific protein
26d00056	0.2674	ni	hypothetical protein	um01206	0.16323	ni	conserved hypothetical protein
22c0137	0.26743	ni	hypothetical protein	um05433	0.16333	K00728	probable PNT4 - dolichyl-phosphate-mannose-protein O-mannosyltransferase
19c00125	0.26772	K07390	glutaredoxin-related protein	um02891	0.1634	ni	conserved hypothetical protein
9k00002	0.26793	ni	hypothetical protein	um10225	0.16344	ni	related to Glia maturation factor
22d00007	0.26803	ni	hypothetical protein	um11949	0.16346	ni	ni
7k00195	0.26829	ni	hypothetical protein	um12120	0.16361	ni	hypothetical protein
9k00001	0.26859	ni	hypothetical protein	um00860.2	0.16363	K12391	golgi adaptor HAT1
9c00211	0.26873	ni	hypothetical protein	um10879	0.16374	K07127	conserved hypothetical protein
19d00060	0.26888	K02955	40S ribosomal protein S14	um03238	0.16401	ni	conserved hypothetical protein
9k00098	0.26903	K12654	bifunctional leukotriene A4 hydrolase	um01246	0.16406	ni	conserved hypothetical protein
10c00037	0.26907	ni	uncharacterized conserved protein	um01716	0.16432	ni	conserved hypothetical protein
1k00015	0.26916	ni	hypothetical protein	um05647	0.16435	ni	related to cation diffusion facilitator 10
26c00023	0.26933	ni	hypothetical protein	um03260	0.16468	ni	conserved hypothetical protein
3k00061	0.26933	ni	uncharacterized conserved protein	um02431	0.16469	ni	conserved hypothetical protein
7c00020	0.2694	K03544	putative ATP-dependent Clp-type protease	um04314	0.16489	K05765	probable COP1 - cofillin
9c00119	0.26945	ni	hypothetical protein	um00131	0.1649	ni	related to NADPH quinone oxidoreductase homolog PIG3
22c00251	0.26953	K03596	elongation factor-type GTP-binding protein	um02214.2	0.16491	ni	putative protein
9k00352	0.26955	ni	hypothetical protein	um05839	0.16514	ni	conserved hypothetical protein
1k00024	0.26956	K01876	asparryl-tRNA synthetase	um11485	0.16535	ni	related to SNARE protein of Golgi compartment
7c00252	0.26975	ni	uncharacterized conserved protein	um03711	0.16535	K00626	acetoacetyl-CoA thiolase
13d00083	0.26981	ni	hypothetical protein	um11548	0.1654	ni	putative protein
6k00012	0.26976	ni	predicted transporter	um06341	0.16563	K13335	related to Peroxisomal membrane protein PEX16
9c00379	0.26976	ni	hypothetical protein	um04680	0.16567	ni	related to Monocarboxylate transporter
22c0161	0.26992	ni	hypothetical protein	um04092	0.16581	ni	conserved hypothetical protein
9k00069	0.27002	K14283	hypothetical protein	um04131	0.16582	K14764	probable COP1 - cofillin
22d00258	0.27017	ni	hypothetical protein	um01553	0.16594	ni	conserved hypothetical protein
18c00050	0.27029	K01591	uridine 5'-monophosphate synthase	um02392	0.16599	ni	conserved hypothetical protein
27d00027	0.27031	K08287	LAMMER dual specificity kinases	um03983	0.16609	ni	related to SEC65 - signal recognition particle subunit
25d0004	0.27069	K00818	chaperonin complex component, TCP-1 subunit	um04413	0.1661	K12860	related to CEP1 - required during G2
19c00012	0.27039	ni	hsp90 co-chaperone CNS1	um10543	0.16625	ni	related to nonribosomal peptide synthetase
1k00013	0.27062	ni	hypothetical protein	um11627	0.16627	ni	conserved hypothetical protein
14c00066	0.27079	ni	hypothetical protein	um02962	0.16628	ni	conserved hypothetical protein
8c00116	0.2708	ni	hypothetical protein	um05255	0.16648	ni	conserved hypothetical protein
26d0006	0.2708	ni	transcription factor MBF1	um11076	0.16658	ni	conserved hypothetical protein
7c00160	0.27088	K10573	ubiquitin-protein ligase	um11987	0.16662	ni	conserved hypothetical protein
18d00061	0.27095	K17053	predicted methyltransferase	um06131	0.16672	K10743	related to 35 kDa ribonuclease H
16d00069	0.27113	K10365	F-actin capping protein, beta subunit	um05986	0.16682	K02729	probable PUP2 - 20S proteasome subunit
7c00123	0.27119	K02141	hypothetical protein	um04609	0.16687	K10747	related to DNA helicase I
14c00039	0.27136	ni	hypothetical protein	um04332	0.16696	K09510	related to DNA-like protein Psi
11k00024	0.2714	K14026	extracellular protein SEL-1 and related proteins	um04625	0.16715	K14821	conserved hypothetical protein
22d0110	0.27187	ni	FOG, Zn-finger	um10960	0.16746	ni	hypothetical protein
16c0015	0.27205	ni	hypothetical protein	um00908	0.16747	ni	conserved hypothetical protein
14c00134	0.27209	ni	hydroxysteroid 17-beta dehydrogenase 11	um00168	0.16776	ni	putative protein
2k00045	0.27219	ni	heat shock transcription factor	um11846	0.16778	ni	related to nucleoside hydrolase
6c00031	0.2722	K00065	reductases with broad range of substrate specificities	um04214	0.16782	K01591	orotidine 5
5k00077	0.27228	K03843	glycosyltransferase	um10614	0.16793	K14292	conserved hypothetical protein
14c00093	0.27234	ni	extracellular protein SEL-1 and related proteins	um11030	0.16825	ni	putative protein
7k00037	0.2724	ni	hypothetical protein	um04237	0.1684	K00417	probable ubiquinol-cytochrome-c reductase
22d00008	0.27244	ni	predicted protein tyrosine phosphatase	um05515	0.16845	ni	hypothetical protein
18d00052	0.27256	ni	hypothetical protein	um06077	0.16859	ni	hypothetical protein
22c00003	0.27263	K02540	DNA replication licensing factor, MCM2 component	um04419	0.16875	ni	related to CSR1 - phosphatidylinositol transfer protein
9k00289	0.27269	K09499	chaperonin complex component, TCP-1 subunit	um10130	0.16877	K01613	related to RNA polymerase I nonense transcripts 1
14c00022	0.27321	K13137	serine/threonine kinase receptor-associated protein	um06405	0.16882	ni	related to AMME syndrome candidate gene 1 protein
26c00012	0.27332	K03240	translational initiation factor 2B, epsilon subunit	um10671	0.16889	ni	related to Plectin Yase B precursor
13d00075	0.27337	K07562	NMD protein affecting ribosome stability and mRNA decay	um12131	0.16911	ni	probable human translationally-controlled tumor protein
7k00083	0.27338	ni	hypothetical protein	um01923	0.16923	K03348	related to 60S ribosomal protein L35
19c00130	0.27338	ni	predicted starch-binding protein	um10966	0.16927	ni	related to JSN1 - RNA-binding protein
2k00052	0.27354	K12871					

26c00050	0.27542	K01783	D-ribulose-5-phosphate 3-epimerase	um03241	0.17197	K06961	probable KRR1 - required for 40S ribosome biogenesis
15d00034	0.27556	ni	copper transporter	um02482	0.17205	ni	conserved hypothetical protein
19d00152	0.27557	K01128	sphingosylcholine family protein	um02613	0.17207	K01883	probable cystanyl-RNA synthetase
27c00031	0.27592	ni	growth hormone-induced protein and related proteins	um03941	0.17224	K08852	related to RE1 - protein kinase
27c00090	0.27588	K03593	predicted ATPase	um06503	0.1725	ni	conserved hypothetical protein
20c00076	0.27592	ni	hypothetical protein	um06360	0.17252	K12845	probable SNU13 - component of the U4
14d00006	0.27596	ni	hypothetical protein	um02718	0.17257	K15255	related to PIFI1 - DNA helicase involved in mitochondrial DNA repair and telomere length control
22d00181	0.27629	ni	hypothetical protein	um03529	0.1727	K04371	MAP kinase
22c00201	0.27646	ni	predicted mutarotase	um00775	0.17289	K10581	conserved hypothetical protein
22c00029	0.27665	K11599	hypothetical protein	um10267	0.1729	ni	conserved hypothetical protein
7d00116	0.27671	K03232	elongation factor 1 beta/delta chain	um05109	0.17296	ni	related to ECM14 - involved in cell wall biogenesis and architecture
10d00049	0.27683	ni	uncharacterized conserved protein	um04678	0.17339	ni	conserved hypothetical protein
28d00099	0.27684	ni	amino acid transporters	um10950	0.1734	ni	hypothetical protein
6d00058	0.27687	ni	hypothetical protein	um11188	0.17348	ni	conserved hypothetical Ustilago-specific protein
26d00039	0.27699	ni	hypothetical protein	um12284	0.17349	K12883	probable nuclear cap binding protein subunit 2
22d00134	0.27705	ni	predicted hydrolase related to diene lactone hydrolase	um11335	0.17365	ni	hypothetical protein
14d00112	0.27713	ni	extracellular protein SEL-1 and related proteins	um02977	0.17385	ni	conserved hypothetical protein
14d00057	0.27733	ni	hypothetical protein	um10352	0.17388	ni	conserved hypothetical protein
27c00062	0.27735	K03094	SCF ubiquitin ligase, Skp1 component	um06326	0.174	ni	conserved hypothetical protein
11c00031	0.27747	ni	uridine permease	um02603	0.17403	ni	related to Myosin heavy chain
9d00081	0.27755	ni	hypothetical protein	um02163	0.17403	ni	hypothetical protein
22d00204	0.27763	ni	hypothetical protein	um04164	0.17414	ni	conserved hypothetical protein
9c00375	0.27782	K11131	pseudouridine synthase	um03550	0.17433	K03011	related to RPB3 - DNA-directed RNA polymerase II chain
5c00156	0.27783	K02974	40S ribosomal protein S24	um05807	0.17453	ni	related to KRE6 - glucan synthase subunit
25d00011	0.27792	K03965	hypothetical protein	um05614	0.17461	ni	conserved hypothetical protein
4c00026	0.27824	K15156	protein tyrosine receptor-associated coactivator complex component	um05204	0.17463	K01112	conserved hypothetical protein
5c00135	0.2781	ni	hypothetical protein	um02576	0.17466	ni	related to Sterol regulatory element binding protein cleavage-activating protein
6c00005	0.27813	K08141	predicted transporter	um01010	0.17479	ni	putative protein
9d00327	0.27828	K11404	histone deacetylase complex, catalytic component RPD3	um05319	0.17486	ni	conserved hypothetical Ustilago-specific protein
26d00052	0.27833	K01620	threonine aldolase	um03980	0.17492	ni	conserved hypothetical protein
22c00148	0.27846	ni	hypothetical protein	um05191	0.17519	K11322	related to EPL1 - Component of histone H4
7d00079	0.27862	ni	hypothetical protein	um04069	0.17521	K10843	probable SSL2 - DNA helicase
2c00010	0.27862	K03163	DNA topoisomerase I	um10539	0.17529	K00804	related to farnesyltransferase
8d00067	0.27871	K02216	checkpoint kinase	um02665	0.17541	K03113	probable translation initiation factor SU11
25d00093	0.27875	K08141	predicted transporter	um04592	0.17545	ni	hypothetical protein
22d00071	0.27887	K07556	F1-ATP synthase assembly protein	um02251	0.1755	ni	conserved hypothetical Ustilago-specific protein
25d00009	0.27898	ni	hypothetical protein	um04120	0.17554	ni	hypothetical protein
19d00091	0.27898	K11270	hypothetical protein	um05627	0.17564	K07101	related to XPT1 - xanthine phosphoribosyl transferase
7d00034	0.27924	K02736	20S proteasome, regulatory subunit beta type PSMB4/PR4	um03520	0.17575	K11501	conserved hypothetical protein
11d00054	0.27934	ni	Na <sup>+</sup> /K <sup>+</sup> transporter	um00298	0.17596	K11836	related to ubiquitin-specific processing protease
18c00101	0.27937	ni	hypothetical protein	um04518	0.17618	K10590	related to UFD4 - Ubiquitin-protein ligase
11c00003	0.27948	ni	hypothetical protein	um02407	0.17627	K15634	related to thymidylate synthase
19d00112	0.27955	ni	hypothetical protein	um01958.2	0.17632	ni	putative protein
19d00052	0.27966	ni	predicted integral ATPase MSH2	um11614	0.17635	ni	related to TOM5 - mitochondrial outer membrane protein
2c00032	0.27984	K10884	DNA-binding subunit of a DNA-dependent protein kinase	um04579	0.17641	ni	related to TRX2 - thioredoxin II
18d00032	0.27985	K03236	translation initiation factor 1A	um11825	0.17688	ni	conserved hypothetical protein
14c00074	0.28003	K11319	chromatin remodeling protein	um11313	0.17704	K03650	related to MSS1 - mitochondrial GTPase involved in expression of COX1
27c00020	0.28011	ni	hypothetical protein	um04587	0.17711	ni	hypothetical protein
6d00084	0.28014	ni	hypothetical protein	um05224	0.17731	ni	related to Muskellin
22c00059	0.28029	ni	predicted protein carboxyl methylase	um12322	0.17742	ni	hypothetical protein
5c00069	0.2803	ni	hypothetical protein	um10646	0.17743	K14686	related to CTR2 - Protein involved in copper transport
26d00046	0.28033	K02265	cytochrome c oxidase, subunit Vb/COX4	um10806	0.1777	ni	conserved hypothetical protein
7d00071	0.28034	K01304	hypothetical protein	um11360	0.17772	K16732	conserved hypothetical protein
7c00179	0.28054	ni	pattern-formation protein	um01443	0.17782	ni	conserved hypothetical Ustilago-specific protein
11d00064	0.28057	ni	nuclear polyadenylated RNA binding protein	um10680	0.17808	ni	conserved hypothetical protein
18d00046	0.28071	ni	hypothetical protein	um10093	0.17815	ni	putative protein
8d00026	0.28071	ni	hypothetical protein	um05494	0.17822	ni	related to secretory pathway protein
24c00044	0.28073	ni	hypothetical protein	um01948	0.17826	K01881	related to prolyl-RNA synthetase
9d00260	0.28076	K09705	hypothetical protein	um04186	0.17828	ni	ni
9d00066	0.28081	ni	hypothetical protein	um00031	0.17835	ni	conserved hypothetical protein
5c00009	0.28089	ni	hypothetical protein	um00160	0.1785	K15296	probable SEC17 - transport vesicle fusion protein
15d00083	0.2809	ni	hypothetical protein	um05603	0.17854	ni	conserved hypothetical protein
22d00253	0.28122	ni	hypothetical protein	um05218	0.17882	ni	conserved hypothetical protein
26c00027	0.28125	ni	hypothetical protein	um11253	0.17883	ni	conserved hypothetical protein
22c00276	0.28134	ni	hypothetical protein	um02206	0.179	ni	conserved hypothetical protein
9d00344	0.28136	K14843	protein required for normal rRNA processing	um06268	0.17912	ni	conserved hypothetical protein
5c00129	0.2814	ni	putative cargo transport protein EMP24	um04158	0.1792	K14794	related to RPL12 - Protein required for normal pre-rRNA Processing
20d00063	0.28142	ni	hypothetical protein	um10256	0.17929	ni	conserved hypothetical protein
9c00434	0.28147	K11788	glycinamide ribonucleotide synthetase	um02589	0.17941	ni	hypothetical protein
10d00030	0.28152	ni	hypothetical protein	um02022	0.17951	ni	conserved hypothetical protein
3c00035	0.28155	ni	hypothetical protein	um12035	0.17998	ni	putative protein
13c00074	0.28157	ni	RNA nucleotidyltransferase	um00347	0.18006	ni	related to Tubulin-folding cofactor D
11d00055	0.28163	ni	predicted membrane protein	um06181	0.18008	ni	Mig2-5
15d00029	0.28163	K02132	F0F1-type ATP synthase, alpha subunit	um02592	0.18032	ni	related to 2-hydroxy-3-oxopropionate reductase
18d00022	0.28163	K03130	transcription initiation factor TFIID, subunit TAF5	um10765	0.18036	K15448	conserved hypothetical protein
26d00086	0.28168	ni	predicted hydrolase	um01074	0.18037	ni	conserved hypothetical protein
26d00028	0.28214	K15026	hypothetical protein	um10110	0.18048	K02920	probable 60S ribosomal protein L36
18d00008	0.28236	ni	hypothetical protein	um11283	0.18051	ni	related to YSC84 - protein involved in the organization of the actin cytoskeleton
12c00095	0.28242	K01885	glutaryl-tRNA synthetase	um05919	0.18062	K00147	related to PRQ2 - gamma-glutamyl phosphate reductase
7d00067	0.28255	K14997	hypothetical protein	um01360	0.18063	K11739	probable STR2 - Cystathionine gamma-synthase
8c00115	0.28267	K14834	protein involved in the nuclear export of pre-ribosomes	um06075	0.18087	ni	related to beta-glucosidase
13c00055	0.28284	ni	phosphatidylinositol transfer protein PDR16 and related proteins	um03557	0.1811	ni	related to nitrogen assimilation transcription factor
10d00020	0.28294	K03386	alkyl hydroperoxide reductase	um11804	0.1811	ni	related to PAN1 - actin-cytoskeleton assembly protein
9d00304	0.28296	K01409	predicted metalloprotease with chaperone activity	um01660	0.18114	ni	putative protein
12d00139	0.28296	ni	hypothetical protein	um03440	0.18151	ni	conserved hypothetical Ustilago-specific protein
7d00328	0.28312	K11600	exosomal 3'-5' exoribonuclease complex, subunit Rps41	um02342	0.18162	ni	hypothetical protein
9d00412	0.28312	ni	50S ribosomal protein L1	um01709	0.18164	ni	conserved hypothetical protein
10d00123	0.28313	ni	Fe2+/Zn2+ regulated transporter	um10282	0.1819	ni	putative protein
26c00084	0.28328	K09650	integral membrane protease of the rhomboid family	um04165	0.18196	ni	conserved hypothetical protein
4c00014	0.2833	K09313	transcription factor	um10841	0.18201	K02900	probable RPL28 - 60S large subunit ribosomal protein L27a
9d00378	0.28339	K07342	preprotein translocase, gamma subunit	um10727	0.18205	K06672	related to proline-rich protein required for meiotic chromosome condensation and synapsis
2c00060	0.28349	ni	hypothetical protein	um05416	0.18209	K06173	related to PUS1 - pseudouridine synthase 1
20d00081	0.28371	K02880	60S ribosomal protein L22	um04764	0.18221	ni	putative protein
9c00193	0.28377	ni	hypothetical protein	um11571	0.18226	K08744	related to GRD1 - cardiolipin synthase
20d00057	0.28396	K04718	sphingosine kinase	um06128	0.18227	ni	conserved hypothetical Ustilago-specific protein
22c00047	0.28396	ni	hypothetical protein	um01774	0.18229	ni	conserved hypothetical protein
11d00028	0.284	K14786	KRR1-interacting protein involved in 40S ribosome biogenesis	um03575	0.18237	ni	putative protein
14c00087	0.284	ni	hypothetical protein	um03406	0.18238	ni	hypothetical protein
10d00084	0.28421	ni	hypothetical protein	um11496	0.18238	K15437	related to Tyrosyl-RNA synthetase
22c00061	0.28431	ni	hypothetical protein	um11882	0.1825	K12733	probable Peptidyl-prolyl cis-trans isomerase
22d00189	0.28444	K00059	mitochondrial/plastidial beta-ketoacyl-ACP reductase	um15057	0.18266	K02516	related to protein arginine N-methyltransferase
26d00038	0.2845	ni	uncharacterized conserved protein	um10663	0.18275	ni	probable RHO1 - GTP-binding protein of the rho subfamily of ras-like proteins
26c00085	0.28448	K01569	hypothetical protein	um04206	0.1829	ni	conserved hypothetical protein
12d00023	0.28465	ni	hypothetical protein	um02400	0.18341	ni	conserved hypothetical protein
11d00007	0.28465	K03246	translation initiation factor 3, subunit V/TF-beta receptor-interact	um05437	0.18363	ni	conserved hypothetical protein
26c00079	0.2847	ni	hypothetical protein	um05633	0.18368	ni	conserved hypothetical protein
2d00025	0.28475	ni	endoplasmic reticulum membrane-associated oxidoreductin	um06205	0.18399	ni	conserved hypothetical Ustilago-specific protein
10d00028	0.28481	ni	hypothetical protein	um06345	0.18404	K01738	probable cysteine synthase
21d00002	0.28483	ni	serine-threonine protein kinase FUSED	um00460	0.18414	K01149	related to exosome complex exonuclease
12d00048	0.28499	K00030	isocitrate dehydrogenase, alpha subunit	um12293	0.18425	K00599	conserved hypothetical protein
6d00029	0.28508	ni	hypothetical protein	um04770	0.18428	ni	related to splicing factor SPF30
22d00136	0.28534	ni	flavin-dependent monooxygenase	um02004	0.18434	ni	conserved hypothetical protein
3d00008	0.28538	K10295	F-box protein FBX9	um10959	0.18456	ni	putative protein
27d00013	0.28553	ni	hypothetical protein	um05820	0.18465	ni	hypothetical protein
19d00062	0.28564	K15262	isoamyl acetate-hydrolyzing esterase and related enzymes	um00152	0.18466	ni	related to tandem ph domain-containing protein-2
15d00088	0.2857	ni	hypothetical protein	um03530	0.18474	ni	related to PAN15 - Presequence translocase-Associated Motor
14c00010	0.28573	ni	hypothetical protein	um11347.2	0.18524	K05284	related to GP114 - Glycosylphosphatidylinositol-alpha 1
5d00112	0.28604	ni	cyclin B and related kinase-activating proteins	um11487	0.18538	K14801	conserved hypothetical protein
8c00019	0.28614	ni	sideroflexin	um05269	0.18543	K16261	probable general amino acid permease
25c00079	0.28618	ni	hypothetical protein	um00415	0.18573	K07023	conserved hypothetical protein
19d00117	0.2863	ni	hypothetical protein	um00805	0.18576	ni	putative protein
22c00199	0.28643	ni	hypothetical protein	um15031	0.18591	K0	

10d00020	0.28949	K01942	biotin holocarboxylase synthetase	um10044	0.19002	K01254	related to leukotriene-A4 hydrolase
8d000027	0.28973	ni	hypothetical protein	um01667	0.19003	ni	conserved hypothetical protein
16c00013	0.29	K12829	splicing factor 3b, subunit 2	um10889	0.19025	K15071	conserved hypothetical protein
9d000385	0.29029	K11126	telomerase catalytic subunit	um00254	0.19036	ni	conserved hypothetical protein
22d00056	0.29035	ni	hypothetical protein	um10979	0.19038	K09680	related to pantothenate kinase
15d00015	0.2905	K15178	pafl1/ma polymerase II complex, RTF1 component	um10000	0.19041	ni	conserved hypothetical protein
22d01614	0.29063	K01515	nucleoside diphosphate-sugar hydrolase of the MutT	um12172	0.19089	ni	conserved hypothetical protein
9c000273	0.29067	ni	hypothetical protein	um11486	0.19114	ni	putative protein
7d00066	0.29069	ni	predicted sugar phosphatase	um10108	0.19119	ni	conserved hypothetical protein
9c00248	0.29101	ni	hypothetical protein	um00114	0.19143	K11313	related to SPT3 - general transcriptional adaptor or co-activator
5c00127	0.29119	ni	mitochondrial import inner membrane translocase, subunit TIM22	um11470	0.19156	ni	conserved hypothetical protein
26d00222	0.29122	K01868	thiazolamine synthetase	um03533	0.19158	K04486	related to HIS2 - histidinyl-phosphatase
8d000090	0.29163	ni	hypothetical protein	um04488	0.1916	ni	related to MRP7 - mitochondrial ribosomal protein
9d00262	0.29166	ni	hypothetical protein	um01605	0.19167	K06662	related to cell cycle checkpoint protein RAD17
9d00297	0.29173	K03849	glucosyltransferase - Alg8p	um11774	0.19189	ni	conserved hypothetical protein
6d00101	0.29187	ni	hypothetical protein	um02961	0.19198	K11315	conserved hypothetical protein
7c00046	0.29204	K12178	COP3 signalosome, subunit CSN4	um05099	0.192	ni	putative protein
6c00134	0.29214	ni	hypothetical protein	um06376	0.19208	K07953	probable GTP-binding protein SAR1
25d00012	0.29217	ni	vesicle coat complex COPI, zeta subunit	um01564	0.19219	ni	related to integral peroxisomal membrane protein
3c00059	0.29256	ni	p21-activated serine/threonine protein kinase	um01875	0.19239	K00965	probable GAL7 - UDP-glucose--hexose-1-phosphate uridylyltransferase
16c00044	0.29264	K04082	mitochondrial J-type chaperone	um04948	0.19251	K03676	probable GRX1 - glutaredoxin
15d00028	0.29264	ni	hypothetical protein	um10162	0.1926	ni	related to Transformer-2 protein homolog
20d00045	0.29265	ni	aldo/keto reductase family proteins	um01103	0.19269	K02134	probable ATP synthase delta chain precursor
15c00077	0.29268	K14951	cation transport ATPase	um11088	0.19279	ni	conserved hypothetical protein
25d00090	0.29304	ni	hypothetical protein	um06417	0.19284	K04564	related to Superoxide dismutase
5c00054	0.29332	ni	hypothetical protein	um05032	0.19295	ni	conserved hypothetical Ustilago-specific protein
3c00065	0.29374	ni	hypothetical protein	um12205	0.19302	ni	hypothetical protein
7c00149	0.29394	K06883	putative transcription factor FET5	um01794	0.19307	K01488	related to adenosine deaminase
9d000314	0.29422	K14303	nuclear pore complex, Nup160 component	um00586	0.19307	ni	conserved hypothetical protein
25c00030	0.29433	K03267	polypeptide release factor 3	um11866	0.19308	K12857	probable U5 snRNP-specific 40 kD protein
22d01005	0.29435	ni	hypothetical protein	0.1931	K09584	ni	probable protein disulfide-isomerase precursor
16d00011	0.29445	K14819	dual specificity phosphatase	um03707	0.19328	ni	putative protein
18d00031	0.29449	ni	hypothetical protein	um11843	0.19334	ni	conserved hypothetical protein
13d00077	0.2945	K15601	putative transcription factor SqNCA	um00356	0.19358	ni	conserved hypothetical protein
15d00048	0.29455	K05564	beta subunit of farnesyltransferase	um10106	0.19367	K10589	related to ubiquitin protein ligase e3
2d00049	0.29467	K02973	40S ribosomal protein S23	um03820	0.19394	ni	related to PEP5 - vacuolar biogenesis protein
9d00417	0.29473	ni	hypothetical protein	um10290	0.19409	K00830	probable AGX1 - alanine-glyoxylate transaminase
13c00092	0.29475	ni	hypothetical protein	um02283	0.19421	ni	conserved hypothetical protein
2d00068	0.29479	ni	hypothetical protein	um05906	0.19424	K02355	probable NEF1 - translation elongation factor G
13d00069	0.29484	ni	hypothetical protein	um05216	0.19425	ni	related to IKS1 - putative serine
22c0110	0.29485	K02212	DNA replication licensing factor, MCM4 component	um03127	0.19428	ni	conserved hypothetical protein
25c00049	0.29485	ni	regulator of ATP-sensitive K+ channels Alpha-endosulfine	um01186	0.19436	ni	conserved hypothetical protein
9c00106	0.29498	ni	putative phosphonitrosite phosphatase	um10423	0.19444	ni	conserved hypothetical protein
9c00349	0.29503	K13118	nucleoside diphosphate kinase	um00743	0.19447	K14774	related to IES1 - inorganic pyrophosphatase
7d00103	0.29513	K03126	transcription initiation factor TFIID, subunit TAF12	um03944	0.19464	ni	conserved hypothetical protein
12d00130	0.29515	ni	ABC (ATP binding cassette) 1 protein	um11727.2	0.19465	K14863	related to YTM1 - microtubule-interacting protein
8d00068	0.29519	ni	oxysterol-binding protein	um11969	0.19471	ni	hypothetical protein
26d00021	0.29546	ni	phosphatidylyl phosphatase activator	um02516	0.19478	K17428	conserved hypothetical protein
12d00088	0.29557	K15325	hypothetical protein	um05868	0.19489	ni	related to peptide transporter Mdt1
12d00033	0.29557	ni	hypothetical protein	um04881	0.19495	K00987	related to mRNA guanylyltransferase
7d00046	0.29579	K15440	tRNA-specific adenosine deaminase 1	um11723	0.19499	K01228	related to ER glucosidase I
7d00049	0.29586	ni	hypothetical protein	um02624	0.19508	ni	related to diploid state maintenance protein chpA
24d00053	0.29621	ni	kinase domain ES2	um10121	0.19512	ni	related to DPP1 - diacylglycerol pyrophosphate phosphatase
9c00127	0.29625	K03860	N-acetylglucosaminyltransferase complex, subunit PIG-Q/GPI1	um05087	0.19529	ni	putative protein
27c00029	0.29626	K12175	COP3 signalosome, subunit CSN1	um01867.2	0.19542	ni	conserved hypothetical protein
10c00024	0.29645	ni	mitochondrial Fe2+ transporter MMT1 and related transporters	um10295	0.1955	ni	hypothetical protein
16d00036	0.29653	K07897	ras-related GTPase	um04356	0.19604	K14772	conserved hypothetical protein
5c00125	0.29656	ni	hypothetical protein	um04874	0.1962	ni	putative protein
16d00034	0.29669	K14849	nuclear protein NOPS2/RRP1	um10262	0.19627	ni	conserved hypothetical protein
27d00061	0.29687	ni	asparaginyl-tRNA synthetase	um10245	0.19638	ni	conserved hypothetical protein
3d00081	0.29691	ni	40S ribosomal protein S7	um10197	0.19641	K02973	probable 40S ribosomal protein S23
25d00083	0.297	ni	hypothetical protein	um03295	0.19655	ni	conserved hypothetical protein
10c00023	0.2971	ni	hypothetical protein	um11605	0.19686	K10761	related to THG1 - protein required for tRNA-His guanylation at 5 prime end
22c00273	0.29725	ni	hypothetical protein	um01713	0.19692	ni	hypothetical protein
9c00188	0.2974	ni	hypothetical protein	um10119	0.19702	K08850	probable IPL1 - ser
22c00283	0.29744	K13281	hypothetical protein	um01129.2	0.19711	ni	conserved hypothetical protein
16d00126	0.29748	ni	hypothetical protein	um03764	0.19712	ni	hypothetical protein
22c00100	0.29751	ni	hypothetical protein	um05439	0.19713	ni	related to Chitin-binding protein
2c00058	0.2976	ni	hypothetical protein	um11536	0.19715	K02932	probable RPL5 - 60S large subunit ribosomal protein L5
7d00115	0.2977	K12626	small Nuclear ribonucleoprotein splicing factor	um01748	0.19733	ni	related to RV3167 - BAR adaptor protein
19d00074	0.29776	ni	hypothetical protein	0.19742	ni	ni	related to fruiting body protein SCT precursor
27d00084	0.29777	ni	hypothetical protein	um05965	0.19747	ni	conserved hypothetical protein
22c00117	0.29791	K12763	hypothetical protein	um03368	0.19752	ni	putative protein
20d00035	0.29792	K01507	inorganic pyrophosphatase	um04197	0.19753	ni	related to purine-cytosine permease
9c00223	0.2981	ni	hypothetical protein	um05307	0.19765	ni	related to glyoxylate
7c00238	0.2981	K11761	hypothetical protein	um11342	0.19769	K13119	related to rap-5 protein
26d00008	0.29814	K05824	isocitrate dehydrogenase, alpha subunit	um05489	0.19779	ni	related to Nuclear pore complex protein Nup214
26c00038	0.29814	ni	hypothetical protein	um03318	0.19783	K00988	related to APA2 - ATP adenylyltransferase II
5d000031	0.29817	ni	hypothetical protein	um12119	0.19786	ni	putative protein
10d00093	0.29841	ni	amino acid transporters	0.1979	K14521	ni	conserved hypothetical protein
6d000001	0.29845	ni	hypothetical protein	um11738	0.19798	K15292	related to syntaxin binding protein 1
15d00042	0.2985	ni	amidases	um12346	0.19812	ni	conserved hypothetical protein
13c00024	0.29858	ni	membrane protein	um05044	0.19859	K13099	conserved hypothetical protein
15c00055	0.29861	ni	predicted guanine nucleotide exchange factor	um12061	0.19874	ni	putative protein
9c000078	0.2987	K16261	amino acid transporters	um10859	0.19817	ni	related to UV induced protein uvr15
27c00023	0.29875	K05859	N-acetylglucosaminyltransferase complex, subunit PIG-C/GPI2	um05287	0.19918	ni	related to Vacuolar protein sorting-associated protein VP55
1c00006	0.29876	ni	hypothetical protein	um01399	0.19948	ni	putative protein
14d00047	0.29883	ni	dimethylglycine dehydrogenase precursor	um03386	0.19949	ni	conserved hypothetical protein
11c00060	0.2992	K12863	uncharacterized conserved protein	um11567.2	0.1995	ni	related to histidine triad protein
10d00114	0.29924	ni	hypothetical protein	um11581	0.19953	ni	conserved hypothetical protein
7c00328	0.29928	ni	hypothetical protein	um11357	0.19961	ni	conserved hypothetical protein
12c00037	0.29932	ni	transport protein particle TRAPP complex subunit	um04773	0.19968	ni	conserved hypothetical protein
22d0108	0.29939	K07904	GTPase Rab11/YPT3	um11534	0.19982	ni	putative protein
24d0010	0.29942	ni	nucleosome-binding factor SPN, POB3 subunit	0.2	0.2	ni	conserved hypothetical protein
7d00107	0.29968	K11843	ubiquitin-specific protease	um01030	0.20004	K15193	conserved hypothetical protein
14c00136	0.2997	ni	hypothetical protein	um03445	0.20007	ni	conserved hypothetical protein
5d00100	0.29971	ni	nuclear transport factor 2	um06433	0.20015	ni	K
6c00058	0.29992	ni	hypothetical protein	um03000	0.20028	ni	conserved hypothetical protein
27c00033	0.29983	K00852	ribokinase	um01370.2	0.20038	K03671	related to Thioresoxin
9c00236	0.29987	ni	calcineurin-mediated signaling pathway inhibitor DSCR1	um00678	0.20046	K14792	related to RRP5 - processing of pre-ribosomal RNA
8c00091	0.29989	ni	hypothetical protein	um05704	0.2006	ni	conserved hypothetical protein
9d00060	0.29997	K10599	mRNA splicing factor	um12332	0.20062	ni	conserved hypothetical protein
10c00079	0.30019	K03458	hypothetical protein	um01527	0.20067	ni	putative protein
9c00360	0.30021	K15082	leucine rich repeat proteins	um05443	0.20075	ni	conserved hypothetical protein
12d00045	0.30036	K00252	glutaryl-coa dehydrogenase	um04880	0.20076	K08337	probable APG7 - component of the autophagic system
10c00052	0.30056	ni	hypothetical protein	um03332	0.20087	K09537	related to cell cycle control protein cwf23
19d00058	0.30056	K00021	3-hydroxy-3-methylglutaryl-CoA	um04127	0.20092	ni	probable ERG26 - C-3 steroid dehydrogenase
5d00056	0.30078	ni	hypothetical protein	um06461	0.20137	K05658	related to Leptomycin B resistance protein pmr1
7c00356	0.30081	K03066	26S proteasome regulatory complex, ATPase RPT6	um00601	0.20175	K13093	related to Splicing factor UZAF-associated protein 2
9c00099	0.30091	ni	hypothetical protein	um10024	0.20188	ni	conserved hypothetical protein
7c00272	0.30097	K01611	S-adenosylmethionine decarboxylase	um03960	0.20195	ni	putative protein
26d00034	0.30116	ni	hypothetical protein	um04581	0.20211	ni	putative protein
7c00266	0.3012	K01648	ATP-citrate lyase	um10185	0.20222	ni	related to MDR1 - Mactp interacting protein
27c00007	0.30121	ni	protein involved in ubiquinone biosynthesis	um05142	0.20244	K08342	related to ATG4 - essential for autophagy
13c00002	0.30127	K12836	U2 snRNP splicing factor, small subunit, and related proteins	um04059	0.20245	K03353	related to anaphase control protein cut9
1c00020	0.30133	K03133	5'UTR initiation factor TFIID, subunit TAF9	um04320	0.20247	K14803	related to PTC1 - protein
7d00054	0.30163	ni	sorting nexin SNX11	um01621	0.20263	ni	conserved hypothetical protein
18d00025	0.30177	ni	hypothetical protein	um11805	0.20291	ni	conserved hypothetical protein
5c00049	0.30185	ni	hypothetical protein	um00561.2	0.20292	ni	related to cell cycle arrest protein BUB2
12c00098	0.30185	K14816	C2H2-type Zn-finger protein	um01231	0.20293	K00729	related to dihydrophosphate beta-glucosyltransferase
10d0004	0.30196	K17361	acyl-coa thioesterase	um10433	0.20299	K03014	probable Pco26 - 19kD subunit of DNA-directed RNA polymerases I
7d00118	0.30209	K02889	60S ribosomal protein L21	um10480	0.20304	ni	conserved hypothetical protein
3c00022	0.30211	K01476	arginase	um00971	0.20321	ni	conserved hypothetical protein
9c00244	0.30234	ni	hypothetical protein	um04546	0.20322	ni	ni
9c00323	0.30235	ni	hypothetical protein	um05999	0.20324	ni	conserved hypothetical protein
5c00079	0.30237	ni	ypd/rab-specific GTPase-activating protein GYP7	um00130	0.20327	K06130	related to lysophospholipase
4c00034	0.30261	ni	hypothetical protein	um00376	0.20327	K11872	related to deubiquitinating enzyme ubh1
18c00012	0.30268	ni	hypothetical protein	um01718	0.20339	K02564	probable glucosamine-6-phosphate isomerase
5d00119	0.30308	ni	hypothetical protein	um01620	0.20348	ni	hypothetical protein
24c00050	0.30311	K14806	ATP-dependent RNA helicase	um04982	0.20357	ni	hypothetical protein
9c00032	0.3032	ni	hypothetical protein	um03619	0.20384	ni	related to multidrug resistant protein
9c00141	0.30353	K02990	mitochondrial ribosomal protein MRP17	um05201	0.20413	K10882	conserved hypothetical protein
12c0101	0.30361	K09580	protein disulfide isomerase	um04470	0.20416	K00700	probable branching enzyme
22c00030	0.30369	ni	hypothetical protein	um01339	0.20418	ni	conserved hypothetical protein
9c00200	0.30373	ni	sorbitol dehydrogenase	um00903	0.20421	K11366	related to UB98 - Ubiquitin-specific protease component of the SAGA complex
15d00085	0.3						



7400030	0.30562	K11397	hypothetical protein	um02944	0.20673	K09531	conserved hypothetical protein
12c00008	0.30564	K00599	guanidinocacetate methyltransferase and related proteins	um00585	0.20687	K03035	probable RPN5 - 26S proteasome regulatory subunit
7400070	0.30571	K14832	CAAT T-binding transcription factor	um01689	0.20693	ni	hypothetical protein
18c00087	0.30585	K10356	myosin class I heavy chain	um06382	0.20697	ni	putative protein
14c00077	0.30589	K01652	thiamine pyrophosphate-requiring enzyme	um06338	0.20698	ni	related to Restin
3400004	0.30592	ni	uncharacterized conserved protein	um01788	0.20711	ni	related to deacetylase
10d00118	0.30598	K00784	predicted metal-dependent hydrolase	um11115	0.20736	K10356	myosin I
16c00048	0.30603	ni	hypothetical protein	um04283	0.20736	ni	putative protein
13c00059	0.30611	ni	hypothetical protein	um04345	0.20743	K02152	probable vacuolar atp synthase subunit g
8400022	0.30614	ni	hypothetical protein	um00273	0.20749	ni	conserved hypothetical protein
22c00303	0.30631	ni	hypothetical protein	um10868	0.20773	ni	conserved hypothetical protein
9c00218	0.30635	K16073	hypothetical protein	um11085	0.20776	ni	related to UDP-N-acetylglucosaminyltransferase
22c00210	0.30637	ni	hypothetical protein	um00215	0.20779	K00931	probable PRC1 - glutamate 5-kinase
9c00220	0.30647	ni	hypothetical protein	um05326	0.20799	ni	conserved hypothetical protein
7400148	0.30652	K00052	3-isopropylmalate dehydrogenase	um03865	0.20800	K07901	probable SEC4-like Rab
15c00050	0.30691	ni	uncharacterized conserved protein	um12174	0.20813	ni	conserved hypothetical protein
9c00168	0.30698	ni	hypothetical protein	um03020	0.20816	ni	ni
19c00104	0.307	ni	hypothetical protein	um03365	0.20823	ni	putative protein
13c00072	0.30706	K06676	chromosome condensation complex Condensin, subunit H	um05371	0.20833	ni	conserved hypothetical protein
11c00015	0.30711	ni	hypothetical protein	um05645	0.20833	K08493	related to VTI1 - v-SNARE
6400074	0.30718	ni	hypothetical protein	um02549	0.20848	ni	conserved hypothetical protein
10d00015	0.30718	K00237	succinate dehydrogenase membrane anchor subunit and related	um05660	0.20851	ni	conserved hypothetical protein
10c00001	0.30724	ni	hypothetical protein	um03814.2	0.20867	ni	conserved hypothetical protein
6400113	0.30744	ni	DEAH-box RNA helicase	um05901	0.20877	K08496	conserved hypothetical protein
14d00118	0.30746	K04079	molecular chaperone	um03892	0.20881	K14810	probable ATP dependent RNA helicase of the DEAD-box family
20c00002	0.30763	K01714	copper chaperone	um05004	0.20895	ni	putative protein
20c00015	0.30777	K14538	GTPase	um10854	0.20892	ni	conserved hypothetical protein
6c00012	0.30786	ni	hypothetical protein	um02615	0.20894	ni	hypothetical protein
25d00040	0.30788	K11984	U4/U5 snRNP associated protein	um03122	0.20922	ni	related to beta-1
12d00094	0.30802	ni	hypothetical protein	um11747.2	0.20934	ni	conserved hypothetical protein
18c00064	0.30802	K07213	copper chaperone	um11878	0.20943	ni	conserved hypothetical protein
22d00262	0.30811	ni	hypothetical protein	um02088	0.20951	K00939	probable ADK1 - adenylate kinase
7c00329	0.30815	K14998	mitochondrial protein Surfeit 1/SURF1/SHY1	um12315	0.20955	ni	hypothetical protein
22d01067	0.30818	K09660	predicted endoplasmic reticulum membrane protein Lec35/MPDL	um03919	0.20973	ni	related to FIS1 - protein involved in mitochondrial division
26d00064	0.3083	K03498	retinol dehydrogenase	um01323	0.20978	K12870	related to pre-mRNA splicing factor
15d00093	0.30833	K00665	animal-type fatty acid synthase and related proteins	um02385	0.20994	K01626	probable phospho-2-dehydro-3-deoxyheptanoate aldolase
15c00048	0.30849	ni	hypothetical protein	um11310	0.21011	ni	conserved hypothetical protein
10d00001	0.30853	K03006	RNA polymerase II, large subunit	um11348.2	0.21023	ni	conserved hypothetical protein
19d00153	0.30862	ni	vacuolar sorting protein VPS45	um11780	0.21028	K03238	probable SUI3 - translation initiation factor eIF2 beta subunit
9c000380	0.30878	ni	hypothetical protein	um05571	0.21048	ni	related to alpha
9c00146	0.30879	ni	hypothetical protein	um05102	0.2106	ni	conserved hypothetical protein
25d00007	0.30889	ni	FOG, RRM domain	um04673	0.21089	ni	related to RecQ family helicase RecQL1
19c00227	0.30901	K00794	6,7-dimethyl-8-ribitylmazine synthase	um02253	0.21089	K14997	related to amino acid vacuolar transport protein AVT2
11d00018	0.30921	ni	myosin class I containing SCP domain	um01321	0.21092	ni	probable VIDX2 - involved in vacuole import and degradation
24c00020	0.30905	K00228	dolichyl-phosphate-mannose, protein O-mannosyl transferase	um00975	0.21101	K02140	related to ATP20 - subunit G of mitochondrial F1F0-ATP Synthase
7400031	0.30918	ni	hypothetical protein	um11378	0.21135	K01725	probable Cyanate hydratase
11d00076	0.30922	K11359	histone acetyltransferase SAGA/ADA, catalytic subunit PCAF/GC	um00835.2	0.21142	ni	putative protein
9c00051	0.30927	K03637	myosin class I containing SCP domain	um02243	0.21148	ni	hypothetical protein
4c00017	0.30951	ni	hypothetical protein	um05397	0.21157	ni	putative protein
20d00007	0.30954	ni	predicted membrane protein	um12232	0.21167	K01875	related to mitochondrial seryl-tRNA synthetases
11d00070	0.30956	ni	predicted membrane protein	um02629	0.21188	ni	related to YRC2 - putative plasma membrane protein
22c00140	0.30959	ni	hypothetical protein	um12281	0.21193	ni	putative protein
9d000348	0.30965	K12847	spinless sole body protein - Sad1p	um00478	0.21212	ni	related to DSM12 - COP9 signalosome
7c00226	0.30967	K13524	4-aminobutyrate aminotransferase	um01363	0.21229	K03004	related to Rps43 - 43 kD subunit of DNA-directed RNA polymerase I
9c00234	0.30968	ni	hypothetical protein	um00074	0.21249	K14839	conserved hypothetical protein
19d00078	0.30992	ni	predicted methyltransferase	um03918	0.21251	ni	conserved hypothetical protein
20c00001	0.31009	ni	hypothetical protein	um12202	0.21261	ni	putative protein
9c000190	0.31019	K08851	serine/threonine protein kinase	um02703	0.21265	ni	hypothetical protein
9c00267	0.31043	ni	hypothetical protein	um06066	0.21278	ni	conserved hypothetical protein
25d00025	0.31055	ni	uncharacterized conserved protein	um05916	0.21296	K01598	related to Phosphopantothencysteine decarboxylase
19d00093	0.3106	ni	hypothetical protein	um10126	0.21314	ni	related to SFT2
25c00063	0.31073	ni	hypothetical protein	0.21313	K14018	ni	related to DDX1 - involved in ubiquitin-dependent proteolysis
28d00102	0.31073	ni	predicted transporter	um10065	0.21332	ni	related to ACN9 - protein of gluconeogenesis in mitochondrial intermembrane space
9d00413	0.31086	ni	NADH-dehydrogenase	um10765	0.21353	K03469	related to Ribonuclease H
16c00083	0.31156	ni	hypothetical protein	um01305	0.21355	K11883	conserved hypothetical protein
7c00080	0.31159	ni	hypothetical protein	um01084	0.21359	ni	conserved hypothetical protein
28d00050	0.31176	ni	hypothetical protein	um03070	0.21381	K01115	probable SPC14 - phospholipase D
7400281	0.31178	K03872	RNA polymerase II transcription elongation factor Elnon1/Sill, su	um04198	0.21367	K12669	related to OST1 - oligosaccharyltransferase gamma subunit
7c00014	0.31195	ni	hypothetical protein	um03100	0.21378	ni	related to Dynein light chain 2B
7c00122	0.312	K03242	translation initiation factor 2, gamma subunit	um10865	0.21411	ni	conserved hypothetical protein
2c00022	0.31205	K04640	G-protein alpha subunit	um01908	0.21412	ni	related to cathepsin d
7c00135	0.31212	ni	B-cell receptor-associated protein and related proteins	um03010	0.21419	ni	conserved hypothetical protein
4c00018	0.31221	ni	hypothetical protein	um00029	0.21421	ni	probable myo-inositol oxygenase
9d00052	0.31235	ni	predicted coiled-coil protein	um11332	0.21434	ni	putative protein
27d00033	0.31243	K15564	CDK9 kinase-activating protein cyclin T	um04027	0.21444	ni	hypothetical protein
22c00241	0.31245	K02943	60S acidic ribosomal protein P2	um04753	0.21449	ni	conserved hypothetical protein
22c00185	0.31245	K06929	hypothetical protein	um03953	0.21462	ni	conserved hypothetical protein
18c00085	0.31263	ni	excyst complex subunit	um03975	0.21462	ni	related to Carboxypeptidase Y precursor
9d00009	0.31268	ni	hypothetical protein	um01890	0.21464	ni	hypothetical protein
9d00068	0.31276	ni	hypothetical protein	um03039	0.21471	K00670	related to terminal acetyltransferase 1
7400025	0.31281	ni	hypothetical protein	um03640	0.21474	ni	conserved hypothetical protein
11d00060	0.31317	K10251	17 beta-hydroxysteroid dehydrogenase type 3	um06387	0.21487	K03133	related to TAF9 - TFIID and SAGA subunit
13c00089	0.31325	K06176	uncharacterized conserved protein	um02354	0.21513	ni	putative protein
9c00245	0.31351	ni	hypothetical protein	um11364	0.21521	K01443	conserved hypothetical protein
20d00029	0.31358	K01593	aromatic L-amino-acid-L-histidine decarboxylase	um01021	0.21522	ni	putative protein
25d00016	0.31383	K14788	WD40 repeat protein	um10644	0.21524	K16938	probable CDC10 - septin
14d00095	0.31386	K12590	exosomal 3'-5' exoribonuclease complex, subunit Rtp46	um03297	0.21525	ni	hypothetical protein
5c00112	0.31398	ni	asparlyl protease	um01239	0.2157	ni	conserved hypothetical Ustilago-specific protein
3c00074	0.31403	K01653	aceticacid synthase, small subunit	um04243	0.21582	ni	conserved hypothetical protein
28c00052	0.31404	K14301	nuclear pore complex, rNup107 component	um06270	0.21589	ni	conserved hypothetical protein
11c00043	0.31421	ni	hypothetical protein	um10163	0.21589	K02882	probable 60S large subunit ribosomal protein L20
11c00067	0.31444	ni	hypothetical protein	um02070	0.21604	ni	conserved hypothetical protein
7c00130	0.31446	K10751	chromatin assembly complex 1 subunit B/CAC2	um01837	0.21613	ni	conserved hypothetical protein
9c001008	0.31481	ni	rho GTPase-activating protein	um06384	0.21632	K02884	related to SUS1 ribosomal protein L19
12c00105	0.31467	K11236	invasion-inducing protein TIAM1/CDC24	um02193	0.21636	ni	hypothetical protein
11d00040	0.31486	ni	3-Methylcrotonyl-CoA carboxylase, non-biotin containing subunit	um04147	0.21638	ni	related to EXO84 - exocyst protein essential for secretion
22c00074	0.31492	ni	hypothetical protein	um03812	0.21639	K12041	probable NHX1 - Na
11c00049	0.31557	ni	FOG, RRM domain	um02190	0.21642	ni	conserved hypothetical protein
13d00079	0.31515	ni	mod5 protein sorting/negative effector of RNA Pol III synthesis	um06112	0.21642	ni	hypothetical protein
12d00102	0.3153	K03029	26S proteasome regulatory complex, subunit RPN10/PSMD4	um11704.2	0.21645	K08339	conserved hypothetical protein
22c00076	0.31544	K12666	oligosaccharyltransferase, alpha subunit	um10129	0.21657	K03242	probable translation initiation factor eIF2 gamma chain
9d000215	0.31551	ni	hypothetical protein	um15003	0.21667	K03138	related to TFG1 - TFIIF subunit
48c00001	0.31564	ni	ni	um04315	0.21687	ni	hypothetical protein
13d00053	0.31562	K08793	ribosomal protein S6 kinase and related proteins	um03044	0.21672	ni	conserved hypothetical protein
27d00069	0.31565	K08991	endonuclease MUS81	um04415	0.21673	ni	conserved hypothetical protein
26c00046	0.31566	K01897	long chain fatty acid acyl-CoA ligase	um00068	0.21689	ni	conserved hypothetical protein
4d00025	0.31572	ni	hypothetical protein	um01524	0.217	ni	putative protein
20d00056	0.31576	K10882	hypothetical protein	um00192	0.21702	ni	putative protein
22d00149	0.31577	ni	hypothetical protein	um10491	0.21709	ni	putative protein
22d00195	0.31577	K12946	hypothetical protein	um04367	0.2172	ni	hypothetical protein
27d00026	0.31581	ni	rhodanese-related sulfurtransferase	um11545	0.21725	K11667	conserved hypothetical protein
19d00148	0.31586	ni	hypothetical protein	um03514	0.21728	ni	putative protein
7c00297	0.31596	K08956	AAA-type ATPase containing the peptidase M41 domain	um01208	0.21731	K10573	probable RAD6 - E2 ubiquitin-conjugating enzyme
25d00001	0.31608	ni	hypothetical protein	um05035	0.21747	K16261	probable AGP3 - Protein of the amino-acid permease family
22c00311	0.31613	ni	hypothetical protein	um02225	0.21747	ni	conserved hypothetical protein
5c00045	0.31619	ni	hypothetical protein	um03041	0.21764	ni	putative protein
7400014	0.3162	ni	hypothetical protein	um02356	0.21777	ni	related to beta-galactosidase precursor
14d0008	0.3163	K07953	vesicle coat complex COPII, GTPase subunit SAR1	um11455	0.21795	ni	hypothetical protein
15c00095	0.31655	ni	phospholipase	um04531	0.21796	ni	conserved hypothetical protein
26c00013	0.31655	K12389	predicted small molecule transporter	um11639	0.21819	ni	hypothetical protein
19d00122	0.31657	ni	hypothetical protein	um06317	0.21822	ni	related to NP52 - phosphatidylinositol phosphate phosphatase
7c00357	0.31658	ni	FOG, PPR repeat	um03049	0.21841	ni	related to neutral amino acid permease
12c00034	0.31669	ni	hypothetical protein	um10525	0.21852	ni	hypothetical protein
22c00037	0.31675	ni	PHD Zn-finger protein	um03079	0.21854	K03130	related to TAF5 - TFIID and SAGA subunit
14c00047	0.31678	K15363	uncharacterized conserved protein	um05171	0.21864	K13941	related to multifunctional folic acid synthesis protein
25c00011	0.31693	ni	hypothetical protein	um05674	0.21868	K01173	probable NUC1 - dna
14c00076	0.31699	ni	hypothetical protein	um05921	0.21875	K05544	related to DUS3 - member of dihydrouridine synthase family
10c00101	0.31701	ni	vacuolar sorting protein VPS1	um00204	0.21876	K01537	related to Ca2 -transporting ATPase
12c00056	0.31732	K02214	serine/threonine protein kinase of the CDC7 subfamily	um02259	0.21891	ni	conserved hypothetical protein
24d00132	0.31755	ni	hypothetical protein	um12982	0.21927	K14263	related to Serine protease
15d00073	0.31771	ni	heat shock transcription factor	um02663	0.21939	ni	conserved hypothetical protein
9d00147	0.31786	ni	hypothetical protein	um11666	0.21969	K11599	related to UMP1 - proteasome maturation factor
12d00091	0.31801	ni	hypothetical protein	um04291	0.22005	K14552	conserved hypothetical protein
18c00092	0.31822	ni	cystine desulfurase NES1	um06382	0.22017	ni	putative protein
25d00033	0.31833	K08286	putative serine/threonine protein kinase	um01852	0.22031	ni	related to Epoxide hydrolase 1
13d00033							

5400136	0.32075	ni	type I phosphodiesterase	um00379	0.22278	K03250	related to eIF3e - eukaryotic initiation factor 3 subunit E
1600008	0.32099	ni	hypothetical protein	um01569	0.2228	ni	related to BRE4 - protein involved in endocytosis
9400396	0.32104	ni	hypothetical protein	um01993	0.22287	ni	conserved hypothetical protein
6400366	0.32105	ni	protein tyrosine kinase 9	um11739	0.22289	K00940	related to Nucleoside diphosphate kinase 6
2400004	0.32119	ni	NADH-dehydrogenase	um11365	0.22298	ni	conserved hypothetical protein
2640066	0.32119	K10598	cyclophilin type	um12335	0.22307	K16738	related to nuclear distribution protein RO11
19c00055	0.32119	K02923	60S ribosomal protein L38	um10034	0.22323	ni	conserved hypothetical protein
12c00118	0.32121	K01175	3'-5' poly(A) polymerase	um00721	0.22334	ni	related to RPS1 - Regulator of the DEAH family of helicases
5000006	0.32128	K10610	damage-specific DNA binding complex, subunit DDB1	um00911	0.22337	K14635	related to MPH1 - Member of the DEAH family of helicases
12c00089	0.32154	K05754	actin-related protein Arp2/3 complex, subunit ARPC5	um10160	0.2238	ni	related to Mig1 protein
6c00114	0.32156	K15053	protein involved in glucose derepression and pre-vacuolar endocytosis	um12216	0.22398	ni	related to Mig1 protein
14c00439	0.32163	ni	hypothetical protein	um11228	0.22402	K08658	related to CAAX prenyl protease 2
19d00141	0.32183	ni	hypothetical protein	um03141	0.22415	K10746	related to EXO1 - exonuclease which interacts with Msh2p
19c00101	0.32196	ni	hypothetical protein	um05998	0.22427	K02893	probable RPL25 - ribosomal protein L23a
5400097	0.32196	ni	hypothetical protein	um11625	0.2243	K02918	probable ribosomal protein L35
14c00023	0.32203	ni	hypothetical protein	um06858	0.22451	ni	related to FIG4 - polyphosphoinositide phosphatase family member
16c00010	0.32205	ni	synaptic vesicle transporter SVOP and related transporters	um03944	0.22495	K14859	related to SSP1 - Nucleolar protein involved in the assembly of the large ribosomal subunit
9400322	0.32205	ni	hypothetical protein	um11620	0.22497	K07573	related to CSL4 - exosome core component
5400007	0.32206	K00826	branched chain aminotransferase BCAT1	um11035	0.22504	K12862	putative protein
13d00019	0.32207	ni	hypothetical protein	um01874	0.22519	ni	conserved hypothetical protein
7400267	0.32237	K11566	hypothetical protein	um02350	0.22519	K09498	probable CCT6 - component of chaperonin-containing T-complex
9c00078	0.32245	ni	glyoxylate oxidase	um00277	0.22524	ni	related to M-phase inducer phosphatase
2c000074	0.32246	ni	hypothetical protein	um01026	0.22535	ni	conserved hypothetical protein
9c00297	0.32273	ni	hypothetical protein	um03493	0.22536	K03687	related to MGE1 - heat shock protein - chaperone
14c00037	0.32281	K01934	5-formyltetrahydrofolate cyclo-ligase	um06299	0.22555	ni	hypothetical protein
9c00037	0.32283	K03786	hypothetical protein	um11566	0.22556	ni	conserved hypothetical protein
22d00285	0.32284	ni	synaptic vesicle transporter SVOP and related transporters	um03991	0.2258	ni	putative protein
26c00048	0.32286	ni	glutathione S-transferase	um01857	0.22583	K15078	conserved hypothetical protein
7400026	0.32294	ni	serine O-acetyltransferase	um15019	0.22596	ni	related to KEL1 - involved in cell fusion and morphology
15d00065	0.3231	K10638	hypothetical protein	um11642	0.22606	K14553	conserved hypothetical protein
10d00090	0.32355	ni	hypothetical protein	um00330	0.22607	ni	related to Protease
25c00024	0.32381	ni	reductases with broad range of substrate specificities	um05769	0.22623	K12666	related to Dolichyl-diphosphooligosaccharide-protein glycosyltransferase 67 kDa subunit precursor
14c00031	0.32386	K15920	hypothetical protein	um12334	0.22629	ni	conserved hypothetical protein
16c00068	0.32389	ni	sexual differentiation process protein ISP4	um15009	0.22635	K07189	conserved hypothetical protein
9c00125	0.3241	ni	hypothetical protein	um11199	0.22643	ni	putative protein
7c00097	0.32401	K04459	dual specificity phosphatase	um03917	0.22644	ni	ni
3d00013	0.32416	K11293	histone transcription regulator HIRA	um01908	0.22653	ni	related to CCAAT-binding transcription factor subunit aab-1
20c00025	0.32431	K03115	casein kinase II, beta subunit	um01455	0.22707	ni	hypothetical protein
2c00077	0.32435	ni	ATPase related to the helicase subunit of the Holliday junction recombination endonuclease	um00781	0.2272	ni	putative protein
11d00047	11d00047	K0586	dichthine synthase	um02597	0.22722	ni	related to Rhizopuspepsin precursor
5d00141	0.3244	ni	hypothetical protein	um10210.2	0.22733	ni	conserved hypothetical protein
22d00201	0.32492	ni	hypothetical protein	um10532	0.22745	ni	related to polyketide synthase required for biosynthesis of fumonisin mycotoxins
24c00019	0.32497	ni	hypothetical protein	um10439	0.22747	ni	related to FRR3 - Ferric reductase
9c00029	0.32503	K08850	hypothetical protein	um11081	0.22751	ni	putative protein
22d00177	0.32504	K00100	voltage-gated shaker-like K+ channel, subunit beta1KCNAB	um05117	0.22786	ni	putative protein
19c00041	0.32506	ni	ribonuclease III domain proteins	um05610	0.22798	K00135	probable LGA2 - succinate semialdehyde dehydrogenase
25c00048	0.32518	ni	cytochrome P450 CYP3/CYP5/CYP9 subfamilies	um02724	0.22805	ni	conserved hypothetical protein
10c00091	0.32544	K07478	ATPase related to the helicase subunit of the Holliday junction recombination endonuclease	um10375	0.22822	ni	related to HR231 - Poly
22d00083	0.32558	ni	hypothetical protein	um03518	0.22823	ni	related to pyrimidine 5-nucleotidase
16d00080	0.32559	ni	aldehyde dehydrogenase	um15037	0.22828	ni	conserved hypothetical protein
22c00093	0.32578	ni	hypothetical protein	um05525	0.22831	ni	related to MRPL16 - mitochondrial ribosomal protein
5d00081	0.3258	K12859	component of the U4/U6.U5 snRNP	um10109	0.22844	ni	conserved hypothetical protein
7c00128	0.32585	ni	membrane coat complex Ratromer, subunit VPS35	um00154	0.22851	ni	related to Para-nitrobenzyl esterase
14c00110	0.32605	ni	cyclin L	um12033	0.22889	ni	HMG-box transcription factor
22d00295	0.32605	ni	phosphoinositide phosphatase SAC1	um04054	0.22894	ni	probable NBP35 - nucleotide-binding protein
22c00086	0.32613	ni	hypothetical protein	um02113	0.22904	ni	hypothetical protein
20c00004	0.32618	K10771	apurinic/apyrimidinic endonuclease	um11371	0.22913	ni	putative protein
22c00256	0.32621	ni	cytochrome P450 CYP19A1, alpha subunit	um12282	0.2292	ni	probable PHO8 - involved in phosphate transport
2d00074	0.32644	ni	hypothetical protein	um02237	0.22927	ni	conserved hypothetical protein
7c00205	0.32649	ni	DNA helicase	um02041	0.22927	ni	putative protein
3c00025	0.3265	K07441	predicted glycosyltransferase	um11910	0.22947	ni	hypothetical protein
10d00110	0.32723	ni	hypothetical protein	um10760	0.22962	ni	conserved hypothetical protein
2c00079	0.32728	K01872	alanyl-tRNA synthetase	um04265	0.22984	K08334	related to Beclin 1
5c00106	0.32732	K11137	hypothetical protein	um05262	0.22988	K11763	conserved hypothetical protein
8d00036	0.32735	ni	hypothetical protein	um06807	0.2299	K02603	related to origin recognition protein Orc1p
25c00031	0.32736	K12462	rho GDP-dissociation inhibitor	um11592	0.23013	ni	conserved hypothetical protein
8d00051	0.32743	K01046	hypothetical protein	um12207	0.23017	ni	putative protein
8d00099	0.32747	ni	triglyceride lipase-cholesterol esterase	um03019.2	0.23033	ni	conserved hypothetical protein
5c00164	0.32758	K00128	aldehyde dehydrogenase	um10941	0.23057	ni	conserved hypothetical protein
9d00167	0.32783	ni	beta-tubulin folding cofactor D	um01613	0.23074	ni	related to AUR1 - inositol phosphotylceramide synthase
9c00039	0.32789	ni	hypothetical protein	um01618	0.23081	ni	related to CDC50 - cell division protein
26d00082	0.32789	ni	hypothetical protein	um10827	0.23094	K14797	related to ENP1 - required for pre-rRNA processing and 40S ribosomal subunit synthesis
7c00085	0.32791	K12855	HAT repeat protein	um10333	0.23104	ni	conserved hypothetical protein
11d00029	0.32794	ni	hypothetical protein	um12197	0.23132	ni	putative protein
7c00062	0.32841	ni	MEKs and related serine/threonine protein kinases	0.23143	K10901	ni	related to SGS1 - DNA helicase
9c00083	0.32841	ni	RAV1 (regulator of V-ATPase assembly) complex subunit RAV1	um11000	0.23143	ni	conserved hypothetical protein
9c00008	0.32843	ni	hypothetical protein	um10862	0.2315	K10578	probable UBC6 - E2 ubiquitin-conjugating enzyme
24d00004	0.32845	ni	hypothetical protein	um11680	0.2315	ni	conserved hypothetical protein
3d00099	0.32855	K02209	DNA replication licensing factor, MCM5 component	um15078	0.23154	ni	conserved hypothetical protein
5c00048	0.32855	ni	hypothetical protein	um02137	0.23157	ni	related to positive C/2H2 transcriptional regulator
7400335	0.32873	K05542	RNA-dihydrouridine synthase	um00628	0.23213	ni	putative protein
10d00082	0.32905	K15117	mitochondrial oxaloacetate carrier protein	um10069	0.23222	ni	hypothetical protein
12c00026	0.32912	ni	hypothetical protein	um06061	0.2325	ni	conserved hypothetical protein
12c00046	0.32948	K06185	predicted transporter	um03763	0.23252	K00384	probable TRR2 - thioredoxin-disulfide reductase
11c00073	0.32959	ni	hypothetical protein	um06412	0.23256	K03177	related to RNA pseudouridine synthase B
9d00131	0.32974	ni	hypothetical protein	um06412	0.2326	ni	related to Paxillin
3d00070	0.32981	ni	hypothetical protein	um10176	0.23279	ni	conserved hypothetical protein
22c00036	0.32983	K02905	60S ribosomal protein L29	um12001	0.23283	ni	probable NADH-ubiquinone oxidoreductase 12 kDa subunit
13c00102	0.32991	ni	predicted ATR1 protein	um10119	0.23292	ni	conserved hypothetical protein
6c00102	0.33	K01802	phosphotyrosyl phosphatase activator	um06141	0.23293	ni	hypothetical protein
14d00100	0.33009	ni	hypothetical protein	um06475	0.2334	ni	hypothetical protein
9d00015	0.3301	K10703	protein tyrosine phosphatase-like protein PTPLA	um01946	0.23351	ni	putative protein
9d00137	0.3301	ni	M-phase inducer phosphatase	um11481	0.23357	K09885	related to aquaporin
8c00130	0.33051	ni	hypothetical protein	um00492	0.23373	ni	putative protein
8c00088	0.3307	K02992	ribosomal protein S7	um10257	0.23377	K09648	related to inner mitochondrial membrane peptidase 2
24d00028	0.33075	ni	hypothetical protein	um11697	0.23378	ni	conserved hypothetical protein
10d00022	0.33092	ni	vagin	um02755	0.23385	ni	conserved hypothetical protein
11c00039	0.331	ni	hypothetical protein	um04254	0.23393	K15489	conserved hypothetical protein
5d00133	0.33102	K06677	chromosome condensation complex Condensin, subunit D2	um02053	0.23416	K06671	related to Nuclear cohesin complex subunit
9c00201	0.33111	ni	hypothetical protein	um04079	0.23423	ni	hypothetical protein
9c00437	0.33119	K12176	COP9 signalosome, subunit CSN2	um05334	0.23437	K03015	probable DNA-directed RNA polymerase II chain Rpb7
5d00111	0.3314	ni	hypothetical protein	um02414	0.23455	K05545	related to A
22d00235	0.33142	ni	hypothetical protein	um10192	0.23462	ni	related to TMS1 protein
19d00085	0.33143	ni	hypothetical protein	um02439	0.23469	K14816	conserved hypothetical protein
7400256	0.33158	K00102	proteins containing the FAD binding domain	um03097	0.2348	ni	related to Mimitin
22d00022	0.3316	ni	hypothetical protein	um03851	0.23487	K01939	probable ADE12 - adenylosuccinate synthetase
3d00037	0.33163	K03676	glutaredoxin and related proteins	um12147.2	0.23502	ni	conserved hypothetical protein
18c00030	0.33168	ni	hypothetical protein	um00355	0.23521	ni	related to SG11 protein
9c00273	0.33189	ni	predicted phospholipase	um03875	0.2353	ni	conserved hypothetical protein
11d00015	0.33206	K11352	NADH:ubiquinone oxidoreductase, B17.2 subunit	um03433	0.2355	ni	putative protein
7d00037	0.33212	ni	hypothetical protein	um04758	0.23569	K10598	related to Peptidyl-prolyl cis-trans isomerase
6d00094	0.33217	K00681	gamma-glutamyltransferase	um01316	0.23586	ni	related to CLC1 - clam light chain
9d00374	0.33226	ni	DNA repair protein RAD18	um04723	0.23611	K14963	probable wd-repeat protein 5
26d00019	0.3323	ni	ankyrin	um15011.2	0.2362	K04728	related to TEL1 - telomere length control protein
20c00012	0.33278	ni	hypothetical protein	um02531	0.23632	ni	related to nucleotide diphosphatase
6d00097	0.33305	ni	hypothetical protein	um01481	0.23649	ni	conserved hypothetical protein
7400063	0.33318	ni	uncharacterized conserved protein	um06316	0.2365	ni	related to GW11 - GPI-anchored wall transfer protein
18d0007	0.33325	K13352	peroxisomal biogenesis protein	um02062	0.23658	ni	related to multidrug resistance proteins
13d00066	0.33328	K00940	nucleoside diphosphate kinase	um04318	0.23671	K05906	related to Prenylcysteine oxidase precursor
19c00043	0.33328	ni	lyso-phospholipase	um00890	0.23672	ni	putative protein
22c00155	0.33333	ni	cytochrome P450 CYP4/CYP19/CYP26 subfamilies	um03471	0.23679	ni	putative protein
4d00032	0.33337	ni	predicted fumarylacetoacetate hydratase	um06377	0.23684	K03259	related to translation initiation factor eIF-4E
20c00056	0.33359	K11664	hypothetical protein	um11524	0.2369	ni	hypothetical protein
12c00050	0.3339	ni	hypothetical protein	um11467	0.23692	ni	conserved hypothetical protein
14d00023	0.33393	ni	predicted E3 ubiquitin ligase	um00578	0.23698	ni	maturing type locus
18d00054	0.33417	ni	hypothetical protein	um10772	0.23706	ni	putative protein
22c00051	0.33419	ni	nuclear transport receptor KAP120	um04033	0.23709	ni	hypothetical protein
14d00102	0.33426	ni	hypothetical protein	um04029	0.23715	ni	conserved hypothetical protein
19d00142	0.33432	ni	hypothetical protein	um05912	0.23727	K04799	probable DNA repair endonuclease rad2
13c00119	0.33445	ni	uncharacterized conserved protein	um11005	0.23731	K02259	related to COX15 - cytochrome oxidase assembly factor
16d00067	0.33464	ni	SPRY domain-containing proteins	um06193	0.23732	K11294	related to NSR1 - nuclear localization sequence binding protein
20c00051	0.33465	ni	hypothetical protein	um05841	0.23748	K15105	related to calcium-binding mitochondrial carrier protein
7d00025	0.33471	K07140	uncharacterized Fe-S protein	um05454	0.23757	K12829	probable Splicing factor 3b
10c00250	0.3348	K00940	ribosomal protein S8	um03493	0.23763	ni	putative protein
3d00025	0.33498	K00898	phosphatidylinositol 4-kinase	um04984	0.23763	ni	conserved hypothetical protein
11d00041	0.33						

19d0090	0.33715	K02985	40S ribosomal protein S3	um02249	0.23998	ni	probable vacuolar protein sorting protein VpsB
7602017	0.33725	ni	hypothetical protein	um12041	0.24001	ni	related to LSB6 - Phosphatidylinositol 4-kinase
2000025	0.33733	ni	hypothetical protein	um10808	0.24005	ni	putative protein
9d00026	0.33733	K13093	transcription elongation factor TAT-SF1	um00162	0.24011	ni	hypothetical protein
3d00048	0.33739	ni	hypothetical protein	um04804	0.24024	ni	hypothetical protein
1400018	0.3374	ni	hypothetical protein	um01281	0.24035	K15378	related to general alpha-glucoside permease
4d00004	0.33741	K15109	mitochondrial carnitine-acylcarnitine carrier protein	um03364	0.2404	K12821	related to Formin binding protein 3
7600182	0.33743	K12811	RNA 4743	um01674	0.24057	K03535	related to COO1 - hexanoyl pyrophosphate synthetase precursor
22c0020	0.33752	K04794	uncharacterized conserved protein	um02474	0.24065	ni	conserved hypothetical protein
8d00036	0.33752	ni	molysdenum cofactor sulfatase	um03956	0.24076	K03964	conserved hypothetical protein
5d00047	0.33756	ni	hypothetical protein	um02506	0.24082	ni	conserved hypothetical protein
13c00009	0.33765	K12200	predicted signal transduction protein	um01701	0.24209	ni	hypothetical protein
8d00060	0.33786	K00128	aldohyde dehydrogenase	um02666	0.24097	ni	putative protein
2c00024	0.338	ni	ni	um11692	0.241	K16575	probable contractin
5d00048	0.33802	K08738	cytochrome c	um12212	0.24138	ni	related to ATP10 - F1F0 ATPase complex assembly protein
8d00081	0.33805	ni	hypothetical protein	um10115	0.24143	ni	hypothetical protein
7d00089	0.33816	ni	hypothetical protein	um04599	0.24143	K12849	related to PRP38A - pre-mRNA-splicing factor
9d00164	0.33822	K13119	uncharacterized conserved protein XAP-5	um11606	0.24149	ni	putative protein
24c0038	0.33829	K12882	nuclear cap-binding complex, subunit NCBP1/CBP80	um05456	0.24156	ni	conserved hypothetical protein
19c00050	0.33836	K00275	pyridoxamine-phosphate oxidase	um10121	0.24162	ni	putative protein
7d00062	0.33842	ni	hypothetical protein	um15076	0.24163	ni	hypothetical protein
14c00040	0.3386	K05759	putifin	um11495	0.2417	K03956	related to nadh-ubiquinone oxidoreductase 21
22d0079	0.33864	K02963	hypothetical protein	um06428	0.24204	K01078	related to Thiamine-repressible acid phosphatase precursor
22d00202	0.33864	ni	cytosolic sorting protein GGA2/TOM1	um11671.2	0.24224	ni	putative protein
11d00089	0.33868	ni	sulfatase	um11407	0.24224	ni	conserved hypothetical protein
12d00043	0.33871	K14967	histone H3 (Lys4) methyltransferase complex, subunit CPS60/AS	um02429	0.24225	ni	putative protein
7d00243	0.339	K00823	acetylornithine aminotransferase	um11169	0.24231	ni	conserved hypothetical protein
19c00111	0.33903	K15437	tRNA-binding protein	um02015	0.24265	K00876	related to uridine kinase
26d0068	0.33916	ni	hypothetical protein	um02827	0.24278	ni	conserved hypothetical protein
20d00018	0.33947	K00162	pyruvate dehydrogenase E1, beta subunit	um03777	0.24281	K11841	related to Ubiquitin carboxyl-terminal hydrolase 10
2c00036	0.3395	ni	hypothetical protein	um01032	0.24281	ni	probable NHRB - nonhistone chromosomal protein
15c00041	0.3398	ni	uncharacterized conserved protein	um02018	0.24299	ni	conserved hypothetical protein
22d00278	0.3404	ni	hypothetical protein	um06140.2	0.24328	ni	related to programmed cell death protein
9d00061	0.3406	K03942	NADH-ubiquinone oxidoreductase, NDUFV1/51kDa subunit	um15046	0.24331	ni	conserved hypothetical protein
14d00008	0.3408	K11572	hypothetical protein	um00293	0.24332	K12599	probable SKZ - putative RNA helicase
22c00241	0.34116	ni	inositol 1,4,5-trisphosphate 5-phosphatase	um05391	0.24347	ni	conserved hypothetical protein
7d00174	0.34143	ni	hypothetical protein	um03252	0.24354	K03033	probable 28S proteasome non-ATPase regulatory subunit p58
22d00126	0.34153	K00143	non-ribosomal peptide synthetase	um11302	0.24413	ni	related to p33ING1b
4d00008	0.34158	ni	hypothetical protein	um05506	0.24428	K15280	conserved hypothetical protein
12d00338	0.34173	ni	hypothetical protein	um02419	0.24438	ni	conserved hypothetical protein
5d00108	0.34198	ni	hypothetical protein	um00741	0.24452	K03125	related to TAF1 - TFIID subunit
12c00104	0.34205	K12581	mRNA deadenylation subunit	um02156.2	0.24453	ni	conserved hypothetical protein
5c00077	0.34212	ni	hypothetical protein	um04355	0.24454	K14026	related to Sel-1 homolog precursor
10d00066	0.34223	ni	hypothetical protein	um15070	0.24468	ni	probable GDP
7d00094	0.34234	ni	histone acetyltransferase SAGA/ADA, catalytic subunit PCAF/IG	um04248	0.24479	ni	putative protein
12c00084	0.34243	ni	hypothetical protein	um01501	0.24486	K09704	conserved hypothetical protein
14c00102	0.34246	ni	RAN guanine nucleotide release factor	um10006	0.24487	K14002	related to SCJ1 protein
8d00131	0.34262	ni	hypothetical protein	um03145	0.24495	K12590	conserved hypothetical protein
11d00011	0.34308	ni	hypothetical protein	um02540	0.24504	ni	hypothetical protein
12c00119	0.34357	ni	hypothetical protein	um05427	0.24513	ni	ni
22d00232	0.34358	ni	aspartyl-tRNA synthetase	um02202	0.24517	ni	putative protein
26c0019	0.34363	ni	heterochromatin-associated protein HP1 and related CHROMO D	um10956	0.24527	K02942	probable RPP1A - 60S large subunit acidic ribosomal protein a1
7d00048	0.34368	ni	hypothetical protein	um04916	0.24545	ni	putative protein
7d00241	0.34384	K08773	rac GTPase-activating protein BCR/ABR	um00592	0.24546	K04508	related to Nuclear receptor co-repressor
8d00077	0.34384	ni	transcription-associated recombination protein - Thp1p	um05481	0.24563	ni	conserved hypothetical protein
10c00030	0.34389	ni	hypothetical protein	um03815	0.24572	K01868	probable MST1 - threonine-tRNA ligase
14c00050	0.34395	ni	hypothetical protein	um05876	0.2461	ni	putative protein
14d00024	0.34409	ni	FOG - FHL2 domain	um11213	0.24612	K12591	related to PRP6 - Exonuclease component of the nuclear exosome
15d00011	0.34414	ni	predicted transporter	um10176	0.2464	K04567	probable lysyl-tRNA synthetase
14c00036	0.34417	K14018	phospholipase A2-activating protein	um05680	0.24656	ni	putative protein
25d00095	0.34422	K01811	glucosidase II catalytic (alpha) subunit	um15058	0.24659	ni	conserved hypothetical protein
9c00061	0.3443	ni	conserved protein	0.24663	K02155	ni	probable CUP5 - proteolipid subunit of the vacuolar H
11d00001	0.34433	ni	hypothetical protein	um04676	0.2467	ni	putative protein
25c00053	0.34445	ni	hypothetical protein	um15102	0.24691	K14311	putative protein
13d00021	0.34484	ni	permease of the major facilitator superfamily	um05679	0.24719	ni	related to Protein-tyrosine phosphatase gamma precursor
11c00084	0.34485	ni	reductases with broad range of substrate specificities	um11702	0.24754	ni	conserved hypothetical protein
10d00012	0.34495	ni	hypothetical protein	0.24767	K02902	ni	related to MRPL24 - mitochondrial ribosomal protein
7d00146	0.34497	K12622	small nuclear ribonucleoprotein	um02222	0.24776	ni	related to membrane protein Dik6
8c00127	0.34507	ni	hypothetical protein	um05930	0.24778	ni	conserved hypothetical Ustilago-specific protein
16d00065	0.34509	ni	cyclin	um05318	0.2478	ni	hypothetical protein
1c00023	0.34519	ni	hypothetical protein	um10805	0.24786	K01120	conserved hypothetical protein
5d00074	0.34531	ni	hypothetical protein	um03618	0.24797	K00877	related to TH121 - Hydroxymethylpyrimidine phosphate kinase
9c00042	0.34544	K01011	mercaptopyruvate sulfurtransferase	um01152	0.24828	ni	conserved hypothetical protein
8d00087	0.34556	K10416	yeast light intermediate chain	um03598	0.24843	K12471	related to ENT2 - clathrin binding protein
14c00024	0.34586	K02684	eukaryotic-type DNA primase, catalytic	um00964	0.24882	ni	related to papsin precursor
5c00025	0.34588	ni	phosphorylase mutase	um00251	0.24883	ni	Kinesin-3 motor protein
19c00085	0.34613	ni	hypothetical protein	um00210	0.24928	ni	conserved hypothetical protein
8c00129	0.34628	K01188	beta-glucosidase, lactase phlorizinhydrolase	um04152	0.24952	K03235	probable YEF3 - translation elongation factor eEF3
13d00065	0.34629	ni	reductases with broad range of substrate specificities	um03172	0.24972	ni	related to Zinc finger protein
14c00081	0.34634	ni	hypothetical protein	um04924	0.24975	ni	related to Par-hesmer repeat protein 5
9c00045	0.34662	ni	hypothetical protein	um02719	0.2498	ni	related to DJP1 - DnaJ-like protein
20c00075	0.34664	ni	WD repeat protein WDR4	um02863	0.25017	ni	conserved hypothetical protein
27c00060	0.3467	K01855	pseudouridylylase synthase	um01381	0.25041	ni	conserved hypothetical protein
16c00021	0.34673	ni	predicted E3 ubiquitin ligase	um10442	0.25044	K11558	conserved hypothetical protein
2d00026	0.3468	K02881	40S ribosomal protein S2/30S ribosomal protein S5	um01131	0.25044	K01669	related to TUBB1 - GTP cyclohydrolase II
20c00019	0.34691	ni	hypothetical protein	um04061	0.25046	ni	related to glycerate dehydrogenase
6d00055	0.34714	ni	hypothetical protein	um06265	0.25062	ni	related to Retrovirus-related POL polyprotein
13d00070	0.34714	ni	inositol polyphosphate 5-phosphatase and related proteins	um01982	0.25073	ni	related to aminotriazole resistance protein
9d000274	0.34722	K03063	glucosyltransferase-3	um00852	0.25077	K02875	probable NPL4B - ribosomal protein
5c00120	0.34723	K01535	plasma membrane H+-transporting ATPase	um11968	0.25081	ni	related to MKT1 - retroviral protease signature protein
22c00021	0.34725	ni	hypothetical protein	um10624.2	0.25083	ni	related to LCB2 - serine C-palmitoyltransferase subunit
11c00040	0.34726	ni	hypothetical protein	um11983	0.25084	K12834	probable Pre-mRNA splicing factor in1
6c00067	0.34767	ni	hypothetical protein	um06428.2	0.25098	ni	conserved hypothetical protein
13d00101	0.34768	K14830	WD40 repeat-containing protein	um04826	0.25105	K01497	related to TUBB1 - GTP cyclohydrolase II
24d00001	0.3478	ni	enoyl-coa hydratase	um06450	0.25112	K04739	cAMP-dependent protein kinase type II regulatory chain
7d00297	0.34785	ni	hypothetical protein	um04168	0.25119	K11360	related to Transcription factor SPT8
22d0194	0.34789	K01078	lysosomal & prostatic acid phosphatases	um01559	0.25141	ni	conserved hypothetical protein
9d00078	0.34791	K14758	casein kinase	um02118	0.25147	ni	putative protein
3d00089	0.3484	K14850	predicted RNA methylase	um00145	0.25152	K08851	related to p53-related protein kinase
14d00015	0.34855	K01689	enolase	um01612	0.25155	ni	conserved hypothetical protein
18d00091	0.34867	ni	hypothetical protein	um12301	0.25155	ni	putative protein
19c00061	0.34876	ni	uncharacterized conserved protein	um00342	0.25181	ni	hypothetical protein
9c00066	0.3488	ni	predicted methyltransferase	um1185.2	0.25181	ni	conserved hypothetical protein
9c00210	0.3488	K11569	hypothetical protein	um03644	0.25183	ni	hypothetical protein
18d00085	0.34884	ni	hypothetical protein	um10536	0.25201	K09569	related to FPR2 - FK506
7d00030	0.34897	K11366	ubiquitin-specific protease	um05584	0.2521	K00963	probable UTP-glucose-1-phosphate uridylyltransferase
22c0024	0.34921	ni	hypothetical protein	um02221	0.25217	ni	conserved hypothetical Ustilago-specific protein
22c0020	0.34953	ni	hypothetical protein	um02194	0.25223	ni	hypothetical protein
22d00246	0.34958	ni	hypothetical protein	um10623	0.25232	ni	related to Tuberin
22d00003	0.34959	K00787	polyprenyl synthetase	um11336	0.25236	ni	conserved hypothetical protein
12d00095	0.34964	ni	hypothetical protein	um02137	0.25252	ni	effector family protein Eff1-7
25d00011	0.34973	ni	pleiotropic drug resistance proteins	um01241	0.25254	ni	hypothetical protein
25d00091	0.34979	ni	predicted transporter	um00569	0.25259	ni	related to GTP-binding protein
3d00015	0.34981	ni	predicted ER membrane protein	um00097	0.25278	ni	ni
22c00267	0.34993	K01477	hypothetical protein	um04563	0.25281	ni	ni
18c00069	0.34996	ni	reductases with broad range of substrate specificities	um02500.2	0.25303	ni	conserved hypothetical protein
7d00021	0.34998	K06911	hypothetical protein	um04365	0.25315	ni	conserved hypothetical protein
18c00058	0.35004	ni	WD40 repeat-containing protein	um03413	0.25318	K00925	related to Acetate kinase
22c00027	0.35007	K04713	sphingolipid hydroxylase	um10334	0.25349	K02985	probable 40S ribosomal protein S3
48d00001	0.35009	K00412	ni	um00085	0.25358	ni	conserved hypothetical protein
22d00245	0.35016	ni	hypothetical protein	um10177	0.25391	K04640	guanine nucleotide-binding protein alpha-1 subunit
4d00029	0.35023	ni	hypothetical protein	um05264	0.25411	ni	probable glutathione-dependent formaldehyde dehydrogenase
24c00012	0.35029	ni	hypothetical protein	um04067	0.25436	K14830	related to MAK11 protein
22c00040	0.35031	K11251	histone 2A	um02272	0.25443	ni	putative protein
9d00027	0.35052	ni	hypothetical protein	um12255	0.2545	ni	conserved hypothetical protein
6d00088	0.35046	ni	hypothetical protein	um01166	0.25456	ni	related to APG2 - required for sporulation
19d0160	0.35047	ni	tyrosine kinase specific for activated	um00553	0.25466	ni	related to GTPase activating protein sec2
13d00013	0.35047	K07407	hypothetical protein	um03018	0.25494	K15262	related to BCP1 - Essential protein involved in nuclear export of cytoskeleton organization protein
9d00106	0.35054	ni	hypothetical protein	um11199	0.25499	K08818	related to CDC28 - cyclin-dependent protein kinase
22d00296	0.35058	K14860	hypothetical protein	um12294	0.25504	ni	conserved hypothetical protein
25d00069	0.35082	K00685	arginyl-tRNA-protein transferase	um05149	0.25523	ni	ni
12d00049	0.35088	ni	carboxylesterase and related proteins	um00731	0.25561	ni	hypothetical protein
19c00080	0.35092	K06990	predicted diacylglycerol	um00645	0.25562	ni	conserved hypothetical protein
15c00051	0.35114	K14530	hypothetical protein	um03518	0.25581	ni	putative protein
19d00151	0.35114	K00942	guanylate kinase	um06239	0.25591	ni	related to phosphatidylinositol 3-phosphate 5-kinase
12c00103	0.35118	K12581	mRNA deadenylation subunit	um02803	0.25643	ni	related to beta-1
3d0							

9c00239	0.35372	K00605	aminomethyl transferase	um06513	0.25787	ni	conserved hypothetical protein
26c0076	0.35374	K01262	putative Xaa-Pro aminopeptidase	um06195	0.25794	K14568	related to EMG1 - Protein required for ribosome biogenesis
6c00097	0.35378	ni	hypothetical protein	um02196	0.25797	ni	hypothetical protein
13c0089	0.35383	ni	hypothetical protein	um01433	0.25802	K06689	probable UBC5 - E2 ubiquitin-conjugating enzyme
22c00270	0.35398	K01725	hypothetical protein	um02769	0.25838	ni	conserved hypothetical protein
5c05102	0.35399	ni	hypothetical protein	um01942	0.25839	K01273	related to Microsomal dipeptidase precursor
7d00291	0.35406	K11121	sirtuin 5 and related class III sirtuins	um10122	0.25846	ni	hypothetical protein
18c00005	0.35407	ni	hypothetical protein	um15033	0.25865	ni	related to ABC transporter
6c00099	0.35408	ni	hypothetical protein	um12177	0.25873	K00854	probable XKS1 - xylokinase
18c00019	0.35412	ni	hypothetical protein	um00988	0.25878	ni	conserved hypothetical protein
10d00048	0.3542	ni	hypothetical protein	um04080	0.25882	K11594	probable DED1 - ATP-dependent RNA helicase
16d00045	0.35421	K15148	hypothetical protein	um11758	0.25886	ni	conserved hypothetical protein
6c00009	0.35423	ni	hypothetical protein	um04549	0.25903	K12587	conserved hypothetical protein
5c00092	0.35454	K01560	hypothetical protein	um05303	0.25906	ni	hypothetical protein
7d00289	0.35461	K12659	N-acetyl-gamma-glutamyl-phosphate reductase	um05027	0.25915	ni	hypothetical protein
5c00143	0.35469	ni	hypothetical protein	um10597	0.25916	K03648	related to UNG1 - Uracil-DNA glycosylase
9c00351	0.35471	K12179	COP9 signalosome, subunit CSN6	um10577	0.25934	ni	related to prelinin subunit 3
8c00018	0.35485	K04486	hypothetical protein	um03099	0.25948	ni	putative protein
19c00114	0.35498	ni	hypothetical protein	um02676	0.25957	K12869	probable protein CCN1 - putative cell cycle control protein
15c00029	0.355	ni	hypothetical protein	um00685	0.25959	K11131	probable CBF5 - Centromere Binding Factor
15d00082	0.35502	ni	hypothetical protein	um10497	0.2596	ni	related to 3-oxo-phenylalanine reductase
24c00037	0.35514	ni	ferric reductase-like proteins	um01245	0.25967	K00052	probable LEU2 - beta-isopropyl-malate dehydrogenase
7c00031	0.3552	K11321	hypothetical protein	um15061.2	0.25977	ni	conserved hypothetical protein
7d00139	0.35522	ni	hypothetical protein	um02021	0.26017	ni	conserved hypothetical protein
7d00318	0.35543	ni	uncharacterized conserved protein	um10189	0.26022	K03657	related to ATP-dependent DNA helicase
5d00107	0.35553	ni	hypothetical protein	um00438	0.26028	ni	conserved hypothetical protein
7d00140	0.35555	ni	hypothetical protein	um00616	0.26036	ni	putative protein
1c00024	0.35564	K11592	dRNA-specific nuclease Dicer and related ribonucleases	um05002	0.26042	ni	related to 7alpha-cephem-hydroxylase P8 chain
14c00125	0.35567	ni	hypothetical protein	um00419	0.26049	ni	related to atp-dependent rna helicase
6c00007	0.35568	ni	sexual differentiation process protein ISP4	um11224	0.26066	ni	putative protein
7d000314	0.35581	K14807	DEAD-box ATP-dependent RNA helicase	um00192	0.26073	K10858	related to PMS1 - DNA mismatch repair protein
4d00026	0.35582	ni	ATP-dependent RNA helicase pitchoun	um02365	0.26082	K15100	probable CTP1 - Mitochondrial citrate transporter - member of the mitochondrial carrier
14c00021	0.35605	ni	hypothetical protein	um02754	0.26083	K07936	related to GSP1 - GTP-binding protein of the ras superfamily
25c00027	0.3562	K00273	D-aspartate oxidase	um05702	0.26094	ni	related to oxidoreductase
7d00137	0.3564	ni	hypothetical protein	um03076	0.26098	ni	related to PDR16 - involved in lipid biosynthesis and multidrug resistance
7c00034	0.3564	K00928	aspartate kinase	um00952	0.261	K13102	related to RTS2 - Basic zinc-finger protein
12c00065	0.35645	K14571	nuclear AAA ATPase	um05948	0.26102	ni	hypothetical protein
26c00024	0.35664	ni	hypothetical protein	um12226	0.26112	ni	putative protein
22c00089	0.35665	ni	hypothetical protein	um04815	0.26114	ni	putative protein
5c00146	0.35673	ni	hypothetical protein	um00271	0.26116	K14763	related to NAF1 - nuclear assembly factor
7d00273	0.35679	K07827	ras-related GTPase	um11657	0.26145	ni	related to actin-interacting protein AIP3
10c00106	0.35687	ni	sterol reductase	um10005	0.26147	ni	conserved hypothetical protein
19d00043	0.35702	K03177	pseudouridine synthase	um11411	0.2617	K02974	probable 40S RIBOSOMAL PROTEIN S24
8d00082	0.35715	ni	hypothetical protein	um02116.2	0.26179	ni	conserved hypothetical protein
24d00015	0.35722	K17417	hypothetical protein	um01024	0.26182	ni	hypothetical protein
9d00009	0.35727	K17257	predicted membrane protein	um00284	0.26205	K08515	related to vesicle-associated membrane protein 7
16c00035	0.35729	K02144	vacuolar H <sup>+</sup> -ATPase V1 sector, subunit H	um04993	0.2621	ni	putative protein
3d00009	0.3573	ni	predicted ubiquitin regulatory protein	um03811	0.26232	K01057	probable SOL1 - Protein with a possible role in tRNA export
26c00008	0.35732	K03000	RNA polymerase I transcription factor TFIIIS, subunit A12.2/RPA	um04464	0.26243	K11092	related to U2 snRNP protein A
9d00042	0.35766	ni	predicted MutS-related protein	um04472	0.2625	K11135	conserved hypothetical protein
27d00003	0.35773	ni	mitochondrial import inner membrane translocase, subunit TIM23	um00399	0.26253	ni	conserved hypothetical protein
25c00087	0.35779	K06978	hypothetical protein	um00792	0.26264	ni	conserved hypothetical Ustilago-specific protein
22c00011	0.35782	ni	hypothetical protein	um11455	0.26266	K02266	related to COX13 - cytochrome-c oxidase chain VIa
18c00066	0.35789	ni	hypothetical protein	um01706	0.26268	ni	conserved hypothetical protein
18c00027	0.35799	ni	uncharacterized conserved protein	um02867	0.2628	K07390	probable GRX5 - glutaredoxin
8d00101	0.35805	K00485	flavin-containing monooxygenase	um02792	0.26281	K01697	related to CYS4 - cystathionine beta-synthase
6c00071	0.35818	K15428	metalloexopeptidases	um12171	0.26287	ni	conserved hypothetical protein
7c00032	0.35819	ni	transcription factor 4F, helicase subunit	um00387	0.26305	ni	conserved hypothetical protein
9c00011	0.35821	K03943	NADH:ubiquinone oxidoreductase, NDUFV2/24 kD subunit	um00542	0.26307	K10601	conserved hypothetical protein
9c00159	0.35853	ni	nitrogen permease regulator NLRG/NPR2	um02230	0.26318	ni	conserved hypothetical Ustilago-specific protein
24c00003	0.35857	ni	hypothetical protein	um03313	0.26338	ni	effector family protein Eff1-3
24d00019	0.3587	K15414	MAM1	um11489	0.26355	ni	conserved hypothetical protein
16c00078	0.35871	ni	sensory transduction histidine kinase	um12089	0.26358	K08851	related to p53-related protein kinase
25d00008	0.35872	ni	ypj/rab-specific GTPase-activating protein GYP1	um11572	0.26369	K14050	related to Rab geranylgeranyltransferase alpha subunit
7d00109	0.35877	ni	hypothetical protein	um05573	0.26378	ni	hypothetical protein
7d00246	0.35883	K00528	ferredoxin:ferredoxin reductase	um10397	0.26379	K02133	probable ATP2 - F1F0-ATPase complex
6c00112	0.35883	ni	hypothetical protein	um12148	0.26382	ni	conserved hypothetical protein
18d00111	0.35883	ni	hypothetical protein	um10133	0.2639	K10768	conserved hypothetical protein
22c00123	0.3594	ni	hypothetical protein	um00801	0.26406	K07204	related to KOG1 - Subunit of TORC1
7c00053	0.35943	ni	ferric reductase	um03225	0.26415	ni	putative protein
18d00012	0.35943	ni	transferrin, ABC superfamily	um10813	0.2642	ni	conserved hypothetical protein
22c00025	0.35952	K14864	SAM-dependent methyltransferase	um10447	0.26434	K11275	related to Histone H1
6c00030	0.35954	ni	hypothetical protein	um05313	0.26439	ni	hypothetical protein
13d00018	0.35957	ni	hypothetical protein	um01526	0.26441	ni	conserved hypothetical protein
12d00117	0.35957	ni	ngg1-interacting factor 3 protein NIF3L1	um05688	0.26455	K12272	conserved hypothetical protein
10c00081	0.35958	ni	uncharacterized conserved protein	um01485	0.2646	K05956	probable BE12 - geranylgeranyltransferase type II beta subunit
7d00358	0.35962	K13628	fe-s cluster biosynthesis protein ISA1	um11344	0.26464	ni	conserved hypothetical protein
9d00037	0.35963	K03458	hypothetical protein	um04836	0.26469	ni	hypothetical protein
11d00048	0.35968	ni	hypothetical protein	um03268.2	0.2648	K14809	related to SPB4 - ATP-dependent RNA helicase of DEAH box family
7c00230	0.35974	ni	uncharacterized conserved protein	um10145	0.26481	K08286	p21-activated kinase
15c00008	0.3598	K14404	polyadenylation factor I complex, subunit, Yth1	um11523	0.26535	ni	conserved hypothetical protein
8c00075	0.35983	K11884	predicted RNA-binding protein Protp1 interacting with Nob1p	um11333	0.26535	K03885	related to NDE1 - mitochondrial cytosolically directed NADH dehydrogenase
12c00093	0.35987	ni	hypothetical protein	um06046	0.26555	ni	conserved hypothetical protein
2d00055	0.3599	ni	hypothetical protein	um00365	0.26562	ni	hypothetical protein
9d00031	0.36003	ni	hypothetical protein	um10184	0.26579	ni	conserved hypothetical protein
7c00317	0.3602	K04523	ubiquitin-like protein	um05438	0.26589	ni	conserved hypothetical protein
12c00142	0.36021	K14003	hypothetical protein	um11109	0.26605	ni	conserved hypothetical Ustilago-specific protein
18c00114	0.36023	K09140	uncharacterized conserved protein	um05256	0.2661	ni	putative protein
10c00021	0.3603	ni	hypothetical protein	um03765	0.26622	K01529	probable DDE5 - ATP-dependent RNA helicase of the DEAD-box family involved in mRNA export
7c00298	0.36048	K08272	conserved protein Mo25	um06280	0.26631	ni	related to J kappa-recombination signal binding protein
26c00092	0.36048	ni	hypothetical protein	um10996	0.26635	ni	conserved hypothetical protein
3d00096	0.36062	K02935	mitochondrial/chloroplast ribosomal protein L12	um04702	0.2664	K01764	related to CYT2 - holocytochrome-c1 synthase
8d00017	0.36062	K03005	RNA polymerase I 49 kDa subunit	um05148	0.26649	K10884	related to ATP-dependent DNA helicase II
13c00049	0.36083	ni	FOG1 - Predicted E3 ubiquitin ligase	um11073	0.26659	ni	conserved hypothetical protein
18c00093	0.36088	ni	hypothetical protein	um10429	0.26659	K03010	probable DNA-dependent RNA polymerase II RPB140
10c00065	0.36102	ni	hypothetical protein	um05809	0.26685	ni	related to KRE6 - glucan synthase subunit
22c00229	0.36119	K10480	arginase family protein	um03242	0.26685	ni	hypothetical protein
16d00031	0.36132	K01920	glutathione synthetase	um06466	0.267	ni	related to amidase
10c00040	0.36141	ni	hypothetical protein	um11818	0.26749	ni	probable SDS22 - protein phosphatase 1
12c00131	0.36141	ni	protein Me2	um10812	0.26751	ni	conserved hypothetical protein
24c00032	0.36144	ni	DNA helicase, TBP-interacting protein	um11341	0.26765	K13119	related to ALG12 - alpha-1
7d00104	0.36148	K07560	D-Tyr-tRNA (Tyr) deacylase	um11964	0.26768	K11426	conserved hypothetical protein
18c00048	0.36171	K15544	protein involved in transcription start site selection	um02033	0.26774	ni	putative protein
9d00306	0.36174	K0361	26S proteasome regulatory complex	um02960	0.26775	K03456	probable ser
9c00237	0.36185	ni	hypothetical protein	um02147	0.26784	ni	related to cytosolic acetyl-CoA hydrolase 1
24d00017	0.3619	ni	triglyceride lipase-cholesterol esterase	um03937	0.268	K14457	probable diacylglycerol acyltransferase type 2b
6d00127	0.36195	ni	uncharacterized conserved protein	um05424	0.26811	ni	conserved hypothetical protein
9c00028	0.36196	K09528	predicted molecular chaperone	um03476	0.26813	ni	conserved hypothetical protein
20c00036	0.36203	ni	hypothetical protein	um10015	0.26815	ni	conserved hypothetical protein
25c00088	0.3621	K09955	hypothetical protein	um12269.2	0.2682	ni	related to CYB2 - lactate dehydrogenase cytochrome b2
16c00016	0.36221	K12586	exosomal 3'-5' exonuclease complex, subunit Rrp43	um12052	0.26833	ni	b mating type locus
7c00023	0.36222	ni	hypothetical protein	um04889	0.26843	ni	related to beta-1
3c00053	0.36228	K00599	carboxymethyl transferase	um10304	0.26855	ni	putative protein
8d00023	0.3624	K14855	notchless-like WD40 repeat-containing protein	um11176	0.26861	ni	conserved hypothetical protein
11d00088	0.36245	ni	hypothetical protein	um10465.2	0.26897	K00921	probable FAF1 - phosphatidylinositol 3-phosphate 5-kinase
22c00227	0.3625	K01113	hypothetical protein	um05214	0.26914	ni	conserved hypothetical Ustilago-specific protein
27c00077	0.3626	ni	hypothetical protein	um10368	0.26961	K09419	related to Heat shock factor protein
15c00058	0.36261	K09265	MADS box transcription factor	um03696	0.26969	K04706	related to SIZ1 - E3-like factor in the SUMO pathway
9c00200	0.36264	K02309	protein kinase essential for the initiation of DNA replication	um00582	0.26978	ni	related to cytoskeleton assembly control protein
9d00128	0.36276	ni	hypothetical protein	um15030	0.26994	K14715	conserved hypothetical protein
14d00063	0.36282	ni	hypothetical protein	um06466	0.27003	ni	conserved hypothetical protein
20c00022	0.36284	ni	NADP-dependent isocitrate dehydrogenase	um03698	0.27007	ni	conserved hypothetical protein
9c00398	0.36289	ni	hypothetical protein	um10355	0.27031	K11876	conserved hypothetical protein
15c00040	0.363	ni	hypothetical protein	um10482	0.27048	K03123	probable transcription initiation factor Iia gamma chain
5d00017	0.36309	ni	hypothetical protein	um04166	0.27051	ni	related to SHG9 - mitochondrial inner membrane protein
27d00083	0.36308	ni	hypothetical protein	um02888	0.27055	ni	related to ADH6 - NADPH-dependent alcohol dehydrogenase
20c0019	0.36319	ni	hypothetical protein	um10418	0.27057	ni	hypothetical protein
9d00194	0.3633	ni	hypothetical protein	um03628	0.27067	ni	related to molybdenum cofactor sulfurase HxB protein
5c00089	0.3634	ni	predicted E3 ubiquitin ligase	um00126	0.27067	ni	related to Chlin deacetylase 1
5c00140	0.36341	K02604	predicted Zn-finger protein	um15042	0.27069	K12763	related to ascospore maturation 1 protein
18d00069	0.36343	K12846	nucleic acid binding protein	um06204	0.27076	ni	ni
9c00426	0.36345	ni	hypothetical protein	um04713	0.27096	K15326	conserved hypothetical protein
9d00027	0.36345	K15710	helicase-like transcription factor HLTf	um12248	0.27106	ni	hypothetical protein
9c00108	0.36351	ni	hypothetical protein	um10964	0.27115	ni	conserved hypothetical protein
22c00082	0.36367	ni	hypothetical protein	um10274	0.27122	ni	putative protein
7d00263							

9c00422	0.36562	ni	hypothetical protein	um10915	0.27401	K12813	probable PRP2 - RNA-dependent ATPase of DEAH box family
22d00038	0.36601	K12733	cyclophilin type peptidyl-prolyl cis-trans isomerase	um05178	0.27411	ni	conserved hypothetical protein
14c00096	0.36629	K00943	thymidylate kinase/adenylate kinase	um04841	0.2742	ni	conserved hypothetical protein
7d00194	0.36633	ni	hypothetical protein	um11201.2	0.27477	ni	putative protein
22c00083	0.36638	K06662	checkpoint RAD17-RFC complex, RAD17/RAD24 component	um06350	0.27479	K01181	probable endo-
11c00200	0.36638	K02152	vacuolar H <sup>+</sup> -ATPase V1 sector, subunit G	um10357	0.27495	ni	probable BAT1- branched chain amino acid aminotransferase
2c000065	0.36648	ni	hypothetical protein	um00390	0.27533	K00416	related to CCR6 - ubiquitin-cytochrome-c reductase 17K protein
22c00007	0.36653	ni	hypothetical protein	um11156	0.27535	ni	hypothetical protein
19c00071	0.36656	ni	FOG, RRM domain	um00657	0.27548	K15082	related to RAD7 - nucleotide excision repair protein
4c00021	0.36661	ni	hypothetical protein	um10153	0.27561	K03029	probable 26S proteasome regulatory subunit Rpn10
22c00114	0.36667	K15436	nuclear transport regulator	um004959	0.27563	ni	related to BCH1 - Protein involved in transport at the trans-Golgi
22c00233	0.36687	ni	hypothetical protein	0.27600	K03021	ni	probable DNA-directed RNA polymerase III
10c00087	0.36691	ni	hypothetical protein	um03058	0.27643	K03023	conserved hypothetical protein
2c00006	0.36695	ni	predicted transporter	um01126	0.2765	ni	probable MRPL38 - mitochondrial ribosomal protein
6d00077	0.36708	ni	TNF receptor-associated factor	um06060	0.27663	ni	putative protein
11d00074	0.36714	ni	hypothetical protein	um11498	0.27675	K02930	probable RPL4A - ribosomal protein L4-A
14c00091	0.36719	K07203	DNA-dependent protein kinase	um00450	0.27681	ni	related to multidrug resistance protein
26d00074	0.36724	ni	hypothetical protein	um02551	0.27686	ni	putative protein
7d00133	0.36725	K00387	sulfite oxidase, heme-binding component	um10293.2	0.2769	K01103	probable FBP26 - fructose-2
19d00136	0.36729	ni	hypothetical protein	um02458	0.277	ni	hypothetical protein
12c00086	0.36737	K04627	hypothetical protein	um12135	0.27702	ni	related to MRE2 - required for maintenance in ploidy
7d00212	0.36747	ni	predicted L-carnitine dehydratase	um04213	0.27715	ni	putative protein
26c00018	0.36759	ni	hypothetical protein	um05136	0.27716	ni	conserved hypothetical protein
24c00033	0.3676	K04499	DNA helicase, TBP-interacting protein	um05842	0.27719	ni	Myp1 protein
7d00189	0.36798	ni	predicted Rho GTPase-activating protein	um01212	0.2773	ni	putative protein
5c00076	0.36816	K03113	transcription initiation factor I	um04908	0.27735	ni	related to serine
13d00080	0.36824	ni	sexual differentiation process protein ISP4	um01617	0.27756	K14561	probable IMP4 - component of the U3 small nuclear ribonucleoprotein
7d00169	0.36832	K13201	FOG, RRM domain	um04947	0.27782	ni	putative protein
14d00074	0.36859	ni	hypothetical protein	um04451	0.27821	ni	conserved hypothetical protein
7d00309	0.3686	K03143	RNA polymerase II transcription initiation/nucleotide excision rep	um11531.2	0.27827	ni	related to RSM427 - mitochondrial ribosomal protein
20c00014	0.36892	ni	hypothetical protein	um04903	0.2783	K03495	related to MTO1 protein involved in mitochondrial rRNA modification
22c00281	0.36888	ni	hypothetical protein	um02127	0.2784	ni	hypothetical protein
25d00089	0.36904	ni	synaptic vesicle transporter SVOP and related transporters	um05254	0.27868	ni	hypothetical protein
14d00030	0.36916	K02896	60S ribosomal protein L10	um03276	0.27883	ni	related to SRP40 - serine-rich protein with a role in pre-ribosome assembly or transport
27d00014	0.36934	K10276	leucine rich repeat proteins	um11016	0.27897	K02830	exonuclease REC1
7d00036	0.36944	ni	predicted 3'-5' exonuclease	um11168	0.27924	ni	probable TIM8 - Translocase of the mitochondrial inner Membrane
19c00137	0.3695	K14402	mRNA cleavage and polyadenylation factor II complex, subunit C1	um02034	0.27943	ni	conserved hypothetical protein
14d00078	0.36975	ni	hypothetical protein	um02601	0.27991	ni	hypothetical protein
12d00113	0.36979	ni	hypothetical protein	um01514	0.27994	ni	probable DL2 - D-lactate dehydrogenase
19c00126	0.36981	ni	hypothetical protein	um04441	0.28015	K10251	related to 17-beta-hydroxysteroid dehydrogenase
12d00047	0.36993	ni	hypothetical protein	um11673	0.28027	K05527	conserved hypothetical protein
6c00103	0.36994	ni	phosphotyrosyl phosphatase activator	um01883	0.28034	ni	conserved hypothetical protein
7d00299	0.36996	ni	ras GTPase-activating protein family - ICGAP	um04050	0.28049	K01951	probable GUA1 - GMP synthase
12d00100	0.37003	K02927	leucine rich repeat protein L40 fusion	um05340	0.28062	ni	related to Oestrin F
18c00015	0.37024	ni	hypothetical protein	um06445	0.28078	ni	conserved hypothetical protein
10d00091	0.37028	ni	hypothetical protein	um04920	0.28101	ni	putative protein
26d00007	0.37028	ni	FOG, Zn-finger	um04447	0.28106	ni	conserved hypothetical protein
26d00070	0.37048	K10839	nucleotide excision repair factor NEF2, RAD23 component	um01341	0.2812	K06185	probable iron inhibited ABC transporter 2
26c00090	0.37056	ni	hypothetical protein	um10929	0.28142	ni	conserved hypothetical protein
11d00085	0.37058	K08150	predicted transporter	um03831	0.28143	ni	conserved hypothetical protein
18d00107	0.37066	ni	hypothetical protein	um00716.2	0.28147	K14789	related to NOP6 - protein with possible role in rRNA processing
26c00097	0.37069	K15100	mitochondrial tricarboxylate/dicarboxylate carrier proteins	um00572	0.28148	K14016	related to UFD1 - ubiquitin fusion degradation protein
22d00035	0.37073	ni	hypothetical protein	um01340	0.28151	K14847	related to RNF2 - protein RPF2 involved in ribosomal large subunit assembly and maintenance
15d00021	0.37088	ni	synaptic vesicle transporter SVOP and related transporters	um12276	0.28148	ni	putative protein
25c00069	0.3709	K10885	DNA-binding subunit of a DNA-dependent protein kinase	um04739	0.28154	ni	conserved hypothetical protein
9c00407	0.37115	K11665	SNF2 family DNA-dependent ATPase	um11421	0.28155	K00140	probable methylmalonate-semialdehyde dehydrogenase
26c00096	0.37135	ni	hypothetical protein	um10264	0.28171	ni	hypothetical protein
19c00051	0.37143	K12617	uncharacterized conserved protein	um03923	0.28188	K00287	conserved hypothetical protein
6d00092	0.37157	ni	integral membrane protease of the rhomboid family	um02855	0.28229	K14300	conserved hypothetical protein
9c00294	0.3716	K03512	DNA polymerase IV	um10764	0.28229	ni	related to TR4 orphan receptor associated protein TRA16
25c00001	0.37161	ni	hypothetical protein	um03080	0.28243	K06269	probable serine
16c00077	0.37193	ni	hypothetical protein	um02426	0.28246	K14411	related to MRE11 - subunit of cleavage factor I
26d00093	0.37182	K10865	DNA repair exonuclease MRE11	um00650	0.28263	ni	related to Progesterone 5-beta-reductase
18d00039	0.37201	ni	histone deacetylase complex, catalytic component RPD3	um04745	0.28263	ni	conserved hypothetical protein
8c00004	0.37204	ni	hypothetical protein	um05898.2	0.28282	K13989	conserved hypothetical protein
12d00027	0.37206	ni	beta-tubulin folding cofactor E	um02521	0.28285	ni	conserved hypothetical protein
5c00075	0.37217	K10863	hypothetical protein	um00700	0.28289	ni	related to Zinc-binding oxidoreductase
3c00040	0.3722	ni	hypothetical protein	um04572	0.28292	ni	conserved hypothetical protein
22d00148	0.37221	ni	hypothetical protein	um10285	0.28294	ni	conserved hypothetical protein
14d00049	0.37236	ni	hypothetical protein	um03952	0.28312	K03248	related to TIF35 - translation initiation factor eIF3 subunit
18d00029	0.37255	K09184	hypothetical protein	um03952	0.28312	K01113	conserved hypothetical protein
14c00075	0.37263	ni	hypothetical protein	um04570	0.28329	ni	hypothetical protein
5c00142	0.37272	ni	hypothetical protein	um01869	0.28352	K00540	related to NADH oxidase
19d00033	0.37277	ni	hypothetical protein	um11157	0.28353	ni	conserved hypothetical protein
16d00033	0.37279	ni	3'-phosphoadenosine 5'-phosphosulfate sulfotransferase	um04994	0.28356	K12670	related to VBP1 - oligosaccharyl transferase beta subunit precursor
9c00110	0.3728	ni	hypothetical protein	um01125	0.28361	ni	hypothetical protein
12c00127	0.37293	ni	hypothetical protein	um04085	0.2837	ni	conserved hypothetical Ustilago-specific protein
10c0002	0.37295	ni	hypothetical protein	um06365.2	0.28385	ni	conserved hypothetical protein
5d00117	0.3733	ni	hypothetical protein	um00602	0.28385	K14848	related to RRB1 - involved in the regulation of ribosome biosynthesis
18c00078	0.37354	K01649	hypothetical protein	um02050	0.28407	ni	related to NUP133 - nucleoporin
14c00068	0.37348	ni	hypothetical protein	um05126	0.28408	K15334	related to NCL1 - rRNA
7d00300	0.37356	ni	stress-activated MAP kinase-interacting protein	um02168.2	0.28415	K08856	related to Prk1p
19c00136	0.37364	ni	MD40 protein DMR-N9	um10265	0.28435	ni	conserved hypothetical protein
22d00026	0.37373	ni	hypothetical protein	um01008	0.28443	K02234	probable POL2 - DNA polymerase epsilon
4c00019	0.37378	ni	voltage-gated shaker-like K <sup>+</sup> channel, subunit beta/KCNAB	um03373	0.28447	K08793	related to serine
7d00203	0.37382	ni	hypothetical protein	um03167	0.2845	ni	related to endothelial zinc finger protein induced by tumor necrosis factor alpha
19d00084	0.37385	K14721	hypothetical protein	um01651	0.28462	K07904	probable GTP-binding protein Rab11
16d00044	0.3741	ni	mitochondrial polypeptide chain release factor	um03153	0.28464	K12608	related to ATP-binding cassette
9c00001	0.37439	K08176	hypothetical protein	um02019	0.28468	K01452	probable Chain disacetylase
25d00059	0.37448	K02677	serine/threonine protein kinase	um02289	0.28468	ni	conserved hypothetical protein
18c00059	0.37458	ni	hypothetical protein	um04610	0.28468	K15174	related to DNA-directed RNA polymerase II regulator
6c00135	0.3747	K06210	nicotinamide mononucleotide adenyllyl transferase	um04351	0.28483	ni	probable SEC7 - component of non-clathrin vesicle coat
7d00272	0.37476	ni	uncharacterized conserved protein	um02549	0.28482	ni	b-induced zinc finger protein
20c00042	0.37485	ni	hypothetical protein	um04361	0.28502	K14786	related to KR1 - KR1-interacting protein 1
25c00050	0.37502	ni	hypothetical protein	um05883	0.28505	K07565	probable NIP7 - required for efficient 60S ribosome subunit biogenesis
7d00033	0.37508	ni	hypothetical protein	um05263	0.28511	ni	putative protein
15d00082	0.37534	ni	hypothetical protein	um05926	0.28523	ni	conserved hypothetical Ustilago-specific protein
15d00043	0.37537	K01426	dual specificity, serine/threonine and tyrosine kinase	um06366	0.28526	ni	putative protein
12d00020	0.37542	ni	glyoxylate/hydroxyypyruvate reductase	um10707	0.28564	ni	putative protein
5c00024	0.37542	ni	hypothetical protein	um03635	0.2858	ni	conserved hypothetical Ustilago-specific protein
26d00077	0.37555	ni	uncharacterized conserved protein	um03743.2	0.2858	ni	related to ARP6 - Actin-related protein
12d00041	0.37559	ni	hypothetical protein	um02546	0.28588	K12275	related to translocation protein sec22
15d00009	0.37561	ni	hypothetical protein	um05124	0.28589	ni	hypothetical protein
9c00394	0.37562	K10755	replication factor C, subunit RFC2	um10373	0.28593	K00794	probable RIB4 - 6
9d00275	0.37599	ni	hypothetical protein	um02190.2	0.28594	ni	putative protein
9c00310	0.37621	ni	hypothetical protein	um00269	0.28603	K14394	probable LTP1 - protein-tyrosine-phosphatase
8c00128	0.37622	K00480	hypothetical protein	um00740	0.28616	K00277	related to 2-dehydrogenate 2-reductase
15d00081	0.37627	ni	hypothetical protein	um01059	0.28618	K15113	probable MRS4 - Protein of the mitochondrial carrier family
24d00059	0.37629	K07152	putative cytochrome C oxidase assembly protein	um00757	0.28632	ni	conserved hypothetical protein
6c00028	0.37641	ni	hypothetical protein	um01698	0.28648	ni	putative protein
5c00022	0.37662	ni	alcohol dehydrogenase	um11249	0.28649	K00574	related to cyclopropane-fatty-acyl-phospholipid synthase
9c00245	0.37684	K03937	NAD <sup>+</sup> -dependent oxidoreductase, NDUFS4/18 kDa subunit	um01758.2	0.28651	K14285	related to R2 - mRNA export protein
9c00189	0.37672	ni	serine/threonine protein kinase	um05754	0.28665	K03522	probable electron transfer flavoprotein alpha chain precursor
18c00009	0.37686	ni	multiple inositol polyphosphate phosphatase	um00239	0.28677	K11233	related to SSK1 - two-component signal transducer
9c00374	0.37697	ni	NADH-cytochrome b-5 reductase	um11412	0.28694	K02921	probable RPL43B - 60S large subunit ribosomal protein
8d00057	0.377	ni	hypothetical protein	um11548	0.28705	ni	conserved hypothetical protein
2c000066	0.37714	ni	hypothetical protein	um12320	0.28709	ni	conserved hypothetical Ustilago-specific protein
11d00030	0.37741	K03979	predicted GTP-binding protein	um00119	0.28715	ni	related to protein FR
7d00132	0.37746	K14396	splicing factor RNP51	um11195	0.28716	ni	related to serine
27c00063	0.37754	K00297	5,10-methyleneisrahydrofolate reductase	um05466	0.28719	ni	putative protein
5c00116	0.37765	ni	hypothetical protein	um01196	0.28725	ni	conserved hypothetical protein
18c00051	0.37788	ni	hypothetical protein	um00249	0.28726	ni	conserved hypothetical protein
7d00181	0.37795	ni	hypothetical protein	um10768	0.28726	ni	conserved hypothetical protein
9c00391	0.37798	K02979	40S ribosomal protein S28	um10754	0.28753	K02135	related to alp synthase epsilon chain
10c00081	0.37807	K05747	actin regulatory protein	um00403	0.28762	K00026	probable MDH1 - malate dehydrogenase precursor
9c00272	0.37808	ni	hypothetical protein	um03419	0.28765	ni	putative protein
22c00058	0.37813	ni	predicted membrane protein	um11050	0.28792	K06682	Ras-GTPase
8d00005	0.37818	ni	RAB proteins geranyl-3-phosphatase component A	um11632	0.28793	K01267	related to bacterial glycerol-3-phosphate acyltransferases
9c00170	0.37839	ni	hypothetical protein	um05029	0.28813	K11768	related to macro nuclear actin 1
14d00003	0.37844	ni	hypothetical protein	um03816	0.28821	K11253	probable HHT1 - histone H3
9c00004	0.37893	ni	hypothetical protein	um12272	0.28822	K04409	Ste20-like protein kinase
7d00030	0.37902	K14292	methylase	um03070	0.28828	K14399	related to Pre-mRNA cleavage complex II protein Ctp1
5c00011	0.37911	ni	hypothetical protein	um05854	0.2884	K11397	conserved hypothetical protein
5c00118	0.37923	ni	hypothetical protein	um03223	0.28841	ni	probable DUR3 - Urea permease
14d00065	0.3						

25c0040	0.38137	K11390	hypothetical protein	um02713	0.29041	ni	pheromone response factor Prf1
19d00155	0.38145	K01341	ubiquitin-like proprotein convertase	um05045	0.29057	K16196	related to GGN2 - ser
9d00273	0.38148	K01191	alpha-mannosidase	um01987	0.29072	ni	hypothetical protein
7c00207	0.38151	ni	hypothetical protein	um02886	0.29086	ni	conserved hypothetical Ustilago-specific protein
12c00031	0.38167	K06630	multifunctional chaperone	um00734	0.29101	ni	conserved hypothetical protein
26c00060	0.38167	ni	dolichol kinase	um00936	0.29105	K04348	calcineurin catalytic subunit
11c00076	0.38173	ni	hypothetical protein	um04342	0.29111	ni	putative protein
11c00205	0.38176	ni	hypothetical protein	um02177.2	0.29115	ni	related to DRAP deaminase RIB2
20c00051	0.38177	K03122	RNA polymerase II transcription initiation factor TFIIE, large chain	um01056	0.29133	K09580	probable protein disulfate isomerase
26c00078	0.38177	K07179	serine/threonine protein kinase	um03584	0.29146	K03005	related to RPA49 - 49 kD subunit of DNA-directed RNA polymerase I
18d00109	0.38218	ni	hypothetical protein	um04689	0.29216	ni	conserved hypothetical Ustilago-specific protein
5c00148	0.38221	K11372	cell cycle-related histone H1-binding protein	um05225	0.29177	K03965	conserved hypothetical protein
25d00088	0.38226	ni	predicted transporter	um12225	0.29177	ni	putative protein
12c00009	0.38241	ni	rasgap SH3 binding protein rasputin	um11208	0.29183	K07973	putative protein
8d00046	0.38249	ni	predicted DEAD-box-containing helicase	um11234.2	0.29195	ni	conserved hypothetical protein
22d01528	0.38252	K01417	jacalin-like lectin domain-containing protein	um03388	0.29202	ni	hypothetical protein
7c000171	0.38254	ni	hypothetical protein	um05052	0.29213	ni	hypothetical protein
7c00253	0.38269	K00602	ALCAR transformylase	um03791	0.29223	K03283	heat shock 70 kd protein 2
22d00227	0.38281	ni	hypothetical protein	um05700	0.29263	ni	conserved hypothetical protein
20d00004	0.38282	ni	hypothetical protein	um10138	0.29283	ni	conserved hypothetical protein
9c000349	0.38285	ni	arylsulfatase deacetylase	um05342	0.29287	ni	hypothetical protein
1c000011	0.38306	ni	predicted transporter	um05392	0.29293	ni	conserved hypothetical protein
7d00131	0.3833	ni	serine/threonine protein kinase	um10503	0.29298	K16944	probable cell division control protein CDC3
11d00043	0.38332	ni	hypothetical protein	um05301	0.29298	ni	conserved hypothetical Ustilago-specific protein
5d00032	0.3834	ni	hypothetical protein	um02039	0.29302	ni	conserved hypothetical protein
5c00157	0.38347	K12765	MAPK related serine/threonine protein kinase	um03907	0.29305	ni	conserved hypothetical protein
14d00092	0.38356	K00559	SAM-dependent methyltransferase	um10258	0.29326	ni	hypothetical protein
14c00117	0.38365	ni	class 2 transcription repressor NC2, beta subunit	um05954	0.29337	K15283	related to SLV41 - Putative transporter of the triose phosphate translocator family
22c00195	0.38371	ni	hypothetical protein	um02224	0.29337	ni	conserved hypothetical protein
7c00206	0.38377	K03038	26S proteasome regulatory complex, subunit RPN8/PSMD7	um01520	0.2934	ni	related to Na
27d00025	0.38383	ni	uncharacterized conserved protein	um11868	0.2934	ni	related to S5
20d00048	0.38394	K00641	hypothetical protein	um11447.2	0.2935	K17257	conserved hypothetical protein
7d00262	0.38403	K13278	asparaginase	um11254	0.29357	ni	conserved hypothetical protein
20d0013	0.38412	K01754	threonine/serine dehydratases	um04790	0.29365	ni	hypothetical protein
7c000231	0.38415	ni	glyoxylate decarboxylase	um01528	0.29368	ni	conserved hypothetical protein
20c00047	0.38419	ni	protein phosphatase 2A-associated protein	um12241	0.29374	ni	related to COX19 - Cytochrome c oxidase assembly protein
5c00089	0.38423	ni	hypothetical protein	um00904	0.29377	K09486	related to glucose regulated stress protein
25c00086	0.3843	ni	UDP-glucose 4-epimerase	um10914	0.29381	K11484	related to HOS3 - Trichostatin A-insensitive homodimeric histone deacetylase
16d00030	0.38431	K15280	Kringle membrane protein	um03983	0.29382	ni	related to WVD repeat and F/YE domain-containing protein 3
22d00265	0.38446	ni	dehydrogenases with different specificities	um10785	0.29402	K03025	related to RPO34 - DNA-directed RNA polymerase III
5d00009	0.38482	ni	hypothetical protein	um01174	0.29402	K12811	related to RNA helicase
7c00107	0.38483	ni	hypothetical protein	um02212	0.29445	K01194	related to trehalase precursor
15c00067	0.38492	ni	hypothetical protein	um11915	0.29459	ni	putative protein
16c00027	0.38493	ni	hypothetical protein	um02002	0.29467	K14808	related to DBP10 - putative ATP-dependent RNA helicase involved in ribosome biogenesis
19c00086	0.38497	K15147	hypothetical protein	um02677	0.29505	K11422	related to regulatory protein SET1
20c00027	0.38505	K14311	uncharacterized conserved protein	um10848	0.29522	K11560	conserved hypothetical protein
12c00143	0.38519	ni	hypothetical protein	um00617	0.29547	K01409	related to probable O-sialoglycoprotein endopeptidase
26d00091	0.38523	ni	hypothetical protein	um02552	0.29552	ni	related to WVD repeat and F/YE domain-containing protein 3
25d00003	0.38534	ni	uncharacterized conserved protein	um02979	0.29554	ni	conserved hypothetical protein
10c00094	0.38536	ni	hypothetical protein	um02437	0.29567	K03950	probable NADH2 dehydrogenase
6c00057	0.38553	ni	hypothetical protein	um11114	0.29574	ni	conserved hypothetical protein
19c00076	0.38557	K00940	nucleoside diphosphate kinase	um11103	0.29576	K02925	probable RPL3 - 60s ribosomal protein l3
9c000304	0.3856	ni	guanine nucleotide exchange factor	um12238	0.29584	ni	putative protein
20c00042	0.38564	K06062	histone acetyltransferase SAGA/ADA, catalytic subunit PCAF/IG	um02466	0.2959	ni	hypothetical protein
8d00033	0.38566	ni	hypothetical protein	um06443	0.29612	K03264	probable TIF6 - translation initiation factor 6
18d00098	0.38569	ni	hypothetical protein	um02849	0.29631	K00942	probable GUK1 - guanylate kinase
7c00226	0.38574	K03768	peptidyl-prolyl cis-trans isomerase	um01990	0.29648	ni	probable hypothetical protein
8c00066	0.38576	ni	serine/threonine protein kinase	um02962	0.29652	ni	hypothetical protein
20d0009	0.38577	K15102	mitochondrial phosphate carrier protein	um10164	0.29653	K02959	related to 30S ribosomal protein S16
7d00162	0.38582	ni	hypothetical protein	um06296	0.29655	K03144	probable TFB2 - TFIIF subunit
27d00021	0.38589	ni	membrane coat complex Retromer, subunit VPS5/SNX1	um12004	0.29674	ni	conserved hypothetical protein
4d00037	0.38593	ni	hypothetical protein	um05122	0.29684	ni	conserved hypothetical protein
13c00077	0.38623	ni	hypothetical protein	um11281	0.29687	K12820	probable PRP43 - involved in spliceosome disassembly
9d00404	0.3863	ni	hypothetical protein	um04035	0.29695	ni	conserved hypothetical Ustilago-specific protein
5c00109	0.38649	ni	hypothetical protein	um03653	0.29725	ni	conserved hypothetical protein
13d00011	0.38656	K14800	hypothetical protein	um11474	0.2973	K12183	related to Tumor susceptibility gene 101 protein
24c0004	0.38667	ni	hypothetical protein	um02707	0.29736	K17408	conserved hypothetical protein
9c00225	0.38671	K00026	NAD-dependent malate dehydrogenase	um11036	0.29741	K12862	related to PRP46 - member of the splicing factor
11c00068	0.38677	ni	mitochondrial matrix protein frataxin	um05428	0.29783	K02896	related to RPL24 - Ribosomal Like Protein 24
10c00009	0.38713	ni	hypothetical protein	um10047	0.29841	K14768	conserved hypothetical protein
14d00109	0.38714	K03239	transcription initiation factor 2B, alpha subunit	um01430	0.2986	ni	Dike
19c00082	0.38721	ni	peroxisomal NUDIX hydrolase	um10066	0.29861	ni	conserved hypothetical protein
22d00229	0.38737	ni	hypothetical protein	um00305	0.29862	K12825	related to Splicing factor 3 subunit 1
11c00007	0.38742	K14803	serine/threonine protein phosphatase	um00094	0.29863	K01423	related to NonF protein
10c00002	0.38791	K12182	membrane trafficking and cell signaling protein HRS	um03092	0.29864	ni	putative protein
15c00016	0.38808	ni	uncharacterized conserved protein	um02733.2	0.29897	ni	related to SMI1 - beta-1
15d00066	0.38809	ni	predicted haloacid-halohydratase and related hydrolases	um03098	0.29933	ni	related to CNS1 - cyclophilin seven suppressor
8c00008	0.38833	ni	hypothetical protein	um01565	0.29943	ni	related to GPI transamidase component PIG-S
9c00418	0.38833	K10581	ubiquitin-conjugating enzyme	um05848	0.29949	ni	related to galactoside O-acetyltransferase
5d00051	0.38842	ni	leucin receptor generated protein	um05215	0.29958	ni	hypothetical protein
8d00096	0.38899	K01772	prothrombin ferro-lyase	um03906	0.29963	ni	hypothetical protein
15d00058	0.38918	ni	histone H3 (Lys9) methyltransferase SUV39H1/Ctr4	um12012	0.29968	ni	conserved hypothetical protein
10c00059	0.38918	ni	hypothetical protein	um01669	0.29974	K12196	probable VPS4 - vacuolar sorting protein
7d00024	0.38928	ni	hypothetical protein	um10526	0.29975	ni	probable SSB2 - heat shock protein of HSP70 family
5d00025	0.38979	ni	mitochondrial phytyl-CoA hydroxylase	um01858	0.3	ni	conserved hypothetical protein
10d00077	0.38981	K01262	xaa-pro aminopeptidase	um05703	0.30004	K00273	related to D-amino-acid oxidase
15c00046	0.38989	ni	rho GTPase-activating protein	um02571	0.30009	K09496	probable CCT4 - component of chaperonin-containing T-complex
6d00123	0.39008	K05841	UDP-glucuronosyl and UDP-glucosyl transferase	um12243	0.30009	K11649	related to sw
18d00048	0.39023	ni	hypothetical protein	um00494	0.30011	ni	conserved hypothetical protein
1c00042	0.39028	ni	mitochondrial import inner membrane translocase, subunit TIM9	um10405.2	0.30014	K15076	hypothetical protein
14d00056	0.39041	K12397	vesicle coat complex AP-3, beta subunit	um04793	0.30047	ni	conserved hypothetical protein
22d00145	0.3905	ni	hypothetical protein	um02772	0.30056	K02933	related to MRPL6 - mitochondrial ribosomal protein
25d00070	0.39056	K14005	vesicle coat complex COP1I, subunit SEC31	um01149	0.30067	ni	glyoxal oxidase 3
22d00221	0.3906	K09648	mitochondrial inner membrane protease, subunit IMP2	um03122	0.30091	ni	hypothetical protein
25c00023	0.39066	K14824	WD40 repeat nuclear protein Bop1	um04074	0.30095	ni	conserved hypothetical protein
3d00039	0.39071	K12819	RNA splicing factor - Slu7p	um12118	0.301	ni	putative protein
2d00072	0.39071	ni	hypothetical protein	um01226	0.30106	ni	hypothetical protein
9c00019	0.39079	ni	predicted membrane proteins	um00598	0.30113	ni	conserved hypothetical protein
16c00022	0.39079	ni	hypothetical protein	um10358	0.30132	ni	hypothetical protein
20c00039	0.39098	K15264	proliferation-associated nuclear protein	um11396	0.30136	K08286	related to ser
7d00230	0.39099	ni	predicted DHHC-type Zn-finger protein	um10139	0.30158	K01918	probable pantoate-beta-alanine ligase
15c00088	0.39099	ni	hypothetical protein	um04988	0.30165	ni	conserved hypothetical protein
9d00112	0.39103	K09885	aquaporin	um01386	0.30174	ni	hypothetical protein
18c00100	0.39107	ni	hypothetical protein	um11387	0.30182	ni	hypothetical protein
20c00001	0.39113	ni	hypothetical protein	um10372	0.3019	ni	related to MRPL3 - Mitochondrial ribosomal protein
22d00082	0.39115	ni	WD40 repeat protein	um00104	0.30218	ni	hypothetical protein
19d00106	0.39121	ni	hypothetical protein	um00725	0.30225	K02331	related to DNA polymerase V
5d00123	0.39146	K11303	histone acetyltransferase type b catalytic subunit	um05207	0.3024	K03506	conserved hypothetical protein
20d00005	0.3916	ni	hypothetical protein	um04767	0.30252	K09549	related to GIM4 - Gim complex component
10c00022	0.39162	ni	hypothetical protein	um05870	0.30255	ni	related to ERV1 - mitochondrial biogenesis and regulation of cell cycle
12c00066	0.39174	K14571	nuclear AAA ATPase	um01870	0.30255	K00799	related to glutathione-S-transferase
9c000371	0.39183	K15447	uncharacterized conserved protein	um01222	0.30278	ni	related to SAL1 - member of the Cas2-binding subfamily of the mitochondrial carrier family
22c00168	0.39181	ni	predicted methyltransferase	um05291	0.30279	ni	conserved hypothetical protein
18d00058	0.39186	ni	hypothetical protein	um01027	0.30289	K11761	conserved hypothetical protein
10d00057	0.39197	ni	hypothetical protein	um06416	0.30323	ni	conserved hypothetical protein
18d00032	0.39197	ni	hypothetical protein	um01746	0.30329	ni	putative protein
3c00031	0.39203	ni	hypothetical protein	um05828	0.30329	K07375	probable tubulin beta chain
7d00342	0.39212	K09522	zotuin and related molecular chaperones	um03498	0.30331	ni	related to CAF4 - CCR4 associated factor
12d00024	0.39216	K00670	subunit of the major N alpha-acetyltransferase	um03467	0.30348	K02992	related to RSM7 - mitochondrial ribosomal protein
16c00071	0.39229	K07443	6-O-methylguanine-DNA methyltransferase MGMT/MGT1	um02938	0.3036	ni	conserved hypothetical protein
1c00012	0.39232	ni	hypothetical protein	um06386	0.3036	K13095	probable MSL5 - branch point bridging protein
12d00039	0.39248	K05756	actin-related protein Arp2/3 complex, subunit ARPC3	um04062	0.30369	ni	conserved hypothetical protein
14c00013	0.39251	ni	hypothetical protein	um11222	0.30382	ni	related to MBP1 - transcription factor
11c00045	0.39256	ni	hypothetical protein	um04223	0.30391	ni	probable glutaredoxin
2c00082	0.39257	ni	rab GTPase interacting factor	um00101	0.30394	K03509	related to DNA polymerase eta
22d00058	0.39265	ni	hypothetical protein	um03028	0.30397	ni	conserved hypothetical protein
9c00003	0.39272	ni	nucleoside phosphatase	um05991	0.30397	K14376	probable PAP1 - poly
9c000365	0.39274	K12872	predicted RNA-binding protein	um02555	0.30397	ni	conserved hypothetical protein
7d00259	0.39287	ni	uncharacterized conserved protein	um04298	0.30399	K14857	probable SPB1 - required for ribosome synthesis
24c00069	0.39293	ni	hypothetical protein	um02936	0.30399	ni	putative protein
9c00037	0.39293	K11567	hypothetical protein	um03933	0.30411	ni	related to WWV1 - WW domain containing protein interacting with Metacaspase
22d00112	0.39295	K01082	salt-sensitive 3'-phosphoadenosine-5'-phosphatase HAL2/SAL1	um00950	0.30418	K16570	related to GIM4 - Gim complex component
13c00041	0.39298	K03248	transcription initiation factor 3, subunit g	um02187	0.30433	ni	conserved hypothetical protein
9d00217	0.39312	ni	hypothetical protein	um05432.2	0.30469	ni	related to ATP-binding cassette
14d00132	0.39328	ni	hypothetical protein	um11989	0.30506	K14776	probable HCA4 - can suppress the U14 snoRNA rRNA processing

5400023	0.39524	ni	hypothetical protein	um02739	0.30801	ni	probable nik-1 protein
26c00056	0.39542	ni	glutaryl-tRNA amidotransferase subunit B	um10169	0.30803	ni	conserved hypothetical Ustilago-specific protein
11c00034	0.39558	K10413	dynlins, heavy chain	um11806.2	0.30809	ni	conserved hypothetical protein
9a00341	0.39574	K11801	W-40 repeat-containing protein	um05517	0.30815	ni	conserved hypothetical protein
15c00089	0.39594	ni	hypothetical protein	um04430	0.30824	K01070	probable esterase D
16c00056	0.39595	K15109	mitochondrial carrier protein	um00887	0.30841	ni	conserved hypothetical protein
8a00092	0.39606	ni	hypothetical protein	um10054.2	0.30853	ni	hypothetical protein
5c00119	0.39644	K11446	DNA-binding protein jumonji/RBP2/SMCY	um03542	0.30866	ni	related to nucleoporin
4a00036	0.3966	K07494	hypothetical protein	um11982	0.30905	ni	conserved hypothetical protein
6c00124	0.39674	K01698	delta-aminolevulinic acid dehydratase	um01892	0.30911	K01637	probable isocitrate lyase
14d00031	0.39699	ni	uncharacterized conserved protein	um10591	0.30912	K06867	conserved hypothetical protein
7c000310	0.397	K10756	replication factor C, subunit RFC3	um15099	0.30913	ni	conserved hypothetical protein
9c00264	0.39725	ni	hypothetical protein	um01415	0.30914	ni	conserved hypothetical protein
19d00061	0.39725	ni	peroxisomal membrane protein MPV17 and related proteins	um11950	0.30917	ni	conserved hypothetical protein
10d00019	0.39733	K11108	RNA 3'-terminal phosphate cyclase	um04258	0.30938	ni	ni
7c00120	0.39744	ni	beta-galactosidase	um03992	0.30944	ni	Don3 interacting protein
12d00128	0.39761	ni	hypothetical protein	um03542	0.30947	ni	conserved hypothetical protein
14c00072	0.39778	ni	hypothetical protein	um06221	0.30957	ni	hypothetical protein
1c00046	0.39791	K02975	40S ribosomal protein S25	um04923	0.30969	K13754	conserved hypothetical protein
22d00221	0.39805	ni	hypothetical protein	um11976	0.30995	ni	putative protein
10d00228	0.39812	K14773	uncharacterized proteins of PIT N-term	um06448	0.31005	K02975	probable 40S ribosomal protein S25
10c00102	0.39816	ni	hypothetical protein	um04594	0.31013	ni	related to TIM44 - mitochondrial inner membrane import receptor subunit
2a00036	0.39858	K12848	U1-like Zn-finger protein	um01573	0.31015	ni	conserved hypothetical protein
16c00038	0.3986	K13110	microfibrillar-associated protein MFAP1	um11294	0.31022	ni	ni
25c00055	0.39862	K11484	histone deacetylase complex, catalytic component HDA1	um11461	0.31024	K01698	probable porphobilinogen synthase
22c00135	0.39891	ni	hypothetical protein	um03755	0.3103	ni	related to ADAM protease ADNF-B
19d00101	0.39891	ni	hypothetical protein	um04731	0.31074	ni	hypothetical protein
8c00056	0.39915	K02906	mitochondrial/chloroplast ribosomal protein L3	um00691	0.31076	ni	related to HRK1 - Protein kinase with a role in ion homeostasis
19d00010	0.39988	K13113	ubiquitin-like protein	um05258	0.31108	ni	putative protein
16c00020	0.40004	ni	mRNA cleavage factor I subunit	um03009	0.31111	ni	related to pyridoxamine-phosphate oxidase
3a00093	0.40076	ni	arylsulfatase deacetylase	um04621	0.31114	ni	putative protein
7c00030	0.40081	ni	mitochondrial sulfhydryl oxidase	um10872	0.31126	K01515	related to YSA1 - sugar-nucleotide hydrolase
6c00104	0.40084	ni	uncharacterized membrane protein	um05931	0.31133	ni	conserved hypothetical Ustilago-specific protein
8a00072	0.40092	ni	uncharacterized conserved protein	um11851	0.31142	K01867	probable MSW1 - tyrosophanyl-RNA synthetase
7c00153	0.401	ni	hypothetical protein	um05621	0.31142	ni	conserved hypothetical Ustilago-specific protein
7a00057	0.40105	ni	cyclin	um01829	0.31153	ni	related to alpha-L-arabinofuranoside I precursor
26c00073	0.40117	ni	hypothetical protein	um01855	0.31154	ni	conserved hypothetical protein
7a00128	0.40127	ni	hypothetical protein	um12165	0.31162	ni	conserved hypothetical protein
9d00116	0.40127	ni	hypothetical protein	um02376	0.31167	K13501	probable anthranilate synthase component II
9c00278	0.40138	ni	hypothetical protein	um10144	0.31172	K00387	related to Sulfite oxidase
22d0161	0.40142	ni	hypothetical protein	um15098	0.31185	ni	putative protein
9a00065	0.40164	ni	serine/threonine protein phosphatase	um02056	0.31193	ni	conserved hypothetical protein
26d00097	0.4018	K06889	predicted alpha/beta hydrolase BEM46	um03593	0.31194	K00227	probable steroid delta 5
6d00024	0.40181	ni	hypothetical protein	um10896	0.31194	ni	probable oligopeptide transporter
27c00026	0.40197	K10577	ubiquitin-protein ligase	um00590	0.3121	ni	putative protein
5c00013	0.40221	ni	hypothetical protein	um04489	0.31219	ni	probable MAS6 - mitochondrial inner membrane import translocase subunit
3a00006	0.40227	ni	sensory transduction histidine kinase	um10321	0.3124	K14790	conserved hypothetical protein
27d00023	0.40225	ni	uncharacterized conserved protein	um11074	0.31243	ni	related to SMC5 - Structural maintenance of chromosomes
6c00131	0.40233	ni	hypothetical protein	um10468.2	0.31253	ni	conserved hypothetical protein
22d00114	0.40235	ni	hypothetical protein	um03038	0.3127	ni	related to candidate tumor suppressor dph21
13c00023	0.40244	K11253	histones H3 and H4	um04486	0.31283	ni	conserved hypothetical Ustilago-specific protein
22d00025	0.40263	K06883	GT-40 domain protein	um17062	0.31286	ni	conserved hypothetical protein
24d00039	0.40255	ni	60S ribosomal protein L2/L8	um12150	0.31288	ni	conserved hypothetical protein
4a00043	0.40265	K01738	cysteine synthase	um02146	0.31298	ni	related to GABA permease
7c00183	0.4028	ni	GTPase-activating protein	um02423	0.31307	ni	hypothetical protein
15c00066	0.403	ni	hypothetical protein	um05761	0.31325	K10436	EB1-like protein
14c00128	0.40306	ni	poly(ADP-ribose) polymerase 1 complex, subunit FIP1	um01269	0.31333	ni	conserved hypothetical protein
14d00027	0.40306	K17439	phosphatidylethanolamine binding protein	um10720	0.31341	ni	related to ser
7a00065	0.40308	ni	permease of the drug/metabolite transporter	um04580	0.31353	ni	conserved hypothetical protein
27c00068	0.40319	K14304	nuclear pore complex component	um06086	0.31358	ni	related to branched-chain alpha-ketoacid dehydrogenase kinase
12c00055	0.40324	ni	hypothetical protein	um11721	0.31361	ni	conserved hypothetical protein
2a00012	0.40357	K14555	WD40-repeat-containing subunit of the 18S rRNA processing co	um15016	0.31385	K14843	conserved hypothetical protein
9c00027	0.40374	ni	hypothetical protein	um00266	0.3139	ni	related to Rps34 - 34 kD subunit of DNA-directed RNA polymerase I
26c00082	0.40382	K10398	kinesin-like protein	um11644	0.31397	ni	probable GLR1 - glutathione reductase
14d00117	0.40424	K02208	cyclin C-dependent kinase CDK3	um06200	0.31414	K13336	related to Peroxisomal assembly protein PEX3
22c00201	0.40424	ni	predicted 2-alpha-mannosyltransferase	um00624	0.31417	ni	conserved hypothetical protein
3c00066	0.40427	ni	predicted methyltransferase	um00624	0.31425	K00999	related to CDP diacylglycerol-inositol 3-phosphatidyltransferase
7c00005	0.40429	K01843	hypothetical protein	um02777	0.31436	K12880	related to THO complex subunit 3
25c00026	0.40431	ni	hypothetical protein	um10354	0.31441	ni	conserved hypothetical protein
2c00037	0.40432	ni	predicted transmembrane protein	um03226	0.31448	ni	related to ALG6 - glucosyltransferase
12d00140	0.40449	ni	hypothetical protein	um03226	0.31451	K03349	related to component of the anaphase promoting complex
7a00150	0.40454	ni	hypothetical protein	um04464	0.31463	ni	conserved hypothetical protein
9a00089	0.40461	ni	hypothetical protein	um12176	0.31468	K13171	conserved hypothetical protein
26c00016	0.40511	K09142	uncharacterized conserved protein	um12138.2	0.31478	ni	hypothetical protein
11c00086	0.40513	ni	hypothetical protein	um04551	0.3148	K15564	conserved hypothetical protein
5c00145	0.40523	ni	hypothetical protein	um11618	0.31481	ni	related to CYC2 - cytochrome-c mitochondrial import factor
7c00148	0.40535	ni	predicted E3 ubiquitin ligase	um02662	0.31489	K14558	probable periodic tryptophan-protein PWP2
14c00082	0.40538	ni	hypothetical protein	um10213	0.3153	K02132	probable H -transporting ATP synthase alpha chain
6c00041	0.40542	ni	gamma-glutamyltransferase	um02908	0.31525	K02309	related to Hsk1-interacting molecule 1
11d00016	0.40543	ni	hypothetical protein	um02908	0.31539	ni	related to nitrogen assimilation transcription factor nit-4
5c00090	0.40544	ni	non-ribosomal peptide synthetase	um05847	0.31544	K01866	probable TYS1 - tyrosyl-tRNA synthetase
9a00153	0.40559	K06072	HEAT repeat-containing protein	um11945	0.31547	K00844	probable hexokinase
9a00354	0.40562	ni	hypothetical protein	um00607	0.31548	ni	related to phosducin homolog
4c00037	0.40564	K03114	cyclin-dependent kinase WEE1	um03263	0.31548	K15083	probable RAD16 - nucleotide excision repair protein
7c00321	0.40568	ni	hypothetical protein	um00260	0.31551	ni	putative protein
9a00268	0.40587	ni	predicted sugar kinase	um03677	0.31556	ni	hypothetical protein
20c00024	0.40591	ni	Zn finger protein	um00906.2	0.31574	ni	conserved hypothetical protein
27d00004	0.40602	K12834	uncharacterized conserved protein	um02475	0.31574	ni	hypothetical protein
7a00179	0.40608	ni	hypothetical protein	um02826	0.31589	ni	conserved hypothetical protein
9c00072	0.4061	ni	hypothetical protein	um06215	0.31592	ni	related to protein ste16
7a00059	0.40611	K10158	thymidylate synthase	um11928	0.31603	ni	related to cyclin
16c00040	0.40611	ni	hypothetical protein	um01615	0.31604	ni	putative protein
9c00345	0.40611	K03941	NADH-tubiquinone oxidoreductase, NDUFS9/23 kDa subunit	um10029	0.31604	ni	related to Glucan 1
8c00117	0.40613	ni	structural maintenance of chromosome protein SMC5/Spr18	um05588	0.31606	K15115	related to FAD carrier protein FLX1
8a00074	0.40617	K08739	DNA mismatch repair protein - MLH3 family	um04013	0.31607	K11676	conserved hypothetical protein
14d00089	0.40637	ni	hypothetical protein	um03528	0.31608	K01046	related to TGL2 - triacylglycerol lipase
27d00025	0.40639	ni	predicted the major facilitator superfamily	um10391	0.31615	K11087	conserved hypothetical protein
26c00069	0.4064	ni	Cs2/calmodulin-dependent protein kinase kinase beta	um04229	0.31626	ni	probable hypothetical protein
9a00410	0.4064	K15198	transcription initiation factor TFIIB, Bdp1 subunit	um10134	0.31639	ni	conserved hypothetical protein
12c00049	0.40641	K14778	ATP-dependent RNA helicase	um10105	0.31655	ni	conserved hypothetical protein
11c00048	0.40641	ni	nuclear transport receptor Karyopherin-beta2/Transportin	um05947.2	0.31669	K01797	related to DCS1 - involved in nitrogen-catabolite metabolism
13c00014	0.40644	ni	hypothetical protein	um02468	0.3168	ni	Mgl1 protein
3c00029	0.40647	ni	hypothetical protein	um03036	0.31684	ni	conserved hypothetical protein
6c00111	0.40651	ni	hypothetical protein	um10627	0.31689	K01803	related to triose-phosphate isomerase
15d00069	0.40657	ni	hypothetical protein	um05940	0.31689	ni	conserved hypothetical protein
5a00025	0.40691	K06997	proline synthetase co-transcribed protein	um04081	0.31696	K00799	related to glutathione S-transferase
11d00049	0.40707	ni	hypothetical protein	um05407	0.31721	ni	probable ALD4 - aldehyde dehydrogenase
8c00071	0.40715	K17080	prothelin	um00564	0.31734	K01488	related to adenosine deaminase
7c00070	0.40716	ni	hypothetical protein	um12136	0.31735	ni	conserved hypothetical protein
6a00011	0.40761	K15283	glucose-6-phosphate/phosphate and phosphoenolpyruvate/phosph	um05145	0.31749	ni	putative protein
26d00086	0.40768	K12908	hypothetical protein	um10574	0.31753	K13107	related to iron binding motif protein
20c00057	0.40774	K00764	glutamine phosphoribosylpyrophosphate amidotransferase	um06001	0.3176	ni	conserved hypothetical protein
7c00103	0.40781	K14169	hypothetical protein	um00540	0.31764	ni	conserved hypothetical protein
22d00272	0.40788	ni	hypothetical protein	um04188	0.31765	K12815	probable PRP16 - RNA-dependent ATPase
16c00086	0.40791	ni	hypothetical protein	um03461	0.31808	ni	conserved hypothetical protein
22c00269	0.40808	K01062	phospholipase A2	um05180	0.31832	K14820	related to BRX1 - Essential nucleolar protein required for biogenesis of the 60S ribosomal subunit
13c00071	0.40845	K03615	hypothetical protein	um10651	0.31836	ni	conserved hypothetical protein
20a00006	0.40848	K02178	mitotic checkpoint serine/threonine protein kinase	um01587	0.31845	ni	ni
7a00101	0.4088	ni	hypothetical protein	um00614	0.31864	K11518	probable TOM40 - mitochondrial import receptor
22d0187	0.40885	ni	hypothetical protein	um05917	0.31865	K01669	related to Deoxyribosylprimidilate photolyase
12d00114	0.40899	ni	hypothetical protein	um01931	0.31872	K02350	probable catalytic subunit of DNA polymerase zeta UPR-1
19c00021	0.40903	K06269	serine/threonine specific protein phosphatase PP1, catalytic subu	um06003	0.31878	K09578	probable prolyl isomerase Ess1
10c0030	0.40911	K11770	SWI-SNF chromatin remodeling complex, Snt5 subunit	um11292	0.3188	K06970	conserved hypothetical protein
9a00321	0.40942	K10842	predicted E3 ubiquitin ligase	um10230	0.31891	K03031	hypothetical protein
27d0102	0.40953	ni	ATP-dependent DNA helicase	um02731	0.31885	K05292	related to GPI-anchor transamidase complex subunit Gpi16
2a00028	0.40965	K08342	cysteine protease	um12251	0.3192	ni	conserved hypothetical protein
22d00232	0.40999	K01626	hypothetical protein	um05538	0.31929	ni	putative protein
25c00007	0.41006	ni	hypothetical protein	um05498	0.31956	ni	related to putative oxysterol-binding protein OSBP
18d00016	0.41008	K06070	acyltolerantase	um02468	0.31957	ni	related to ABC1 - ubiquitin-cytochrome-c reductase complex assembly protein
7a00080	0.41023	ni	predicted membrane protein	um03599	0.31981	K16948	probable CDC12 - septin
19d00088	0.41031	K03456	protein phosphatase 2A regulatory subunit A and related proteins	um02889	0.31987	K08508	related to SEC9 - protein transport protein
9a00425	0.41037	ni	hypothetical protein	um06036	0.31994	K12261	Coiled-coil domain-containing protein 12
7a000294	0.4109	K00600	glycine serine hydroxymethyltransferase	um04775	0.32005	K11093	conserved hypothetical protein
11d00004	0.41064	ni	hypothetical protein	um10437	0.32003	ni	conserved hypothetical protein
7c00324	0.4107	ni	hypothetical protein	um05760	0.32066	ni	hypothetical protein
22d00085	0.41088	K11806	sof1-like rRNA processing protein	um01321	0.32067		

27d00100	0.41363	K03679	exosomal 3'-5' exonuclease complex, subunit Rrp4	um02007.2	0.32263	ni	related to mitochondrial carrier family protein
3400012	0.41373	ni	hypothetical protein	um10376	0.32271	ni	conserved hypothetical protein
22c00197	0.41384	ni	hypothetical protein	um00477	0.32285	ni	related to Monocarboxylate transporter 1
18c00056	0.41389	ni	uncharacterized conserved protein	um04789	0.32309	K14785	conserved hypothetical protein
5c00006	0.41391	ni	hypothetical protein	um10824	0.3231	K12397	related to Beta3 protein
22d00218	0.41401	ni	hypothetical protein	um02075	0.32311	ni	related to calpain-like protease PalBory
25c00044	0.41411	ni	dimeric dihydrodipicolyl dehydrogenase	um00629	0.3232	ni	putative protein
22c00088	0.41423	K01647	citrate synthase	um00573	0.32327	ni	conserved hypothetical protein
15c00094	0.41427	ni	voltage-gated shaker-like K <sup>+</sup> channel, subunit beta2KCNA B	um00947	0.32337	ni	related to Stress-activated map kinase interacting protein 1
14d00051	0.41509	ni	hypothetical protein	um10955	0.32348	ni	conserved hypothetical protein
9d000242	0.41515	ni	hypothetical protein	um00294	0.32353	K02873	probable ribosomal protein L13B
7d000255	0.41541	K04799	5'-3' UTR binding protein	um11194	0.32357	K0354	related to cap-dependent cap protease
20d00017	0.41561	K03783	purine nucleoside phosphorylase	um06388	0.32374	K02954	related to MRP2 - mitochondrial ribosomal protein
15c00042	0.41563	ni	hypothetical protein	um05995	0.32378	ni	related to Acid phosphatase precursor
89d00001	0.41567	ni	ni	um04227	0.32386	ni	putative protein
11d00027	0.41571	ni	hypothetical protein	um05361	0.32401	ni	related to Laccase I precursor
25d00081	0.41591	ni	hypothetical protein	um00577	0.32419	ni	conserved hypothetical protein
19d00113	0.41624	K00833	acetylornithine aminotransferase	um06349	0.32427	ni	related to siderophore iron transporter mirc
22c00268	0.41629	K01477	allantoicase	um05773	0.32456	ni	putative protein
7c00113	0.41646	ni	hypothetical protein	um01961	0.3246	ni	hypothetical protein
26d00063	0.41647	K09549	molecular chaperone Prefoldin, subunit 2	um02089	0.32462	K03350	related to nuclear protein binA
15d00090	0.41659	K13348	peroxisomal membrane protein MPV17 and related proteins	um05527	0.32482	ni	conserved hypothetical protein
8d00075	0.41667	ni	hypothetical protein	um03244	0.32488	K11319	conserved hypothetical protein
10d00094	0.41669	K16261	amino acid transporters	um06255	0.32495	ni	hypothetical protein
15d00071	0.41688	ni	hypothetical protein	um04350	0.32514	ni	related to 3-phosphase A precursor
7c00218	0.41735	ni	translocase of outer mitochondrial membrane complex, subunit T	um10809.2	0.3253	ni	hypothetical protein
22c00188	0.41743	ni	hypothetical protein	um04811	0.32554	ni	related to ADP1 - ABC transporter
9c00403	0.41745	K02918	60S ribosomal protein L35	um04744	0.32603	ni	conserved hypothetical protein
18c00081	0.41761	K10844	RNA polymerase II transcription initiation/nucleotide excision repa	um11305	0.32606	ni	conserved hypothetical protein
13c00053	0.41765	K02892	hypothetical protein	um11616	0.32619	ni	related to TIM13 - Translocase of the inner membrane
22d00244	0.41782	ni	hypothetical protein	um03293	0.32628	K01530	related to ONP1 - protein transporter
27d00004	0.41788	K02899	mitochondrial ribosomal protein MRP7	um02688	0.32658	ni	putative protein
10d00080	0.4179	K11090	FOG, RRM domain	um01360	0.32709	ni	hypothetical protein
6c00088	0.41804	ni	hypothetical protein	um11852	0.32711	K08773	related to BEM3 - GTPase-activating protein
11c00332	0.41807	K00801	squalene synthase	um01913	0.32724	ni	putative protein
22c00169	0.41814	ni	hypothetical protein	um01657	0.32739	ni	putative protein
13c00001	0.41821	ni	hypothetical protein	um10430	0.3274	ni	related to cell cycle control protein cwf25
25d00043	0.41823	ni	1-aminocyclopropane-1-carboxylate synthase	um10729	0.32751	ni	conserved hypothetical protein
4d00002	0.4183	ni	hypothetical protein	0.32758	K01556	related to kynureninase	
9c00082	0.41832	ni	hypothetical protein	um04024	0.32758	ni	related to Choline dehydrogenase
16d00017	0.41838	ni	hypothetical protein	um10724	0.32759	K02867	probable MRPL19 - mitochondrial ribosomal protein
22c00297	0.41843	ni	hypothetical protein	um01249	0.32803	K12622	probable LSM3 - U6 snRNA-associated Sm-like protein
10c00031	0.41859	K14563	fibrillarin and related nucleolar RNA-binding proteins	um11563	0.32803	ni	conserved hypothetical protein
7c00247	0.41862	ni	hypothetical protein	um10693	0.32818	K14845	related to RA11 - Rat1p Interacting Protein
9c00039	0.41864	ni	hypothetical protein	um02045	0.32819	ni	conserved hypothetical protein
22d00011	0.41868	K02327	DNA polymerase delta, catalytic subunit	um02823	0.32846	K11269	related to CTF18 - Chromosome Transmission Fidelity factor
7d00193	0.41881	ni	hypothetical protein	um02537	0.32854	ni	conserved Hypothetical protein
10d00335	0.41884	K01057	6-phosphogluconate-2-epimerase-like protein	um01954	0.32857	ni	conserved hypothetical protein
22c00147	0.41896	ni	hypothetical protein	um00317	0.32861	ni	hypothetical protein
9d00206	0.4192	K01259	hypothetical protein	um03700	0.32864	K16261	probable DIP5 - Glutamate and aspartate permease - able to mediate transport of other amino acids
22d00297	0.41929	ni	hypothetical protein	um02966	0.32878	K14721	conserved hypothetical protein
12d00051	0.41945	K03251	translational initiation factor 3, subunit d	um01624	0.32891	K14006	probable SEC23 - component of COPII coat of ER-golgi vesicles
7c00099	0.41946	ni	hypothetical protein	um05128	0.32892	ni	conserved hypothetical protein
2d00073	0.41953	K14842	uncharacterized conserved protein related to ribosomal protein S1	um11952	0.32894	K04079	probable heat shock protein 80
18c00103	0.4196	ni	hypothetical protein	um01161	0.32897	ni	related to BEM2 - GTPase-activating protein
7d00343	0.41968	K02875	60S ribosomal protein L14	um02264	0.32901	ni	putative protein
14d00085	0.41972	ni	hypothetical protein	um10371	0.32909	K08266	related to LSTR - required for transport of permeases from the golgi to the plasma membrane
22c00246	0.41991	ni	hypothetical protein	um02159	0.32912	ni	conserved hypothetical protein
10d00037	0.41993	ni	hypothetical protein	um01156	0.32948	ni	related to myo-inositol transporter
18d00024	0.42019	ni	MEKK and related serine/threonine protein kinases	um06363	0.3297	K08269	related to APG1 - essential for autophagocytosis
15d00057	0.4202	ni	flavin-containing monooxygenase	um02227	0.32972	K01230	related to alpha-mannosidase
9c00203	0.42022	ni	hypothetical protein	um05132	0.32983	K012175	related to COP9 signalosome complex subunit 1
20d00078	0.42022	ni	hypothetical protein	um01531	0.33001	ni	related to Importin 11
13d00076	0.42024	ni	transport protein particle TRAPP complex subunit	um05278	0.33011	ni	conserved hypothetical protein
7c00280	0.42031	K06867	FOG, Ankyrin repeat	um10036	0.33011	K03352	conserved hypothetical protein
6c00119	0.42047	ni	hypothetical protein	um12291	0.33021	ni	conserved hypothetical protein
15d00027	0.4205	ni	hypothetical protein	um12182	0.33045	ni	putative protein
8c00069	0.42052	ni	hypothetical protein	um05922	0.33061	ni	related to RMD6 - Cytosolic protein required for sporulation
6d00134	0.42064	K13100	uncharacterized conserved protein	um04038	0.33071	ni	hypothetical protein
27c00006	0.42064	ni	regulator of Rac1	um10923.2	0.33085	ni	conserved hypothetical protein
13d00049	0.42065	K12843	putative uL6 small nuclear ribonucleoprotein	um05191	0.33096	ni	putative protein
7d00347	0.4208	K01881	prolyl-tRNA synthetase	um11736	0.33099	ni	putative protein
8c00121	0.4211	ni	hypothetical protein	um04849	0.33112	ni	hypothetical protein
26c00031	0.42117	K02922	60S ribosomal protein L37	um05458	0.33122	ni	related to CCH1 - Calcium channel
9c00009	0.42123	ni	predicted steroid reductase	um10338	0.33125	ni	conserved hypothetical protein
12c00124	0.42134	K03027	RNA polymerase I and III, subunit RPA40/RPC40	um02278	0.33138	ni	putative protein
22d00248	0.42137	ni	hypothetical protein	um02221	0.33154	ni	conserved hypothetical protein
8d00104	0.42139	ni	hypothetical protein	um03435	0.33161	ni	conserved hypothetical protein
14d00124	0.4217	ni	FOG, Zn-finger	um01210	0.33172	ni	related to mitochondrial import receptor subunit TOM20
5d00033	0.42175	K01613	predicted histone H4 acetyltransferase	um10457	0.33173	ni	related to protein involved in intramitochondrial protein sorting
22c00236	0.42191	K00540	NADH, flavin oxidoreductase	um10195	0.3321	K10956	probable endoplasmic reticulum insertion protein SEC61
6c00132	0.42195	ni	hypothetical protein	um10662	0.33217	K15544	probable SSU72 - Nuclear zinc-finger motif containing protein
3d00063	0.42218	ni	hypothetical protein	um03055	0.33226	ni	conserved hypothetical protein
20d00021	0.42218	ni	hypothetical protein	um12168	0.33248	ni	putative protein
7d00147	0.42219	K02931	mitochondrial/chloroplast ribosomal protein L5/L7	um02338	0.3326	K0488	related to PEP12 syntactin
9c00065	0.42254	ni	aquaporin	um01006	0.33266	ni	conserved hypothetical protein
25c00084	0.42257	K03939	NADH:ubiquinone oxidoreductase, NDUFS6/13 kDa subunit	um10787	0.3327	K01679	probable FUM1 - fumarate hydratase
7c00299	0.4226	ni	hypothetical protein	um06383	0.33273	ni	related to MAP kinase
6c00095	0.42265	K02835	mitochondrial polypeptide chain release factor	um0071	0.33276	ni	putative protein
22c00299	0.42279	ni	hypothetical protein	um01732	0.33296	K14811	probable DBP3 - putative RNA helicase required for pre-rRNA processing
21c00003	0.42294	ni	hypothetical protein	um02351	0.33317	K14684	related to mitochondrial carrier protein
22c00141	0.42295	ni	hypothetical protein	um05115	0.33318	ni	conserved hypothetical protein
10c00056	0.42303	ni	hypothetical protein	um01215	0.33333	ni	related to vacuolar segregation protein PEP7
2c00084	0.42307	ni	sirtuin 4 and related class II sirtuins	um02044	0.33337	K01874	probable METHIONYL-tRNA SYNTHETASE
12d00080	0.42308	K14753	G protein beta subunit-like protein	um04278.2	0.33339	ni	putative protein
27d00080	0.4231	K11667	uncharacterized conserved protein	um12319	0.33356	ni	hypothetical protein
8c00055	0.42312	ni	hypothetical protein	um03950	0.33372	K15304	related to YRB2 - Ran-GTPase-binding protein involved in nuclear protein export
18d00116	0.42313	ni	hypothetical protein	um15179	0.33376	ni	putative protein
9c00025	0.42315	K14455	aspartate aminotransferase	um03047	0.33382	ni	hypothetical protein
26d00071	0.42347	ni	hypothetical protein	um11901	0.33385	ni	related to Lactamase
24d00043	0.42372	ni	hypothetical protein	um02895	0.3341	ni	related to ERG27 - 3-keto sterol reductase
7d00149	0.42384	K13431	signal recognition particle receptor, alpha subunit	um00703	0.3343	K04536	G-protein beta subunit Bpp1
11c00087	0.42387	ni	invasion-inducing protein TIAM1/DC24	um11160	0.33434	ni	hypothetical protein
14c00009	0.42402	ni	uncharacterized conserved protein	um01427	0.33437	ni	related to Crg1 protein
5d00014	0.42419	K02933	mitochondrial/chloroplast ribosomal protein L6	um04072	0.33456	ni	conserved hypothetical protein
20d00060	0.42423	K08734	DNA mismatch repair protein - MLH1 family	um05583	0.33485	ni	putative protein
15d00024	0.42452	ni	hypothetical protein	um05659	0.33449	ni	conserved hypothetical protein
6c00026	0.42454	ni	methyltransferase	um02559	0.33494	K15306	probable YRB1 - ran-specific GTPase-activating protein
7c00227	0.42457	K11699	RNA-directed RNA polymerase QDE-1	um11477	0.33503	ni	conserved hypothetical protein
5c00124	0.4246	ni	cholesterol transport protein	um03672	0.33509	K14298	related to GLE2 - required for nuclear pore complex structure and function
7d00072	0.42471	ni	hypothetical protein	um10874	0.33512	ni	conserved hypothetical protein
6c00098	0.42481	ni	hypothetical protein	um04886	0.3354	ni	related to Hc1 protein
10c00069	0.42486	ni	hypothetical protein	um10837	0.33558	ni	conserved hypothetical protein
25c00032	0.42498	ni	hypothetical protein	um02268	0.33571	ni	putative protein
4c00030	0.42517	K00799	glutathione S-transferase	um04031	0.3358	ni	related to BST1 - negative regulator of COPII vesicle formation
6c00133	0.4252	ni	FOG, Zn-finger	um02079	0.33583	K02947	probable ribosomal protein S10
27d00034	0.42521	ni	hypothetical protein	um12229	0.33598	ni	related to diacylglycerol
10d00072	0.42539	K11426	predicted histone tail methylase containing SET domain	um01284	0.33636	K06027	probable SEC18 - vesicular-fusion protein
6c00003	0.42544	ni	hypothetical protein	um02828	0.33647	ni	conserved hypothetical protein
9c00269	0.42551	ni	hypothetical protein	um02558	0.33678	K15202	conserved hypothetical protein
18c00046	0.42559	ni	densitly-regulated protein related to translation initiation factor 1	um01852	0.33704	K0869	conserved hypothetical protein
5c00111	0.42559	ni	hypothetical protein	um03809	0.33712	K00889	related to phosphatidylinositol-4-phosphate 5-kinase
9d00188	0.42565	ni	hypothetical protein	um11330			



5400030	0.42949	K10847	DNA excision repair protein XPA/XPC/RAD14	um11532	0.34064	ni	conserved hypothetical protein
14400120	0.42968	K03539	protein subunit of nuclear ribonuclease P	um10763	0.34081	K03469	conserved hypothetical protein
7600165	0.42971	ni	hypothetical protein	um00012	0.34091	ni	related to ZIM17 - Zinc finger Motif protein
19c00011	0.42981	ni	hypothetical protein	um03691	0.34112	ni	conserved hypothetical protein
22c00165	0.42989	K13728	mitotic spindle checkpoint protein	um01227	0.34115	ni	hypothetical protein
9400019	0.43008	ni	hypothetical protein	um03908	0.34128	ni	related to TPO1 - Vacuolar polyamine-H <sup>+</sup> antiporter
13c00011	0.4301	ni	glucose-repressible alcohol dehydrogenase transcriptional effect	um11312	0.34128	ni	conserved hypothetical protein
15c00017	0.43018	ni	subunit of cargo transport vesicle tethering complex - Sec34p	um04431	0.34129	K02995	probable RPS8A - ribosomal protein S8
22d00078	0.43018	ni	uncharacterized conserved protein	um11494	0.34131	K14012	related to SHP1 - potential regulatory subunit for Gic7p
11c00010	0.43021	ni	hypothetical protein	um01032	0.34133	ni	related to ROM2 - GDP
16d00082	0.43025	ni	hypothetical protein	um04681	0.34136	ni	hypothetical protein
9d00193	0.43027	K02936	60S ribosomal protein L7A	um11770	0.34141	ni	conserved hypothetical protein
5400002	0.4303	K00262	glutamate/leucine/phenylalanine/valine dehydrogenases	um04271	0.34143	ni	putative protein
7d00152	0.43043	K00058	D-3-phosphoglycerate dehydrogenase	um06035	0.34155	K00764	probable ADE4 - amidophosphoribosyltransferase
25d00005	0.4305	ni	hypothetical protein	um10048	0.34178	ni	related to COX8 - cytochrome-c oxidase chain VIII
13c00028	0.43059	K12737	peptidyl-prolyl cis-trans isomerase	um03803	0.34181	K10389	gamma-tubulin
7d00153	0.43067	K01372	bicoid/mycrin hydrolases and aminopeptidases of cysteine protease	um04571	0.34194	ni	probable RKM101 - mitochondrial genome maintenance protein
1d00001	0.43075	ni	hypothetical protein	um00786	0.342	ni	conserved hypothetical protein
22c00296	0.43082	K15979	transcriptional coactivator p100	um11017	0.34201	ni	related to CAP59
9c00255	0.43094	ni	hypothetical protein	um10554	0.34203	ni	conserved hypothetical Ustilago-specific protein
22c00001	0.43101	K10759	hypothetical protein	um05310	0.34212	ni	conserved hypothetical Ustilago-specific protein
12c00069	0.43101	ni	hypothetical protein	um05239	0.34218	ni	related to NAD-dependent deacetylase sirtuin type 4
2c00026	0.43104	K07300	Ca2+/H <sup>+</sup> antiporter VCX1	um02211	0.34258	K08073	related to bifunctional polyphosphatase
16c00057	0.43107	K01858	myo-inositol-1-phosphate synthase	um00762	0.34261	ni	hypothetical protein
3000006	0.43107	ni	hypothetical protein	um10943	0.34266	ni	conserved hypothetical protein
7d00141	0.43109	K12857	UlsA/HRP-specific protein-like factor and related proteins	um11943.2	0.34271	ni	conserved hypothetical protein
7c00029	0.43127	ni	mitochondrial carnitine-acylcarnitine carrier protein	um02850	0.34282	ni	ni
9c00143	0.43132	ni	mitochondrial fatty acid anion carrier protein	um05819	0.34303	ni	hypothetical protein
27d00015	0.43137	K03320	ammonia permease	um11642	0.34318	ni	conserved hypothetical protein
10c00086	0.43149	ni	mitochondrial/lysosomal beta-ketothio-ACP reductase	um02967	0.34324	K03686	related to MDJ1 - heat shock protein
22d00179	0.43156	ni	uncharacterized conserved protein	um01230	0.34329	K14676	related to NTE1 - Serine esterase
19d00072	0.43156	ni	beta-1rpt (transducin repeats containing)/Slmb proteins	um11650	0.34366	ni	related to Oxidoreductase
13c00090	0.43179	ni	hypothetical protein	um05734	0.34368	K04513	probable GTPase Rho1
20c00062	0.43182	ni	hypothetical protein	um02853	0.34369	ni	conserved hypothetical Ustilago-specific protein
9c00187	0.43183	ni	uncharacterized conserved protein	um01298.2	0.34389	ni	conserved hypothetical Ustilago-specific protein
12c00025	0.4321	ni	hypothetical protein	um04985	0.34424	ni	probable ORM1 - unfolded protein response protein
10c00077	0.43214	ni	uncharacterized conserved protein	um01099	0.34427	K00022	probable short chain 3-hydroxyacyl-CoA dehydrogenase
9c00179	0.43238	ni	lish moff-containing protein	um05354.2	0.34428	ni	conserved hypothetical protein
16d00036	0.43262	ni	hypothetical protein	um05334	0.34437	ni	putative protein
12d00062	0.43262	ni	hypothetical protein	um01252	0.3444	K06943	probable NOG1 - nuclear G-protein required for 60S ribosomal subunit biogenesis
25d00021	0.4329	ni	hypothetical protein	um10568.2	0.34479	ni	conserved hypothetical protein
9c00181	0.43302	K10689	ubiquitin-protein ligase	um05753	0.34482	ni	hypothetical protein
8c00095	0.4332	ni	lipid exporter ABCA1 and related proteins	um05058	0.34486	K00658	probable KGG2 - dihydrolipoil transsuccinylase component of the alpha-ketoglutarate dehydrogenase complex
26d00005	0.43334	K08337	ubiquitin-activating E1 enzyme-like protein	um03000	0.34502	ni	conserved hypothetical protein
15d00016	0.43345	ni	hypothetical protein	um01814	0.34511	ni	conserved hypothetical protein
5c00080	0.43345	ni	hypothetical protein	um10037	0.34513	ni	probable mitochondrial import receptor subunit tom7
26c00081	0.43345	K17387	kinesin-like protein	um03058	0.34526	K02953	probable 40S ribosomal protein S13
7c00249	0.4335	K15113	mitochondrial carrier protein MRS3/4	um10478	0.34551	ni	related to RER1 protein
9d00345	0.43367	ni	membrane coat complex Retromer, subunit VPSS/SNX1	um02226	0.34551	ni	conserved hypothetical protein
25c00090	0.43374	ni	hypothetical protein	um04816	0.34561	ni	related to Endoglycanase 1 precursor
22d00054	0.43375	K01889	phenylalanyl-tRNA synthetase, beta subunit	um00563	0.34565	ni	related to MRPL33 - mitochondrial ribosomal protein
9d00387	0.43385	ni	hypothetical protein	um02141	0.34575	ni	effector family protein Eff1-11
5c00128	0.43385	K03062	26S proteasome regulatory complex, ATPase RPT2	um01511	0.34582	ni	hypothetical protein
22c00312	0.43406	K13704	predicted alpha/beta hydrolase	um11405	0.34589	K03358	related to anaphase promoting complex subunit 11
9c00122	0.43415	ni	synaptic vesicle transporter SV2	um04301	0.34601	K14827	conserved hypothetical protein
22d00124	0.43451	K03657	3'-5' DNA helicase	um01387	0.3461	ni	putative protein
13c00006	0.43453	ni	synaptic vesicle transporter SVOP and related transporters	um11811	0.34612	K06770	probable RhoGAP1 - Rho GTPase-activating protein
9c00173	0.43456	ni	WD40 repeat protein	um00310	0.34621	K14829	related to WD-repeat protein crtb3
7d00204	0.43482	K03002	RNA polymerase I, second largest subunit	um02656	0.34624	ni	conserved hypothetical protein
9c00253	0.43489	K06678	chromosome condensation complex Condensin, subunit G	um01512	0.34643	K11718	related to UDP-glucose
4d00020	0.43491	K16302	predicted membrane protein	um02452	0.34647	ni	putative protein
9c00172	0.43492	ni	GTP-binding ADP-ribosylation factor Arf1	um15039	0.3465	K15223	conserved hypothetical protein
25c00056	0.43546	ni	predicted membrane protein	um04251	0.34666	ni	conserved hypothetical protein
9c00086	0.43556	ni	FOG, Zn-finger	um02242	0.34671	K07566	related to translation initiation protein SUA5
3d00091	0.4356	ni	hypothetical protein	um00423	0.34673	K10364	related to CAP1 - F-actin capping protein alpha subunit
19c00149	0.43574	ni	hypothetical protein	um01941	0.34681	ni	hypothetical protein
22c00216	0.4358	ni	hypothetical protein	um10298	0.34683	ni	putative protein
7d00068	0.43588	ni	phosphatidic acid-preferring phospholipase A1	um12308	0.34704	ni	conserved hypothetical protein
4d00024	0.43595	K02936	mitochondrial/chloroplast ribosomal protein S9	um01359	0.34717	ni	conserved hypothetical protein
20c00057	0.43603	ni	zinc-binding protein of the histidine triad	um05830	0.34719	ni	putative protein
9d00346	0.43605	K00249	short-chain acyl-CoA dehydrogenase	um05846	0.34733	ni	probable MSH1 - DNA mismatch repair protein
22c00048	0.43624	ni	hypothetical protein	um10284	0.34741	ni	probable vacuolar sorting protein
13d00106	0.43638	ni	hypothetical protein	um02989	0.34745	ni	related to IME4 - positive transcription factor for IME2
7d00309	0.43644	ni	hypothetical protein	um10500	0.34746	ni	hypothetical protein
18c00067	0.43653	K00211	phenanthrene dehydrogenase	um02844	0.34747	ni	conserved hypothetical protein
15c00073	0.43688	ni	amphiphysin	um02123	0.34764	K06877	conserved hypothetical protein
27d00019	0.43691	K02320	DNA polymerase alpha, catalytic subunit	um01077.2	0.34773	ni	putative protein
5c00072	0.43703	K03036	26S proteasome regulatory complex, subunit RPN6/PSMD11	um01132	0.34773	ni	hypothetical protein
6d00029	0.43715	ni	hypothetical protein	um04118	0.34775	ni	conserved hypothetical Ustilago-specific protein
16c00007	0.4373	ni	hypothetical protein	um10535	0.34798	K12863	related to cell cycle control protein cw15
12d00037	0.43736	ni	5'-AMP-activated protein kinase, gamma subunit	um02774	0.34812	ni	related to alternative oxidase precursor
19c00085	0.43754	K14209	amino acid transporters	um10146	0.34822	K14753	probable CPC2 protein
7c00164	0.43778	ni	hypothetical protein	um03431	0.34831	ni	conserved hypothetical protein
26d00002	0.43796	K10209	hypothetical protein	um05101	0.34835	K03163	DNA topoisomerase I
26d00115	0.43818	ni	hypothetical protein	um10621	0.34838	K02912	probable 60S ribosomal protein L32
10c00037	0.43823	K13509	1-acyl-sn-glycerol-3-phosphate acyltransferase	um05053	0.34846	ni	conserved hypothetical protein
16d00059	0.43835	ni	hypothetical protein	um02405	0.34847	ni	conserved hypothetical protein
12c00088	0.43836	ni	hypothetical protein	um01278	0.34862	ni	conserved hypothetical protein
6c00047	0.43837	K06693	26S proteasome regulatory complex, subunit PSMO9	um03797	0.34876	ni	hypothetical protein
10c00068	0.43842	ni	transferrin receptor and related proteins	um10878	0.34885	ni	conserved hypothetical protein
6d00061	0.43853	ni	hypothetical protein	um15092	0.34896	K11227	probable PBS2 - tyrosine protein kinase of the MAP kinase family
25d00064	0.43854	ni	hypothetical protein	um01235	0.34821	ni	conserved hypothetical Ustilago-specific protein
24c00001	0.43874	ni	non-ribosomal peptide synthetase	um03170	0.34943	K13181	related to DR51 - RNA helicase of the DEAD box family
27d00094	0.4389	ni	hypothetical protein	um03877	0.34943	ni	hypothetical protein
15d00075	0.43884	ni	hypothetical protein	um03437	0.34967	K11684	related to BDF1 - sporulation protein
14c00126	0.43888	ni	inner membrane protein required for assembly of the FO sector of	um00612	0.34972	ni	conserved hypothetical protein
22d00141	0.43894	ni	hypothetical protein	um00602	0.34985	K08286	probable SCH9 - serine
15d00040	0.43923	K01641	NAD <sup>+</sup> -ubiquitin-lyase/ubiquitin-ubiquitin synthase	um05228	0.34997	K10839	related to RAD23 - nucleotide excision repair protein
28d00054	0.43957	ni	hypothetical protein	um10901	0.35009	ni	probable polyubiquitin
9d00097	0.43999	ni	hypothetical protein	um06197	0.35017	ni	putative protein
22c00262	0.44008	ni	hypothetical protein	um10792	0.35029	K01611	related to S-adenosylmethionine decarboxylase
24d00063	0.4401	ni	mitochondrial F <sub>1</sub> F <sub>0</sub> transporter MMT1 and related transporters	um03043	0.35043	ni	conserved hypothetical protein
6c00049	0.44023	ni	hypothetical protein	um10558	0.35044	ni	probable tubulin beta chain
11c00085	0.44031	K00700	1,4-alpha-glucan branching enzyme/starch branching enzyme II	um00668	0.35044	ni	related to SIP2 - subunit of the Snf1 serine
8d00113	0.44049	ni	FOG, Zn-finger	um04465	0.35049	K11359	related to transcription regulator SP17
3000044	0.44069	ni	TPR repeat-containing protein	um02152	0.35054	K15015	related to amino acid transport protein
22d00287	0.44092	ni	protein carbonylase dehydratase PCBD	um15072	0.35078	ni	related to SUR1 - required for mannosylation of sphingolipids
16c00090	0.44092	ni	hypothetical protein	um05862	0.3509	K06053	conserved hypothetical protein
4c00002	0.44094	K03144	RNA polymerase II transcription initiation/nucleotide excision rep	um02320	0.35095	ni	conserved hypothetical protein
5d00080	0.44147	ni	spliceosome subunit	um12019	0.35117	K12879	related to RLR1 - Subunit of the THO complex
11c00001	0.44174	ni	multidrug resistance-associated protein	um04336	0.35117	ni	conserved hypothetical protein
15d00022	0.44187	ni	hypothetical protein	um02395	0.35117	ni	related to ferric reductase
12c00017	0.44198	ni	membrane coat complex Retromer, subunit VPSS/SNX1	um11709	0.35126	ni	hypothetical protein
9c00389	0.44208	K14789	FOG, RRM domain	um11268	0.35129	K00528	related to NADPH
20c00007	0.44212	K14692	putative Zn <sup>2+</sup> transporter MSC2	um04174	0.35136	ni	conserved hypothetical protein
12d00131	0.44219	ni	hypothetical protein	um06158	0.35142	ni	probable glutaminase A
16c00014	0.44223	K02731	20S proteasome, regulatory subunit alpha type PSMA7/PRE6	um02794	0.35144	K06993	related to 26S proteasome non-ATPase regulatory subunit 9
9c00080	0.44242	ni	arylalkylamine N-acetyltransferase	um11525	0.35152	K04382	protein phosphatase 2A
12d00098	0.44243	K03950	NAD <sup>+</sup> -ubiquinone oxidoreductase, NDUFA6/B14 subunit	um11388	0.3516	ni	conserved hypothetical protein
22d00281	0.44244	ni	hypothetical protein	um06148	0.35176	ni	conserved hypothetical protein
6c00127	0.44247	ni	predicted gamma-butyrobetaine,2-oxoglutarate dioxygenase	um02305	0.35187	ni	related to peptidyl-prolyl cis-trans isomerase
11d00086	0.44277	ni	alcohol dehydrogenase	um10911	0.35191	K10661	conserved hypothetical protein
8c00083	0.44288	K17263	TATA-binding protein-interacting protein	um04593	0.35194	ni	conserved hypothetical protein
7d00353	0.44292	K13108	transcriptional regulator SNP1	um10142	0.35197	K14397	probable CF25 - polyadenylation factor
9c00107	0.44292	K03249	translational initiation factor 3, subunit I	um06175	0.35212	K09540	related to SEC3E - ER protein-translocation complex subunit
19c00067	0.44293	ni	predicted N6-adenine RNA methylase	um04242	0.35221	ni	conserved hypothetical protein
14c00078	0.44307	K02969	40S ribosomal protein S20	um05927	0.3523	ni	conserved hypothetical Ustilago-specific protein
22d00243	0.44337	ni	hypothetical protein	um03262	0.35235	ni	hypothetical protein
10d00045	0.44343	K12236	transcription factor NF-X1	um11672	0.35245	K05955	related to Protein farnesyltransferase alpha subunit
6c00110	0.4435	ni	hypothetical protein	um01262	0.35246	K02330	DNA polymerase X - putative
8d00032	0.44378	ni	synaptic vesicle transporter SVOP and related transporters	um03565	0.35248	K14575	related to AFG2 - ATPase of the CDC48
19c00135	0.44388	K10579	ubiquitin-protein ligase	um03738	0.35255	K12854	probable ATP dependent RNA helicase
9c00181	0.4439	ni	magnesium-dependent phosphatase	um11064	0.35271	ni	conserved hypothetical protein
15							

7c00068	0.44691	ni	hypothetical protein	um04136	0.3541	K08286	related to serine
7c00196	0.44692	K17402	hypothetical protein	um04668	0.3542	K03593	related to nucleotide-binding protein NBP35
9d00118	0.44700	K12668	cyclin D-interacting protein GCJP	um05087	0.35431	ni	conserved hypothetical protein
13c0050	0.44716	K00693	3-phosphoglycerate 5-phosphosulfate sulfoltransferase	um01619	0.35431	K00111	related to GLT2 - glyceral-3-phosphate dehydrogenase
22c00279	0.44725	ni	permease of the major facilitator superfamily	um03464	0.35434	ni	conserved hypothetical protein
5a00129	0.44734	K06111	exocyst complex subunit Sec8	um02623	0.35441	ni	conserved hypothetical protein
7c00105	0.44735	K14771	predicted nucleolar protein	um11675	0.35454	ni	conserved hypothetical protein
14d00116	0.44742	K06675	struc1422: a member of chromosome protein 4	um05337	0.35463	K14807	related to DfnsP - ATP-dependent RNA helicase
5000043	0.44755	ni	HMG-box nif protein	um05025	0.35467	K11805	related to human and petunia an11 protein
5c00126	0.44756	K14016	ubiquitin fusion-degradation protein	um01843	0.35472	ni	probable acetyl-CoA C-acyltransferase precursor
7c00092	0.44762	K01176	alpha-amylose	um05937	0.35477	ni	Putative Cys
3c00022	0.44726	ni	hypothetical protein	um04236	0.35488	K00231	related to ribose-phosphate diphosphokinase catalytic chain I
11c00051	0.44767	K09500	chaperonin complex component, TCP-1 theta subunit	um10713.2	0.35514	ni	conserved hypothetical protein
13c00091	0.44771	ni	negative regulator of COPII vesicle formation	um11135	0.35519	K02978	probable 40S ribosomal protein S27
9c00072	0.44771	ni	predicted phosphoglucomannose acetyltransferase	um11200	0.35527	ni	conserved hypothetical protein
2a00017	0.44774	ni	hypothetical protein	um12314	0.35531	ni	putative protein
14c00052	0.44781	K06686	WD40 repeat-containing protein	um05376	0.35535	ni	putative protein
10d00116	0.44831	ni	FOG_RCC1 domain	um01117	0.35558	ni	conserved hypothetical protein
16d00085	0.44836	K00135	aldehyde dehydrogenase	um04371	0.35563	K15026	conserved hypothetical protein
2a00005	0.44845	K03238	translocation initiation factor 2, beta subunit	um02804	0.35577	ni	conserved hypothetical protein
12d00119	0.44947	K09602	uncharacterized conserved protein	um04901	0.35581	ni	related to CK11 - choline kinase
15c00060	0.44982	ni	hypothetical protein	um10179	0.35593	ni	conserved hypothetical protein
7c00244	0.44988	ni	transcription factor of the Forkhead/HNF3 family	um11410	0.35596	K12765	cdk-related kinase 1
27c00065	0.44972	K04705	signal transducing adaptor protein STAM/STAM2	um12292	0.356	ni	hypothetical protein
22d00228	0.44977	ni	hypothetical protein	um04925	0.3563	K00916	related to CTK1 - carboxy-terminal domain
3d00079	0.45087	K10742	DNA replication helicase	um06380	0.35637	K03948	related to ribose-phosphate diphosphokinase catalytic chain I
9c00067	0.449	K06978	hypothetical protein	um11840	0.35674	K14998	related to Surfeit locus protein 1
9c00257	0.44906	K00601	5-phosphoribosylglycinamide formyltransferase	um11379	0.35675	ni	putative protein
15d00053	0.4492	K01834	phosphoglycerate mutase	um11429	0.35686	ni	conserved hypothetical protein
8c00081	0.44921	K05012	cl-channel CLC-3 and related proteins	um02778	0.35694	ni	related to aspartic protease
6d00053	0.44929	ni	NxifH antiporter	um03937	0.35698	K17439	probable MRPL56 - mitochondrial ribosomal protein
26d00062	0.44941	ni	hypothetical protein	um11695	0.3571	K01735	related to 2-epi-5-epi-valiolone synthase
27d00045	0.44947	ni	thioredoxin-like protein	um04934	0.35729	K14793	related to RRP9 - protein associated with the U3 small nuclear RNA
13d00060	0.44956	ni	cytoplasmic Zn-finger protein BRAP2	um01150	0.3574	ni	related to COX7 - cytochrome-c oxidase
22c00008	0.44959	ni	para-hydroxybenzoate polyprenyl transferase	um10302.2	0.35744	ni	conserved hypothetical protein
7d00035	0.44963	K05909	multicopper oxidases	um01408	0.35797	ni	probable MCA1 - Metacaspase
9c00326	0.44979	K05663	mitochondrial Fe/S cluster exporter	um05569	0.35806	K07443	related to methylated-dna-protein-cysteine methyltransferase
19c00054	0.44989	ni	thioredoxin-like protein	um12159	0.35818	ni	conserved hypothetical protein
9d00092	0.44998	ni	hypothetical protein	um11698	0.35843	K10752	probable Chromatin assembly factor 1 subunit c
24c00024	0.45001	K06639	protein tyrosine phosphatase CDC14	um00318	0.35882	K14615	related to MRT4 - protein involved in mRNA turnover
14d00076	0.45002	ni	voltage-gated shaker-like K+ channel, subunit beta/KCNAB	um04316	0.35871	ni	hypothetical protein
5c00158	0.45035	ni	hypothetical protein	um05767	0.35883	ni	related to ATP-dependent RNA helicase
16c00009	0.45035	ni	hypothetical protein	um10459	0.35889	K03063	probable RPT3 - 26S proteasome regulatory subunit
13c00029	0.45053	K14838	nucleolar RNA-binding protein NIFK	um01734	0.35922	K101227	related to Endo-N-acetylglucosaminidase
11c00013	0.45073	ni	hypothetical protein	um01734	0.35925	ni	hypothetical protein
20c00070	0.45076	K02503	zinc-binding protein of the histidine triad	um04892	0.35933	ni	hypothetical protein
5c00070	0.45078	ni	hypothetical protein	um04217	0.35942	ni	conserved hypothetical protein
22c00032	0.45089	K10426	dynactin, subunit p62	um12168	0.35945	ni	hypothetical protein
26d00014	0.45112	ni	hypothetical protein	um04970	0.35949	K08869	conserved hypothetical protein
20d00070	0.45137	K05658	multidrug/pheromone exporter	um05064	0.35955	K02209	probable CDC46 - cell division control protein
7c00060	0.45147	ni	glutathione S-transferase	um02462	0.35991	ni	conserved hypothetical protein
13c00012	0.45152	ni	predicted protein tyrosine phosphatase	um11350.2	0.35996	K01908	related to acetyl coenzyme A synthetase
15d00013	0.45158	K09527	molef58 protein	um02352	0.36013	K02997	probable 60S ribosomal protein S9
13c00111	0.45158	K02868	60S ribosomal protein L11	um11990	0.36016	ni	putative protein
15d00060	0.45159	ni	hypothetical protein	um05548	0.36019	ni	related to L-ascorbate oxidase precursor
26d00086	0.45165	K15326	predicted tRNA-splicing endonuclease subunit	um02523	0.36035	ni	related to Endoglycanase 1 precursor
8d00084	0.45167	K05298	glycylphosphatidylinositol anchor synthesis protein	um03946	0.36035	ni	putative protein
22d00294	0.45196	K00876	hypothetical protein	um03011	0.36118	ni	conserved hypothetical protein
26c00044	0.45198	ni	hypothetical protein	um10658	0.36125	ni	related to component of the spindle assembly checkpoint dma1
7d00239	0.45206	ni	hypothetical protein	um10842	0.36126	K02866	probable RPL10 - 60S large subunit ribosomal protein L10
27d00086	0.45214	ni	CDC42 Rho GTPase-activating protein	um05642	0.36132	ni	probable SNQ2 - ABC transporter involved in multidrug resistance
19c0148	0.45215	K01969	3-hydroxyacyl-CoA carboxylase, non-biotin containing subunit	um03946	0.36132	K05607	probable methionyl-tRNA-coa hydratase
5c00130	0.45224	K15202	RNA polymerase III transcription factor (TF)IIIC subunit	um10918	0.36166	ni	Brd2-interacting protein Dss1
15c00096	0.45245	ni	hypothetical protein	um03265	0.36169	ni	putative protein
22c00239	0.45246	ni	hypothetical protein	um10582.2	0.36187	K06889	conserved hypothetical protein
22c00156	0.45246	ni	hypothetical protein	um01310	0.36204	K14766	related to NUP14 - nuclear and nucleolar protein with possible role in ribosome biogenesis
15d00068	0.45249	ni	protein involved in vacuolar protein sorting	um02575	0.36216	ni	related to toxJ gene
15c00093	0.45282	ni	hypothetical protein	um00193	0.36224	ni	conserved hypothetical protein
13c00034	0.45286	ni	HSP90 co-chaperone p23	um10492	0.36229	ni	hypothetical protein
9c00103	0.4529	ni	hypothetical protein	um02968	0.36243	K12620	related to LSM1 - Sm-like
19c0006	0.45333	ni	hypothetical protein	um05168	0.36252	ni	conserved hypothetical protein
11d00083	0.45336	ni	hypothetical protein	um06212	0.36254	K15161	related to SSN8 - DNA-directed RNA polymerase II holoenzyme and SRB subcomplex subunit
24d00040	0.45342	K02938	60s ribosomal protein L2L8	um10325	0.36256	ni	putative protein
27d00072	0.45344	K02877	60s ribosomal protein L15	um06329	0.36269	K00721	dolichyl-phosphate beta-D-mannosyltransferase
3d00038	0.4535	ni	hypothetical protein	0.36272	K07152	probable SCO1 - involved in stabilization of Cox1p and Cox2p	
11d00058	0.45358	K02967	mitochondrial/choroplast ribosomal protein S2	um03708.2	0.36288	ni	related to gata transcription factor
7c00037	0.45395	K12862	pleiotropic regulator 1	um00242	0.36315	K14805	related to MAK5 - ATP-dependent RNA helicase
22d00254	0.45403	ni	acyl-coa synthetase	um00061	0.36323	ni	related to quinate transport protein
7c00295	0.45419	K07442	tRNA-1-methyladenosine methyltransferase, subunit GCDD14	um02840	0.36325	ni	related to CHS5 - chitin biosynthesis protein
13d00151	0.45431	K15292	vesicle trafficking protein Sec1	um04296	0.36325	K11338	probable RVB2 - RUVB-like protein
24d00055	0.45449	ni	hypothetical protein	um02003	0.36351	ni	hypothetical protein
13c00068	0.45451	ni	hypothetical protein	um02310	0.36368	ni	putative protein
22c00070	0.45473	ni	hypothetical protein	um04310	0.36399	K12736	related to Peptidylprolyl isomerase domain and WD repeat-containing protein 1
7c00283	0.45473	ni	hypothetical protein	um05783	0.36418	K15272	related to UDP-galactose transporter
9c00010	0.45474	ni	hypothetical protein	um11196	0.36422	K10747	probable CDC3 - DNA ligase I
22d00128	0.45482	K14284	mRNA export factor TAP/MEX67	um00256	0.36423	ni	related to 3-oxoacyl-
25c00065	0.45532	ni	hypothetical protein	um10774	0.3644	ni	conserved hypothetical Ustilago-specific protein
12d00054	0.45536	ni	hypothetical protein	um06183	0.36441	ni	related to RNA-binding protein mp24
6c00072	0.45547	K02295	deoxyribonucleic acid photolyase	um01322	0.36476	ni	hypothetical protein
12d00078	0.45571	ni	hypothetical protein	um06398	0.36478	ni	related to calcineurin temperature suppressor cts1
22c00133	0.45579	ni	proteins containing armadillo/beta-catenin-like repeat	um03494	0.36479	K13126	mRNA polyadenylate-binding protein PAB1
18c00055	0.45583	ni	hypothetical protein	um04820	0.36485	ni	related to ITC1 - subunit of lsw2 chromatin remodelling complex
13c00061	0.45604	ni	hypothetical protein	um02814	0.365	ni	hypothetical protein
13d00107	0.45604	ni	GAT-A-4/6 transcription factors	um03533	0.36537	K02894	probable RPL24 - 60S large subunit ribosomal protein L23
6c00045	0.45606	ni	methyltransferase	um03748	0.3655	ni	conserved hypothetical Ustilago-specific protein
5a00144	0.45622	ni	amidases	um11198	0.36577	K11126	conserved hypothetical protein
19c00031	0.45626	ni	predicted mRNA cap-binding protein related to eIF-4E	um04032	0.36596	ni	probable beta-glucosidase
20c00014	0.45631	ni	chitin synthetase	um02125	0.36592	ni	conserved hypothetical protein
10d00089	0.45681	K13115	CC2C-type Zn-finger protein	um10296	0.36592	K02267	probable COX12 - cytochrome-c oxidase
2a00054	0.45701	ni	late Golgi protein sorting complex, subunit Vps53	um06393	0.36612	K12729	related to YOP1 - Ypt-interacting protein
11c00047	0.45716	ni	hypothetical protein	um12340	0.36616	ni	related to C-4 methylsterol oxidase
9d00148	0.45719	K12825	splicing factor 3a, subunit 1	um01754	0.36642	ni	putative protein
9d00008	0.45726	ni	molecular chaperone	um10135	0.36668	K10768	conserved hypothetical protein
14c00099	0.45746	ni	hypothetical protein	um00534	0.36665	ni	conserved hypothetical protein
27d00076	0.45762	ni	hypothetical protein	um01456	0.36667	ni	ni
12d00060	0.45777	K11883	predicted RNA-binding protein Nob1p involved in 26S proteasom	um12342	0.36708	ni	conserved hypothetical protein
8d00102	0.45779	ni	hypothetical protein	um00300	0.3671	ni	related to Glutathinyl-peptide cyclotransferase precursor
9c00230	0.45781	ni	aldoketo reductase family proteins	um05505	0.3674	K15153	related to mediator complex subunit soh1
24d00008	0.45803	ni	hypothetical protein	um05404.2	0.36762	ni	related to conserved oligomeric Golgi complex component 3
4c00043	0.45813	K07124	17-beta-hydroxysteroid dehydrogenase type 3	um11822	0.36781	K02871	probable MRPL23 - mitochondrial ribosomal protein
12c00044	0.45814	ni	predicted methyltransferase	um00588	0.36787	ni	hypothetical protein
15c0008	0.45819	K11495	histones H3 and H4	um11328	0.36796	ni	conserved hypothetical protein
1c00029	0.45839	ni	arp2/3 complex-interacting protein VIP1/Asp1	um10702	0.368	K02940	probable RPL9A - ribosomal protein L9
11d00008	0.45867	ni	hypothetical protein	um04485	0.3681	ni	related to Cut9 interacting protein scn1
19d00008	0.45879	ni	hypothetical protein	um11729	0.36829	ni	putative protein
5a00121	0.4589	K00698	chitin synthetase/hyaluronan synthase	um11512	0.36838	K08827	related to mRNA splicing-associated serine-threonine protein kinase
10d00002	0.45909	K14557	HAT (Hail-A-TPR) repeat-containing protein	um11725	0.36859	K14563	conserved hypothetical protein
24d00049	0.45938	ni	hypothetical protein	um01361	0.36862	ni	hypothetical protein
27d00053	0.4594	ni	hypothetical protein	um00575	0.36871	K11675	related to IES1 - Subunit 1 of the INO80 chromatin remodeling complex
3c00023	0.45955	ni	hypothetical protein	um03216	0.36891	K07203	probable TOR1 - 1-phosphatidylinositol 3-kinase
13d00105	0.45959	ni	vacuolar assembly-sorting protein VPS16	um11782	0.36892	ni	putative protein
9c00049	0.45982	ni	hypothetical protein	um10194	0.36915	K03115	related to CKB1 - casein kinase II
5a00143	0.45982	K02921	60S ribosomal protein L37	um01031	0.36916	ni	conserved hypothetical protein
14d00005	0.45983	K14818	angio-associated migratory cell protein	um04624	0.36918	K14304	conserved hypothetical protein
4c00044	0.45993	ni	hypothetical protein	um06295	0.36921	ni	related to dolichyl-phosphate-mannose-glycolipid alpha-mannosyltransferase
10d00064	0.46001	K10300	3'-5' DNA helicase	um01175	0.36922	K03514	related to TRF4 - topoisomerase I-related protein
20d00053	0.46004	K01265	metallopeptidase	um01123	0.3693	K11373	related to IK3 - Subunit of RNA polymerase II elongator histone acetyltransferase complex
3a00094	0.46012	ni	hypothetical protein	um15022.2	0.36931	K12893	related to pre-mrna splicing factor srp55
27d00056	0.46033	ni	leucine permease transcriptional regulator	um02027	0.36933	ni	related to glutamate carboxypeptidase II
15c00075	0.46033	K12623	small nuclear ribonucleoprotein	um03001	0.36945	ni	putative protein
26d00049	0.46048	K03124	transcription initiation factor TFIIB	um11715	0.36948	ni	related to VPS13 - involved in regulating membrane traffic
2c00048	0.46051	K17086	endosomal membrane proteins, EMP70	um04995	0.36951	ni	conserved hypothetical protein
27c0001							

14d00077	0.46329	ni	cylophilin-type peptidyl-prolyl cis-trans isomerase	um00057	0.37225	ni	conserved hypothetical protein
16c00089	0.46369	ni	uncharacterized conserved protein	um12206	0.3724	ni	conserved hypothetical protein
15c00004	0.46371	ni	uncharacterized conserved protein	um03718	0.37246	ni	ni
27d00035	0.46386	ni	predicted transporter	um04591	0.3726	K12571	related to PAN2 - component of Pab1p-stimulated poly
18d00099	0.46398	ni	hypothetical protein	um03411	0.37261	K01181	probable endo-
9c00130	0.46405	K15542	polyadenylation factor I complex, subunit PFS2	um01539	0.37263	ni	hypothetical protein
3c00004	0.46418	ni	hypothetical protein	um02453	0.3728	K04564	probable SOD2 - superoxide dismutase
9c00045	0.46425	K03964	glycosyltransferase	um05339	0.37282	ni	conserved hypothetical protein
6d00033	0.46443	ni	hypothetical protein	um01372	0.37282	K14538	related to nuclear GTPase
22d00096	0.46448	K02902	mitochondrial/chloroplast ribosomal protein L2	um05833	0.37291	K16576	conserved hypothetical protein
9c00302	0.46456	ni	uncharacterized conserved protein	um00337	0.37312	ni	hypothetical protein
22d00274	0.46457	ni	predicted N6-DNA-methyltransferase	um03641	0.37344	ni	ni
10d00076	0.46471	K01251	S-adenosylhomocysteine hydrolase	um06154	0.37344	ni	hypothetical protein
7c00008	0.46473	ni	hypothetical protein	um03863	0.37344	K03006	probable RPO21 - DNA-directed RNA polymerase II
9d00008	0.46484	K14826	FKBP-type peptidyl-prolyl cis-trans isomerase	um06384	0.37355	ni	hypothetical protein
20c00049	0.46485	K01770	uncharacterized conserved protein	um05725	0.3736	K00550	probable OPI3 - methylene-fatty-acyl-phospholipid synthase
2c00064	0.46486	K03844	glycosyltransferase	um11469	0.37406	K07952	related to ARL5 - ADP-ribosylation factor-like protein
7c00147	0.46509	ni	uncharacterized conserved protein	um04779	0.37414	ni	conserved hypothetical protein
10d00087	0.46514	ni	hypothetical protein	um10731	0.37416	K13337	related to PEX19 - required for biogenesis of peroxisomes
11c00072	0.46516	K05658	multidrug/phenone exporter	um11677.2	0.37438	K12767	related to serine
9d00395	0.46516	ni	hypothetical protein	um11521	0.37448	K03575	related to A
7d00243	0.46539	K08333	rhogt GTPase	um02886	0.37456	ni	putative protein
24d00016	0.46548	K08489	SNARE protein TLG2	um02083	0.37462	K10875	probable RAD54 - DNA-dependent ATPase of the Srf2p family
9d00401	0.46553	ni	acyl-coa synthetase	um05758	0.37469	ni	related to HST4 - member of the Sir2p family of NAD
7d00064	0.46558	ni	hypothetical protein	um10938	0.37492	ni	probable NADP-dependent mannitol dehydrogenase
9d00044	0.46567	K00761	arabinose	um04859	0.37492	ni	putative protein
12d00022	0.46581	K01090	serine/threonine protein phosphatase	um11120	0.37494	ni	conserved hypothetical protein
9c00199	0.46598	ni	uncharacterized conserved protein	um06458	0.37494	ni	conserved hypothetical protein
7c00104	0.46606	ni	hypothetical protein	um01974	0.37499	K15979	conserved hypothetical protein
18d00103	0.4661	ni	hypothetical protein	um02552	0.375	ni	conserved hypothetical protein
9c00138	0.46619	ni	hypothetical protein	um11029	0.37504	K02946	related to WH2 - growth regulation protein
7d00022	0.46628	K10747	ATP-dependent DNA ligase I	um00788	0.37513	ni	conserved hypothetical protein
27c00082	0.46636	K10418	dynein light chain type 1	um10243	0.37522	K11885	related to DNA-damage inducible protein 2
9d00398	0.46642	ni	hypothetical protein	um10269	0.37532	ni	conserved hypothetical protein
18c00086	0.46643	ni	hypothetical protein	um01957	0.37536	K12618	probable KEN1 - 5
8c00099	0.4665	ni	hypothetical protein	um15023	0.37537	K02677	probable protein kinase C
9c00310	0.46705	K03035	26S proteasome regulatory complex, subunit RPN5/PSMD12	um03612	0.37555	ni	conserved hypothetical protein
22c00157	0.4671	ni	hypothetical protein	um03874	0.37572	ni	conserved hypothetical protein
7d00315	0.4674	ni	hypothetical protein	um02722	0.37585	ni	hypothetical protein
3c000078	0.46767	ni	transcription factor of the Forkhead/HNF3 family	um01360	0.37589	ni	related to SNE4 - nuclear regulatory protein
12d00096	0.46775	ni	hypothetical protein	um00391.2	0.376	ni	conserved hypothetical protein
18c00043	0.46783	ni	hypothetical protein	um04523	0.37601	K03320	low affinity ammonium transporter
12d00118	0.46786	ni	COP1 vesicle protein	um03227	0.3766	K11800	probable exosome complex exonuclease rrp41
22d00014	0.46792	ni	hypothetical protein	um11898	0.37666	K02880	probable RPL17A - ribosomal protein L17
18d00051	0.46794	ni	hypothetical protein	um10949	0.37695	ni	conserved hypothetical protein
9d00024	0.46804	ni	hypothetical protein	um01296	0.37705	K14571	related to RIX7 - AAA-type ATPase required for biogenesis and nuclear export of 60S ribosomal subunits
7d00013	0.46807	ni	hypothetical protein	um04604	0.37741	ni	conserved hypothetical protein
22c00115	0.46809	K12196	AAA-type ATPase	um12204	0.37751	ni	conserved hypothetical protein
7d00238	0.46825	ni	uncharacterized conserved protein	um04201	0.37765	K08900	related to RCS1 - mitochondrial protein of the AAA family of ATPases
19d00086	0.46837	ni	hypothetical protein	um00176	0.37777	ni	probable SAC1 - recessive suppressor of secretary defect
8d00058	0.46839	ni	hypothetical protein	um10485	0.37786	ni	conserved hypothetical protein
9d00026	0.46864	K00344	zinc-binding oxidoreductase	um01566	0.37796	ni	hypothetical protein
4d00027	0.46865	ni	inositol polyphosphate 5-phosphatase and related proteins	um11960	0.37799	ni	conserved hypothetical protein
5d00101	0.46878	ni	synaptic vesicle transporter SVOP and related transporters	um00422	0.37815	ni	conserved hypothetical protein
9c00058	0.46887	ni	lysophospholipase	um05567	0.37836	K08341	probable ATG8 - essential for autophagy
20d00015	0.46892	ni	hypothetical protein	um11049.2	0.37841	ni	related to Exonuclease II
20c00058	0.46903	ni	hismacro and SEC14 domain-containing proteins	um00439	0.37852	ni	conserved hypothetical protein
9c00309	0.46922	ni	hypothetical protein	um10455	0.37867	ni	conserved hypothetical protein
18d00027	0.46932	ni	hypothetical protein	um00357	0.37881	ni	conserved hypothetical protein
7c00178	0.46938	ni	hypothetical protein	um11812	0.37891	ni	related to Cytochrome P450
9c00014	0.46939	K13617	predicted acetyltransferases and hydrolases with the alpha/beta	um02281	0.37894	K12855	probable pre-mRNA splicing factor prp1
9c00207	0.46968	ni	hypothetical protein	um11511	0.37897	K11713	related to Type I protein geranylgeranyltransferase beta subunit
13d00108	0.46968	ni	predicted transporter	um02651	0.37903	K04712	related to dihydroceramide delta
4c00038	0.46973	ni	cytoskeleton-associated protein and related proteins	um05085	0.37937	K10627	related to postreplication repair protein uvsH
6c00073	0.46981	ni	amino acid transporters	um01535	0.37953	ni	conserved hypothetical protein
9c00069	0.47001	K05909	multicopper oxidases	um02510	0.37967	K01213	probable PGL1 - Endo-polygalacturonase
22c00146	0.47002	ni	hypothetical protein	um10345	0.38013	ni	putative protein
6c00081	0.4701	ni	queuine-trna ribosyltransferase	um11530	0.38016	ni	putative protein
2c00068	0.47018	ni	Ca <sup>2+</sup> /calmodulin-dependent protein kinase	um15027	0.38071	K10771	related to exodeoxyribonuclease
1d00034	0.47025	ni	Na <sup>+</sup> /K <sup>+</sup> ATPase, alpha subunit	um02499	0.38117	K14003	conserved hypothetical protein
9c00577	0.47056	ni	hypothetical protein	um11913	0.38118	ni	related to PRP43 - spliceosomal RNA helicase
5d00004	0.47064	K01697	cystathionine beta-synthase and related enzymes	um10075	0.38121	K12161	related to ubiquitin related modifier URM1
22d00052	0.47066	ni	hypothetical protein	um05964	0.38128	ni	related to esterase
14c00028	0.47071	K16261	amino acid transporters	um04679	0.38158	K12831	related to spliceosome-associated protein SAP-49
13c00104	0.47072	K03353	anaphase-promoting complex (APC), Cdc16 subunit	um01950	0.38168	K15532	conserved hypothetical protein
6d00087	0.47084	ni	hypothetical protein	um05007	0.38168	ni	conserved hypothetical protein
15d00032	0.47112	ni	hypothetical protein	um05518	0.38185	ni	hypothetical protein
7d00087	0.47116	ni	hypothetical protein	um05771	0.38193	ni	related to aimless RasGEF
20c00071	0.47123	ni	predicted membrane protein	um00697	0.38212	ni	putative protein
22c00060	0.47129	ni	hypothetical protein	um11925	0.38214	K13100	probable Prip-mRNA splicing factor cwc22
9c00123	0.47151	ni	hypothetical protein	um02469	0.38227	ni	related to pre-mRNA splicing factor
3d00019	0.47178	K13754	K <sup>+</sup> -dependent Na <sup>+</sup> , Ca <sup>2+</sup> antiporter	um05173	0.38252	K09523	related to DnaJ homolog subfamily C member 3
19d00119	0.47185	ni	hypothetical protein	um01438	0.38253	ni	conserved hypothetical protein
16d00032	0.47197	K17427	mitochondrial ribosomal protein L17	um01739	0.38278	ni	putative protein
14c00063	0.47204	ni	hypothetical protein	um00981	0.38303	ni	putative protein
6d00013	0.47205	ni	hypothetical protein	um12076	0.38314	ni	telomere-associated recQ-like helicase usher
22d00030	0.47236	ni	hypothetical protein	um00574	0.38332	ni	probable DNA
9d00201	0.47249	K04464	mitogen-activated protein kinase	um03774	0.38332	ni	probable positive effector protein GCN20
6d00095	0.47301	ni	hypothetical protein	um05301	0.38335	ni	putative protein
9c00050	0.47305	ni	hypothetical protein	um02346	0.38346	K14787	probable RNA-binding protein
10c00020	0.47314	ni	vacuolar assembly/sorting protein PEP5V/PS11	um04926	0.38356	K01381	probable PEP4 - aspartyl protease
2d00057	0.47323	ni	hypothetical protein	um02311	0.38358	ni	conserved hypothetical protein
14d00044	0.47353	ni	DNA repair protein RAD51/RHP55	um01753	0.3836	ni	probable GCY1 - galactose-induced protein of aldo
3c00034	0.47364	K02976	40S ribosomal protein S2b	um05302	0.38368	ni	hypothetical protein
12d00009	0.4739	K14307	hypothetical protein	um12010	0.38413	ni	putative protein
9c00394	0.47405	ni	mitochondrial/chloroplast ribosomal protein L17	um01442	0.3843	ni	conserved hypothetical protein
5c00019	0.47406	ni	uncharacterized conserved protein	um02526	0.38494	K03537	conserved hypothetical protein
10c00364	0.47416	ni	FOG, Arabin repeat	um05030	0.38495	K17081	probable PIP2 - phosphoin
18c00049	0.47419	K10773	endonuclease III	um05282	0.38506	K12198	related to VPS80 involved in vacuolar protein sorting
9c00284	0.4742	K15014	nucleoside transporter	um04457	0.38537	ni	conserved hypothetical protein
11c00054	0.4744	ni	hypothetical protein	um04046	0.38537	ni	related to aldehyde dehydrogenase
8d00094	0.47443	ni	NDR and related serine/threonine kinases	um11279	0.38538	ni	conserved hypothetical protein
15c00079	0.47448	ni	hypothetical protein	um00382	0.38564	ni	related to CWC2 - involved in mRNA splicing
12c00051	0.47464	ni	hypothetical protein	um06228	0.3855	K14806	related to DBP7 - RNA helicase required for 60S ribosomal subunit assembly
14c00058	0.47483	ni	hypothetical protein	um11242	0.3856	ni	hypothetical protein
12c00135	0.47494	K08158	synaptic vesicle transporter SVOP and related transporters	um03972	0.38567	K02892	conserved hypothetical protein
9c00213	0.47503	ni	hypothetical protein	um00336	0.38573	K09780	conserved hypothetical protein
18d00062	0.47508	K13338	AAA-type ATPase	um06189	0.38595	ni	hypothetical protein
20c00028	0.47511	K15272	predicted UDP-galactose transporter	um05332	0.38595	ni	conserved hypothetical protein
7d00318	0.47537	ni	hypothetical protein	um12302	0.38621	ni	conserved hypothetical Ustilago-specific protein
19c00028	0.47542	ni	hypothetical protein	um00603	0.38624	ni	putative protein
18d00067	0.47544	ni	hypothetical protein	um10227	0.38648	K02952	related to mitochondrial ribosomal protein S13
12d00015	0.47547	K13519	predicted membrane protein	um10323	0.38676	K02919	conserved hypothetical protein
22c00158	0.47566	K00860	adenosine 5'-phosphosulfate kinase	um00493	0.38703	ni	conserved hypothetical protein
3d00072	0.47583	ni	carbon-nitrogen hydrolase	um00742	0.38704	ni	conserved hypothetical protein
2c00018	0.47593	ni	hypothetical protein	um05537	0.38714	ni	conserved hypothetical protein
18c00091	0.47593	ni	hypothetical protein	um00161	0.38717	ni	hypothetical protein
19d00131	0.476	ni	alcohol dehydrogenase	um11594	0.3872	ni	conserved hypothetical protein
20c00077	0.47603	K15371	glutamate/leucine/phenylalanine/valine dehydrogenases	um04494	0.38724	ni	related to Engulfment and cell motility gene 1 protein
25d00054	0.47608	K15731	TFIIH-interacting CTD phosphatase, including NLI-interacting fac	um01518	0.38725	K02951	probable 40S ribosomal protein S12
27c00052	0.47618	ni	hypothetical protein	um11206	0.38726	ni	conserved hypothetical protein
22d00185	0.47624	ni	dehydrogenases with different specificities	um05285	0.38726	K04460	related to phosphoprotein phosphatase
26c00020	0.47629	ni	uncharacterized conserved protein	um02337	0.38732	ni	conserved hypothetical protein
25d00042	0.47647	ni	protein tyrosine phosphatase	um04051	0.38759	ni	conserved hypothetical protein
14c00105	0.47649	K12396	vesicle coat complex AP-3, delta subunit	um10261	0.38787	ni	conserved hypothetical protein
9c00036	0.47658	ni	hypothetical protein	um03050	0.38787	ni	conserved hypothetical protein
9d00333	0.47663	ni	glycolipid transfer protein	um05821	0.38828	ni	hypothetical protein
19d00135	0.47664	ni	hypothetical protein	um10335	0.38829	ni	hypothetical protein
27c00080	0.47699	ni	hypothetical protein	um00715	0.38881	ni	hypothetical protein
3d00090	0.47704	ni	hypothetical protein	um01417	0.38917	ni	related to MDMD10 - mitochondrial morphology and inheritance component
14c00079	0.47706	K06631	polo-like serine/threonine protein kinase	um12023	0.38941	ni	conserved hypothetical protein
26c00006	0.47716	ni	hypothetical protein	um11476	0.38971	ni	related to Guanylyl nucleotide exchange factor Sg2
14d00121	0.47749	ni	hypothetical protein	um01641	0.38971	ni	conserved hypothetical protein
22c00032	0.47751	K05527	stress-induced protein UVI31+	um11022	0.38987	ni	related to FRE4 - Farnesyl transferase
7d00084	0.47756	ni	hypothetical protein	um01505	0.38992	K11252	probable HTB2 - histone H2B
24c00058	0.4777	ni	helicase-like transcription factor HLTf	um10203	0.39016	ni	hypothetical protein
25d00092	0.47772	ni	hypothetical protein	um0106			

11c00052	0.48049	K03495	NAD/FAD-utilizing protein	um15007	0.39302	K11108	related to RCL1 - RNA terminal phosphate cyclase-like protein
18c00086	0.48049	ni	hypothetical protein	um01694	0.39305	ni	conserved hypothetical protein
313c00001	0.48051	K02396	RNA splicing factor	um10976	0.39307	K01557	conserved hypothetical protein
90010183	0.48059	K12844	mRNA splicing factor PRP31	um01769	0.39319	ni	conserved hypothetical protein
7c00284	0.48071	K01758	cystathionine beta-lyase	um12039	0.39321	ni	related to NADH-ubiquinone oxidoreductase 21
12d00028	0.48087	ni	hypothetical protein	um02904	0.39322	ni	conserved hypothetical protein
22d00049	0.48092	ni	hypothetical protein	um06410	0.39322	K11770	conserved hypothetical protein
8c000339	0.48099	ni	predicted RNA polymerase superfamily	um11869	0.39358	K11568	conserved hypothetical protein
26d00051	0.48107	K14785	TBP-binding protein, activator of basal transcription	um02065	0.3939	K06067	histone deacetylase
20d00061	0.48109	ni	FOG, Predicted E3 ubiquitin ligase	um02911	0.3941	K11849	related to UBP2 - ubiquitin-specific protease
9c000035	0.48123	ni	hypothetical protein	um10643	0.39415	K02026	related to dihydroorotate dehydrogenase
7d000056	0.48132	ni	hypothetical protein	um04632	0.39424	K02943	probable ribosomal protein P2
9c000211	0.48144	ni	uncharacterized conserved protein	um06126	0.39433	ni	Mig2-6
5c000016	0.48157	ni	hypothetical protein	um04751	0.39462	K14852	related to RRS1 - regulator of ribosome biogenesis
10d00088	0.48165	ni	hypothetical protein	um04511	0.39475	ni	probable RML2 - mitochondrial ribosomal protein
12d00104	0.48168	K14411	RNA-binding protein musashi	um00483	0.39481	ni	putative protein
27c00047	0.48168	ni	predicted RNA polymerase superfamily	um02456	0.39487	ni	conserved hypothetical protein
11c00058	0.48179	K12860	mRNA splicing protein CDC5	um00625	0.39516	K02605	putative protein
22d00120	0.48195	ni	hypothetical protein	um04895	0.39517	ni	putative protein
18d00108	0.48197	ni	hypothetical protein	um11755	0.39532	ni	hypothetical protein
6d000022	0.48199	ni	hypothetical protein	um05107	0.39539	K15163	conserved hypothetical protein
25c00029	0.48201	ni	hypothetical protein	um10207	0.39547	K01426	related to AMD2 - acetamidase
9c000320	0.48247	ni	hypothetical protein	um00054	0.39554	ni	putative protein
22c00062	0.4828	ni	hypothetical protein	um02958	0.39555	K11650	related to SWI
7c00116	0.48286	ni	membrane protein	um12338	0.39557	ni	hypothetical protein
16c00047	0.48293	ni	hypothetical protein	um10371	0.39558	K08065	related to transcription factor hsp3
25d00087	0.48294	ni	hypothetical protein	um10049	0.39588	ni	related to MNR2 - Manganese resistance protein
12d00099	0.48296	ni	hypothetical protein	um11085	0.39619	K12735	related to Multidomain cyclophilin type peptidyl-prolyl cis-trans isomerase
19d00116	0.48325	ni	hypothetical protein	um03091	0.39625	ni	hypothetical protein
9d000408	0.48329	K14715	ZnF-like zinc transporter proteins	um03491	0.39634	K12180	related to cag9 signalosome complex subunit 7a
22d01211	0.48334	ni	ribase kinase and related carbohydrate kinases	um04736	0.39648	K12195	conserved hypothetical protein
8d00041	0.48337	ni	hypothetical protein	um00387	0.3965	ni	ni
12d00107	0.48368	ni	hypothetical protein	um11282.2	0.39659	ni	related to Beta-mannosidase precursor
5d000018	0.48381	ni	hypothetical protein	um05229	0.39662	K01192	conserved hypothetical protein
10d00062	0.48415	ni	clathrin coat dissociation kinase GAK/PTEN/AuXilin	um03267	0.39665	ni	conserved hypothetical protein
15c00070	0.48432	K04563	protein kinase PCTAIRE and related kinases	um10602	0.3971	K10706	related to SEN1 protein
19d00095	0.4845	ni	decapping enzyme complex component DCP1	um06093	0.3971	K15272	related to UDP-galactose transporter
12c00010	0.48457	ni	hypothetical protein	um00136.2	0.39715	ni	related to Zinc finger protein
14c00094	0.4849	K02219	cyclin-dependent protein kinase CDC28, regulatory subunit CKS	um04522	0.39721	K10276	conserved hypothetical protein
16d00075	0.48492	ni	hypothetical protein	um00528	0.39724	ni	conserved hypothetical protein
24c00015	0.48493	ni	hypothetical protein	um02657	0.39752	K00671	related to NMT1 - N-methyltransferase
11d00069	0.48507	K09569	FKBP-type peptidyl-prolyl cis-trans isomerase	um06462	0.39773	ni	conserved hypothetical protein
9c000327	0.48513	K08490	SNARE protein SED5	um06414	0.39782	ni	related to Polyketide synthase
25d00067	0.48513	ni	signal transduction protein	um05292	0.39786	ni	related to Diga protein
10d00100	0.4852	ni	ubiquitin-protein ligase	um05013	0.398	ni	related to caffeine-induced death protein 1 Cid1
8d00048	0.48527	ni	hypothetical protein	um00346.2	0.39807	K15859	related to SKN7 - transcription factor
11d00014	0.48527	ni	hypothetical protein	um01357	0.3981	ni	ni
25c00059	0.48528	ni	hypothetical protein	um02151	0.39827	K00100	related to 2
22d00253	0.48537	ni	cytochrome c oxidase assembly protein PET191	um02167	0.39829	ni	conserved hypothetical protein
22d00230	0.48579	ni	succinyl-coa synthetase, beta subunit	um04797	0.39864	K01783	probable RPE1 - D-ribulose-5-phosphate 3-epimerase
18d00105	0.48597	ni	ovarian tumor-like cysteine protease	um05088	0.39885	ni	hypothetical protein
16c00091	0.48622	ni	uncharacterized conserved protein	um00366	0.39902	ni	conserved hypothetical protein
7d000007	0.48647	ni	hypothetical protein	um05384	0.39923	ni	conserved hypothetical protein
19c00040	0.48678	ni	amino acid transporters	um11449	0.39929	ni	related to Phenol 2-monooxygenase
22d00042	0.48695	K03441	aquaporin	um01580	0.39929	K12385	related to NCR1 - transmembrane glycoprotein
7d00029	0.48695	ni	glucanase transport-inducing protein	um04030	0.39932	ni	related to MRPS8 - mitochondrial ribosomal protein
7d00120	0.48702	K10768	uncharacterized conserved protein	um05378	0.39942	K17065	mitochondrial fusion factor DNMI1
19d00107	0.48702	ni	predicted membrane protein	um00186	0.39987	ni	conserved hypothetical protein
7c000036	0.48716	K12862	IRF-2-binding protein CELTIX-1	um05605	0.40006	ni	hypothetical protein
5c00153	0.4876	ni	arylcetamide deacetylase	um05432.2	0.40022	K12662	related to PRP4 - U4
8d00043	0.48771	ni	hypothetical protein	um10747	0.40036	K12586	related to Exosome complex exonuclease RRP43
11c00037	0.48774	K15026	predicted translation initiation factor related to eIF-3a	um04659	0.40059	ni	conserved hypothetical protein
8c000029	0.48809	ni	sphingoid base-phosphate phosphatase	um10012	0.4007	ni	conserved hypothetical protein
6d000076	0.48816	ni	hypothetical protein	um10999	0.40078	K10524	related to NRK1 - Nicotinamide riboside kinase
7c000246	0.48826	K10256	hypothetical protein	um11555	0.4009	ni	hypothetical protein
20d00061	0.4884	K02307	hypothetical protein	um05577	0.40106	ni	conserved hypothetical protein
7c000287	0.48862	ni	signal transduction serine/threonine kinase	um01300	0.40114	ni	conserved hypothetical Ustilago-specific protein
22c00032	0.48863	ni	2-enoyl-CoA hydratase	um00724	0.40123	ni	ni
15c00044	0.48885	ni	putative steroid membrane receptor Hpr6.6/25-Dx	um12286	0.40127	ni	conserved hypothetical protein
19d00055	0.48888	ni	putative steroid membrane receptor Hpr6.6/25-Dx	um03459	0.40172	K10416	related to dynein light-intermediate chain
10d00075	0.4889	K11339	dosage sensitive transcription regulatory complex	um04911	0.40175	K15196	related to BRP1 - TFIIB subunit
9c00167	0.48901	K11836	ubiquitin-specific protease UBP14	um11415	0.40183	ni	conserved hypothetical Ustilago-specific protein
7d00191	0.48912	ni	hypothetical protein	um04844	0.40194	ni	ni
9c000023	0.48912	ni	hypothetical protein	um04009	0.40196	K06980	conserved hypothetical protein
14c00006	0.48979	ni	ATP-dependent RNA helicase	um02307	0.40215	ni	conserved hypothetical protein
11d00032	0.48981	ni	hypothetical protein	um04232	0.40215	K14554	related to S
6c000055	0.48985	K12734	similar to cyclophilin-type peptidyl-prolyl cis-trans isomerase	um04293	0.40237	ni	conserved hypothetical protein
22d01019	0.48986	ni	vacuolar assembly/sorting protein VPS39/VAM6/VPS3	um04818	0.40259	ni	conserved hypothetical protein
22d00277	0.49023	ni	hypothetical protein	um00213	0.40281	K03860	related to GPI1 - required for N-acetylglucosaminyl phosphatidylinositol synthesis
14c00020	0.49047	K11129	box H4CA snRNP component	um01453	0.40326	K01584	related to Ustilago-specific protein
2c000046	0.49048	K02941	60S acidic ribosomal protein P0	um00516	0.40309	K14573	related to Nucleolar protein NOP4
26c00051	0.49056	ni	Ca2+-dependent lipid-binding protein CLB1	um00390	0.4031	ni	conserved hypothetical protein
14c00120	0.49061	K13181	ATP-dependent RNA helicase	um12044	0.40318	ni	probable TIM9 - Translocase of the mitochondrial Inner Membrane
5d001128	0.49063	K02321	DNA polymerase alpha-prime complex, polymerase-associated	um11717	0.40321	K11644	related to SIN3 - transcription regulatory protein
9c000206	0.49102	ni	3-methylcrotonyl DNA glycosylase	um02361	0.4035	ni	related to ATPase inhibitor
19d00161	0.49112	K12273	preprotein translocase subunit Sec66	um10777	0.40352	K00485	related to Dimethylamine monoxygenase
8c000085	0.49123	ni	permease of the major facilitator superfamily	um06127	0.40368	ni	conserved hypothetical Ustilago-specific protein
14c00017	0.49125	K11863	ataxin 3	um03751	0.40396	ni	hypothetical protein
15c00049	0.49152	ni	hypothetical protein	um11635	0.40502	K04554	probable UBC5 - E2 ubiquitin-conjugating enzyme
12d00031	0.4917	K03004	DNA-dependent RNA polymerase I	um03146	0.40537	ni	related to TIM54
24d00061	0.49173	ni	permease of the major facilitator superfamily	um04601	0.40549	ni	hypothetical protein
25d00026	0.49193	ni	actin-related protein - Arp4/Act3p	um11029	0.40556	K02946	related to RSM10 - mitochondrial ribosomal protein
14c00129	0.49199	ni	uncharacterized conserved protein	um10074	0.40576	ni	conserved hypothetical protein
12c00006	0.49204	ni	cyclin	um10317.2	0.40585	ni	putative protein
22c00055	0.49205	ni	flavin-containing monoxygenase	um02108	0.40592	ni	conserved hypothetical protein
6d00042	0.49224	K03515	translesion DNA polymerase - REV1 deoxycytidyl transferase	um02807	0.40662	K09788	conserved hypothetical protein
6c001125	0.49228	K09553	molecular co-chaperone STH1	um05478	0.40663	ni	conserved hypothetical protein
2c000035	0.49237	ni	hypothetical protein	um01308	0.40667	ni	related to Trophoblast
19c00013	0.49262	ni	hypothetical protein	um00305.2	0.40667	ni	related to SAC3 - leucine permease transcriptional regulator
27d00057	0.49266	K00872	homoserine kinase	um00364.2	0.40677	K12844	related to U4
22d00010	0.49283	ni	hypothetical protein	um02925	0.40686	ni	hypothetical protein
22c00187	0.49284	ni	hypothetical protein	um04856	0.40698	K08286	protein kinase Ukc1p
25c00006	0.49308	ni	hypothetical protein	um02872	0.40705	ni	conserved hypothetical protein
13d00016	0.49313	ni	hypothetical protein	um11636	0.40732	ni	related to vacuolar protein sorting 16
7c000201	0.49322	K11341	transcription initiation factor IIF, auxiliary subunit	um04765	0.40736	K03439	probable TRM8 - part of complex required for 7-methylguanosine modification
9c000113	0.49331	ni	hypothetical protein	um12025	0.40784	ni	conserved hypothetical protein
9c000265	0.49332	ni	hypothetical protein	um00017	0.40815	ni	conserved hypothetical protein
5d00102	0.49366	K14154	hypothetical protein	um11648	0.40841	K06287	conserved hypothetical protein
25c00089	0.49401	ni	hypothetical protein	um10123	0.40865	K13303	SK1-type AGC kinase
11d00059	0.49415	ni	hypothetical protein	um10689	0.4087	K01705	probable LYS4 - homocarnitase precursor
12c00082	0.49433	K15634	thymidylate synthase	um04514	0.40885	ni	hypothetical protein
27d00098	0.49436	K12831	splicing factor 3b, subunit 4	um05825	0.40885	K14565	probable NCR5 - required for pre-18S RNA processing
7d000313	0.4944	ni	hypothetical protein	um05684	0.40916	K12386	related to cystostinin
14c00006	0.49447	K02830	checkpoint 9-1-1 complex, RAD1 component	um02344	0.40942	K02519	related to translation initiation factor IF-2
12d00093	0.49454	K06316	nuclear division RFT1 protein	um05836	0.40948	K06911	conserved hypothetical protein
8d00107	0.49454	ni	hypothetical protein	um11424	0.4095	K01433	conserved hypothetical protein
6c000010	0.49464	ni	long chain fatty acid elongase	um00981	0.40954	ni	putative protein
22d00116	0.49472	ni	permease of the major facilitator superfamily	um02896	0.40965	ni	putative protein
10d00060	0.49473	K00384	thioredoxin reductase	um11377	0.40965	ni	ni
20c00059	0.49474	ni	phospholipid scramblase	um01275	0.40966	K02738	probable PRE3 - 20S proteasome subunit
16c00025	0.49507	ni	hypothetical protein	um11962.2	0.40976	ni	probable Arp2
24d00026	0.4952	ni	hypothetical protein	um10196	0.40976	ni	related to TOM22 - mitochondrial outer membrane import receptor complex subunit
19c00053	0.49527	K12190	vacuolar sorting protein VPS36	um05774	0.40978	ni	related to metalloprotease MEP1
5c00134	0.49538	ni	ribosomal protein S5	um04368	0.40981	ni	related to endo-
9d000340	0.4954	K02891	60S ribosomal protein L22	um05306	0.40984	K05757	probable Arp2
8c000084	0.49577	ni	hypothetical protein	um02426	0.41012	K10575	probable ubiquitin-conjugating enzyme E2
7c00042	0.49577	ni	hypothetical protein	um11552	0.41018	ni	hypothetical protein
7c000288	0.49583	K11324	DNA methyltransferase 1-associated protein-1	um11602	0.41046	ni	related to zinc finger protein
16c00007	0.49589	ni	hypothetical protein	um10551.2	0.41062	K03142	probable SSL1 - FIIH subunit
6d000063	0.49598	ni	purpke acid phosphatase	um00568	0.41132	ni	hypothetical protein
10c00047	0.49617	ni	hypothetical protein	um10934	0.41142	K11237	related to Protein scd2
25c00022	0.4962	K12398	clathrin-associated protein medium chain	um10625	0.41147	K02896	probable ribosomal protein L24
9c000298	0.49625	ni	hypothetical protein	um00364	0.41173	ni	putative protein
16d00029	0.49628	K03169	predicted metal-binding protein	um05091.2	0.41181	K03238	probable SUI3 - translation initiation factor eIF2 beta subunit
9c000229	0.49638	ni	hypothetical protein	um00711	0.41207	K06698	related to Proteasome activator complex subunit 3
10c00075	0.49648						

25d00017	0.4987	K02726	20S proteasome, regulatory subunit alpha type PSMA2/PRE8	um03980	0.4161	ni	conserved hypothetical protein
26d00030	0.49874	K11279	nucleosome assembly protein NAP-1	um03745	0.41623	ni	conserved hypothetical Ustilago-specific protein
10d00014	0.49877	K02925	60S ribosomal protein L3	um01534	0.41633	ni	putative protein
7d00130	0.49887	ni	hypothetical protein	um10845	0.41634	ni	conserved hypothetical protein
24c00060	0.49895	ni	folypolyglutamate synthase	um11142	0.41657	K01733	probable THR4 - threonine synthase
12d00016	0.49919	K17302	vesicle coat complex COP1, beta' subunit	um10422	0.41668	ni	putative protein
22d01019	0.49925	ni	3-oxacyl CoA thiolase	um02262	0.41706	K14832	related to MAK21 - protein required for 60S ribosomal subunit biogenesis
3d00028	0.49947	ni	histone H2B	um00746	0.41706	ni	conserved hypothetical Ustilago-specific protein
10d00034	0.49955	K12041	sodium/hydrogen exchanger protein	um04720	0.41733	ni	putative protein
19d00066	0.49963	ni	hypothetical protein	um04466	0.4174	K12623	related to U6 snRNA-associated Sm-like protein LSM4
8d00018	0.49967	K11568	hypothetical protein	um03535	0.41749	ni	hypothetical protein
16d00032	0.49995	ni	hypothetical protein	um11659	0.4175	ni	putative protein
8d00098	0.50006	ni	hypothetical protein	um11182	0.41755	ni	conserved hypothetical protein
3d00073	0.50007	ni	hypothetical protein	um01529	0.41757	K03134	related to TAF10 - TFIID and SAGA subunit
16d00077	0.50011	K15115	mitochondrial FAD carrier protein	um01504	0.41761	K11251	probable Histone H2A
7d00341	0.50019	K09250	E3 ubiquitin ligase interacting with arginine methyltransferase	um11089	0.41786	ni	related to CHS7 - control of protein export from the ER
22d00039	0.50022	K11252	hypothetical protein	um04812	0.41787	ni	putative protein
18d00114	0.50056	ni	hypothetical protein	um10386	0.41798	ni	conserved hypothetical protein
26d00080	0.50057	K03012	RNA polymerase II, fourth largest subunit	um05295	0.41809	ni	conserved hypothetical Ustilago-specific protein
10c00072	0.50073	K01922	uncharacterized conserved protein	um02386	0.41814	K02965	probable mitochondrial ribosomal protein S19
7d00270	0.50085	K11808	phosphotriphosphatidomethylsuccinocarboxamide synthase	um00156.2	0.41819	ni	conserved hypothetical protein
9d00252	0.5009	ni	hypothetical protein	um11066	0.41826	ni	conserved hypothetical Ustilago-specific protein
9d00127	0.50165	ni	predicted dehydrogenase	um01957	0.41835	K01230	related to Mannosyl-oligosaccharide alpha-1
24d00044	0.50177	ni	transport protein particle TRAPP complex subunit	um00745	0.41842	ni	putative protein
22c01077	0.50184	K12584	uncharacterized conserved protein	um06201	0.41864	K04499	probable RVB1 - RUVB-like protein
22c00011	0.50192	ni	hypothetical protein	um01865	0.41865	ni	hypothetical protein
6d00005	0.50205	K00155	aldehyde dehydrogenase	um02450	0.41884	K03263	probable HYP2 - translation initiation factor eIF5A
26d00039	0.50207	K03934	NADH:ubiquinone oxidoreductase, NDUFS1/75 kDa subunit	um05603	0.41901	K01053	related to Gluconolactonase
9d00286	0.50208	ni	helicase-like transcription factor HLTf	um06279	0.41919	ni	hypothetical protein
25d0054	0.50211	K02901	60S ribosomal protein L27	um02138	0.41931	ni	effector family protein Eff1-6
18d00003	0.50213	ni	predicted membrane protein	um01867	0.41945	K12598	probable MTS4 - involved in nucleocytoplasmic transport of mRNA
10c00066	0.50231	K04708	ethanolamine-p-transferase GP111/PIG-F	um01937	0.41954	ni	related to acid sphingomyelinase
9d00289	0.50239	K04649	ubiquitin-protein ligase	um01087	0.41981	K03347	probable SCF complex member Cullin 1
3d00053	0.50246	K02328	DNA polymerase delta, regulatory subunit 55	um10737	0.41985	K14567	conserved hypothetical protein
12c00007	0.50248	ni	hypothetical protein	um11583	0.41988	K03939	related to NADH2 dehydrogenase
9d00360	0.50268	ni	mitochondrial import inner membrane translocase, subunit TIM8	um04856	0.42002	ni	conserved hypothetical protein
9d00025	0.50277	ni	hypothetical protein	um01842	0.42002	ni	hypothetical protein
6d00039	0.50279	K15109	mitochondrial carrier protein	um01244	0.42035	ni	conserved hypothetical protein
9d01161	0.50288	ni	hypothetical protein	um05305	0.42038	ni	conserved hypothetical Ustilago-specific protein
22d00061	0.50324	ni	vacuolar sorting protein VPS22	um15987	0.42054	ni	conserved hypothetical protein
11c00078	0.50337	ni	nicotinic acid phosphoribosyltransferase	um11214	0.4207	ni	related to conserved oligomeric Golgi complex component 6
19d00162	0.50347	ni	ras 1 guanine nucleotide exchange factor	um00778	0.42075	K03955	probable ACP1 - mitochondrial acyl-carrier protein
25d00014	0.50391	ni	hypothetical protein	um11240	0.4208	ni	putative protein
12c00180	0.50423	ni	hypothetical protein	um01239	0.42092	ni	conserved hypothetical Ustilago-specific protein
24c00062	0.50487	ni	hypothetical protein	um05801	0.42097	ni	related to C2H2 zinc finger protein
5d00044	0.50497	K02987	40S ribosomal protein S4	um00032	0.42103	ni	hypothetical protein
11d00013	0.50499	K03649	G/T mismatch-specific thymine DNA glycosylase	um03003	0.42142	ni	probable GUP1 - Multimembrane-spanning protein essential for proton symport of glycerol
6d00108	0.50503	K00939	adenylate kinase	um10556	0.42174	ni	hypothetical protein
9d00329	0.50568	ni	hypothetical protein	um01519	0.42174	ni	putative protein
9d00074	0.50511	K15172	RNA polymerase II transcription elongation factor DSIF/SUPT5H	um12121	0.42177	ni	putative protein
3d00033	0.50522	ni	predicted spermine/spermidine synthase	um06459	0.42178	ni	ni
26c00022	0.50531	ni	hypothetical protein	um11223	0.42208	ni	conserved hypothetical protein
9d00264	0.50559	K10601	E3 ubiquitin ligase	um02422	0.42221	K11236	related to CD24 - GTP
9d00113	0.5059	K12624	U6 snRNA-associated Sm-like protein	um10639	0.42222	ni	conserved hypothetical protein
9c00094	0.50595	ni	hypothetical protein	um00199	0.4224	K03247	related to eIF3h - translation initiation factor 3 subunit H
26c00072	0.50605	ni	hypothetical protein	um02812	0.42269	ni	hypothetical protein
16d00081	0.50608	ni	hypothetical protein	um10833	0.42286	K00653	related to histone acetyltransferase 3
22d01051	0.50631	K15463	mitochondrial RNA phosphoribosyl-transferase	um05294	0.42339	ni	conserved hypothetical Ustilago-specific protein
9d00307	0.50691	K02605	hypothetical protein	um00763	0.42355	ni	conserved hypothetical protein
9c00066	0.50708	ni	synaptic vesicle transporter SVOP and related transporters	um11146	0.42371	ni	hypothetical protein
26d00023	0.50718	K01556	L-tryptophan hydrolase	um10533	0.42373	K00164	probable KGD1 - alpha-ketoglutarate dehydrogenase
25d00071	0.50725	ni	uncharacterized conserved protein	um05300	0.42385	K03960	probable 40S Ribosomal protein S14
11c00056	0.50725	ni	uncharacterized conserved protein	um03307	0.42405	K01934	related to 5-formyltetrahydrofolate cyclo-ligase
7d00160	0.50727	K15029	RNA polymerase I-associated factor - PAF67	um11691	0.42424	ni	conserved hypothetical protein
27c00051	0.5073	K17103	hypothetical protein	um11417	0.42439	ni	conserved hypothetical Ustilago-specific protein
16d00041	0.50738	K11338	DNA helicase TIP49	um10343	0.4244	ni	conserved hypothetical protein
6d00112	0.5074	ni	hypothetical protein	um11817	0.42454	K13511	related to YAK1 - L-lysophosphatidylcholine acyltransferase
10d00071	0.5074	ni	hypothetical protein	um06306	0.42462	ni	related to YAK1 - ser
16d00040	0.50759	ni	mitochondrial ribosomal protein L16	um05653.2	0.42479	ni	conserved hypothetical protein
5d00099	0.50761	K08054	calnexin	um04346	0.42487	K06100	related to Symplekin
24d00025	0.50763	ni	NADH pyrophosphatase I of the Nudix family of hydrolases	um11318	0.42487	K02970	probable N-terminal acetyltransferase complex subunit ARD1
4c00013	0.50791	ni	hypothetical protein	um10512	0.425	K03013	probable 25 kD subunit of DNA-directed RNA polymerase I
22c00316	0.50795	ni	hypothetical protein	um03178	0.42503	K14325	conserved hypothetical protein
22d00250	0.50858	K10858	DNA mismatch repair protein - MLH2/PMS1/Pms2 family	um11643	0.42509	ni	putative protein
14c00071	0.50879	ni	hypothetical protein	um02564	0.42523	K14545	related to CDC73 - DNA-directed RNA polymerase II accessory protein
14c00065	0.50882	ni	hypothetical protein	um05127	0.42523	K15175	related to YAK1 - L-lysophosphatidylcholine acyltransferase
11d00012	0.50901	ni	hypothetical protein	um11314	0.42529	K09250	related to GIS2 - Putative zinc finger protein
22d00237	0.50908	K13171	splicing coactivator SRm160/300, subunit SRm160	um03541	0.42543	ni	related to Meiotic expression upregulated protein 26
26d00090	0.50913	ni	hypothetical protein	um04613	0.42545	ni	related to APP1 - Actin Patch Protein
7d00360	0.50915	ni	microbial chaperones HSP105/HSP110/SSB1	um00895	0.42549	ni	conserved hypothetical protein
9d00389	0.50925	K01937	CTP synthase	um03823	0.42556	ni	hypothetical protein
7c01037	0.50938	K14397	mRNA cleavage factor I subunit	um10821	0.42577	ni	conserved hypothetical protein
11d00051	0.5095	ni	actin-binding protein Coronin	um00251	0.42605	ni	conserved hypothetical protein
26c00020	0.50969	ni	hypothetical protein	um04845	0.42611	ni	conserved hypothetical protein
19d01031	0.50971	K08495	SNARE protein GS28	um04568	0.42613	ni	conserved hypothetical protein
22d00223	0.50985	K00624	carnitine O-acetyltransferase CPT2/YAT1	um05614	0.42617	ni	related to Acetyltransferase
16d00083	0.51005	ni	hypothetical protein	um05095	0.42634	ni	hypothetical protein
3c00072	0.51018	K13099	uncharacterized conserved protein	um05646	0.42637	ni	conserved hypothetical protein
14c00022	0.51037	ni	hypothetical protein	um11471	0.42657	ni	conserved hypothetical protein
10c00085	0.51065	ni	hypothetical protein	um10615	0.42694	K07976	probable VPS21 - Rab5-like GTPase involved in vacuolar protein sorting
3d00062	0.51105	ni	mitochondrial RNA helicase SUV3	um02520	0.4271	ni	conserved hypothetical protein
8d00114	0.51108	ni	hypothetical protein	um02487	0.42711	ni	conserved hypothetical protein
9d00292	0.51111	ni	hypothetical protein	um03701	0.42737	ni	conserved hypothetical protein
16c01061	0.51121	ni	uncharacterized mRNA-associated protein RAP55	um01499	0.42743	ni	hypothetical protein
6d00059	0.51121	ni	hypothetical protein	um12321	0.42749	ni	conserved hypothetical protein
9d00023	0.51122	ni	uncharacterized conserved protein	um01017	0.42756	ni	conserved hypothetical protein
10c00025	0.51124	K14309	cullins	um05309	0.42763	ni	conserved hypothetical Ustilago-specific protein
7c00028	0.51136	ni	hypothetical protein	um05190	0.4277	K02964	probable RPS18a - ribosomal protein S18
6c00054	0.51144	ni	hypothetical protein	um06169	0.42781	K15901	conserved hypothetical protein
9d00011	0.51155	ni	hypothetical protein	um04562	0.42793	K14454	probable aspartate aminotransferase
9d00163	0.51158	K04555	ubiquitin-protein ligase	um11894	0.42806	ni	putative protein
3c00050	0.51195	K06927	putative translation initiation inhibitor UK114/IBM1	um10347	0.42808	K11672	related to ARPS - Actin-related protein
24d00094	0.51221	ni	hypothetical protein	um04313	0.4281	ni	putative protein
24d00050	0.5126	K00121	alcohol dehydrogenase	um00233	0.42812	K14328	conserved hypothetical protein
9c00073	0.51266	K11313	histone acetyltransferase PCAF/SAGA, subunit SUPT3H/SPT3	um00067	0.42831	K10625	related to ubiquitin-protein ligase e3 component
19d00097	0.51294	ni	hypothetical protein	um11489	0.42842	ni	hypothetical protein
19d0006	0.51297	ni	uncharacterized conserved protein	um06498	0.42855	ni	putative protein
13d00047	0.51298	ni	araldin/beta-catenin-like repeat-containing protein	um05780	0.42879	ni	hypothetical protein
7d00146	0.51304	K00294	delta-1-pyrroline-5-carboxylate dehydrogenase	um05580	0.42882	K07941	probable ADP-ribosylation factor 6
9c00063	0.51306	ni	predicted dehydrogenase	um03553	0.42883	ni	conserved hypothetical protein
4d00034	0.51317	K01759	glyoxalase	um10043	0.42887	K00791	related to RNA isopentenylpyrophosphate transferase
7d00150	0.51362	ni	hypothetical protein	um06362	0.42893	ni	related to Para-nitrobenzyl esterase
13d00071	0.51446	ni	hypothetical protein	um04202	0.4291	K11835	related to UDP12 - ubiquitin C-terminal hydrolase
24d00047	0.5146	K08065	CCAAT-binding factor, subunit A	um06143	0.42911	ni	hypothetical protein
24d00029	0.51508	K02895	hypothetical protein	um03218	0.42921	ni	related to Secretory carrier-associated membrane protein 2
27d00071	0.51532	K00413	cytochrome c1	um05369	0.42936	K09142	conserved hypothetical protein
10c00092	0.51543	ni	peptidyl-prolyl cis-trans isomerase	um00362	0.42937	ni	conserved hypothetical protein
16c00043	0.51544	ni	uncharacterized protein PSP1	um02901	0.42942	ni	conserved hypothetical protein
22c00108	0.51604	ni	hypothetical protein	um00440	0.42943	ni	conserved hypothetical protein
6d00093	0.51622	K12873	G10 protein	um04407	0.42956	ni	conserved hypothetical protein
22d00093	0.51623	K00670	N-acetyltransferase	um05974	0.42963	ni	putative protein
8d00097	0.51652	K10592	E3 ubiquitin-protein ligase	um11719	0.42967	K02987	probable ribosomal protein S4
6d00036	0.5166	K12161	ubiquitin-like protein	um02245	0.42971	K14004	probable SEC13 - protein transport protein
27c00097	0.5166	ni	multidrug resistance-associated protein	um01040	0.42978	K00823	probable 4-aminobutyrate aminotransferase
5d00094	0.51679	ni	hypothetical protein	um11159	0.42998	ni	putative protein
18c00028	0.5173	ni	vesicle coat complex AP-1/AP-2/AP-4, beta subunit	um10748	0.43001	ni	conserved hypothetical protein
7d00070	0.51759	K03145	transcription elongation factor TFIIS	um00270	0.43014	ni	putative protein
18d00057	0.51764	ni	hypothetical protein	um11209	0.43021	K07973	probable Guanine nucleotide-binding protein gamma subunit
22c01017	0.51787	ni	hypothetical protein	um01273	0.43042	K11855	related to ubiquitin carboxy-terminal hydrolase 36
4d00033	0.51793	K16803	microtubule-associated protein	um03486	0.43046	K14022	conserved hypothetical protein
22d00029	0.51803	ni	SNARE protein TLG1	um03685	0.43047	ni	related to YVC1 - vacuolar cation channel
15d00047	0.51818	ni	hypothetical protein	um10522	0.43052	K04711	related to YPC1 - Alkaline ceramidase
16c00031	0.51819	ni	hypothetical protein	um01811	0.43057	ni	related to complex I intermediate-associated protein CIA30 precursor
25c00057	0.51826	ni	sensory transcription histidine kinase	um03062	0.43062	ni	conserved hypothetical Ustilago-specific protein
22d00104	0.518						

5000121	0.52122	ni	predicted methyltransferase	um10079	0.43456	ni	probable lanosterol synthase
8000012	0.52135	K17095	aneurin	um00262	0.43473	ni	conserved hypothetical protein
9030432	0.52136	K07107	hypothetical protein	um11236	0.43484	ni	ni
2200045	0.52138	K03468	mitogen-activated protein kinase kinase	um01045	0.435	K13123	conserved hypothetical protein
5000127	0.52163	K15306	ran-binding protein RANBP1 and related RanBD domain proteins	um10475	0.43544	ni	putative protein
1900083	0.52165	K10997	DNA topoisomerase I-interacting protein	um00536	0.43555	ni	conserved hypothetical protein
1900157	0.5218	ni	FOG, Low-complexity	um01495	0.43566	K15115	related to Y1A6 - P-uvulate transporter of the mitochondrial inner membrane
1000053	0.52201	ni	beta (bacterial stress-induced morphogen)-related protein	um00354	0.43562	ni	conserved hypothetical protein
9000192	0.52207	ni	hypothetical protein	um01146	0.43566	ni	conserved hypothetical protein
9000117	0.52242	K16185	GTP-binding protein	um05406	0.43595	ni	endosomal t-SNARE
6000016	0.52244	ni	hypothetical protein	um00238	0.43597	ni	conserved hypothetical Ustilago-specific protein
7000126	0.52257	ni	ferri-1	um01235	0.436	K15030	related to iron-translocation initiation factor 3 subunit M
9000318	0.52272	K01488	adenine desaminase	um00926	0.43614	K02872	probable ribosomal protein L13a
5000123	0.52274	K00033	6-phosphogluconate dehydrogenase	um01834	0.43628	ni	conserved hypothetical protein
9000214	0.52285	K01441	ceramidases	um00476	0.43648	ni	related to 2-hydroxy-6-oxo-6-phenylhexa-2
1900121	0.52291	ni	hypothetical protein	um00501	0.43648	ni	hypothetical protein
1600067	0.52307	K03869	culin-3	um10617	0.43658	ni	conserved hypothetical protein
1500025	0.5232	ni	hypothetical protein	um04605	0.43675	K12274	conserved hypothetical protein
6000070	0.52338	K15015	amino acid transporters	um00798	0.43676	K15505	related to RAD5 - DNA helicase
7000058	0.52368	ni	uncharacterized conserved protein	um11478	0.43681	ni	putative protein
1200063	0.5237	ni	hypothetical protein	um00557	0.43698	K01191	probable AMS1 - alpha-mannosidase
1900100	0.52384	K15206	hypothetical protein	um01383	0.43712	ni	putative protein
7000331	0.5239	K06018	acid sphingomyelinase and PHM5 phosphate metabolism protein	um10393	0.4372	ni	conserved hypothetical protein
8000092	0.52394	K16833	hypothetical protein	um03821	0.4373	ni	hypothetical protein
9000160	0.52404	ni	hypothetical protein	um00605	0.43737	ni	related to MIE12 - methyltetrahydrofolate reductase
2200072	0.52409	ni	calcitriol	um01287	0.43752	ni	related to NADPH-dependent FMN and FAD containing oxidoreductase
7000213	0.52406	K15628	peroxisomal long-chain acyl-CoA transporter	um10193	0.43757	ni	hypothetical protein
10000120	0.52414	ni	hypothetical protein	um11591	0.43759	ni	related to SSP120 - secretory protein
6000011	0.52431	K01796	predicted L-carnitine dehydratase	um00071	0.43763	K00809	probable deoxyhypusine synthase
22000128	0.52435	ni	hypothetical protein	um00550	0.43766	ni	hypothetical protein
9000086	0.52439	ni	hypothetical protein	um01430	0.43768	ni	conserved hypothetical Ustilago-specific protein
5000108	0.52451	ni	hypothetical protein	um11152	0.4381	ni	related to 2-amino-3-carboxymuconate-6-semialdehyde decarboxylase
2200004	0.52485	ni	hypothetical protein	um00463	0.43828	K10082	related to vesicular integral-membrane protein VIP36
7000177	0.52511	K15456	RNA polymerase II elongator associated protein	um05471	0.43833	ni	conserved hypothetical protein
22000021	0.52532	ni	hypothetical protein	um04363	K00968	ni	related to choline-phosphate cytidylyltransferase
22000295	0.52547	ni	hypothetical protein	um10983.2	0.43865	ni	conserved hypothetical protein
5000098	0.52595	K06063	mRNA splicing factor	um11173	0.43869	ni	putative protein
4000010	0.52604	K00327	NAD(P)FAD dependent oxidoreductase	um03240	0.43887	ni	related to RUD3 - suppressor of uso1-1 transport defect
9000396	0.5261	K03448	peptidase of the major facilitator superfamily	um00621	0.43892	ni	hypothetical protein
14000397	0.52613	ni	hypothetical protein	um00861.2	0.43898	K03256	related to GCD10 - translation initiation factor eIF3 RNA-binding subunit
1000078	0.52613	K14686	copper transporter	um03422	0.43899	ni	conserved hypothetical protein
22000221	0.5262	ni	hypothetical protein	um11096	0.43908	K17279	related to YOP1 - Ypt-interacting protein
22000121	0.52649	K03936	NADH-ubiquinone oxidoreductase, NDUFS3/30 kDa subunit	um04039	0.4391	ni	hypothetical protein
3000005	0.52649	K03245	hypothetical protein	um00287	0.43925	K15542	related to PFS2 - polyadenylation factor 1 subunit 2
4000021	0.52696	ni	predicted methyltransferase	um04375	0.43931	K11436	related to hnRNP arginine N-methyltransferase
9000147	0.52731	ni	hypothetical protein	um02216	0.43948	K15109	related to Carrier protein YMC1
1800042	0.52761	ni	golgi transport complex COD1 protein	um00355	0.4395	ni	related to ERV25 - component of the COPII-coated vesicles
1800099	0.52771	ni	hypothetical protein	um03782	0.4397	ni	hypothetical protein
1300050	0.52794	ni	hypothetical protein	um02016	0.43981	K17278	related to Membrane steroid binding protein
19000124	0.52803	ni	3-keto steroid reductase	um04809	0.43983	K14823	related to EBP2 - required for pre-rRNA processing and ribosomal subunit assembly
11000017	0.52819	K11560	microtubule-associated protein essential for anaphase spindle etc	um02064	0.43985	K02151	probable VMA7 - H-ATPase V1 domain 14 kDa subunit
22000129	0.52848	K16732	microtubule-associated protein essential for anaphase spindle etc	um11130	0.44016	ni	conserved hypothetical protein
8000025	0.52852	ni	hypothetical protein	um00383	0.44039	K12837	related to pre-mRNA splicing factor UZAF large chain
13000109	0.52854	ni	protein involved in sister chromatid separation and/or segregation	um04722	0.4405	K03012	related to Rpb4 - 16 kD subunit of DNA-directed RNA polymerase II
6000125	0.52855	K06671	sister chromatid cohesion complex Cohesin, subunit STAG1/IRR1	um03534	0.44065	ni	putative protein
5000116	0.52876	K10739	single-stranded DNA-binding replication protein A	um03752	0.44071	ni	conserved hypothetical Ustilago-specific protein
9000307	0.52876	K09252	hypothetical protein	um00232	0.44084	ni	conserved hypothetical protein
22000119	0.529	ni	transcription-associated recombination protein - Thp1p	um02918	0.44103	K03128	related to TIF2 - component of TFIID complex
5000033	0.52909	K14863	predicted E3 ubiquitin ligase	um12264	0.44144	ni	putative protein
3000064	0.52929	ni	inositol phospholipid synthesis protein	um11540	0.44162	ni	related to carboxylesterase
19000114	0.52968	K06963	THUMP domain-containing proteins	um11325	0.4417	ni	related to VPS17 - vacuolar protein sorting-associated protein
24000059	0.53019	ni	hypothetical protein	um00719.2	0.44171	ni	putative protein
1000021	0.53052	K05770	peripheral-type benzodiazepine receptor and related proteins	um01964	0.44188	ni	related to multidrug resistance protein
6000100	0.53063	ni	FYVE finger containing protein	um11649	0.44195	ni	related to D-amino acid oxidase
7000067	0.53077	K10427	dynactin, subunit p25	um00140	0.44218	K05542	related to RNA dihydrouridine synthase
20000009	0.53101	ni	hypothetical protein	um06102	0.44222	ni	related to Glucan 1
7000155	0.53111	K07374	alpha Lact III	um06152	0.44222	ni	putative protein
1600042	0.53184	ni	uncharacterized conserved protein	um02313	0.44233	ni	hypothetical protein
1600023	0.53206	ni	hypothetical protein	um01072	0.4424	ni	conserved hypothetical protein
7000048	0.53313	K05757	actin-related protein Arp2/3 complex, subunit ARPC1/p41-ARC	um02218	0.44244	K01738	related to cysteine synthase
10000361	0.53321	ni	hypothetical protein	um01388	0.44258	ni	hypothetical protein
18000019	0.53343	K00290	lysine-ketoglutarate reductase	um10326.2	0.44272	K00971	probable Mannose-1-phosphate guanylyltransferase
13000042	0.53346	K01196	alpha amylase	um02327	0.44277	K14169	hypothetical protein
26000004	0.53354	ni	predicted transporter	um01055	0.44295	ni	ni
7000312	0.53375	K16466	Ca2+-binding protein	um10306	0.44317	K01426	related to Serine
20000017	0.53451	ni	hypothetical protein	um11226	0.44327	ni	conserved hypothetical protein
9000338	0.5347	K13511	phosphate acyltransferase	um00055	0.4433	K10134	conserved hypothetical protein
2600042	0.53495	ni	hypothetical protein	um10884	0.44365	K16075	related to LPE10 - strong similarity to Mrs2p
1000044	0.53496	ni	transcription factor ely2	um00632	0.44368	ni	putative protein
7000340	0.53506	K02957	40S ribosomal protein S15/S22	um00358	0.44386	ni	related to YFP1
9000109	0.53514	ni	sister chromatid cohesion complex Cohesin, subunit RAD21/SCC	um04724	0.44391	ni	conserved hypothetical protein
24000013	0.53519	ni	hypothetical protein	um10628	0.44404	ni	conserved hypothetical protein
26000031	0.53521	K00253	isovaleryl-coa dehydrogenase	um00189	0.44413	ni	related to ESF1 - 18S rRNA factor
26000041	0.53539	ni	ubiquitin cytochrome c reductase assembly protein CBP3	um02186	0.44422	ni	conserved hypothetical protein
3000003	0.53544	K11271	FOG, Predicted E3 ubiquitin ligase	um02343	0.44426	K14833	related to exon repair protein RAD4
22000270	0.53556	ni	hypothetical protein	um00312	0.44435	ni	conserved hypothetical protein
12000117	0.53557	ni	hypothetical protein	um03353	0.44465	K11863	related to ataxin-3
7000202	0.53592	ni	hypothetical protein	um11082	0.4447	ni	hypothetical protein
7000207	0.53593	ni	hypothetical protein	um11559	0.44478	K09927	conserved hypothetical protein
16000088	0.53601	ni	hypothetical protein	um12289	0.4448	K00859	conserved hypothetical protein
9000240	0.53618	ni	hypothetical protein	um02263	0.44527	K01304	conserved hypothetical protein
22000445	0.5362	ni	putative mitochondrial/chloroplast ribosomal protein L45	um00167	0.44533	ni	conserved hypothetical protein
1000011	0.53638	K13095	splicing factor 1/branch point binding protein	um00274	0.44543	K02218	probable casein kinase I
18000006	0.53646	ni	hypothetical protein	um01978	0.44552	ni	conserved hypothetical protein
13000036	0.53648	K00924	serine/threonine protein kinase	um05873	0.44554	ni	related to TIF2 - translation initiation factor eIF4A
9000158	0.53652	K02331	predicted regulator of rRNA gene transcription	um01271	0.44576	ni	related to NAM8 - meiotic recombination protein
7000281	0.53663	ni	hypothetical protein	um03908	0.4458	ni	related to RRP14 - protein involved in Ribosomal RNA Processing
10000042	0.53699	K01930	folylpolyglutamate synthase	um01789	0.44587	ni	related to ERG28 - involved in synthesis of ergosterol
14000083	0.53696	ni	hypothetical protein	um04607	0.44588	ni	related to Asparaginyl-tRNA synthetase
20000072	0.53696	ni	hypothetical protein	um04782	0.4459	K01885	probable GUS1 - Glutamyl-tRNA synthetase
18000075	0.53714	ni	hypothetical protein	um05209	0.44625	K03844	related to ALG11 - required for asparagine-linked glycosylation
19000016	0.53734	K16261	amino acid transporters	um11021	0.44638	ni	probable mitochondrial precursor protein import receptor tom70
19000120	0.53766	K12842	predicted splicing regulator	um04987	0.44644	K02146	probable vacuolar atp synthase subunit d
5000037	0.53777	ni	hypothetical protein	um04987	0.44648	ni	conserved hypothetical protein
26000018	0.53798	ni	hypothetical protein	um11058	0.44651	ni	conserved hypothetical Ustilago-specific protein
13000086	0.53836	K06875	apoptosis-related protein	um11749	0.4466	K03246	probable TIF34 - translation initiation factor eIF3
2000003	0.53845	K14777	ATP-dependent RNA helicase	um10306	0.44678	ni	conserved hypothetical protein
9000288	0.53873	K00921	phosphatidylinositol-4-phosphate 5-kinase	um01776	0.44707	ni	conserved hypothetical protein
5000113	0.5388	K01106	inositol-1,4,5-trisphosphate 5-phosphatase	um04016	0.44716	ni	hypothetical protein
19000003	0.53898	ni	membrane coat complex Retromer, subunit VPS5/SNX1	um05026	0.44722	ni	related to NSP1 - nuclear pore protein
7000172	0.53934	ni	membrane coat complex Retromer, subunit VPS5/SNX1	um10809.2	0.44734	ni	related to GTPase-activating protein beta-chimerin
26000022	0.53985	ni	DHHC-type Zn-finger proteins	um03827	0.44747	ni	hypothetical protein
6000135	0.53986	K01870	isoleucyl-tRNA synthetase	um10830	0.44839	K15363	conserved hypothetical protein
2000068	0.54024	ni	hypothetical protein	um01009	0.4484	K00693	probable glycogen synthase
9000122	0.54031	ni	hypothetical protein	um11106	0.44852	ni	conserved hypothetical protein
22000120	0.54039	ni	hypothetical protein	um01217	0.44861	ni	hypothetical protein
15000065	0.54098	ni	hypothetical protein	um11510	0.44864	K12200	conserved hypothetical protein
9000372	0.54128	ni	oxidation resistance protein	um02294	0.44886	ni	conserved hypothetical Ustilago-specific protein
9000295	0.54143	ni	hypothetical protein	um02049	0.4491	ni	putative protein
11000038	0.54146	ni	predicted metal-dependent hydrolase of the TIM-barrel fold	um01375	0.44924	ni	hypothetical protein
26000078	0.5415	K1923	phosphoribosylamidoimidazole-succinocarboxamide synthase	um05928	0.44957	ni	conserved hypothetical Ustilago-specific protein
22000163	0.5417	ni	hypothetical protein	um05994	0.44958	ni	conserved hypothetical protein
5000019	0.54171	K02325	DNA polymerase epsilon, subunit B	um02609	0.44966	K12833	conserved hypothetical protein
8000041	0.5419	K03011	RNA polymerase II, subunit POLR2C/RPB3	um02851	0.44968	ni	putative protein
7000269	0.54208	K01104	dual specificity phosphatase	um02055	0.44983	K14408	related to RNA14 - component of pre-mRNA 3
5000162	0.54222	K01213	hypothetical protein	um01042	0.44991	ni	putative protein
25000070	0.54237	ni	mitochondrial associated endonuclease MAR1	um04257	0.44992	ni	hypothetical protein
15000003	0.54273	ni	hypothetical protein	um10099	0.44995	ni	conserved hypothetical protein
10000043	0.54286	K01658	ATPase component of ABC transporters with duplicated ATPase	um01058	0.44987	K12389	probable APS3 - AP-3 complex subunit
22000109	0.54287	K12199	uncharacterized conserved protein	um06238	0.45001	K02858	probable RIB3 - 3
9000308	0.54288	ni	protein phosphatase, regulatory subunit PPP1R3C/D	um00662	0.45038	ni	ni
19000007	0.54306	ni	hypothetical protein	um11619	0.45064	K02891	probable ribosomal protein L22
15000006	0.54343	K12662	U4/U6 small nuclear ribonucleoprotein Prp4	um02638	0.45068	K07870	conserved hypothetical protein
26000089	0.54352	ni	hypothetical protein	um15005	0.4509	K11541	probable URA2 - multifunctional pyrimidine biosynthesis protein
9000108	0.54358	K11557	hyp				

15c00074	0.54694	K03142	RNA polymerase II transcription initiation/nucleotide excision rep	um06334	0.45407	ni	related to beta 1
18c00096	0.54773	K01077	alkaline phosphatase	um02370	0.45431	ni	hypothetical protein
14d00048	0.54616	ni	DNA polymerase epsilon, subunit D	um11444	0.45438	ni	conserved hypothetical Ustilago-specific protein
7c00395	0.54822	K01209	hypothetical protein	um03273	0.45448	ni	related to Tlo elongation aberrant protein 1
22c00068	0.54824	ni	aldo/keto reductase family proteins	um04960	0.45494	K02950	related to 30S ribosomal protein S12
13d00084	0.54827	ni	hypothetical protein	um06304.2	0.45523	ni	conserved hypothetical protein
7d00298	0.54832	K16570	gamma-tubulin complex, DGRIP91/SPC98 component	um06434	0.4553	ni	conserved hypothetical protein
7c00134	0.54833	ni	hypothetical protein	um03843	0.45539	ni	probable FMP43 - protein found in mitochondrial proteome
25c00039	0.54843	ni	hypothetical protein	um03045.2	0.45583	ni	related to BSD2 - metal homeostasis protein
19c00117	0.54848	K14407	mRNA cleavage and polyadenylation factor I complex, subunit Rf	um10579	0.45593	K02180	related to mitotic checkpoint protein BUB3
7d00125	0.54859	K00511	squalene monooxygenase	um04900	0.45627	K11293	related to histone transcription regulator HIP1
7d00271	0.54875	K10862	hypothetical protein	um00805	0.45659	ni	hypothetical protein
7c00009	0.54891	ni	flavin-containing monooxygenase	um02489	0.45664	ni	putative protein
7d00018	0.549	K04076	mitochondrial chaperonin	um15035	0.45685	ni	related to 60S ribosomal protein l7
12d00117	0.54901	K01736	chormate synthase	um00667	0.45691	K12872	related to Pre-mRNA-splicing factor RBM22
19c00120	0.54901	ni	hypothetical protein	um03314	0.45697	ni	effector family protein Eff1-4
14c00130	0.5492	ni	dehydrogenase with different specificities	um11710	0.45704	K14560	probable IMP5 - component of the U3 small nuclear ribonucleoprotein
8c00012	0.54922	K01077	alkaline phosphatase	um03148	0.45719	ni	related to ATP-binding cassette protein
9d00269	0.54958	ni	hypothetical protein	um03540	0.4572	ni	conserved hypothetical protein
9c00242	0.54959	ni	hypothetical protein	um02308	0.45738	ni	hypothetical protein
5d00350	0.54969	K03106	signal recognition particle, subunit Srp54	um10232	0.45768	ni	probable cytochrome b5
11d00046	0.5499	ni	subtilisin-related protease	um03832	0.45782	ni	related to BNA2 - tytophphan 2
7c00345	0.55001	ni	hypothetical protein	um02614	0.45784	K14154	related to thiamine-phosphate diphosphorylase
10d00010	0.55005	K01939	adenylsuccinate synthase	um06413	0.45785	ni	putative protein
15c00038	0.55008	ni	hypothetical protein	um10050	0.45785	K12624	probable U6 snRNA-associated Sm-like protein LSm5
12d00136	0.55009	K11423	clathrin coat binding protein	um10286	0.45791	ni	related to KES1 - member of an cytoskeleton-binding protein family
22d00240	0.55013	K00854	sugar (pentulose and hexulose) kinases	um11484	0.45807	ni	hypothetical protein
19c00150	0.55042	ni	hypothetical protein	um11309	0.45852	K12768	related to coatomer epsilon subunit
22d00193	0.55062	ni	hypothetical protein	um01944	0.45858	ni	related to allantoinase permease
9d00383	0.55073	ni	uncharacterized conserved protein TEX2	um05017.2	0.4586	ni	putative protein
2d000028	0.55075	ni	dehydrogenase kinase	0.45861	K01950		probable ONS1 - Glutamine-dependent NAD Synthetase
11d00036	0.55086	ni	hypothetical protein	um01610	0.45864	ni	conserved hypothetical protein
18d00037	0.55087	ni	predicted membrane protein	um10324	0.45867	ni	putative protein
8c00048	0.55096	ni	aromatic amino acid aminotransferase and related proteins	um10988	0.45871	K11827	probable clathrin coat assembly protein ap17
22d00208	0.55097	ni	predicted Phf1-Phf2-type epimerase	um15041	0.45872	ni	conserved hypothetical protein
15c00069	0.55118	ni	vacuolar sorting protein PEP3/VPS18	um03699	0.45886	K01922	conserved hypothetical protein
27c00056	0.55121	ni	hypothetical protein	um04348	0.45887	K03380	probable phenol 2-monooxygenase
19d00035	0.55141	ni	golgi-associated protein	um04750	0.45891	ni	conserved hypothetical protein
2d00041	0.55141	ni	hypothetical protein	um11250	0.45917	ni	Mig2-3
15c00061	0.55188	ni	hypothetical protein	um06162	0.45958	ni	conserved hypothetical protein
7c00273	0.55245	ni	N-methyltransferase	um11623	0.45959	K14539	probable LSG1 - Large-Subunit GTPase involved in 60S ribosomal subunit biogenesis
12d00077	0.55248	K15305	uncharacterized conserved protein	um04665	0.45993	K14780	related to ECM16 - putative DEAH-box RNA helicase
16d00058	0.5525	ni	predicted Dolichyl-phosphate-mannose-protein mannosyltransfer	um05978	0.46001	ni	conserved hypothetical protein
9c00143	0.55261	ni	hypothetical protein	um04451	0.46007	K01537	probable PMR1 - secretory pathway Ca <sup>2+</sup> -transporting P-type ATPase
12d00061	0.55276	ni	nuclear-export-signal (NES)-containing protein	um10236	0.46007	K02949	probable RPS11B - ribosomal protein S11B
26d00103	0.55278	ni	hypothetical protein	um15028	0.4601	K01955	probable arginine-specific carbamoyl-phosphate synthetase
5c00093	0.55285	ni	urea transporter	um03515	0.46036	ni	related to LCB1 - serine C-palmitoyltransferase subunit
9c00159	0.55297	ni	hypothetical protein	um01063	0.46034	K15219	conserved hypothetical protein
25d00055	0.5532	ni	hypothetical protein	um04047	0.46058	K02537	probable MAD2 - spindle-assembly checkpoint protein
7c00224	0.55375	K15219	hypothetical protein	um06479	0.46066	ni	conserved hypothetical Ustilago-specific protein
9c00276	0.5539	ni	hypothetical protein	um11472	0.46074	ni	putative protein
8d00065	0.55405	ni	hypothetical protein	um10114	0.46082	K02960	probable 40S ribosomal protein S16
14d00013	0.55432	ni	hypothetical protein	um12025	0.46095	ni	conserved hypothetical protein
10d00109	0.55441	ni	hypothetical protein	um05863	0.46114	K12160	related to SMT3 ubiquitin-like protein
9c00186	0.55458	K15201	RNA polymerase III transcription factor TFIIC	um00278	0.46118	ni	hypothetical protein
8c00005	0.555	K14575	AAA-type ATPase	um02438	0.46123	ni	related to c1p1
22d00002	0.55522	ni	hypothetical protein	um03681.2	0.46123	ni	conserved hypothetical protein
10d00116	0.55544	K14859	RNA-binding protein required for 60S ribosomal subunit biogenes	um10285	0.46149	ni	putative protein
27d00032	0.55547	ni	karyopherin beta 3	um05804	0.46155	ni	Cys
10d00113	0.55551	ni	hypothetical protein	um06116	0.46172	ni	putative protein
8d00056	0.55554	K01873	valyl-trna synthetase	um11291	0.46181	K03064	probable RPT4 - 26S proteasome regulatory subunit
9c00285	0.55595	K15206	protein required for fusion of vesicles in vesicular transport	0.46187	ni		related to GDP-glucosylase
8d00085	0.55641	K01288	serine carboxypeptidases	um05989	0.46202	ni	related to 3-oxoadipate enol-lactone hydrolase
7d00037	0.55642	ni	serine racemase	um11361.2	0.46255	ni	related to branched chain alpha-ketoacid dehydrogenase kinase
9c00402	0.55669	ni	hypothetical protein	um04203	0.46313	ni	conserved hypothetical protein
9c00263	0.5567	ni	hypothetical protein	um05068	0.46322	K01130	probable Arylsulfatase
11c00067	0.55684	ni	predicted transporter	um01916	0.46336	ni	conserved hypothetical protein
19d00051	0.55703	ni	hypothetical protein	um12307	0.46357	K15424	conserved hypothetical protein
14d00032	0.55715	ni	hypothetical protein	um10416	0.46368	ni	conserved hypothetical protein
22c00217	0.55716	ni	regulatory protein MLP and related LIM proteins	um11436	0.46407	K03521	probable electron transfer flavoprotein beta chain
22c00190	0.55723	ni	predicted membrane protein	0.46408	ni		conserved hypothetical protein
22d00057	0.55727	ni	uncharacterized conserved protein	um01102	0.46478	ni	putative protein
19c00004	0.55737	ni	hypothetical protein	um05741	0.46488	ni	conserved hypothetical protein
11d00066	0.55767	ni	hypothetical protein	um02622	0.46492	K01560	conserved hypothetical protein
9c00263	0.55771	ni	hypothetical protein	um03636	0.46501	ni	conserved hypothetical Ustilago-specific protein
7d00208	0.55794	ni	FOG, PPR repeat	um05337	0.46538	ni	related to SLA1 - cytoskeleton assembly control protein
9c00152	0.55813	ni	dihydropyrimidine acetyltransferase	um04066	0.46618	ni	conserved hypothetical protein
9c00331	0.55822	ni	5' nucleotidase	um00195	0.46629	ni	putative protein
7c00202	0.55835	ni	hypothetical protein	um11352	0.4663	K01441	related to neutral ceramidase
7d00109	0.55893	ni	hypothetical protein	um05009	0.46678	ni	hypothetical protein
9c00010	0.55867	ni	hypothetical protein	um11561	0.46683	K02903	related to 60S ribosomal protein L28
9c00390	0.55875	ni	predicted transporter	um04503	0.467	ni	related to Alpha-N-acetylgalactosaminidase precursor
2d00051	0.55886	ni	hypothetical protein	um04034	0.46732	ni	conserved hypothetical Ustilago-specific protein
22d00301	0.55897	ni	hypothetical protein	um05501	0.46746	ni	TPR-containing protein Mgl1
19c00138	0.55935	ni	hypothetical protein	um06241	0.46749	ni	putative protein
6d00114	0.55962	K08770	ubiquitin and ubiquitin-like proteins	um10255	0.4677	ni	putative protein
19c00121	0.55969	K11584	serine/threonine protein phosphatase 2A, regulatory subunit	um10704	0.4677	ni	conserved hypothetical protein
9d00129	0.55985	K02437	glycine cleavage system H protein	um01654	0.46783	ni	conserved hypothetical protein
6d00094	0.55986	K03039	proteins containing the FAD binding domain	um02287	0.46793	ni	hypothetical protein
16d00004	0.56049	ni	hypothetical protein	um03456	0.46814	ni	putative protein
9c00257	0.56057	ni	hypothetical protein	um10993	0.46822	ni	conserved hypothetical protein
15c00087	0.56064	ni	hypothetical protein	um10549	0.46832	K14840	related to Glioma tumor suppressor candidate region gene 2 protein
11c00070	0.56119	ni	hypothetical protein	um00221	0.4686	ni	conserved hypothetical protein
16c00036	0.5614	K11672	actin-related protein - Arp5p	um06167	0.46869	K06639	related to CDC14 - dual specificity phosphatase
12d00042	0.5619	ni	hypothetical protein	um02378	0.46875	K14007	related to Protein transport protein Sec24C
22c00264	0.56202	ni	hypothetical protein	um00414	0.46891	ni	conserved hypothetical protein
7d00011	0.56206	ni	hypothetical protein	um01202	0.46909	ni	hypothetical protein
0.56209	0.5621	ni	animal one fatty acid synthase and related proteins	um03439	0.46913	ni	hypothetical Ustilago-specific protein
9c00315	0.56232	K00772	methylthioadenosine phosphorylase MTAP	um05005	0.46919	ni	related to 30S ribosomal protein S17
14d00014	0.56263	ni	serine/threonine protein kinase	um10226	0.46924	K06268	probable CNB1 - calcineurin B
14d00026	0.56264	ni	hypothetical protein	um12327	0.46928	K15376	related to Gephyrin
12d00076	0.56267	ni	FOG, Zn-finger	um16822	0.46938	K07556	related to ATP12 - F1F0-ATPase complex assembly protein
9c00344	0.56281	ni	hypothetical protein	um04238	0.46962	ni	related to poly
7d00242	0.56283	K15193	hypothetical protein	um10102	0.46962	ni	related to SLY1 protein
9d00235	0.56294	ni	hypothetical protein	um04294	0.46968	K13352	related to peroxin-11
7d00351	0.56308	ni	hypothetical protein	um11916	0.46987	ni	probable MRPL31 - mitochondrial ribosomal protein
22c00050	0.56312	ni	hypothetical protein	um10843	0.47001	ni	putative protein
2c00072	0.56357	ni	hypothetical protein	um10369	0.47031	K00568	related to COQ3 - enzyme of ubiquinone
12d00106	0.56377	K10753	histone chaperone	um02982	0.47058	K05857	related to PLC1 - 1-phosphatidylinositol-4
12c00063	0.56383	K03660	8-oxoguanine DNA glycosylase	um01240	0.47063	ni	conserved hypothetical Ustilago-specific protein
18d00102	0.56388	ni	uroporphyrinogen III synthase UROS/HEM4	um10068	0.47102	ni	related to Acid phosphatase precursor
9c00286	0.5642	ni	hypothetical protein	um04238	0.47107	ni	conserved hypothetical protein
7d00002	0.56445	ni	serine/threonine protein phosphatase	um04672	0.47126	K01098	related to CTL1 - RNA 5
9c00216	0.56447	ni	hypothetical protein	um11334	0.47127	K00599	related to RMT2 - protein-arginine N-methyltransferase
12d00046	0.56478	ni	peroxisomal NUDIX hydrolase	um00236	0.47128	ni	conserved hypothetical Ustilago-specific protein
15d00086	0.56495	ni	hypothetical protein	um05389	0.47148	ni	putative protein
8c00025	0.56503	ni	hypothetical protein	um11706	0.47197	ni	putative protein
18d00113	0.5651	ni	acetylcholinesterase	um10100	0.47209	K10734	conserved hypothetical protein
7d00159	0.56548	ni	hypothetical protein	um11997	0.47222	ni	probable ZPR1 - protein binds to translation elongation factor eEF-1
8d00108	0.56565	K00641	hypothetical protein	um06243	0.47227	ni	conserved hypothetical protein
19d00031	0.56567	ni	hypothetical protein	um11225	0.47231	K02895	conserved hypothetical protein
11c00089	0.5657	ni	tad-related DNase	um11743	0.47266	K02260	related to COX17 - Cytochrome c oxidase copper chaperone
12c00091	0.56581	K01626	hypothetical protein	um11078	0.47287	ni	conserved hypothetical protein
12c00118	0.56588	ni	hypothetical protein	um00671	0.47293	ni	putative protein
12c00028	0.56589	K14538	GTPase	um04040	0.47344	ni	hypothetical protein
5d00113	0.56591	ni	hypothetical protein	um02402	0.47372	ni	conserved hypothetical protein
9d00267	0.56599	K00286	pyrroline-5-carboxylate reductase	um01761	0.47372	ni	conserved hypothetical protein
24c00064	0.56609	ni	urea transporter	um02014	0.4738	ni	conserved hypothetical protein
5c00144	0.56611	ni	hypothetical protein	um12239	0.47388	K07478	related to MGS1 - Maintenance of Genome Stability 1
13c00043	0.5662	ni	hypothetical protein	um03262	0.47399	ni	conserved hypothetical Ustilago-specific protein
13c00031	0.56639	ni	extracellular protein SEL-1 and related proteins	um12287	0.474	ni	conserved hypothetical protein
7c00225	0.56662	K10684	SMT3/SUMO-activating complex, AOS1/RAD31 component	um01465	0.47409	ni	conserved hypothetical protein
18d00045	0.56667	K15076	RNA polymerase II transcription elongation factor Elongin/SIII, su	um03744	0.47418	ni	hypothetical protein
19d0146	0.567	ni	hypothetical protein	um03262	0.47444	K14544	conserved hypothetical protein
10c00026	0.56719	ni	ras-related GTPase	um11628	0.4745	ni	hypothetical protein
7d00112	0.56748	K14787	RNA-binding protein	um11760.2	0.47468	K03065	probable RPT5 - 26S proteasome regulatory subunit
5d00010	0.56766	ni	hypothetical protein	um01285	0.47489	ni	

12c00061	0.57194	ni	hypothetical protein	um12152	0.47844	ni	conserved hypothetical protein
18d00036	0.57214	ni	predicted seven transmembrane receptor - rhodopsin family	um04228	0.47859	K08486	related to SSO1 - syntaxin-related protein
13d00094	0.57254	ni	flavonol reductase	um03702	0.47867	K12585	probable D3S3
2c00081	0.57267	ni	aspartyl protease	um04948	0.47884	K01868	probable THS5 - threonyl tRNA synthetase
9c00368	0.57269	K12391	vesicle coat complex AP-1, gamma subunit	um02631	0.47887	K06997	conserved hypothetical protein
26c00015	0.57277	ni	uncharacterized conserved protein	um15086.2	0.47905	ni	conserved hypothetical protein
9c00387	0.57284	ni	sec5 subunit of exocyst complex	um04674	0.47939	ni	related to YB11 - Vacuolar
5c00099	0.57285	ni	hypothetical protein	um10165	0.47926	ni	related to Ngg1-interacting factor 3
22d00020	0.57305	K14403	mRNA cleavage and polyadenylation factor II complex, BRRS	um12215	0.47934	ni	hypothetical protein
14d00025	0.57336	ni	hypothetical protein	um05383	0.47946	ni	conserved hypothetical protein
10d00106	0.57358	ni	hypothetical protein	um00468	0.47955	ni	related to SPA2 protein
12c00129	0.57394	K02264	cytochrome c oxidase, subunit Va/COX6	um00596	0.47981	ni	hypothetical protein
7c00194	0.57428	ni	hypothetical protein	um10035	0.47982	K12398	related to AP-3 adaptor complex mu3A subunit
24c00010	0.57455	ni	hypothetical protein	um05695	0.48013	K03267	probable SUP35 - eukaryotic peptide chain release factor GTP-binding subunit
6d00034	0.57468	ni	hypothetical protein	um00388	0.48017	ni	hypothetical protein
9d00213	0.57471	ni	hypothetical protein	um05266	0.48029	ni	ni
15d00061	0.57488	ni	hypothetical protein	um10548	0.48041	K02127	probable H -transporting two-sector ATPase chain b precursor
3c00027	0.57508	ni	hypothetical protein	um00930	0.48073	ni	conserved hypothetical Ustilago-specific protein
16c00084	0.57538	K00052	3-isopropylmalate dehydrogenase	um03730.2	0.48081	ni	putative protein
6c00085	0.5757	K06877	predicted ATP-dependent RNA helicase	um03829.2	0.48102	ni	hypothetical protein
22c00259	0.57579	ni	CCAAT binding factor, subunit C	um03609	0.48106	K14855	probable RSA4 - WD-repeat protein involved in ribosome biogenesis
5c00036	0.57585	K01228	glucosidase	um05338	0.48118	ni	related to transcription factor MBP1
7c00189	0.57587	K10967	glycolipid 2-alpha-mannosyltransferase	um10756	0.48147	ni	conserved hypothetical protein
18d00104	0.57603	ni	permease of the drug/metabolite transporter	um11837	0.48192	ni	conserved hypothetical protein
26c00045	0.57624	ni	hypothetical protein	um04196	0.48199	K10424	conserved hypothetical protein
8c00113	0.57629	ni	hypothetical protein	um05158	0.48223	K14297	related to Nucleoporin nup189
27d00013	0.57683	ni	mitochondrial/chloroplast ribosomal protein L2	um10063	0.4826	K09008	conserved hypothetical protein
11c00011	0.57686	K10597	ubiquitin fusion degradation protein-2	um04932	0.48266	ni	related to ATG18 - Phosphatidylinositol 3
26c00063	0.57703	ni	hypothetical protein	um11792	0.48278	K07950	conserved hypothetical protein
9c00321	0.57706	K02989	ribosomal protein S7	um01648	0.48333	ni	conserved hypothetical protein
3d00035	0.57747	ni	hypothetical protein	um04908	0.48381	K03245	conserved hypothetical protein
6c00120	0.57752	K06067	histone deacetylase complex, catalytic component RPD3	um10410	0.48394	K13179	probable HAS1 - helicase associated with Set1p
3c00048	0.57763	ni	hypothetical protein	um00338	0.48414	ni	conserved hypothetical protein
1c00050	0.57769	K00616	transaldolase	um11239	0.48446	ni	hypothetical protein
18c00023	0.57781	K00767	quininate phosphoribosyl transferase	um05219	0.48468	ni	related to andropogonin oxidoreductin 1 precursor
6d00133	0.57818	ni	hypothetical protein	um10958	0.48502	K17261	related to kinetochore associated 2
19c00079	0.57825	ni	acyl-coa-binding protein	um10233	0.48516	ni	conserved hypothetical Ustilago-specific protein
18c00021	0.57825	K02911	predicted membrane protein	um00752	0.48522	ni	hypothetical protein
1c00023	0.57846	K02884	mitochondrial/chloroplast ribosomal protein L19	um00259	0.48531	K07739	probable ELP3 - subunit of elongator
7c00173	0.57869	ni	hypothetical protein	um15090	0.48545	ni	conserved hypothetical protein
22d00130	0.57861	ni	dehydrogenase kinase	um12257	0.48551	ni	hypothetical protein
12c00074	0.57921	ni	microtubule-binding protein	um10228.2	0.48582	ni	hypothetical protein
8d00026	0.57941	ni	hypothetical protein	um12099	0.48593	ni	conserved hypothetical protein
22c00116	0.57935	ni	hypothetical protein	um12218	0.48618	K08874	related to TRX1 - component of the Ada-Spt transcriptional regulatory complex
12d00127	0.57962	ni	hypothetical protein	um02011	0.48645	ni	putative protein
27d00042	0.57974	ni	molecular chaperone	um02861	0.48683	ni	conserved hypothetical protein
14c00080	0.5799	ni	hypothetical protein	um03966	0.48718	ni	hypothetical protein
26c00033	0.5802	ni	endoplasmic reticulum protein EP58	um02451	0.48736	ni	conserved hypothetical protein
13d00009	0.58023	ni	hypothetical protein	um10867	0.48742	ni	hypothetical protein
13c00007	0.58045	ni	signaling protein SWIFT and related BRCT domain proteins	um05726	0.48849	K07178	related to RIO Kinase 1
12d00050	0.58054	K02883	60S ribosomal protein L18	um12258	0.48856	ni	hypothetical protein
2d00035	0.58077	K07466	single-stranded DNA-binding replication protein A proteins	um12017	0.48862	ni	conserved hypothetical protein
19c00146	0.5812	ni	hypothetical protein	um04903	0.48867	ni	conserved hypothetical protein
5d00110	0.58126	ni	hypothetical protein	um04896	0.48867	ni	conserved hypothetical protein
14d00046	0.58204	K01114	hypothetical protein	um06235	0.48889	K09494	probable CCT2 - chaperonin of the TCP1 ring complex
6d00025	0.5828	ni	hypothetical protein	um06178	0.48928	ni	Mig2-1
6c00035	0.58286	ni	hypothetical protein	um00964	0.48933	K14537	related to NOG2 - GTPase involved in ribosomal large subunit-nucleus export
6c00037	0.58287	ni	hypothetical protein	um11900	0.48939	ni	putative protein
6c00006	0.58292	K01915	glutamine synthetase	um03235	0.4897	ni	conserved hypothetical protein
24c00008	0.5831	ni	hypothetical protein	um10700	0.48997	K02908	probable RPL30 - 60S large subunit ribosomal protein L30
10d00098	0.58311	K00521	ferric reductase	um10513	0.4901	ni	putative protein
26c00065	0.5832	K01752	nucleosome remodeling factor, subunit CAF1/NURF55/MSH1	um04223	0.49022	ni	conserved hypothetical protein
7d00049	0.58388	K15356	nucleotide-sugar transporter VRC4/SQV-7	um04383	0.49032	ni	related to ERP2 - p24 protein involved in membrane trafficking
27d00066	0.58475	K02917	60S ribosomal protein L35A/L37	um10846	0.49069	ni	related to UGA2 - succinate semialdehyde dehydrogenase
22d00238	0.58515	ni	hypothetical protein	um10064	0.49091	K00844	probable glucokinase
5d00062	0.58518	K07078	hypothetical protein	um03964	0.49099	K12943	related to PRP3 - essential splicing factor
15d00079	0.58572	ni	hypothetical protein	um05158	0.49101	ni	putative protein
7d00220	0.58585	K03137	transcription initiation factor IIE, beta subunit	um00443	0.49107	K14960	conserved hypothetical protein
9d00166	0.58585	ni	hypothetical protein	um06229	0.4913	K14856	related to SDA1 - required for normal organization of the actin cytoskeleton
9c00341	0.58592	ni	hypothetical protein	um11148	0.49172	ni	related to MTG2 - Mitochondrial GTP binding protein
7c00312	0.58593	K03231	transcription elongation factor EF-1 alpha/Tu	um05203	0.49183	K03869	related to euk-4A
2d00022	0.58555	K01907	acyl-coa synthetase	um03626	0.4918	ni	putative protein
8d00080	0.58658	ni	hypothetical protein	um00180	0.49213	ni	hypothetical protein
19c00019	0.58677	ni	hypothetical protein	um06256	0.49215	ni	hypothetical protein
8d00060	0.58682	ni	nuclear protein export factor	um02393	0.49222	ni	hypothetical protein
22d00142	0.58696	ni	transporter, ABC superfamily	um05656	0.49244	ni	related to SOK1 protein
7c00339	0.58705	K02929	60S ribosomal protein L44	um04218	0.49289	ni	Kinesin-1 motor protein
22c00094	0.58717	K14561	U3 small nucleolar ribonucleoprotein	um05568	0.49303	ni	probable SPT16 - general chromatin factor
22c00078	0.58733	ni	hypothetical protein	um10425	0.49326	K02911	conserved hypothetical protein
9c00018	0.58736	K07824	cytochrome P450 CYP11C/CYP12/CYP24/CYP27 subfamilies	um00283	0.49335	ni	conserved hypothetical protein
15c00063	0.58747	ni	hypothetical protein	um10808	0.49372	ni	related to ERV2 - Flavin dependent sulphydryl oxidase
2d00054	0.58769	ni	uncharacterized conserved protein	um01463	0.49396	K03237	probable SUI2 - translation initiation factor eIF-2 alpha chain
9d00102	0.58828	K01673	predicted carbonic anhydrase involved in protection against oxidant	um10328	0.49419	ni	hypothetical protein
10d00103	0.58836	K10877	DNA repair protein	um03936	0.49423	K12818	probable ATP dependent RNA helicase
24d00024	0.58844	K11294	nucleic acid localization sequence binding protein	um01866	0.49424	ni	conserved hypothetical protein
19d00149	0.58879	ni	hypothetical protein	um01242	0.49485	K13431	related to SRP101 - signal recognition particle receptor
11d00067	0.5888	ni	endoplasmic reticulum protein EP58	um00654	0.49497	K07943	probable ARL1 - ADP-ribosylation factor
22d00162	0.58907	ni	uncharacterized conserved protein	um11568	0.49521	K01144	related to SWH1 - Member of an oxysterol-binding protein family
7c00119	0.58933	ni	hypothetical protein	um05208	0.49537	K07374	related to MLIH1 - DNA mismatch repair protein
22c00144	0.58944	ni	predicted hydrolase	um04752	0.49553	K12816	probable CDC40 - Pre-mRNA splicing factor important for catalytic step II
2c00029	0.58971	K03511	predicted DNA damage inducible protein	um02757	0.4957	ni	conserved hypothetical protein
13d00045	0.58974	ni	hypothetical protein	um05306	0.49579	ni	conserved hypothetical Ustilago-specific protein
9d00403	0.58992	ni	hypothetical protein	um10908	0.49601	ni	probable OPT1 - High-affinity glutathione transporter
8d00084	0.5900	K02213	hypothetical protein	um01162	0.4961	ni	related to large neutral amino acid transporter 1
11c00082	0.59007	K00804	geranylgeranyl pyrophosphate synthase	um03134	0.49614	ni	conserved hypothetical protein
2c00027	0.59046	K02139	hypothetical protein	um11092	0.49616	K17080	probable prohibitin PHB1
6c00004	0.59094	ni	hypothetical protein	um03588	0.49645	ni	related to transcription factor medusa
6c00044	0.59095	ni	hypothetical protein	um05158	0.49648	ni	hypothetical protein
13c00105	0.59164	ni	hypothetical protein	um00956	0.49649	ni	related to RAX1 - Protein involved in determination of budding patterns
24d00020	0.59169	ni	nuclear localization sequence binding protein	um05350	0.49674	ni	hypothetical protein
7d00213	0.59192	ni	oxysterol-binding protein	um00394	0.4969	ni	putative protein
9c00235	0.59198	ni	glucose dehydrogenase	um10928	0.49692	ni	hypothetical protein
15c00001	0.59203	ni	hypothetical protein	um03175	0.49703	ni	putative protein
8d00103	0.59215	ni	hypothetical protein	um11211	0.49712	ni	conserved hypothetical protein
7c00141	0.59218	K12864	uncharacterized conserved protein	um06420	0.49721	ni	conserved hypothetical protein
13d00082	0.59232	ni	hypothetical protein	um11716	0.4973	K02971	probable 40S ribosomal protein s21
7c00129	0.59245	K08286	p21-activated serine/threonine protein kinase	um00212	0.4974	ni	conserved hypothetical protein
22c00182	0.5926	ni	hypothetical protein	um11443	0.4974	ni	conserved hypothetical Ustilago-specific protein
12c00035	0.59321	ni	hypothetical protein	um02017	0.49769	ni	ni
6d00007	0.59352	ni	hypothetical protein	um00927	0.49775	ni	putative protein
12d00057	0.5936	K14766	nucleolar protein	um05308	0.49796	ni	hypothetical protein
18c00020	0.59389	ni	FOG, RRM domain	um06117	0.49806	ni	ni
9c00395	0.59392	K02606	origin recognition complex, subunit 4	um00912	0.49806	ni	conserved hypothetical protein
6c00137	0.59409	ni	hypothetical protein	um00851	0.49808	ni	related to BFR1 - Nuclear segregation protein
6d00010	0.59415	K14845	nuclear 5'-3' exoribonuclease-interacting protein	um12217	0.49808	ni	hypothetical protein
24c00017	0.59457	ni	hypothetical protein	um05434	0.49815	K14574	probable Shwachman-Bodian-Diamond syndrome protein
22c00219	0.59499	ni	hypothetical protein	um06260	0.49887	ni	conserved hypothetical protein
22d00242	0.59503	ni	membrane protein	um01772	0.49898	K01785	related to Aldose 1-epimerase precursor
8d00088	0.59515	ni	hypothetical protein	um03778	0.49908	ni	hypothetical protein
9c00061	0.59516	ni	reductases with broad range of substrate specificities	um01633	0.49945	ni	related to Zinc finger DHHC domain containing protein 2
24d00011	0.59525	ni	translin-associated protein X	um01923	0.49946	ni	conserved hypothetical protein
24c00021	0.59571	K09540	molecular chaperone	um06211	0.49968	K12882	related to 80 kDa nuclear cap binding protein
8c00049	0.59582	K00611	ornithine carbonyltransferase OTC/ARG3	um00784.2	0.49973	K15190	putative protein
10c00039	0.59604	ni	cell-cycle nuclear protein	um12214	0.50012	ni	hypothetical protein
22d00251	0.59613	K09829	sigma receptor and C-8 sterol isomerase	um11925	0.50019	ni	related to VPS5 - protein involved in late endosome to vacuole trafficking
16c00008	0.5964	ni	hypothetical protein	um10295	0.50043	ni	related to LYS2 - L-aminooxidase-semialdehyde dehydrogenase
27d00064	0.59718	ni	hypothetical protein	um01817	0.50059	ni	conserved hypothetical protein
14d00050	0.59723	ni	transferrin receptor and related proteins	um02298	0.50074	ni	hypothetical protein
27c00044	0.59731	ni	uncharacterized conserved protein	um05018	0.50077	ni	related to ribosomal protein S4 precursor
13d00058	0.59737	ni	predicted RNA-binding protein	um10396	0.50093	ni	conserved hypothetical protein
14c00101	0.59783	ni	glucose-6-phosphate/phosphate and phosphoenolpyruvate/phosph	um10424.2	0.50096	K02911	related to PTM1 - member of the major facilitator superfamily
7d00193	0.59893	ni	hypothetical protein	um04501	0.50104	ni	ni
13d00002	0.59894	K14810	RNA helicase	um10903	0.50113	K03037	probable RPN7 - subunit of the regulatory particle of the proteasome
13c00069	0.59905	K02332	nucleosome DNA polymerase gamma, catalytic subunit	um05106	0.50108	K09600	probable serine hydroxymethyltransferase
22d00234	0.59945	ni	uncharacterized conserved protein	um04940	0.50188	ni	hypothetical protein
7c00342	0.59984	ni	ferredoxin	um04456	0.50241	K04345	protein kinase A



10c00011	0.6063	ni	hypothetical protein	um01608	0.50673	K14775	conserved hypothetical protein
11d00021	0.60632	ni	multiple inositol polyphosphate phosphatase	um04541	0.50702	ni	conserved hypothetical protein
7d00113	0.60648	K09498	chaperonin complex component, TCP-1 zeta subunit	um11418	0.50721	ni	related to VMA21 - ATPase assembly integral membrane protein
4c00016	0.60651	ni	predicted G-protein coupled receptor	um05527	0.50761	ni	putative protein
18d00088	0.60666	ni	predicted hydrolases or acyltransferases	um02736	0.5077	ni	conserved hypothetical protein
14d00071	0.60676	K06636	structural maintenance of chromosome protein 1	um01645	0.50793	K12199	conserved hypothetical protein
5c00160	0.60718	ni	uncharacterized conserved protein	um03895	0.50794	K14570	related to exonuclease GOR
8c00015	0.60738	ni	hypothetical protein	um00702	0.50826	ni	putative protein
7c00157	0.60764	K08869	predicted unusual protein kinase	um04950	0.50841	K15562	related to cyclin dependent kinase C
14c00086	0.60769	ni	hypothetical protein	um01862	0.50872	K03325	related to arsenite transporter ARR3
9d00284	0.6077	ni	hypothetical protein	um11551	0.50881	K02966	probable RPS19B - ribosomal protein S19
18d00065	0.6079	ni	hypothetical protein	0.50953	ni		hypothetical protein
8c00028	0.60797	ni	hypothetical protein	um06233	0.50958	K14564	probable SIK1 - involved in pre-rRNA processing
9c00316	0.60817	ni	predicted GTP-binding protein MMR1	um00432	0.50963	K01259	probable proline iminopeptidase
18c00317	0.60875	K02876	mitochondrial/chloroplast ribosomal protein L15/L10	um01530	0.50965	K01889	probable FRS2 - phenylalanine-tRNA ligase beta chain
19d00097	0.6093	K08286	checkpoint kinase	um10175	0.51003	ni	probable sphingosine-1-phosphate lyase
6c00001	0.60959	ni	hypothetical protein	um00982	0.51023	K08018	related to PPM1 - vacuolar endopolyphosphatase
14d00041	0.6097	K15458	SAP family cell cycle dependent phosphatase-associated protein	um00652	0.51049	ni	related to RNA helicase
12d00111	0.60975	K15427	serine/threonine specific protein phosphatase	um11871	0.51059	K03360	related to GRR1 - required for glucose repression and for glucose and cation transport
16c00060	0.60977	ni	hypothetical protein	um11652	0.51128	K10733	related to PSF2 - part of GINS
9c00413	0.60982	ni	hypothetical protein	um10374	0.51145	ni	related to TIM11 - subunit E of the dimeric form of mitochondrial F1F0-ATPase
3c00054	0.60993	ni	hypothetical protein	um03855	0.51158	ni	conserved hypothetical protein
15c00021	0.61035	ni	hypothetical protein	um03862	0.51174	K12182	related to VPS27 - vacuolar protein sorting-associated protein
22c00198	0.61052	K09584	thioredoxin/protein disulfide isomerase	um10739	0.51183	ni	hypothetical protein
7d00064	0.61109	K14004	vesicle coat complex COPII, subunit SEC13	um10438	0.51215	ni	conserved hypothetical protein
3c00028	0.61134	K15562	hypothetical protein kinase	um03929	0.51216	ni	related to Signal peptide peptidase
9d00046	0.61273	K14709	Fez2/Zn2+ regulated transporter	um04167	0.51219	K02149	probable vacuolar ATP synthase subunit D
13c00106	0.61276	K07975	ras-related small GTPase	um00857	0.51242	ni	probable KRE6 - glucan synthase subunit
9c00300	0.61287	ni	hypothetical protein	um12260	0.51244	ni	putative protein
9c00068	0.61343	ni	hypothetical protein	um06058	0.51253	ni	conserved hypothetical protein
28c00064	0.61346	ni	Cot2-related actin-bundling protein	0.51261	ni		related to ARL1 - ADP-ribosylation factor
27c00009	0.61368	ni	hypothetical protein	um02910	0.51272	ni	conserved hypothetical protein
7d00268	0.61395	K03754	translation initiation factor ZB, beta subunit	um10171	0.51279	ni	conserved hypothetical protein
9c00041	0.61446	ni	permease of the major facilitator superfamily	um00909	0.51291	ni	conserved hypothetical protein
26c00062	0.6156	ni	hypothetical protein	um00259	0.51314	ni	conserved hypothetical protein
7c00156	0.61569	ni	hypothetical protein	um10220	0.51357	ni	conserved hypothetical protein
22c00052	0.61579	ni	diamine acetyltransferase	um04390	0.51363	ni	conserved hypothetical protein
6c00046	0.61601	ni	hypothetical protein	um04100	0.51377	ni	hypothetical protein
24d00023	0.61602	ni	D-3-phosphoglycerate dehydrogenase	um01638	0.51404	ni	related to Epoxide hydrolase 1
19c00052	0.61638	ni	hypothetical protein	um10805	0.51412	K11099	probable SMM2 - serRNP G protein
9d00319	0.61645	K02953	40S ribosomal protein S13	um12062	0.51506	K10949	probable ERD2 - ER lumen protein-retaining receptor
9c00117	0.61665	K15441	hypothetical protein	um10270	0.51511	ni	related to aspartate-tRNA ligase
12d00129	0.61721	ni	hypothetical protein	um01197	0.51526	K00652	related to 8-amino-7-oxononanoate synthase
22c00081	0.61754	K01735	hypothetical AROM protein	um11420	0.51565	ni	conserved hypothetical protein
10c0040	0.61791	ni	hypothetical protein	um03652	0.51556	ni	conserved hypothetical protein
27c00003	0.61824	ni	hypothetical protein	um01803	0.51556	ni	related to NCA2 - control of mitochondrial synthesis of Atp6p and Atp6b
12c00122	0.61857	ni	hypothetical protein	um11701	0.51564	ni	related to NUP57 - nuclear pore protein
22c00005	0.61881	ni	hypothetical protein	um01180	0.51572	K03097	probable protein kinase CK2 alpha subunit
9c00056	0.61883	ni	hypothetical protein	um01479	0.51574	ni	putative protein
9c00369	0.6193	ni	hypothetical protein	um05557	0.51575	K11756	related to RSC2 - member of RSC complex
9c00090	0.61946	K14846	ribosome biogenesis protein RPF1	um04905	0.51578	ni	conserved hypothetical protein
12c00087	0.6195	ni	hypothetical protein	um03943	0.5158	ni	putative protein
5c00091	0.61984	ni	hypothetical protein	0.51586	ni		conserved hypothetical Ustilago-specific protein
6d00128	0.62009	ni	hypothetical protein	um10448	0.51604	K12393	probable clathrin assembly protein AP47
9d00075	0.62026	K11563	hypothetical protein	um11075	0.51622	ni	hypothetical protein
9c00060	0.62055	ni	hypothetical protein	um10609	0.5164	K15100	probable CTP1 - Mitochondrial citrate transporter - member of the mitochondrial carrier
20d00003	0.62074	ni	hypothetical protein	um10735	0.51641	K00166	probable 2-oxoisovalerate dehydrogenase alpha subunit
19c00339	0.62091	ni	hypothetical protein	0.51645	ni		related to MRPS - DNA-directed RNA polymerase I
19d00037	0.62094	ni	hypothetical protein	um10147	0.517	ni	hypothetical protein
7d00269	0.621	ni	hypothetical protein	um06032	0.51702	ni	conserved hypothetical protein
2d00067	0.62114	ni	muskelin	um11104	0.5171	K00362	putative nitrite reductase
18d00053	0.62118	K15745	RNA 5'-phosphatase	0.51717	ni		related to MRPL10 - mitochondrial ribosomal protein
2d00033	0.62125	K06634	cdk activating kinase	um12117	0.51716	ni	putative protein
7d00033	0.62171	ni	putative phosphoinositide phosphatase	um01763	0.51786	ni	putative protein
6d00072	0.62185	ni	arylacetylamine deacetylase	um10793	0.51798	K12881	conserved hypothetical protein
8d00093	0.62207	K14535	predicted nucleoside kinase/nuclear protein	um02852	0.51809	ni	conserved hypothetical Ustilago-specific protein
22d00001	0.62229	K01181	hypothetical protein	0.52229	ni		conserved hypothetical Ustilago-specific protein
9d00135	0.6227	ni	putative lipase essential for disintegration of autophagic bodies in	um06425	0.51845	ni	conserved hypothetical protein
7d00231	0.62274	ni	hypothetical protein	um11601	0.51882	ni	conserved hypothetical protein
9c00151	0.62274	ni	FOG, Zn-finger	um05624	0.51953	ni	hypothetical protein
5d00114	0.62337	ni	Cot2-related actin-bundling protein	um03933	0.51966	K01942	related to BPL1 - biotin holocarboxylase synthetase
3c00044	0.62373	K15084	mitochondrial solute carrier protein	um05405	0.51981	K17260	probable actin-like protein ACT2
10c00019	0.62384	ni	hypothetical protein	um10040.2	0.51987	ni	conserved hypothetical protein
22d00004	0.62452	ni	hypothetical protein	um06180	0.52009	ni	Mig2-4
7d00339	0.62481	K04798	prefoldin subunit 6	um05708	0.52014	ni	conserved hypothetical protein
6c00015	0.62509	ni	hypothetical protein	um12247	0.52021	ni	conserved hypothetical protein
27d00008	0.62515	ni	sensory transduction histidine kinase	um01778	0.52037	ni	putative protein
9d00057	0.62517	K07243	hypothetical protein	um01886	0.52056	K13289	related to carboxypeptidase
10c00052	0.62607	K02220	cyclin B and related kinase-activating proteins	um10629.2	0.52062	ni	conserved hypothetical protein
5d00011	0.62614	ni	putative phosphate transporter	um04721	0.52151	K09650	conserved hypothetical protein
16d00021	0.62634	K03341	RNA polymerase II transcription initiation/nucleotide excision repara	um11165	0.52159	ni	conserved hypothetical protein
22c00127	0.62691	ni	hypothetical protein	um04487.2	0.52163	ni	conserved hypothetical protein
7c00011	0.62693	ni	hypothetical protein	um05737	0.52168	ni	conserved hypothetical protein
27d00051	0.62717	K12840	hypothetical protein	um02600	0.52196	K01412	probable mitochondrial processing peptidase alpha chain precursor
18c00002	0.62721	K03253	translation initiation factor 3, subunit b	0.52213	ni		related to transcription elongation factor TFIIS
22d00092	0.62777	ni	hypothetical protein	um05589	0.52274	ni	hypothetical protein
14d00069	0.62809	ni	tomosyn and related SNARE-interacting proteins	um02881	0.5229	K14407	related to Cleavage stimulation factor
22c00025	0.62813	K13124	conserved WD40 repeat-containing protein	um11553	0.52297	K06679	related to spindle assembly checkpoint protein
27c00010	0.62825	K03433	hypothetical protein	um04129	0.52325	ni	related to proliferation associated SNF2-like protein
27d00087	0.62866	K03019	RNA polymerase III subunit C11	um11141	0.52349	K00861	related to FMN1 - Riboflavin kinase
19d00104	0.62972	ni	hypothetical protein	um01514	0.52376	K04368	dual specificity protein kinase Fuz7
15c00026	0.62998	ni	hypothetical protein	um10272	0.5239	ni	putative protein
16d0049	0.63053	ni	multicopper oxidases	um12092	0.52416	ni	hypothetical protein
6d00091	0.63128	ni	hypothetical protein	um11269	0.52453	K02929	probable RPL42B - ribosomal protein L36a
7c00124	0.63154	K01613	RNA helicase nonsense mRNA reducing factor	um05417	0.52467	K03361	related to F-box
5c00165	0.63182	ni	hypothetical protein	um12129.2	0.5247	K17292	related to Tubulin-specific chaperone A
9d00133	0.632	ni	hypothetical protein	um11316	0.5248	ni	conserved hypothetical protein
19c00133	0.63233	ni	hypothetical protein	um12233	0.52487	ni	conserved hypothetical protein
9c00314	0.63255	K11675	hypothetical protein	um01690	0.52541	ni	hypothetical protein
6d00039	0.63294	ni	hypothetical protein	um02116	0.52565	ni	hypothetical protein
15d00033	0.63301	ni	hypothetical protein	um04749	0.52578	ni	conserved hypothetical protein
14d00090	0.63351	K00820	glucosamine 6-phosphate synthetases	um04324	0.5258	K00232	probable PDX1 - acyl-CoA oxidase
9c00043	0.63369	ni	hypothetical protein	um10708	0.52602	K01653	related to LVL - acetylacolate synthase
5c00114	0.63398	K02153	hypothetical protein	um02387	0.52625	ni	related to oligopeptide transporter
3c00030	0.63399	ni	glucose dehydrogenase	um10667	0.52636	ni	related to SPN1 - Spi6-interacting putative elongation factor
7d00287	0.63422	ni	transcription-coupled repair protein CSB/RAD26	um11647	0.52646	ni	hypothetical protein
18d00072	0.63436	K02734	ZDS proteasome regulatory subunit beta type PSMB2/PRE1	um05651	0.52672	K14788	conserved hypothetical protein
15d00018	0.63504	ni	phospholipase A2-activating protein	um04748	0.52683	ni	putative protein
15c00011	0.63558	ni	hypothetical protein	um01733	0.52684	ni	related to short chain dehydrogenase
11c00064	0.63583	ni	hypothetical protein	um02421	0.52687	K13339	related to PEX6 - peroxisomal assembly protein
9c00192	0.63588	K16261	amino acid transporters	um11801	0.52701	K02914	related to S0S ribosomal protein L34
24d00056	0.63595	ni	uncharacterized conserved protein	um10192	0.52709	ni	conserved hypothetical protein
19d00016	0.63601	ni	hypothetical protein	um10418	0.52714	ni	related to MRPS28 - mitochondrial ribosomal protein
24d00034	0.6361	ni	hypothetical protein	um05709	0.5274	ni	probable GPI8 - GPI-anchor transamidase
8d00079	0.63623	ni	hypothetical protein	um11745	0.52762	K02332	related to MIP1 - DNA-directed DNA polymerase gamma catalytic subunit
19c00057	0.63629	ni	hypothetical protein	0.528	ni		related to IADH1 dehydrogenase
14d00008	0.63642	ni	hypothetical protein	um03147	0.52814	K12396	related to Adapter-related protein complex 3 delta 1 subunit
10d00095	0.63649	ni	FOG, Zn-finger	um00187	0.52819	ni	hypothetical protein
14d00073	0.63672	ni	hypothetical protein	um11439	0.5282	K12493	related to GLO3 - zinc finger protein
9d00299	0.6372	ni	conserved phosphodiester-like protein	um10168	0.52835	ni	conserved hypothetical protein
9c00056	0.63732	ni	hypothetical protein	um10063	0.52861	K15430	related to TRM11 - Catalytic subunit of an adoMet-nucleotide tRNA methyltransferase complex
22d00268	0.63754	ni	hypothetical protein	um03998	0.52872	K10846	related to RAD2 - structure-specific nuclease of the nucleotide excision repairosome
18d00050	0.63764	K14416	elongation factor 1 alpha	um02094	0.52884	ni	putative protein
22c00235	0.63766	ni	hypothetical protein	um02751	0.5289	ni	hypothetical protein
15d00077	0.63783	ni	hypothetical protein	um10776	0.52901	K03680	related to GC02 - translation initiation factor eIF2B
5d00085	0.63796	K11838	ubiquitin carboxyl-terminal hydrolase	um02107	0.52905	ni	conserved hypothetical protein
19d00164	0.63818	ni	predicted Zn-dependent hydrolase	um00169	0.52933	ni	related to AUT1 - essential for autophagocytosis
15c00022	0.63848	ni	synaptic vesicle transporter SV2	um10929	0.52946	K08501	conserved hypothetical protein
16d0030	0.63887	ni	hypothetical protein	um10970	0.52989	ni	related to Sno-type pyridoxime vitamin B6 biosynthetic protein SNO1
22c00089	0.63973	ni	hypothetical protein	um02853	0.53026	ni	related to MRPS5 - mitochondrial ribosomal protein
10c00089	0.64025	ni	hypothetical protein	um05331	0.53063	ni	conserved hypothetical protein
12d00055	0.64041	ni	proteins containing the FAD binding domain	um10171	0.53064	ni	hypothetical protein
10c00074	0.64044	K04706	Zn-finger transcription factor	um00224	0.53101	K07734	conserved hypothetical protein
5d00104	0.64095	K02975	methylenetetrahydrofolate dehydrogenase	um05356	0.53122	ni	hypothetical protein
12d00126	0.64099	ni	hypothetical protein	um03171.2	0.53127	K03299	related to GCN3 - translation initiation factor eIF2B
7d00124	0.6413	ni	hypothetical protein	um02697	0.53134	K03106	probable SRP54 - signal recognition particle subunit
13c00066	0.6414	K02260	hypoth				

7c00352	0.65121	ni	hypothetical protein	um01897	0.53502	ni	conserved hypothetical protein
9c00301	0.65204	K11429	histone tail methylase	um00923	0.53509	K04523	related to DSK2 - ubiquitin-like protein
9c00321	0.65277	ni	hypothetical protein	um05467	0.53519	ni	conserved hypothetical protein
8a00039	0.65339	ni	hypothetical protein	um05332	0.53532	128	conserved hypothetical protein
5c00067	0.65319	K11422	histone H3 (Lys4) methyltransferase complex, subunit SET1	um02604	0.53533	ni	hypothetical protein
15c00091	0.65319	K05863	mitochondrial ADP/ATP carrier proteins	um11690	0.53606	ni	conserved hypothetical protein
16a00049	0.65322	ni	hypothetical protein	um04576	0.53628	ni	conserved hypothetical protein
19a00038	0.65329	ni	hypothetical protein	0.53633	K02081		related to CD31 - CDP-diacylglycerol synthase
26c00049	0.65464	ni	hypothetical protein	um00367	0.53661	K07555	related to ATP11 - F1F0-ATPase complex assembly protein
8c01026	0.65472	ni	hypothetical protein	um04380	0.53721	ni	related to ATG9 - integral membrane protein required for Cvt and autophagy transport
12c00071	0.65504	ni	hypothetical protein	um10511	0.53757	K03013	conserved hypothetical protein
14c00135	0.65561	ni	hypothetical protein	um06435	0.53776	ni	conserved hypothetical protein
12a00107	0.65565	ni	hypothetical protein	um03344	0.53788	ni	conserved hypothetical protein
22c00131	0.65669	ni	hypothetical protein	um06179	0.53808	ni	Mig2-2
19a00106	0.65688	ni	hypothetical protein	um04656.2	0.53817	ni	related to Rho-GTPase-activating protein 1
7a00036	0.65746	K12160	ubiquitin-like proteins	um11991	0.53828	ni	conserved hypothetical protein
12c00109	0.65782	K05545	RNA-dihydrourate synthase	um00779	0.53865	ni	related to mitochondrial ribosomal protein Yml8
4a00009	0.65793	ni	hypothetical protein	um01201.2	0.53884	ni	conserved hypothetical protein
7a00034	0.65821	ni	hypothetical protein	um11756	0.53978	ni	hypothetical protein
3a00097	0.65926	K12194	protein involved in glucose depression and pre-vacuolar endocytosis	um00895	0.53981	K15440	related to tRNA-specific adenosine deaminase 1
12a00124	0.66025	ni	hypothetical protein	um00609	0.53991	ni	conserved hypothetical protein
9a00290	0.66062	ni	F-box protein containing LRR	um03434	0.53999	K10754	related to replication factor C protein
19a00100	0.66068	ni	hypothetical protein	um04951	0.54008	K12819	related to step II splicing factor SLU7
22a00097	0.66116	ni	vesicle coat complex COPII, subunit SEC23	um03062	0.5406	K14559	related to MPP10 - component of the U3 small nuclear ribonucleoprotein
22c00044	0.66175	K11718	UDP-glucose, glycoprotein glucosyltransferase	um03207	0.54061	K13348	related to glomerulosclerosis protein Mpv17
9c00043	0.66177	K16315	RNA-5'-phosphatase	um11884.2	0.54091	K03539	related to Mitochondrial Dnal chaperone
14a00057	0.66216	ni	kelch repeat-containing proteins	um06226	0.54133	ni	conserved hypothetical protein
19a00115	0.66283	K11849	ubiquitin carboxyl-terminal hydrolase	um04505	0.5414	ni	related to glutamyl-tRNA
22a00275	0.66362	ni	acid sphingomyelinase and PHM5 phosphate metabolism protein	um01544	0.54165	K11230	related to SSK2 - MAP kinase kinase of the high osmolarity signal transduction pathway
7c00015	0.66476	ni	hypothetical protein	um04187	0.54171	ni	conserved hypothetical protein
13a00022	0.66493	ni	hypothetical protein	um01481	0.542	ni	hypothetical protein
19c00118	0.66667	ni	hypothetical protein	um01392	0.54227	ni	conserved hypothetical Ustilago-specific protein
12a00083	0.66733	ni	hypothetical protein	um00615	0.54261	K14566	conserved hypothetical protein
8c00089	0.66746	ni	transcription factor	um04785	0.54282	K10903	related to protein hus1
5c00038	0.66762	ni	pleiotropic drug resistance proteins	um11262	0.54283	K04798	related to YKE2 - Gm complex component
9c00178	0.66795	K14815	protein involved in mRNA turnover	um01313	0.54381	ni	conserved hypothetical protein
9c00137	0.66832	K14328	nonsense-mediated decay protein Upf3	um02700	0.54383	ni	conserved hypothetical protein
27c00049	0.66908	K02977	ubiquitin40s ribosomal protein S27a fusion	um04698	0.544	ni	conserved hypothetical protein
26a0053	0.66917	ni	hypothetical protein	um00694.2	0.54406	K00249	related to Acyl-CoA dehydrogenase
19c00337	0.66934	ni	hypothetical protein	um03434	0.54434	ni	hypothetical protein
12a00101	0.67054	K10575	ubiquitin-protein ligase	um03306	0.54461	K00948	probable PR54 - ribose-phosphate pyrophosphokinase 3
3c00058	0.67115	ni	S-M checkpoint control protein CID1 and related nucleotidyltransferase	um00987	0.54462	ni	related to YND1 - apyrase
16a00003	0.67208	ni	hypothetical protein	um10384	0.54498	ni	related to TATA-binding protein-associated phosphoprotein Dr1 protein
12c00058	0.67243	ni	uncharacterized conserved protein	um02222	0.54503	ni	hypothetical protein
19a00096	0.67259	K14171	alkyl hydroperoxide reductase	um10377	0.54511	ni	conserved hypothetical protein
14a00075	0.67287	ni	hypothetical protein	um00871	0.54519	K14679	related to TRL1 - tRNA ligase
8c00072	0.67379	ni	rab6 GTPase activator GAPCenA and related TBC domain protein	um10042	0.54545	ni	related to wdr-repeat protein 8
12c00080	0.67429	ni	hypothetical protein	um10169	0.54545	ni	probable potassium channel beta subunit protein
5a00040	0.67494	K11254	histone H4	um05511	0.54549	K07897	probable GTPase Rab7 protein
19a00004	0.67562	ni	predicted transporter	um10709	0.5456	ni	conserved hypothetical protein
12a00068	0.67666	ni	hypothetical protein	um10495	0.54569	ni	putative protein
15a00091	0.67745	ni	hypothetical protein	um05722	0.54587	K14569	probable BMS1 - GTP-binding protein
22c00172	0.67749	ni	ubiquitin-resistance-associated protein	um11885	0.54603	ni	related to TPN2
3a00021	0.67852	K01381	aspartyl protease	um03071	0.5463	K05605	related to enoyl-CoA-hydrolase
7c00076	0.67959	K00981	CDP-diacylglycerol synthase	um01234	0.54682	ni	putative protein
25c00073	0.68018	ni	transcription factor	um12237	0.54692	ni	hypothetical protein
22a00298	0.68033	ni	hypothetical protein	um10620	0.54714	K03946	probable nadh-ubiquinone oxidoreductase 10
9a00373	0.68092	ni	hypothetical protein	um0592	0.54749	K01262	probable aminopeptidase P
20a00060	0.6815	K00765	ATP phosphoribosyltransferase	um05720	0.54783	K15731	related to PSR1 - plasma membrane phosphatase required for sodium stress response
14a00101	0.68157	K10848	structure-specific endonuclease ERCC1-XPF, catalytic component	um01120	0.54785	K00995	related to PGS1 - phosphatidylglycerophosphate synthase
9a00175	0.68289	K10761	uncharacterized conserved protein	um10275	0.54786	ni	conserved hypothetical protein
14a00053	0.68331	K14737	cell cycle control protein	um04071	0.548	ni	conserved hypothetical protein
13a00055	0.68395	K06980	transcription factor, component of CCR4 transcriptional complex	um00651	0.54828	K03355	related to CDC23 - cell division control protein
27a00006	0.68448	ni	alpha-d-galactosidase	um00638	0.54864	ni	related to CDA2 - sporulation-specific chitin deacetylase
16a00026	0.68448	ni	exocyst complex, subunit SEC15	um03819	0.54923	ni	conserved hypothetical protein
7a00038	0.6849	ni	hypothetical protein	um11134	0.54932	ni	related to Ylpeepe protein
16a00122	0.6849	ni	hypothetical protein	um04704	0.54959	K10865	related to MRB74 - DNA repair and meiotic recombination protein
5a00046	0.68629	ni	permease of the major facilitator superfamily	um01700	0.54961	ni	related to ABC transporter protein
2c00013	0.68636	ni	zinc carboxypeptidase	um03121	0.54965	ni	related to beta-1
6a00130	0.68716	K01874	methylornithine synthetase	um01756.2	0.54983	K06901	probable Purine Transporter AzgA
22c00050	0.68721	K11806	scf-like E3 ubiquitin processing protein	um05122	0.54987	K01062	related to platelet-activating factor acetylhydrolase precursor
9c00029	0.68733	ni	hypothetical protein	um00931	0.55012	ni	ni
6c00019	0.68836	ni	WD40 repeat stress protein	um15015	0.55049	K08825	related to putative dual specificity protein kinase pom1
22a00051	0.6888	ni	hypothetical protein	um10431	0.55081	ni	conserved hypothetical protein
6a00101	0.68919	K11407	histone deacetylase complex, catalytic component HDA1	um01079	0.5509	ni	conserved hypothetical protein
16c00100	0.6891	ni	hypothetical protein	um03371	0.55117	K00851	related to thermoresistant glucokinase
7c00043	0.69158	ni	hypothetical protein	um03876.2	0.55119	K05012	related to chloride channel protein
22c00145	0.69256	ni	hypothetical protein	um00808	0.55198	K15198	conserved hypothetical protein
7a00016	0.69287	ni	hypothetical protein	um15993	0.55243	ni	related to Serine
19a00155	0.69292	K09885	serine/threonine protein kinase	um02762	0.55306	ni	related to Enoyl-CoA hydratase
12c00032	0.69334	K07936	GTPase Rat7C4/GSP1	um05955	0.55353	ni	probable VTC1 - protein controls Sec18p
4a00019	0.694	ni	hypothetical protein	um10383	0.55384	ni	related to KIP1 - kinesin-related protein
22c00150	0.69413	ni	hypothetical protein	um00701.2	0.55413	ni	hypothetical protein
22c00071	0.69443	ni	hypothetical protein	um03346	0.55428	ni	hypothetical protein
7a00091	0.69452	ni	hypothetical protein	um10131	0.55433	K07942	probable ARL1 - ADP-ribosylation factor
9c00246	0.69462	ni	hypothetical protein	um10853	0.55437	ni	putative protein
7c00264	0.6953	K02324	DNA polymerase epsilon, catalytic subunit A	um10722	0.55466	ni	related to GYP1 - GTPase activating protein
7a00211	0.69674	K01693	imidazoleglycerol-phosphate dehydratase	um11924	0.55474	ni	conserved hypothetical protein
9c00293	0.69677	ni	hypothetical protein	um01270	0.55512	K01262	probable aminopeptidase P
10a00112	0.69684	K05917	cytochrome P450	um11386	0.55602	K13704	conserved hypothetical protein
20c00038	0.70182	ni	hypothetical protein	um04590	0.55631	K17103	related to CHO1 - CDP-diacylglycerol serine O-phosphatidyltransferase
22a00023	0.70316	ni	hypothetical protein	um04241	0.5564	ni	putative protein
9a00131	0.70437	K15122	predicted divalent cation transporter	um11184	0.55664	ni	conserved hypothetical protein
52a000001	0.70823	K02128	ni	um06014	0.55673	ni	putative protein
9c00411	0.70932	ni	hypothetical protein	um04537	0.55678	ni	putative protein
7a00020	0.71079	K06674	structural maintenance of chromosome protein 2	um00410	0.55693	ni	conserved hypothetical protein
10a00033	0.71098	K01868	thromboxin synthetase	um01081	0.55706	K10684	related to AOS1 - Smi3p activating protein
9a00078	0.71168	ni	hypothetical protein	um11633	0.55784	ni	putative protein
27c00058	0.7132	K12849	predicted PRP38-like splicing factor	um03772	0.55857	K01930	related to tetrahydrofolylpolyglutamate synthase
9a00177	0.71349	ni	hypothetical protein	um06308	0.55861	ni	putative protein
4a00007	0.71384	ni	hypothetical protein	um01795	0.55864	ni	conserved hypothetical protein
24a00003	0.71398	ni	predicted transporter	um06372	0.55893	ni	conserved hypothetical protein
14c00019	0.71544	ni	hypothetical protein	um00836	0.55948	ni	conserved hypothetical protein
7c00061	0.71686	K07566	RNA binding/translational regulation protein	um05542	0.55958	K15205	conserved hypothetical protein
17a00001	0.71708	ni	predicted transporter ADD1	um00042	0.56082	ni	related to L-serine dehydratase 1
7a00151	0.71724	ni	hypothetical protein	um10668	0.56106	ni	related to Shuttle craft protein
21a00001	0.71813	ni	hypothetical protein	um06113	0.56107	ni	hypothetical protein
6c00066	0.71889	K08856	serine/threonine protein kinase	um11437	0.56121	ni	probable FRQ1 - regulator of phosphatidylinositol-4-OH kinase protein
7c00242	0.71925	K00993	sn-1,2-diacylglycerol ethanolamine- and cholinephosphotransferase	um00858	0.56131	ni	hypothetical protein
14a00038	0.72071	K00948	ribose-phosphate pyrophosphokinase	um01107	0.56162	ni	related to Exocyst complex component Sec3
11a00082	0.72526	K04640	G-protein alpha subunit	um11938	0.56192	ni	conserved hypothetical protein
5c00096	0.72631	ni	nuclear distribution protein NUDC	um11468	0.56221	K01613	related to PSD1 - phosphatidylserine decarboxylase 1
6c00060	0.72791	ni	aspartyl protease	um12151	0.56261	K15710	related to SNF2 family helicase
13a00039	0.72917	ni	hypothetical protein	um05167	0.56272	ni	conserved hypothetical protein
15a00087	0.72941	ni	cytochrome P450 CYP3/CYP5/CYP6/CYP9 subfamilies	um03828	0.56295	ni	hypothetical protein
15c00118	0.72959	K17260	actin-related protein Arp2/3 complex, subunit Arp2	um04558	0.56296	ni	related to WVD40 protein Ciao1
12a00123	0.73007	ni	hypothetical protein	um10078	0.56317	ni	hypothetical protein
9a00054	0.73029	ni	hypothetical protein	um01797	0.56354	ni	conserved hypothetical protein
5c00161	0.73118	ni	hypothetical protein	um04509	0.56403	K14306	related to Nucleoporin NSP1
7a00209	0.73153	K11373	cAMP-dependent protein kinase catalytic subunit	um05215	0.56411	ni	putative protein
19a00080	0.73263	ni	hypothetical protein	um06323	0.56424	K03252	probable translation initiation factor eIF3
9a00040	0.73409	ni	hypothetical protein	um11864	0.56425	ni	related to MDM31 - Mitochondrial inner membrane protein required for mitochondrial morphology and inheritance
14a00042	0.73425	ni	predicted transporter	um00879	0.56446	ni	conserved hypothetical protein
12a00103	0.73502	ni	hypothetical protein	um02883	0.56455	K09548	related to Prefoldin subunit 1
10a00050	0.73571	ni	hypothetical protein	um10204	0.565	K16365	conserved hypothetical protein
15c00033	0.73644	K12821	spliceosomal protein FBP11	um01680	0.5651	ni	conserved hypothetical protein
26c00009	0.74028	ni	hypothetical protein	um02725	0.56523	K11996	related to molybdenum cofactor biosynthetic protein
25c00054	0.74097	ni	hypothetical protein	um05155	0.56555	ni	hypothetical protein
22c00318	0.74097	K12778	putative steroid membrane receptor Hsp6.6/25-Dx	um01080	0.56562	K13524	4-aminobutyrate aminotransferase
7a00047	0.7449	K01293	aminocyclase CY1 and related metallooxpeptidases	um01494	0.56602	ni	conserved hypothetical protein
12c00136	0.74542	K00134	glyceraldehyde 3-phosphate dehydrogenase	um12256	0.56628	ni	hypothetical protein
9a00184	0.7479	ni	uncharacterized Fe-S protein	um01266	0.56631	K12864	conserved hypothetical protein
11c00065	0.74857	ni	hypothetical protein	um00774	0.56631	K04392	Rac1 GTP binding protein
8a00106	0.75034	ni	hypothetical protein	um04911	0.56637	K10534	serine reductase
18a00052	0.75032	K00555	RNA methyltransferase	um00040	0.56643	K08528	conserved hypothetical protein
27c00083	0.75467	K03644	lipote synth				

19c00092	0.80205	K14790	hypothetical protein	um00874	0.57193	ni	hypothetical protein
22d00059	0.80833	ni	hypothetical protein	um10488	0.57242	ni	conserved hypothetical protein
14d00020	0.81667	ni	predicted RNA-binding protein involved in translational regulation	um04132	0.57269	ni	hypothetical protein
9d000391	0.81716	K14961	WD40 repeat protein	um02473	0.57286	ni	conserved hypothetical Ustilago-specific protein
27d00054	0.82754	ni	hypothetical protein	um04611	0.5729	K03094	probable negative regulator sulfur controller-3
4c00004	0.84019	K03681	exosomal 3'-5' exonuclease complex subunit Rrp40	um10299	0.57322	ni	conserved hypothetical protein
5c00032	0.84721	K14863	microtubule binding protein YTM1	um02591	0.57327	K06670	related to Double-strand-break repair protein rad21
15d00037	0.84788	ni	hypothetical protein	um05800	0.5733	ni	probable zinc metallo-protease
3c00007	0.85283	ni	members of tubulin	um10571	0.57354	ni	related to Rab proteins geranyltransferase component A 2
7d000317	0.89172	K05863	mitochondrial ADP/ATP carrier proteins	um11062	0.57402	ni	hypothetical protein
				um00725	0.57403	K14769	conserved hypothetical protein
				um04225.2	0.57443	ni	related to conserved oligomeric Golgi complex component 4
				um00091	0.57557	ni	putative protein
				um05232	0.57575	K01768	adenylate cyclase
				um11615.2	0.57596	K03357	related to anaphase promoting complex subunit 10
				um00728	0.57603	K02606	related to Origin recognition complex subunit 4
				um01896	0.57657	ni	related to PET191 - involved in assembly of cytochrome oxidase
				um12193.2	0.57673	ni	related to multidrug resistant protein
				um05648	0.57678	ni	putative protein
				um10997	0.57709	ni	putative protein
				um00694	0.57736	K07442	related to GCD14 - translational repressor of GCN4
				um00467	0.57767	ni	conserved hypothetical protein
				um01049	0.57771	K00249	probable acyl-CoA dehydrogenase
				um00405	0.57794	ni	conserved hypothetical protein
				um01673	0.57801	K14546	related to UTP5 - U3 snoRNP protein
				um10856	0.57869	K12389	related to YHC3 - protein involved in vacuolar arginine transport
				um04911	0.5787	ni	hypothetical protein
				um10301	0.57908	ni	hypothetical protein
				um11301	0.57935	K11796	probable SNF2 - component of SWI
				um04975	0.57988	ni	conserved hypothetical protein
				um10847	0.58002	K02732	probable FRE7 - 20S proteasome subunit
				um10773	0.5801	ni	related to MRPS9 - mitochondrial ribosomal protein
				um11072	0.58045	ni	hypothetical protein
				um02500	0.58091	K11423	related to SET2 - Histone methyltransferase
				um03237	0.58144	K02969	probable 40s ribosomal protein s20
				um11265	0.58257	ni	probable ARP3 - actin related protein
				um02562	0.58263	K03062	probable RPT2 - 26S proteasome regulatory subunit
				um00513	0.5827	ni	conserved hypothetical protein
				um10771	0.58444	K03681	related to RRP40 - protein involved in ribosomal RNA processing
				um00008	0.58448	ni	conserved hypothetical protein
				um01104	0.58473	K03137	conserved hypothetical protein
				um02999	0.58504	ni	conserved hypothetical protein
				um03231	0.58505	ni	conserved hypothetical Ustilago-specific protein
				um01154	0.58556	K10967	probable KRE2 - alpha-1
				um00329	0.58575	ni	related to exocyst complex 100 kDa component
				um05352	0.58575	K09584	related to MPD1 - Disulfide isomerase related protein
				um05197	0.58587	ni	conserved hypothetical protein
				um10349	0.58602	ni	putative protein
				um10152	0.58617	ni	cytokinesis protein Don1
				um05317	0.5862	ni	conserved hypothetical Ustilago-specific protein
				um11937	0.58622	ni	probable APS1 - AP-1 complex subunit
				um00618	0.587	K00766	related to TRP4 - anthranilate phosphoribosyltransferase
				um10161	0.58701	ni	conserved hypothetical protein
				um10158	0.58723	ni	probable adapter-related protein complex 1 beta 1 subunit
				um00076	0.58729	ni	ni
				um06473	0.58792	K00495	related to Cytochrome P450
				um00822	0.58793	ni	conserved hypothetical protein
				um10531	0.58809	ni	putative protein
				um02685	0.5881	ni	conserved hypothetical protein
				um11043	0.58817	K11088	related to small nuclear ribonucleoprotein sm d3
				um00629	0.5887	ni	hypothetical protein
				um10578	0.58875	ni	related to PRIB protein
				um12311	0.58885	ni	hypothetical protein
				um10957	0.58944	K17261	probable adenylyl-cyclase-associated protein CAP
				um03089	0.58946	ni	conserved hypothetical protein
				um10307	0.58956	ni	conserved hypothetical protein
				um11853	0.58963	ni	hypothetical protein
				um05283	0.58998	ni	probable RVS161 - protein involved in cell polarity development
				um01041	0.59041	ni	hypothetical protein
				um03250	0.59057	ni	conserved hypothetical protein
				um03201	0.59083	ni	hypothetical protein
				um05896	0.5909	ni	putative protein
				um05065	0.59094	ni	related to SPT23 - suppressor of TY retrotransposon
				um06089	0.59098	ni	conserved hypothetical protein
				um04065	0.59167	ni	conserved hypothetical protein
				um02857	0.5926	ni	conserved hypothetical protein
				um05924	0.59282	ni	probable ADK2 - adenylylase kinase
				um00321	0.59338	K15541	conserved hypothetical protein
				um01731	0.59342	ni	hypothetical protein
				um02784	0.5946	ni	putative protein
				um12254	0.59514	K11238	sepa-related Formin
				um10194	0.59665	K03007	probable DNA-directed RNA polymerase II chain RPB10
				um10089.2	0.59677	ni	related to muconate cycloisomerase
				um11839.2	0.59729	K15278	hypothetical protein
				um01503	0.59779	ni	conserved hypothetical protein
				um05054	0.59779	ni	conserved hypothetical protein
				um03312	0.5983	ni	putative protein
				um04609	0.59914	ni	conserved hypothetical protein
				um00378	0.59916	K03678	probable RRF45 - Exosome complex exonuclease
				um01013	0.59952	ni	putative protein
				um11256	0.5997	ni	related to D-arabinitol 2-dehydrogenase
				um11656	0.6007	ni	conserved hypothetical protein
				um06315	0.60182	ni	hypothetical protein
				um02102	0.60224	K11407	related to HD41 - histone deacetylase A
				um03536	0.6027	ni	related to Zinc finger protein SFP1
				um06135	0.60359	ni	conserved hypothetical protein
				um10761	0.60376	ni	conserved hypothetical protein
				um01573.2	0.60408	ni	related to Vacuolar membrane protein
				um00244	0.6042	ni	conserved hypothetical protein
				um05273	0.60436	ni	related to dipeptidyl aminopeptidase B
				um10305	0.60542	ni	related to GYP7 - GTPase-activating protein for Ypt7p
				um10594	0.60571	ni	hypothetical protein
				um05781.2	0.60587	ni	hypothetical protein
				um00880	0.60664	K05542	related to tRNA dihydrouridine synthase
				um04042	0.60745	ni	conserved hypothetical protein
				um04473	0.60775	ni	conserved hypothetical protein
				um01712	0.60772	ni	conserved hypothetical protein
				um06257	0.60781	ni	conserved hypothetical protein
				um05166	0.6079	K14439	related to FUN30 - protein important for chromosome integrity and segregation
				um01338	0.60812	K14967	conserved hypothetical protein
				um00002	0.6083	K06916	related to AFG1 - ATPase family gene
				um03694	0.60877	ni	hypothetical protein
				um02357	0.609	K04441	probable osmotic sensitive-2 protein
				um03393	0.60904	ni	hypothetical protein
				um04907	0.60911	ni	conserved hypothetical protein
				um05214	0.60938	K14777	probable DEAD box protein
				um02913	0.60938	K06963	conserved hypothetical protein
				um03757	0.6095	ni	hypothetical protein
				um01167	0.6105	ni	hypothetical protein
				um04118	0.61076	ni	conserved hypothetical protein
				um11584	0.61113	ni	related to 50S ribosomal protein L22
				um00449	0.61147	ni	ni
				um05782	0.61229	ni	capsule-associated protein-like protein
				um04927	0.6129	K10732	conserved hypothetical protein
				um06336	0.6129	ni	conserved hypothetical protein
				um01176.2	0.61308	ni	putative protein
				um00120	0.61394	ni	conserved hypothetical protein
				um04931	0.61467	K00888	related to PIK1 - phosphatidylinositol 4-kinase
				um05395	0.61531	ni	conserved hypothetical protein
				um02059	0.61612	K03024	related to RPO31 - DNA-directed RNA polymerase III
				um01219	0.61695	ni	conserved hypothetical protein
				um11831	0.61713	ni	related to NADH
				um10294	0.61751	ni	conserved hypothetical protein
				um11587	0.61831	ni	putative protein
				um01900	0.61873	ni	conserved hypothetical protein
				um11876	0.61888	K10426	related to dynactin subunit p62
				um10217	0.61914	ni	probable aldehyde dehydrogenase
				um05721	0.61944	ni	putative protein
				um11217	0.61984	K03963	conserved hypothetical protein
				um00957	0.62028	ni	related to serine
				um02244	0.6204	ni	related to ser
				um10555	0.62081	ni	conserved hypothetical protein
				um02367	0.62082	ni	conserved hypothetical protein
				um12018	0.62103	ni	putative protein
				um05260	0.62138	ni	related to inorganic phosphate transporter
				um10723	0.62194	ni	conserved hypothetical protein
				um03463	0.62214	K15728	related to SMP2 protein
				um06083	0.62319	K01593	related to Aromatic-L-amino-acid decarboxylase
				um06287	0.62381	ni	related to Phytoene synthase
				um10902.2	0.62388	K12876	related to Y14
				um01297	0.62441	ni	conserved hypothetical Ustilago-specific protein
				um00699	0.62627	K13118	related to protein DGCR14
				um01148	0.62639	ni	putative protein
				um05322	0.6265	ni	hypothetical protein
				um10831	0.62653	ni	conserved hypothetical protein
				um02397	0.62763	ni	conserved hypothetical protein

um05872	0.62764	ni	putative protein
um11094	0.62767	ni	hypothetical protein
um10434	0.62823	K03234	probable EFT2 - translation elongation factor eEF2
um02926	0.62855	ni	conserved hypothetical protein
um05408	0.62888	K11839	related to Ubiquitin carboxyl-terminal hydrolase 4
um11091	0.62907	ni	related to GYP5 - GTPase-activating protein
um12189	0.62913	ni	conserved hypothetical protein
um11604	0.62919	ni	related to Ferric reductase transmembrane component 1 precursor
um05932	0.62921	ni	hypothetical protein
um02983	0.62936	ni	conserved hypothetical protein
um10626	0.63021	ni	conserved hypothetical protein
um15020	0.63059	ni	conserved hypothetical protein
um11389	0.63229	ni	related to DnaJ-like protein
um05462	0.63236	ni	ni
um11779	0.63247	K11367	probable CHD1 - transcriptional regulator
um04297	0.63416	ni	conserved hypothetical protein
um04020	0.63497	ni	conserved hypothetical protein
um10917	0.63641	K03868	probable RING-box protein 1
um03766	0.63683	K03504	conserved hypothetical protein
um03138	0.63683	ni	hypothetical protein
um10681	0.63732	K00053	probable ILV5 - keto-acid reductoisomerase
um00006	0.63735	ni	conserved hypothetical protein
um03833	0.63775	K07874	probable GTP-binding protein ypt1
um05014	0.63778	ni	related to Serine
um11865	0.63785	ni	putative protein
um03965.2	0.63865	ni	conserved hypothetical protein
um10603.2	0.63866	ni	hypothetical protein
um01891	0.63891	K03596	probable GUF1 - GTP-binding protein
um05348	0.64013	K05954	related to RAM1 - protein farnesyltransferase
um01426	0.64143	ni	ni
um11566	0.64192	K07511	probable enoyl-CoA hydratase precursor
um12153	0.64289	ni	conserved hypothetical protein
um05110	0.64375	K14555	related to UTP13 - U3 snoRNP protein
um04637	0.64434	ni	conserved hypothetical protein
um03450	0.64579	K14535	related to FAP7 - involved in the oxidative stress response
um11670	0.64599	ni	putative protein
um01344	0.64654	ni	related to TIM50 - mitochondrial inner membrane import translocase subunit
um11230	0.64862	ni	related to protein disulfide isomerase
um03948	0.64958	ni	conserved hypothetical protein
um02379	0.64876	ni	conserved hypothetical protein
um11661.2	0.65002	K01194	probable Neutral trehalase
um00656	0.6521	ni	related to YSC84 - protein involved in the organization of the actin cytoskeleton
um04655	0.65231	ni	conserved hypothetical protein
um03361	0.6524	K17301	probable SEC26 - coatomer complex beta chain of secretory pathway vesicles
um11918	0.65335	ni	conserved hypothetical protein
um12323	0.65363	ni	hypothetical protein
um03722	0.65398	ni	related to conserved oligomeric Golgi complex component 2
um02296	0.65479	ni	hypothetical protein
um10490.2	0.65568	ni	putative protein
um05575	0.65618	ni	conserved hypothetical protein
um01145	0.65823	ni	hypothetical protein
um12253	0.66126	ni	conserved hypothetical Ustilago-specific protein
um11867	0.66137	K14536	translation elongation factor 2 - putative
um04712	0.66262	ni	related to N-methyltransferase
um05411	0.66278	ni	probable quinase permease
um02687	0.66281	ni	conserved hypothetical protein
um03454	0.664	ni	related to ATP-binding cassette
um04817	0.66461	ni	related to TOS3 - protein localized to membranes
um11630	0.66483	K07107	conserved hypothetical protein
um11833	0.66591	K12847	related to SAD1 - protein required for assembly of U4 snRNA into the U4
um04969	0.66696	K03240	related to Translation initiation factor eIF-2B epsilon subunit
um06294	0.66779	ni	conserved hypothetical protein
um05090	0.66798	K02136	probable ATP3 - F1FO-ATPase complex
um02620	0.668	ni	conserved hypothetical protein
um03873	0.66974	K00761	probable FUR1 - uracil phosphoribosyltransferase
um02606	0.66984	K11137	hypothetical protein
um10607	0.67073	K03948	related to NADH-ubiquinone oxidoreductase MLRQ subunit
um02759	0.67314	ni	hypothetical protein
um10728	0.67362	ni	hypothetical protein
um05137	0.67399	K02998	probable 40S ribosomal protein s0
um04249	0.67414	ni	probable beta-actinin
um03483	0.67445	ni	hypothetical protein
um03866	0.67457	K14557	related to UTP6 - U3 snoRNP protein
um10400	0.67484	ni	related to triose phosphate
um06305	0.67588	ni	conserved hypothetical protein
um00523	0.67615	K12605	related to CD38 - transcription factor
um04802	0.67631	K02265	probable COX4 - cytochrome-c oxidase chain IV
um05579	0.6764	ni	conserved hypothetical protein
um04943	0.67641	K02976	probable 40S ribosomal protein S26
um12156	0.67653	ni	putative protein
um11707	0.67737	K14771	conserved hypothetical protein
um11083	0.67786	ni	related to p24 protein
um03943	0.68015	ni	conserved hypothetical protein
um00684	0.68201	ni	conserved hypothetical protein
um04883	0.68243	ni	conserved hypothetical protein
um10017	0.68348	ni	conserved hypothetical protein
um12213	0.68443	ni	conserved hypothetical protein
um01053	0.68493	ni	hypothetical protein
um05259	0.68593	ni	conserved hypothetical protein
um10687	0.68596	K12184	probable VPS28 - protein involved in vacuolar traffic
um12022	0.68657	ni	conserved hypothetical protein
um01467	0.68744	K14835	probable NOP2 - nucleolar protein
um01902.2	0.6879	ni	conserved hypothetical protein
um05789	0.68894	ni	conserved hypothetical protein
um06164	0.69015	K12619	related to dna exonuclease Dhp1p
um04098	0.69108	ni	conserved hypothetical Ustilago-specific protein
um00299	0.69165	ni	conserved hypothetical protein
um00691	0.69227	ni	related to cell wall protein UTR2
um02174	0.69392	ni	hypothetical protein
um00084.2	0.69404	ni	hypothetical protein
um03389	0.69553	ni	hypothetical protein
um03763	0.69745	ni	conserved hypothetical protein
um03939	0.69863	K14838	related to NOP15 - protein involved in 60S ribosomal subunit biogenesis
um11163.2	0.70091	K10838	related to RAD4 - Excision repair protein
um04701	0.70204	K12606	probable rcd1 protein involved in sexual development
um00344	0.70206	ni	putative protein
um01661	0.70408	ni	hypothetical protein
um03277	0.70483	K01164	related to Ribonucleases P
um10180	0.70751	K02139	related to ATP17 - ATP synthase complex
um01307	0.71102	ni	conserved hypothetical protein
um11791	0.71283	ni	related to TRS31 - TRAPP subunit of 31 kDa involved in targeting and fusion of ER to golgi transport vesicles
um10893	0.71427	ni	guanylyl nucleotide exchange factor Sqj2
um00395	0.71557	ni	probable Rds1 protein
um04234	0.71641	ni	related to histone deacetylase
um05174	0.71868	ni	putative protein
um04913	0.71897	ni	related to TRM10 - tRNA methyltransferase
um10807	0.71897	K12856	probable PRP8 - US snRNP protein
um05849	0.72154	ni	hypothetical protein
um00181	0.72679	ni	putative protein
um04422	0.72863	ni	related to endo-1
um03202	0.72916	ni	conserved hypothetical Ustilago-specific protein
um11794	0.73293	ni	related to SCD6 - protein may bind RNA and have a role in RNA processing
um10714	0.73639	ni	conserved hypothetical protein
um01113	0.73706	ni	conserved hypothetical protein
um03285	0.73924	ni	conserved hypothetical protein
um10566	0.74094	ni	conserved hypothetical protein
um10312	0.74221	K11097	probable small nuclear ribonucleoprotein E
um04156	0.74252	K01649	probable LEU4 - 2-isopropylmalate synthase
um04526.2	0.74563	ni	hypothetical protein
um05827	0.75368	ni	conserved hypothetical protein
um06090	0.76378	K03258	conserved hypothetical protein
um05062	0.76679	K12194	related to SNF7 protein
um04401	0.769	K09500	probable CCT8 - component of chaperonin-containing T-complex
um03643.2	0.77094	ni	conserved hypothetical protein
um06290	0.77113	ni	conserved hypothetical protein
um01659	0.77784	ni	hypothetical protein
um00915	0.78126	ni	conserved hypothetical protein
um12036	0.78547	ni	conserved hypothetical protein
um00847	0.78919	ni	putative protein
um05316	0.79433	ni	ni
um10363	0.80358	ni	conserved hypothetical protein
um11550	0.80724	K03019	probable Rgc11 - DNA-directed RNA polymerase III subunit C11
um01988	0.84368	ni	related to Oxidoreductase
um11535.2	0.89788	K02958	probable 40S ribosomal protein S15
um11257.2	0.90601	ni	probable YAH1 - Ferredoxin of the mitochondrial matrix