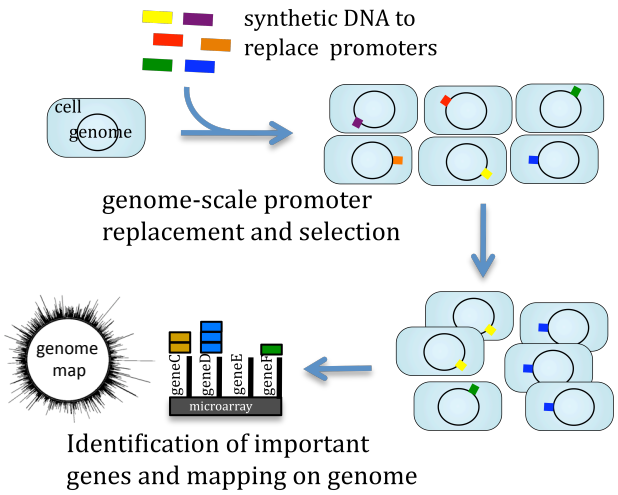
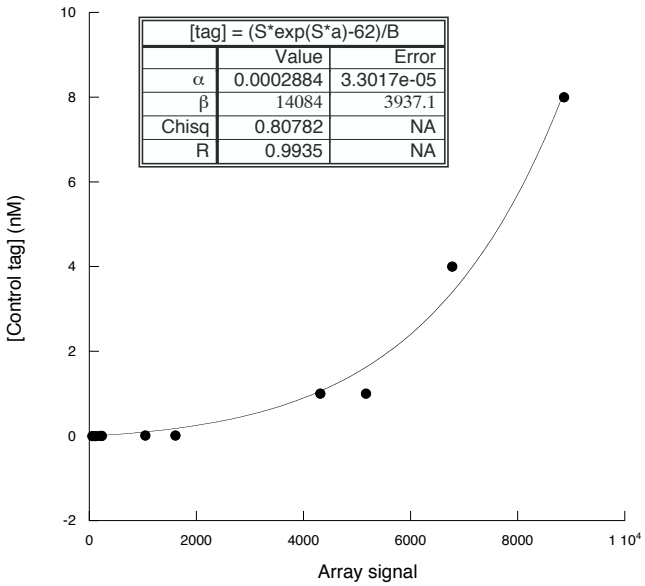


Supplementary Figure 1. TRackable Multiplex Recombineering method. TReMR comprises inserting a library of synthetic DNA containing a suite of mutations of interest into *E. coli* cells where recombination incorporates the DNA into the genome. Selections or screens are performed on the recombinant library and microarray technology maps the effect of all genetic alterations onto the trait of interest.



Supplementary Figure 2. Example array signal and saturation calibration curve. Ten tags were spiked onto arrays with the hybridization mixture at known concentrations. Signal saturation may be corrected with the following function[1]:

$S_{corr} = S*e^{(S*\alpha)}$

where "α" is a constant between 0.0001 and 0.0005. Tag concentrations may be calculated from corrected signals by the equation:

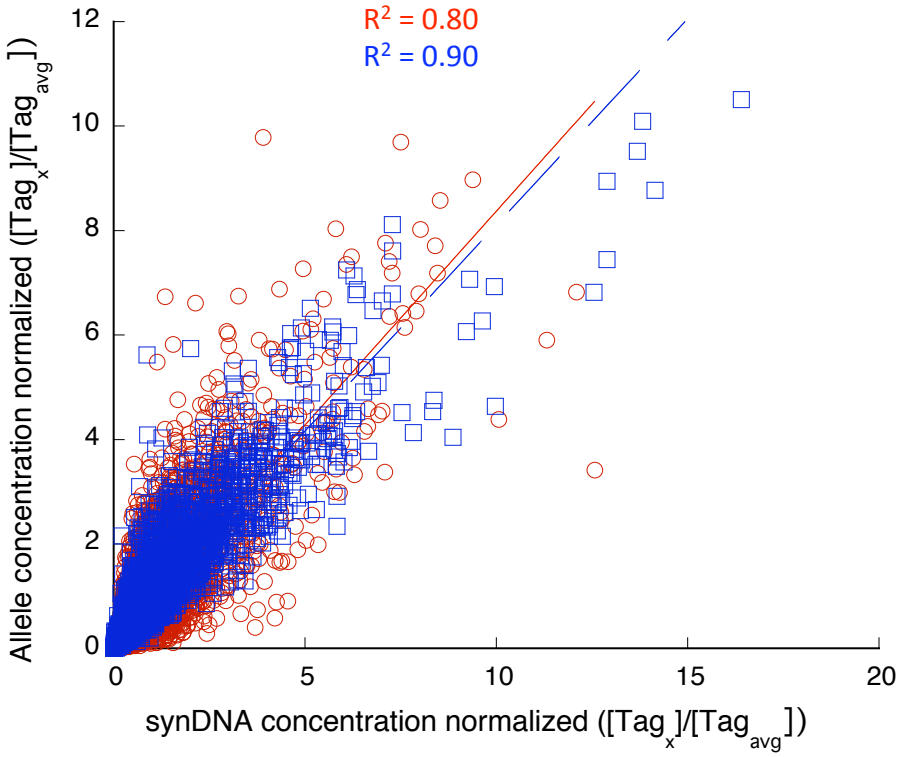
$[tag] = (S_{corr} - background)/\beta$

where "β" is a constant that relates signal to concentration. These two equations were combined:

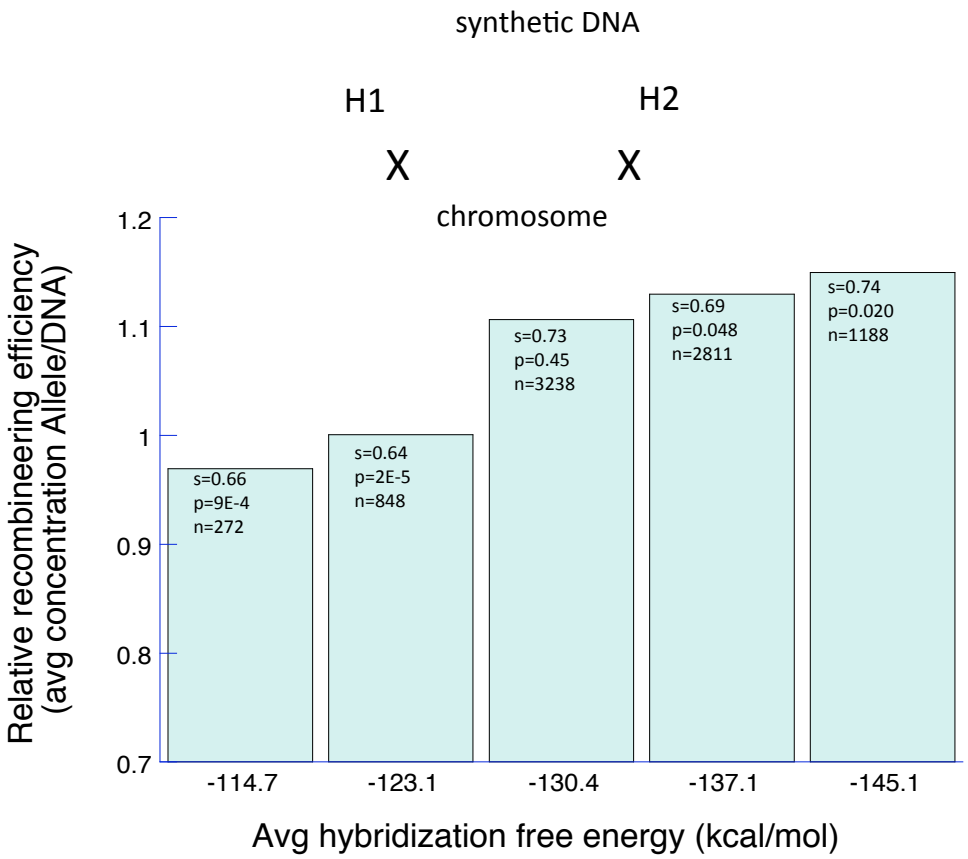
$[tag] = (S*e^{(S*\alpha)} - background)/\beta$,

and fit to known tag concentrations to solve for α and β. This equation with estimates of α and β was then used to calculate tag concentrations for each array.

[1] Pierce, S. E. *et al.* A unique and universal molecular barcode array. *Nature Methods* **3**, 601-603 (2006).



Supplementary Figure 3. Allele concentrations show a roughly liner dependence to the DNA concentration used to construct the alleles.. The relative efficiency of allelic replacement for all of the 7829 alleles can be estimated by comparing allele concentrations post-recombinering to synDNA concentrations pre-recombinering from the tag hybridizations (concentrations were normalized such that separate arrays could be compared by dividing the concentration of a unique tag by the average concentrations of all tags within a sample). We observed a linear correlation between post-recombineering allele concentration and pre-recombineering synDNA concentration. Recombineering efficiencies have been previously shown to be partially dependent upon the concentration of double-stranded DNA within the cell, which is dependent upon transformation efficiency and survival within the cell. Our results suggests that uniformity of allele libraries generated by multiplex recombineering can be further improved at the DNA synthesis step. (blue squares = up library, red circles = down library).



Supplementary Figure 4. Relative recombineering effeciency (likelihood of generating each allele, normalized for DNA concentration) shows a small increase with the energy of hybridization of the homology regions. 2-state hybridization free energies (ΔG) were calculated (ref. 30) separately for each homology region (parameters set to: 30°C, 10 mM sodium, 10 mM magnesium, 20 ηM homology sequence and complement). The energies for each homology region were summed for each allele. Alleles were binned by hybridization free energy by finding the mean (-134 kcal/mol) of all free energies and sorting by standard deviations (7.5 kcal/mol) from the mean. The average recombineering efficiency was calculated for each set of binned alleles and plotted vs hybridization energy. To determine if recombineering efficiency of each group of alleles are significantly different to all alleles, the recombineering efficiency of these samples were compared to the total by student's t-tests (s = standard deviation in recombineering eff, p = single tailed probability of population mean recombineering eff being within the sample mean recombineering eff., n = number of alleles in sample

SUPPLEMENTARY NOTES

Synthetic DNA Design.

Targeting oligos were designed for all protein coding genes in *E. coli* K12, gene annotation was from the Ecogene database version 2.20 (http://www.ecogene.org/). Sequences that were excluded include: RNA genes, pseudogenes and insertion elements. Each 189 nucleotide targeting oligo contains: flanking regions for PCR priming (43 b), downstream homology region (48 b), AscI site (8 b), upstream homology region (52 b), Tag priming site P3 (18 b), barcode sequence (20 b). In all, 8,154 targeting oligos were designed to create two possible expression alleles for 4,077 genes. Targeting regions were chosen such that DNA cassettes would insert upstream of genes and replace the translation start codon. In 584 instances gene overlap occurs where allelic replacement may result in disruption of the upstream gene. In these cases up to five nucleotides including the start codon are replaced such that a stop codon (UAG) is inserted in-frame of the upstream gene. Because gene overlap is usually minimal (1-4 nucleotides), cassette insertion usually results in no change to the upstream gene product or a single amino acid change at the C-terminus. In 4% of instances a small truncation of the upstream gene product has occurred. Once designed, the set of targeting oligos, each 189 nucleotides in length, were purchased through limited access to the Oligonucleotide Library Synthesis product from Agilent.

Molecular barcodes, known as "barcodes" or "tags", were chosen from the experimentally verified set used in the yeast deletion collection[3,17].
Barcode tag sequences were downloaded from: http://chemogenomics.stanford.edu/supplements/04tag/download.html
and converted to 5'-3' orientation. This collection of tags was further narrowed by excluding sequences that would lead to cleavage of the DNA during library synthesis and sequences that may hybridize with the regions used to amplify the tag sequences. Tags in this set were excluded if they have the following sequences (M=A or C, K = G or T): GGCGCGCC, CCGCGCGG, CCTCAGA, GCTGAGG, GTMKAC, GGCGCG, CACGAG, GAGGTC, GCACGA, TAGTGA, GAGTCG, TCCCTA, CTCGTG, GACCTC, TCGTGC, TCACTA, CGACTC, TAGGGA. Tags were then assigned randomly to the 8,154 targeting oligos.

The 10 control tag sequences where chosen randomly and purchased from Integrated DNA technologies with flanking primer regions P3 and P2. The sequences are:

Identifier	Sequence (5'-3')
3574_	gtagcacacgaggtctctGACAGGAGCTATAATGACTCtctccctatagtgagtcgta
2866_	gtagcacacgaggtctctCCTGCATCAGCATTATGGAGtctccctatagtgagtcgta
9046_	gtagcacacgaggtctctCCCGCGTGTCGATTAGGTTTtctccctatagtgagtcgta
1620_	gtagcacacgaggtctctGAGTTTGCGCTCATGCCTCTtctccctatagtgagtcgta
496_s	gtagcacacgaggtctctCACTATATGTCAACAGGCACtctccctatagtgagtcgta
13148	gtagcacacgaggtctctCTACTTCTGGCAGTGCGGATtctccctatagtgagtcgta
7392_	gtagcacacgaggtctctGTGTCACCTACCGTACTATGtctccctatagtgagtcgta
11168	gtagcacacgaggtctctCCGGAGTCATCAGATATTAGtctccctatagtgagtcgta

Nature Biotechnology: doi: 10.1038/nbt.1653

7066_ gtagcacacgaggtctctGGGCCACGCAAAGATTCCAAtctccctatagtgagtcgta
6408_ gtagcacacgaggtctctATGCGACCTTGTGGCAATTTtctccctatagtgagtcgta

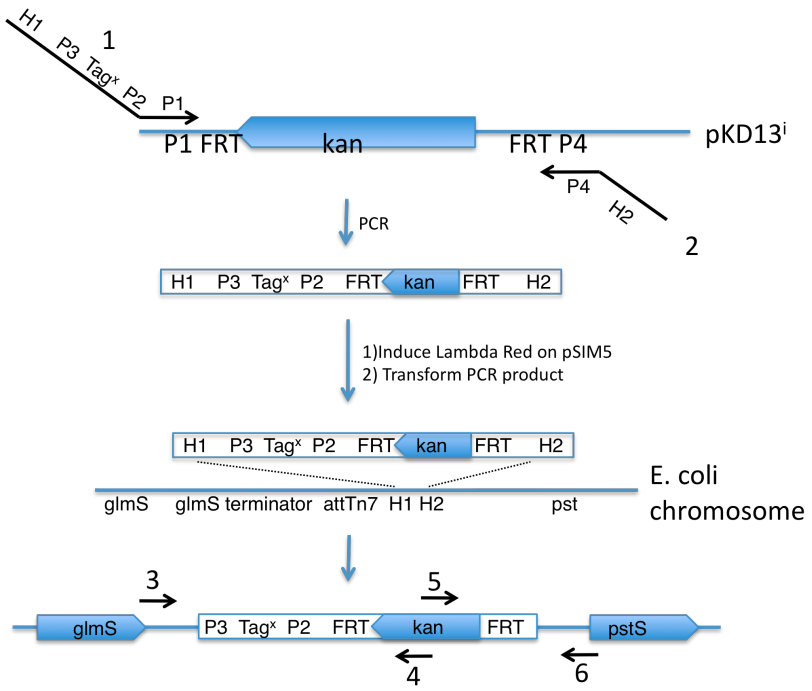
The "Up" and "Down" DNA cassettes contain the blasticidin resistance gene (BSD) with its own promoter. The BSD gene and promoter are flanked by I-SceI restriction endonuclease sites and FLP recognition target (FRT) sites for *in vitro* or *in vivo* removal of the resistance gene. Because the "Down" cassette contains the BSD promoter it is possible that some downstream genes experience increased transcription. Some genes may have multiple translation start sites and it these cases it is possible that insertion of the "down" cassette can increase downstream gene expression. In such instances the effect of increased transcription on phenotype may be tested by removal of the blasticidin resistance gene using common FLP methods.

The effect of the "Up" mutations may be modulated in *E. coli* cells that contain the tet repressor, however, herein the "up" mutations induce strong and constant gene expression.

Nature Biotechnology: doi: 10.1038/nbt.1653

Construction of barcoded, Kan^R Control cell, JWKAN

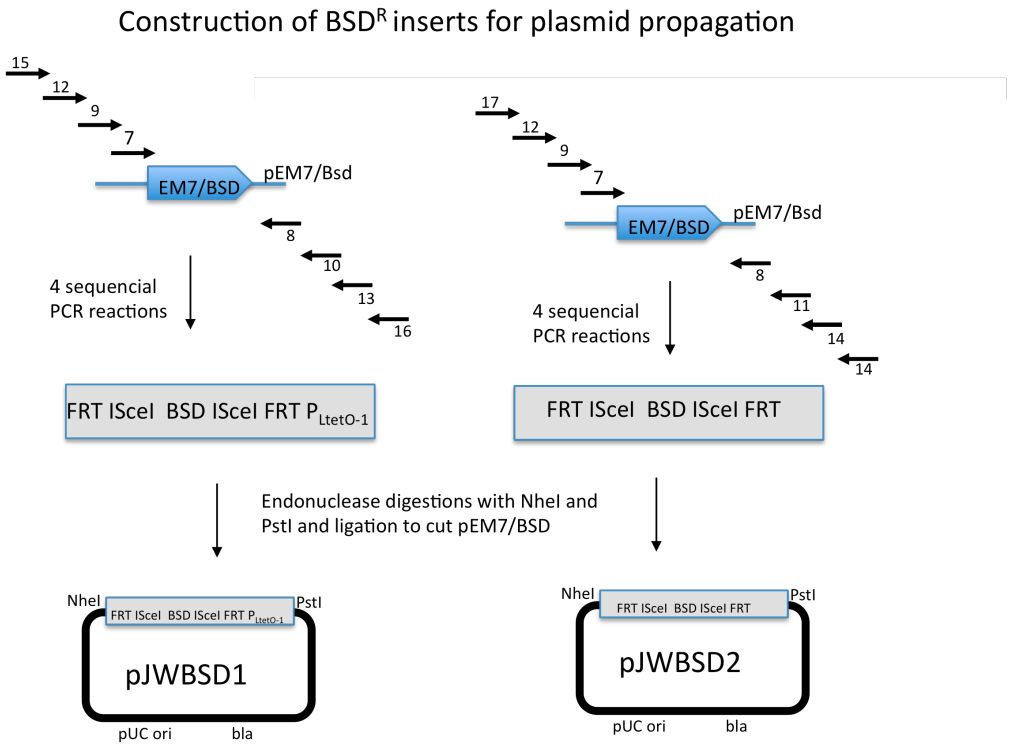
Primers 1 and 2 containing 50 bp regions of homology to the *E. coli* chromosome near the attTn7 site were used to PCR amplify the kanamycin resistance gene from the pKD13 plasmid[i]. Primer 1 also contained the molecular barcode tag 7661 from the yeast deletion collection flanked by the same sequences used for amplification of the tags in the TReMR libraries. The PCR product was inserted into the *E. coli* MG1655 (700926) chromosome by the recombineering procedure described in the Methods section. Recombinants were selected by the ability to growth on LB agar plates containing kanamycin (30 μg/mL) at 37°C. The desired recombinants replaced nucleotide 3,909,796 with the tagged kanamycin cassette. Recombinants were verified by PCR amplification of the flanking regions where the cassette inserted into the chromosome using primers 3 and 4 or 5 and 6. Sequencing (Macrogen USA) of the PCR products showed recombinants to have the correct tagged sequence. Cells were stored as glycerol stocks at -80 °C. Prior to growth experiments cells were streaked onto minimal agar plates and allowed to grow overnight at 37°C. This Control Strain, JWKAN, has subsequently been show to behave similarly as MG1655 in numerous growth conditions.



Supplementary Notes Figure 1. Scheme showing construction and orientation of the tagged Kan cassette in the Control strain, JWKAN.

Preparation of "Shared" DNA: Up and Down blasticidin^R cassette construction.

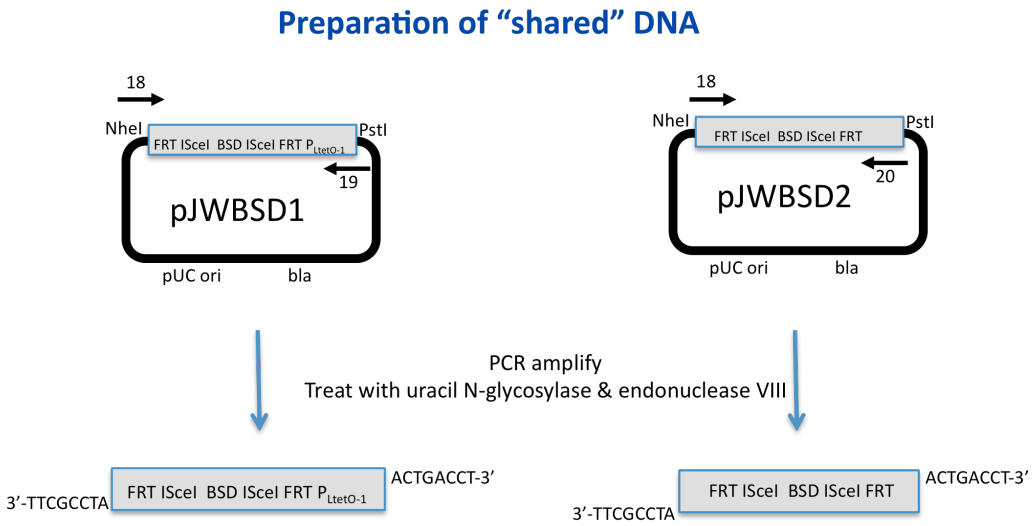
Creation of plasmid-based "Up" (pJWBSD1) and "Down" (pJWBSD2) cassettes. Four sequential PCR reactions were carried out using the primers shown in Suppl. Notes Fig. 2 to amplify the EM7 promoter and the blasticidin-S deaminase gene (BSD)[ii] (nucleotides 1938-2403) from plasmid pEM7/Bsd (Invitrogen). The primers were designed to add flanking *I-SceI*, FRT and promoter sites to the BSD gene. The products after four PCR reactions were digested with *Nhe*I and *Pst*I endonucleases to generate single-strand overhangs. The products were then recloned into the NheI and PstI sites of the pEM7/BSD plasmid, generating pJWBSD1 and pJWBSD2 plasmids.



Supplementary Notes Figure 2. Scheme showing construction of "Up" and "Down" blasticidin resistant cassettes and incorporation into a plasmid for stable propagation.

Amplification/Uracil excision of "up" and "down" cassettes for ligation to "target oligos. The plasmid pJWBSD1 was used as a template for PCR with primers 18 and 19 and PfuTurbo C_x hotstart DNA polymerase[iii] (Stratagene) in a 100 µL reaction following the manufacturer recommended polymerase conditions. Likewise the plasmid pJWBSD2 was used as template in PCR using primers 18 and 20 to amplify the "down" cassette.). The reactions were heated to 95 °C for 2 min in a thermal cycler (DNA Engine, BIORAD) followed by 30 cycles of: 30 sec at 96 °C, 30 sec at 56 °C, 1 min at 72 °C, and a final step of 5 min at 72°C. The unpurified PCR products were treated with 2 units of USER enzymes (New England Biolabs) at 37

°C for 2 hour to generate single-stranded 3'-overhangs. The reaction products were purified by QIAquick PCR purification and eluted in 50 μL water. Products were treated with 20 units *Dpn*I in a total of 60 μL for 2 hrs at 37°C. Products were separated by agarose gel electrophoresis and the correct size band corresponding to the major product was excised and extracted using the QIAquick gel extraction protocols (Qiagen). A portion of each of the purified "up" or "down" products was used directly in ligations to the "target" DNA library.



Supplementary Notes Figure 3. Scheme showing amplification, uracil-excision and 3' overhangs of the "up" and "down" shared DNA.

"up" shared DNA sequence prior to uracil excision

5'-
AAGCGGATAGTAGACCTCAGCGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCACGCT
AGGGATAACAGGGTAATTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATA
ATACGACAAGGTGAGGAACTAAACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCCT
CATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGC
CAGCGCAGCTCTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTAC
TGGGGGACCTTGTGCAGAACTCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAA
CCTGACTTGTATCGTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCTGCGGACG
GTGCCGACAGGTGCTTCTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGA
TGGACAGCCGACGGCAGTTGGGATTCGTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGG
CTAATAGGGATAACAGGGTAATATAGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTC
TCCCTATCAGTGATAGAGATTGACATCCCTATCAGTGATAGAGATACTGAGCACATCAGC
AGGACGCACTGACCT-3'

"down" shared DNA sequence prior to uracil excision

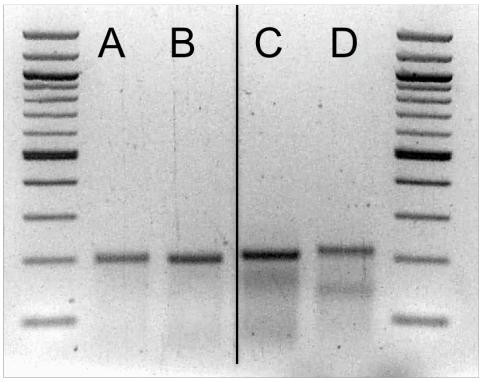
5'-
AAGCGGATAGTAGACCTCAGCGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCACGCT

AGGGATAACAGGGTAATTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATA
ATACGACAAGGTGAGGAACTAAACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCCT
CATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGC
CAGCGCAGCTCTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTAC
TGGGGGACCTTGTGCAGAACTCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAA
CCTGACTTGTATCGTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCTGCGGACG
GTGCCGACAGGTGCTTCTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGA
TGGACAGCCGACGGCAGTTGGGATTCGTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGG
CTAATAGGGATAACAGGGTAATATAGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTC
TAACTAATCATTCTGCAGACTGACCT-3'

Preparation of synthetic DNA libraries.

Amplification of "target" DNA libraries. An oligonucleotide library containing a theoretical total of 10 pmol of 8,154 unique "target" sequences was purchased from Agilent. This lyophilized library was dissolved in 50 μL of 5 mM Tris-Cl, pH 8.0, 0.5 mM EDTA. The "up" library DNA (3 μL) was PCR amplified in a 50 μL solution containing PAGE purified primers 21 and 22 (0.5 μM each), 0.2 mM each dNTP, 1 x PfuTurbo C_X reaction buffer and 2.5 units PfuTurbo C_X Hotstart DNA polymerase (Stratagene). The reactions were heated to 95 °C for 2 min in a thermal cycler (DNA Engine, BIORAD) followed by 17 cycles of: 30 sec at 95 °C, 30 sec at 58 °C, 30 sec at 72 °C, and a final cycle of 5 min at 72°C. Reactions were PCR purified by the QIAquick PCR purification protocols (Qiagen) and eluted in 50 μL of 5 mM Tris-Cl, pH 8.5. The "down" library DNA was PCR amplified under the same reaction conditions using PAGE purified primers 21 and 23.

A portion of the "up" library DNA from the first amplification was PCR amplified a second time to attach the sequences used for subsequent ligations. A 250 μL solution containing PAGE purified primers 24 and 25 (0.5 μM each), approx 60 ng "up" PCR product , 0.2 mM each dNTP, 1 x PfuTurbo C_X reaction buffer and 12.5 units PfuTurbo C_X Hotstart DNA polymerase was heated to 95 °C for 2 min followed by 18 cycles of 30 sec at 95 °C, 30 sec at 60 °C, 30 sec at 72 °C, and a final cycle of 5 min at 72 °C. Likewise, the "down" library DNA was PCR amplified a second time under the same reaction conditions using PAGE purified primers 24 and 26. After PCR, to each reaction was added 4 units USER enzyme (New England Biolabs) and EDTA to 0.1 mM. The reactions were incubated at 37 °C for 2 hours to generate the 3' single-stranded overhangs. The products were separated by electrophoresis using a 1.5% agarose gel. The correct size band was excised and extracted from the gel using the QIAquick gel extraction protocols (Qiagen). The "up" and "down" target DNA was eluted in 60 μL of 5 mM Tris-Cl, pH 8.5. An estimated yield of 120 ng of each product was obtained.



Supplementary Notes Figure 4. Electrophoresis on a 2% agarose gel of a 100 bp ladder (New England Biolabs) left and right lanes, A is "down" target library after 1st PCR, B is "up" target library after 1st PCR, C is "down" target library after 2nd PCR, D is "up" target library after 2nd PCR. PCR products are sizes; A = 199 bp, B= 200 bp, C= 207 bp, D= 215 bp.

Ligation of "target" DNA to "shared" DNA. In a total volume of 100 μL of 1 x T4 ligase buffer containing 200 units T4 DNA ligase, approximately 0.5 pmol of "target" DNA was mixed with 1.5 pmol "shared" DNA. Ligations were carried out separately but in parallel for the "up" DNA and "down" DNA. The mixtures were heated to 37°C for 10 min then allowed to react for ~15 hours at 18 °C to generate DNA circles with a 2 base gap on the sense strand. The ligase was inactivated by heating at 65 °C for 10 min.

Rolling circle amplification (RCA) of ligation products. The circular products of ligation were copied into concatemers by multiply-primed RCA[iv]. The ligation product for the "up" library was divided into 5 aliquots of 20 μL. 20 ηmol exo-resistant random hexamer was added (20 μL of primer 27) with Phi29 buffer (6 μL, New England Biolabs). The mixture was heated to 96 °C for 4 min then cooled on ice. To this was then added 160 μL of the following mixture (final concentration in 200 μL reactions): Phi29 DNA polymerase buffer (1x), Dithiothreitol (10 mM), Bovine serum albumin (200 μg/mL), dNTPs (1mM each), Phi 29 DNA polymerase (9 units, New England Biolabs), Yeast inorganic pyrophosphatase (0.1 units, New England Biolabs). The RCA reaction was carried out at 32 °C overnight. EDTA was added to 10 mM and the polymerase was inactivated by heating the reaction at 65°C for 20 min. The DNA (jelly like) was desalted by diluting to 450 μL and concentrating to ~ 50 μL by spinning in an Amicon YM30 filter (millipore) for 5 min at 10,000 g. Dilution and concentration was carried out four times total. Afterward the DNA was collected, total volume of each aliquot was 200 μL. These procedures were also carried out in parallel to amplify the "down" library.

Nuclease treatment of RCA products. 22 μL of buffer 4 (New England Biolabs) was added to an aliquot of the RCA product of the "up" or "down" library. To cleave the RCA concatemers to monomer units the restriction endonuclease AscI was added (20 units, New England Biolabs) and the reaction was incubated at 37 °C for 4-8 hours. The enzyme was inactivated by heating to 65°C for 15 min. The DNA was precipitated by addition of sodium acetate (0.3 M final, pH 5.2) and 480 μL cold ethanol for 1 hr to overnight at -20°C. DNA was collected by centrifugation and the pellet washed twice with cold 70% ethanol. The DNA was dissolved 100 μL water. Mung bean nuclease reaction buffer (11 μL, New England Biolabs) and mung bean nuclease (1 unit/μg DNA, New England Biolabs) were added to remove 5' terminal extensions. (Treatment with mung bean nuclease was shown to stop the formation of recombineering side products that are thought to have arisen from *in vivo* ligation of AscI site overhangs.) The reactions were carried out at 32 °C for 40 min then EDTA was added to 10 mM and SDS to 0.01 %, and the DNA products were separated by agarose gel electrophoresis. The correct size bands were excised and extracted from the gel using the QIAquick gel extraction protocols (Qiagen). The "up" or "down" DNA was eluted in 100 μL of 5 mM Tris-Cl, pH 8.5. Separately, the

"up" and "down" DNA was concentrated by ethanol precipitation to 0.5 μg/μL in 20 μL water. This DNA was used in recombineering experiments or for microarray analysis. Each RCA aliquot carried though these steps yields 3-10 μg of synDNA. Approximately 7-10 μg DNA was used to make each allele library.

Sequences of DNA cassettes

Sequence of "up" mutation (start codon underlined)

5'-
GTAGCACACGAGGTCTCT(Barcode)TCTCCCTATAGTGAGTCGTATTAGAAGCGGATAG
TAGACCTCAGCGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCACGCTAGGGATAACA
GGGTAATTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATAATACGACAAG
GTGAGGAACTAAACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCCTCATTGAAAGA
GCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCT
CTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTACTGGGGGACCT
TGTGCAGAACTCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGACTTGT
ATCGTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCTGCGGACGGTGCCGACAG
GTGCTTCTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCG
ACGGCAGTTGGGATTCGTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGGCTAATAGGG
ATAACAGGGTAATATAGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCTCCCTATCA
GTGATAGAGATTGACATCCCTATCAGTGATAGAGATACTGAGCACATCAGCAGGACGCA
CTGACCTAAGTAGGTACGTAAGGAGGTGATAAATG

Sequence of "down" mutation (start codon underlined)

5'-
GTAGCACACGAGGTCTCT(Barcode)TCTCCCTATAGTGAGTCGTATTAGAAGCGGATAG
TAGACCTCAGCGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCACGCTAGGGATAACA
GGGTAATTGTTGACAATTAATCATCGGCATAGTATATCGGCATAGTATAATACGACAAG
GTGAGGAACTAAACCATGGCCAAGCCTTTGTCTCAAGAAGAATCCACCCTCATTGAAAGA
GCAACGGCTACAATCAACAGCATCCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCT
CTCTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTTACTGGGGGACCT
TGTGCAGAACTCGTGGTGCTGGGCACTGCTGCTGCTGCGGCAGCTGGCAACCTGACTTGT
ATCGTCGCGATCGGAAATGAGAACAGGGGCATCTTGAGCCCCTGCGGACGGTGCCGACAG
GTGCTTCTCGATCTGCATCCTGGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCG
ACGGCAGTTGGGATTCGTGAATTGCTGCCCTCTGGTTATGTGTGGGAGGGCTAATAGGG
ATAACAGGGTAATATAGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCTAACTAATC
ATTCTGCAGACTGACCTCTCCGTTATCTCCTCCATG

Identification of TReMR colonies

PCR and Sequencing of TReMR isolates. Colony PCR was used to amplify TReMR "up" and "down" cassettes including barcode tags. Iced 50 μL PCR reactions contained: 1x Taq polymerase buffer, 2.5 mM $MgCl_2$, 0.2 mM each dNTPs, 0.3 μM each primer 100 and 101, 5% DMSO, and 1.5 units Taq polymerase (Invitrogen). A colony was added to the reaction by toothpick. Reactions were heated to 95 °C for 3 mins followed by 35 cycles of: 94°C for 40 sec, 55°C for 30 sec, 72 °C for 30 sec. Afterward, reactions were heated at 72 °C for 5 min then chilled to 4 °C. An aliquot was analyzed by agarose gel electrophoresis showing the correct size product of 386 bp. PCR products were sequenced using primer 52. The incorporated tag sequence was obtained from the reverse complement sequence and searched in Suppl. Table 1 to identify allele.

PCR was used to identify chromosome insertion sites by using primers that hybridize to chromosomal DNA approximately 450 bp upstream or downstream of the insertion site and primers (101 or 100, respectively) within the synthetic cassette. Loci and primers (upstream, downstream) tested are: sodC (28,29), ampH (30,31), yeiG (32,33), yobD (34,35), leuL (36,37), ilvN (38,39), emrD (40,41), xylA (42,43), hns (44,45), gloA (46,47), pbpG (48,49), ihfB (50,51), ydeK (52,53), ybgQ (54,55), tnaC (56,57), ydeM (58,59), cyaA (60,61), yhaM (62,63), paaI (64,65), puuE (66,67), ptsI (68,69), ugpE (70,71), ydiH (72,73), ygaZ (74,75), yciV (76,77), rluF (78,79), lsrA (80,81), panF (82,83), lpp (84,85), ahpC (86,87), talA (88,89), elaD (90,91), yqhC (92,93), pykF (94,95), lacZ (96,97) & galK (98,99). In all cases PCR was successful for at least one region of the genomic insertion site. In 5 instances (sodC, ampH, yeiG, ilvN & tnaC) PCR confirmation was inconclusive only at the downstream loci of the cassette and no further attempt was made to optimize these reactions. PCR products were sequenced using primers 102 or 103. Traditional recombineering[i] was used to separately reconstruct alleles reported in the manuscript following PCR amplification of the lacZ "up" or "down" synDNA with primers containing homology regions identical to those used in the targeting oligos for the alleles being reconstructed. Alleles were isolated by blasticidin-S resistance, verified by PCR amplification of the chromosome insertion site, and transferred to the corresponding selective plate conditions alongside wild-type cells and TReMR isolates.

Cellulosic Feedstock TReMR Selections, Allele Identification, and Analysis

Cellulosic Feedstock (hydrolysate) TReMR Selections. Freezer stocks of prepared up and down TReMR libraries were thawed and added equally (290μL) to 50mL of low salt LB media and grown to an OD_{600} of ~0.4 at 37ºC, 225rpm. 10^9 cells of this culture were saved as frozen pellets for control microarrays. Hydrolysate growth media was prepared as described in Recipes at various concentrations of hydrolysate (15, 16, 17, 18, 19, 20%) and inoculated with an OD_{600} of 0.01 mixed library cells in 400mL (1L flask). Growth at 37ºC, 225rpm was monitored until the OD_{600} reached 0.2, at which point 10^9 were harvested by centrifugation and frozen as pellets for microarray analysis. A second batch of media was prepared at 1% lower hydrolysate concentration, inoculated at an OD_{600} of 0.01 with cells from the

previous batch, and grown as before. This was repeated a third time, resulting in 2 step-wise reductions in hydrolysate concentration intended to reduce the number of alleles with the persistence phenotype by encouraging growth of faster alleles at less inhibitory concentrations of hydrolysate. At all times during selection that cell samples were taken, cells were also plated on blasticidin-S low salt LB agar plates for later colony selection.

Allele identification by microarray. The allele populations were measured by TAG4 array of barcodes before the selection and after the third-serial dilution in each concentration of cellulosic hydrolysate. Allele frequencies before selection are averaged from 4 array experiments. The fitness of each allele (ln W') after each selection was determined and the average fitness of each allele was calculated across selections in 15-17% hydrolysate and in 18-20% hydrolysate. For the average fitness and standard deviation to be calculated the allele had to be detected at the end of at least two selections with an array signal of at least 100 arbitrary units.

Analysis of growth of individual alleles in hydrolysate. Unique alleles from each selection were studied for increased growth characteristics in the presence of hydrolysate. The concentration of hydrolysate used was dependent on a control growth curve of MG1655 vs. hydrolysate, as the potency of the feedstock is variable over time. For the growth curves shown in Fig. 5f, alleles and the wild-type were grown in LB with blasticidin-S (40μg/mL, excluding wild-type) from freezer stock to an OD_{600} of 0.2, and then diluted into 27.5% hydrolysate media to an OD_{600} of 0.02 (a sub-MIC amount to enable measurement of MG1655 biomass productivity and growth in the presence of the hydrolysate, for reference). Subsequent growth at 37ºC and 225rpm was monitored by measuring the OD_{600} of aliquots after collecting 1 mL cells, removing the hydrolysate, and resuspending the cells in 1 mL MA salts. All growth curves were done in complete triplicate (from a single freezer stock). Biomass productivity is the area under each growth curve. %-change in biomass productivity was calculated by the difference in biomass productivity for each allele with respect to wild-type and then dividing the difference by the wild-type biomass productivity. The maximum growth rate of each allele was estimated using a curve fit of the following Gompertz function: $y(x) = a \cdot e^{b \cdot e^{c \cdot x}}$ where y is OD_{600} and x is time, and the initial conditions were a=1,b=-1, and c=-1. Calculations were carried out in Data Graph 2.2.1 (Visual Data Tools, Inc.) The constant c is a negative value, the absolute value of which is the maximum growth rate of a sigmoidal growth curve. The %-change in growth rate for each allele was then determined by the difference in growth rate for each allele with respect to wild-type and then dividing the difference by the wild-type growth rate.

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Recipes

- low salt LB media
  1 liter H20
  10 g tryptone
  5 g yeast extract
  5 g NaCl
  adjust to pH 7 with NaOH
  Autoclaved at 120 °C for 20 min
  -for plates added 15 g agar prior to autoclave

-5x Minimal A salts (MA)
  1 liter H_2O
  52.5 g K_2HPO_4
  22.5 g KH_2PO_4
  5 g $(NH_4)_2SO_4$
  2.5 g Sodium citrate·$2H_2O$
  Autoclaved at 120°C for 20min

-$MgSO_4 \cdot 7H_2O$ solution
  10 g $MgSO_4 \cdot 7H_2O$
  50 mL H_2O
  Autoclaved at 120°C for 20min

- Basic minimal agar solution
  7.5 g Agar
  400 mL H_2O
  Autoclaved at 120°C for 20min, then added
  100 mL 5xMA
  0.25 mL Thiamine Hydrochloride solution 1% (filter sterilized)
  0.5 mlL $MgSO_4 \cdot 7H_2O$ solution

-L-Valine plates (VGMA)
  500 mL agar Solution
  1 mL of 0.02g/ml L-Valine (filter sterilized)
  5 mL of 20% glucose solution (filter sterilized)

-D-fucose/L-arabinose plates (DfMA)
  500 mL Basic minimal agar Solution
  0.5 g L-arabinose (Filter sterilized in 3 mL water)
  1 g D-fucose (Filter sterilized with the arabinose)

-β- glucoside Plates (βGMA)
  500 mL Basic minimal Agar Solution
  0.375 g yeast extract (autoclaved with the basic miniml agar solution)
  2.5 g Salicin (Filter sterilized in 3 mL water)
  0.1 g Bromothymol blue (Dissolved in 2 mL 1:1 ethanol/0.2 M NaOH)

-Methylglyoxal Plates (MMA)
  500 mL Basic minimal Agar Solution

5ml of 20% glucose solution (filter sterilized)
90µl of 40 wt% Pyruvaldehyde (final 1mM concentration of Methylglyoxal)
added 50 µL LB media to each plate prior to growth selections

-<u>10X MOPS Solution</u>
300 mL water
83.72 g MOPS
7.17 g Tricine
Add 10 M KOH to a final pH of 7.4
Add water to 440mL
0.028 g FeSO4•7H2O (in 10mL)
50 mL 1.9 M NH_4Cl
10 mL 0.276 M K_2SO_4
0.25 mL 0.02 M $CaCl_2$•$2H_2O$
2.1 mL 2.5 M $MgCl_2$
100 mL 5 M NaCl
0.2 mL Micronutrient stock (50mL stock)
ammonium molybdate 0.009 g
boric acid 0.062 g
cobalt chloride 0.018 g
cupric sulfate 0.006 g
manganese chloride 0.040 g
zinc sulfate 0.007 g
387 mL Autoclaved dH_2O

-<u>Hydrolysate in MOPS Minimal Media, Supplemented</u>
X% hydrolysate (contains 30.9g/L glucose at 100%), sterile filtered, pH 7.2
10 mL 10X MOPS solution (filter sterilized)
0.1 mL 0.132M K_2HPO_4 (filter sterilized)
Add glucose to 30.9 g/L with 20% stock (filter sterilized)
Add water to 100 mL (filter sterilized)

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Sequences of primers (5'-3', * denotes phosphorothioate linkage)

1	GTAAGCGGGGCATTTTTCTTCCTGTTATGTTTTTAATCAAACATCCTGCGTAGCACACGAGGTCTCTTTAGTCACGCCACTGGTTCGTCTCCCTATAGTGAGTCGTATTAGTGTAGGCTGGAGCTGCTTC
2	TCTGTGACAGAGAAAAAGTAGCCGAAGATGACGGTTTGTCACATGGAGTTATTCCGGGGATCCGTCGACC
3	GCTGCTGGCTTACCATGTC
4	CAGTCATAGCCGAATAGCCT
5	CGGTGCCCTGAATGAACTGC
6	CAGTTATATGTAAGGAATATGACAG
7	GGAACTTCACGCTAGGGATAACAGGGTAATTGTTGACAATTAATCATCGGCA
8	GAAGTTCCTATACTTTCTAGAGAATAGGAACTTCTATATTACCCTGTTATCCCTATTAGCCCTCCCACACATAAC
9	GGAACTTCACGCTAGGGATA
10	TCACTGATAGGGATGTCAATCTCTATCACTGATAGGGAGAAGTTCCTATACTTTCTAGAG
11	CCAATGCTATGTCTGCAGAATGATTAGTTAGAAGTTCCTATACTTTCTAGAG
12	GTAGACCTCAGCGAAGTTCCTATTCTCTAGAAAGTATAGGAACTTCACGCTAGGGATA
13	TAGGTCAGTGCGTCCTGCTGATGTGCTCAGTATCTCTATCACTGATAGGGATGTCAATC
14	CCAATGCTATGTCTGCAGAATG
15	GTAGACATCAGCTAGCTCTCCCTATAGTGAGTCGTATTAGTAGACCTCAGCGAAGTTCC
16	CCAATGCATTGTCTGCAGTCCTCCTTAGGTCAGTGCGTCCTGCT
17	GTAGACATCAGCTAGCTCTCCCTTTAGTGAGGGTTAATTGTAGACCTCAGCGAAGTTCC
18	AAGCGGAUAGTAGACCTCAGCGAAGTTC
19	AGGTCAGUGCGTCCTGCTG
20	AGGTCAGUCTGCAGAATGATTAGTTAGAAG
21	CTTCTAATACGACTCACTATAGGGAGA
22	GTAGGTACGTAAGGAGGTGATAAATG
23	GACCTCTCCGTTATCTCCTCCATG
24	ATCCGCUTCUAATACGACTCACTATAGGGAGA
25	ACTGACCUAAGTAGGTACGTAAGGAGGTGATAAATG
26	ACTGACCUCTCCGTTATCTCCTCCATG
27	NNNN*N*N
28	TTTAATGATGATTATTTCCAGCC
29	CAGACGAGGCGCGATGAC
30	TGCACTCCTGCTAACTTCTTATC
31	GACCAGCGTAATGGGCGTC
32	TCGTTATCCATTTCATGCACG
33	AAATTGCGACTGAACCAGCG
34	CTGCAAAAACTGACGGAAGG
35	TAATTCAGCCGACGCTGTTC
36	ATGCATTAATTCTTAACATTAATTGATC
37	AGCGAGCTAACGCACATAC
38	TGATGAATATTCAGGAGATGGC
39	TGAGGTGATCGTCTATAAGG
40	CATTCTTATCCTCAAACTCATTG
41	AGCATGGCGCAACTGTGTC

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42 CTTCTGTAGTTAGAGGACAG
43 TCTCTTCTTGCTTGCCTGC
44 ACTAAGTCCATGCTCTTATTGC
45 AAATCGTCGAGGGATTTACC
46 GTGAACCGTATACTGATGCG
47 CGTCTTTCTCTTCGATTAACTC
48 GCTACCTGCTTTACCTTGG
49 GGTTTTCTGAAGACATCAGC
50 CGACGAAGTTGAAGCTAAATTC
51 ACTTAACCGTAAATATTGGCGC
52 GGCTTGTTAAAAGCCAGCTTG
53 AAT ATT CAG CGT CCC CGT TC
54 GACAACCCATATAAACCGG
55 ACC TTC TTT CCA TGT AGA GGG
56 ACCTACAGGCGCTGGAACAG
57 CGA TTT ACT GAC CGA CAG CG
58 CAAGGCGAGCCACATAAAAATC
59 TAC TTG ATA TGA TTT CAG ACG CTC G
60 GCTTTGGCGTGTGGCAATTC
61 TGA CTT CCA CAC CCA GCG AG
62 CACAGTTTATTAGCGGTGACG
63 AAT GTT GGT ATG CCC GCC GAC
64 TTGAGACACAAGGCGAGAC
65 GAA TTC CGT CAC AAA TAA AGG CTT C
66 TTGTGGTGCCGAAACTGCTG
67 TTT TCC GGT CAG CGC CAT G
68 CAATGGACTGTATTGCGCTC
69 CGC TCA GGT CGA TAA TCT TC
70 CTACGACTGGAACCACGC
71 GTT AAA CCG GCG TAG CTG TC
72 GTGGGGTTCCTGGATATTCG
73 GAA AAC CCT TAA GTC TGT GCG
74 CTATTACTTTCATGGCTGGCG
75 CAT AGC TCA TCG GGC GCT C
76 AGCGCACTGTCTACCAGCAG
77 CAC TCA ACA AGG AAA CGC GC
78 GCATTTTCAATCGCGGCAAC
79 GAA TAA ACT CCT CGG TAA TCG G
80 AGCGAGAATTAATCTGTACGCG
81 GAG GAT TTC CAC CAT TTG GC
82 CAACGTTGATCTGCAGATCC
83 TGC ATG GTG TCG TTC AGC AC
84 CTACTGATGATTTCTACCGTCTG
85 CAG AAG TTA GTC GAT AAA GCG
86 GCTTTTACTGGAGCAGGAAG
87 ATT TTA CGC AGC AGG TCA GAC
88 CGATTTCAAGACAAGGTGCG
89 AAT ACC TTC TTT TTC CAG CTC TTC
90 ACTTGACCTGGCTAAAGGTG

91	CAT TTA AAA GCA CCT TTG AAA GCG
92	GCGATAAATTTGGTGCCGTC
93	GAG TTA ATC CCG CTG GCT GC
94	CACCGGATGAACTTTCACTTATCC
95	AGG TCA CCG TTG TTC AGC AC
96	CAGGCTTTACACTTTATGCTTCCG
97	TAAGTTGGGTAACGCCAGGG
98	CTGACCGCAGAACAGGCAGC
99	GCGCCTGAATGGTGTGAGTG
100	CACGAGTTCTGCACAAGGTC
101	GTAGCACACGAGGTCTCT

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Supplementary Table 2. Array detection threshold and frequencies of TReMR alleles and synthetic DNA.

Symbol	Name	Up synDNA above threshold	Up synDNA frequency ([tag_x]/ [all tags])	Up allele above threshold	Up allele frequency	Down synDNA above threshold	Down synDNA frequency	Down allele above threshold	Down allele frequency
EG12823	aaeA	1	3.27E-05	1	9.01E-05	1	8.7867E-06	0	2.1244E-06
EG12822	aaeB	1	1.80E-04	1	1.20E-04	1	8.4319E-05	1	3.7963E-05
EG12825	aaeR	1	7.58E-04	1	8.38E-04	1	0.00017059	1	0.00022499
EG12824	aaeX	1	1.31E-04	1	9.17E-05	1	0.00016369	1	0.00015355
EG11679	aas	1	1.52E-05	1	1.46E-05	1	0.00043058	1	0.0001452
EG11112	aat	1	2.11E-04	1	1.71E-04	1	8.2334E-05	1	0.00025905
EG13352	abgA	1	8.52E-04	1	9.18E-04	1	0.00026406	1	0.00015169
EG13351	abgB	1	1.21E-04	1	1.53E-04	1	0.00026144	1	0.00032926
EG13353	abgR	1	1.60E-05	1	2.13E-05	1	7.04E-05	1	6.4887E-06
EG12853	abgT	1	2.52E-04	1	2.84E-04	1	0.00017176	1	0.00015248
EG13310	abrB	1	1.37E-05	1	6.24E-06	1	9.9173E-05	1	5.5346E-05
EG11647	accA	1	3.10E-04	1	2.64E-04	1	2.8307E-05	1	1.9543E-05
EG10275	accB	1	2.17E-05	1	3.63E-05	1	2.6925E-05	1	1.8044E-05
EG10276	accC	1	6.76E-05	1	9.21E-05	1	4.3078E-05	1	6.2787E-05
EG10217	accD	1	5.14E-04	1	5.13E-04	1	0.00023003	1	0.00039003
EG10022	aceA	1	2.05E-04	1	4.49E-04	1	0.00027184	1	0.00027143
EG10023	aceB	1	2.93E-05	1	5.31E-05	1	0.00020091	1	0.00021588
EG10024	aceE	1	1.51E-04	1	3.13E-05	1	2.7445E-05	1	9.8146E-06
EG10025	aceF	1	1.36E-04	1	9.06E-05	1	5.4692E-05	1	1.4961E-05
EG10026	aceK	1	1.39E-04	1	2.04E-04	1	7.637E-05	1	7.6765E-05
EG10027	ackA	1	6.55E-04	1	5.46E-04	1	0.00054535	1	0.00053409
EG11325	acnA	1	1.09E-04	1	1.49E-04	1	0.00011326	1	3.2675E-05
EG12316	acnB	1	4.25E-05	1	2.92E-05	1	0.0001009	1	0.00012546
EG11095	acpH	1	6.37E-04	1	4.78E-04	1	0.0002442	1	0.00036728
EG50003	acpP	1	1.21E-04	1	2.93E-04	1	0.00052812	1	0.00045284
EG10247	acpS	1	4.90E-05	1	4.48E-05	1	6.7965E-05	1	1.6811E-05
EG12221	acpT	1	1.05E-03	1	7.03E-04	1	0.00123665	1	0.0010103
EG11703	acrA	1	1.78E-04	1	4.52E-05	1	0.00023095	1	0.00015494
EG11704	acrB	1	2.70E-04	1	1.16E-04	1	6.6854E-05	1	0.0001179
EG10014	acrD	1	3.44E-05	1	2.97E-05	1	0.00023003	1	8.1401E-05
EG10266	acrE	1	1.87E-04	1	9.54E-05	1	0.00093132	1	0.00084035
EG10267	acrF	1	3.45E-04	1	7.01E-04	1	0.00023063	1	0.00032743
EG12116	acrR	1	2.03E-05	1	6.06E-05	1	0.00012449	1	0.00010286
EG11448	acs	1	1.31E-03	1	1.01E-03	1	0.00023586	1	2.3598E-05
EG11942	actP	1	2.59E-04	1	4.73E-04	1	0.00019607	1	0.00011021
EG10029	ada	1	2.26E-05	1	1.29E-05	1	0.00023069	1	0.0002201
EG10030	add	1	5.77E-05	1	1.28E-04	1	5.6436E-05	1	6.2719E-05
EG11692	ade	1	7.91E-05	1	2.09E-04	1	0.00010602	1	4.3337E-05
EG10031	adhE	1	6.64E-05	1	3.05E-05	1	0.0008632	1	0.00124664
EG12622	adhP	1	5.26E-05	1	7.15E-05	1	0.0005827	1	0.00066415
EG11501	adiA	1	8.43E-04	1	1.16E-03	1	0.00079372	1	0.00054934
EG12462	adiC	1	1.16E-03	1	1.13E-03	1	0.00016922	1	0.00053686
EG11966	adiY	1	1.13E-04	1	2.13E-04	1	0.00013923	1	0.00012713
EG10032	adk	1	5.45E-05	1	4.34E-05	1	0.00011384	1	0.00034684
EG11257	adrA	1	4.45E-04	1	2.66E-04	1	0.00013092	1	3.4053E-05
EG12409	aegA	1	3.45E-04	1	2.47E-04	1	0.00031498	1	0.00022917
EG12955	aer	1	1.71E-04	1	2.95E-04	1	0.00045778	1	0.00049975
EG11101	aes	1	3.99E-04	1	3.64E-04	1	0.0002965	1	0.00013799
EG12340	afuC	1	1.96E-04	1	2.86E-04	1	6.683E-05	1	6.517E-05
EG12769	agaB	1	2.43E-04	1	1.83E-04	1	8.7522E-05	1	0.00011049
EG12770	agaC	1	3.46E-04	1	2.62E-04	1	8.7601E-05	1	8.8986E-05
EG12771	agaD	1	2.07E-04	1	1.63E-04	1	0.00018609	1	0.00039062
EG12772	agaI	1	4.40E-05	1	3.88E-05	1	0.0016318	1	0.00112564
EG12762	agaR	1	1.38E-05	1	1.41E-05	1	5.8932E-05	1	4.5795E-05
EG12767	agaS	1	9.46E-05	1	5.69E-05	1	0.0002995	1	0.00039987
EG12764	agaV	1	8.59E-05	1	1.34E-04	1	0.00031848	1	0.00017878
EG10033	agp	1	6.99E-04	1	5.51E-04	1	4.7608E-05	1	0.00011253
EG11384	ahpC	1	9.96E-04	1	8.47E-04	1	0.00029517	1	0.0001746
EG11385	ahpF	1	3.18E-04	1	2.87E-04	1	0.00026199	1	0.000316
EG11811	aidB	1	1.90E-05	1	2.73E-05	1	9.1696E-05	1	6.7464E-05
EG13155	ais	1	5.28E-04	1	3.02E-04	1	0.00195672	1	0.00166674
EG10034	alaS	1	7.09E-04	1	1.13E-03	1	0.00027544	1	0.00014887
EG10035	aldA	1	1.88E-04	1	1.63E-04	1	0.00030999	1	0.00015084
EG12292	aldB	1	1.60E-04	1	3.82E-04	1	0.00016359	1	0.0001653
EG11222	alkA	1	1.47E-05	1	1.09E-05	1	0.00021891	1	0.00010393

EG10037	alkB	1	3.49E-05	1	2.21E-05	1	0.0002209	1	0.00027473
EG13615	allA	1	1.38E-05	1	1.71E-05	1	0.00012368	1	0.00013399
EG13619	allB	1	8.45E-05	1	1.32E-04	1	0.00044336	1	0.00012176
EG13623	allC	1	7.53E-04	1	8.08E-04	1	0.00012045	1	0.00011669
EG13624	allD	1	1.47E-04	1	1.24E-04	1	0.00010298	1	1.8551E-05
EG13616	allR	0	2.00E-06	0	1.45E-06	1	7.2825E-06	0	4.2913E-06
EG13267	allS	1	3.41E-05	1	1.49E-05	1	0.00015165	1	4.995E-05
EG12112	alpA	1	2.66E-04	1	2.71E-04	1	0.00010571	1	0.00014071
EG10001	alr	1	1.16E-04	1	1.32E-04	1	0.00027694	1	0.00022123
EG11959	alsA	1	6.17E-06	1	8.40E-06	1	0.00026174	1	0.00042056
EG12458	alsB	1	3.77E-04	1	4.97E-04	1	0.00039456	1	0.00099862
EG11958	alsC	1	2.14E-05	1	1.36E-05	1	0.00052479	1	0.00074265
EG11957	alsE	1	1.09E-04	1	3.90E-04	1	0.0002871	1	0.00021747
EG11956	alsK	1	7.44E-06	1	6.54E-06	1	8.1079E-05	1	0.00012774
EG12731	alx	1	1.04E-04	1	8.26E-05	1	4.825E-05	1	0.00021775
EG11823	amiA	1	1.07E-03	1	7.22E-04	1	0.00012152	1	0.00051713
EG11363	amiB	1	3.04E-04	1	1.99E-04	1	6.3669E-05	1	3.7849E-05
EG13086	amiC	1	5.71E-05	1	1.17E-04	1	0.00016612	1	0.000204
EG13687	amiD	1	2.13E-05	1	1.98E-05	1	1.4999E-05	1	6.4041E-06
EG10039	amn	1	7.02E-05	1	5.49E-05	1	0.00067058	1	0.00079766
EG10040	ampC	1	3.39E-04	1	4.16E-04	1	0.00039758	1	0.00027586
EG10041	ampD	1	5.29E-06	0	4.40E-06	1	2.5317E-05	1	9.2304E-05
EG10042	ampE	1	3.12E-04	1	2.63E-04	1	0.00021946	1	0.00016346
EG12183	ampG	1	3.60E-04	1	3.83E-04	1	0.00020771	1	0.00031126
EG12867	ampH	1	4.02E-04	1	6.75E-04	1	4.4686E-05	1	4.3586E-05
EG11821	amtB	1	1.59E-05	1	4.38E-05	1	4.8184E-05	1	4.4441E-05
EG11387	amyA	1	9.73E-05	1	1.15E-04	1	0.00015142	1	8.6593E-05
EG13942	anmK	1	1.46E-04	1	2.44E-04	1	5.4783E-05	1	3.4042E-05
EG10045	ansA	1	9.33E-04	1	7.02E-04	1	0.00016325	1	0.0003662
EG10046	ansB	1	3.36E-04	1	2.82E-04	1	0.00015811	1	0.00022388
EG13776	ansP	1	1.68E-04	1	2.27E-04	1	0.00073909	1	0.00142294
EG10047	apaG	1	5.82E-05	1	5.48E-05	1	6.0692E-05	1	5.9563E-05
EG10048	apaH	1	2.52E-04	1	2.12E-04	1	0.0001478	1	0.00041498
EG12073	apbE	1	4.05E-04	1	8.04E-04	1	0.00049771	1	0.00031825
EG11934	aphA	1	3.06E-04	1	4.53E-04	1	0.00010145	1	0.00024559
EG10049	appA	1	5.52E-04	1	5.58E-04	1	0.0001253	1	0.0004055
EG11379	appB	1	9.57E-05	1	5.70E-05	1	0.00012467	1	0.00016021
EG11380	appC	1	1.94E-04	1	1.88E-04	1	0.00050671	1	0.0008492
EG10050	appY	1	9.86E-05	1	2.22E-04	1	0.00019618	1	0.00033304
EG10051	apt	1	1.03E-04	1	1.64E-04	1	0.00039863	1	0.00015736
EG13270	aqpZ	1	7.61E-05	1	3.84E-05	1	1.1471E-05	1	5.4207E-06
EG10052	araA	1	1.43E-05	1	9.46E-06	1	0.00015298	1	6.9607E-05
EG10053	araB	1	2.49E-04	1	1.77E-04	1	0.00015259	1	0.00023607
EG10054	araC	1	1.96E-05	1	8.93E-06	1	6.5244E-05	1	3.8702E-05
EG10055	araD	1	3.37E-05	1	2.11E-05	1	0.00011171	1	0.00011888
EG10056	araE	1	1.64E-04	1	1.93E-04	1	0.00025408	1	0.00011402
EG10057	araF	1	3.96E-04	1	3.49E-04	1	0.00040742	1	0.00011375
EG10058	araG	1	7.70E-05	1	1.70E-04	1	9.9036E-05	1	0.00018898
EG10059	araH	1	1.94E-04	1	2.17E-04	1	0.00013071	1	0.00016355
EG10060	araJ	1	5.06E-05	1	3.72E-05	1	5.8658E-05	1	1.65E-05
EG10061	arcA	1	1.04E-04	1	1.34E-04	1	0.00097629	1	0.00102662
EG10062	arcB	1	2.51E-04	1	2.67E-04	1	0.0003396	1	0.00029317
EG10063	argA	1	1.60E-04	1	1.49E-04	1	0.0009657	1	0.00031523
EG10064	argB	1	7.22E-05	1	5.34E-05	1	3.4369E-05	1	3.1281E-05
EG10065	argC	1	2.77E-05	1	4.15E-05	1	8.9865E-05	1	0.00021371
EG10066	argD	1	8.19E-04	1	8.52E-04	1	0.0004209	1	0.00033262
EG11286	argE	1	3.88E-05	1	9.31E-05	1	0.0002948	1	0.00015292
EG10067	argF	1	3.11E-04	1	1.96E-04	1	5.5539E-05	1	4.2231E-05
EG10068	argG	1	1.93E-04	1	1.71E-04	1	0.00038584	1	0.00013567
EG11223	argH	1	5.39E-06	0	4.04E-06	1	6.252E-06	1	7.0317E-06
EG10069	argI	1	3.12E-04	1	3.90E-04	1	0.00019234	1	0.00022646
EG11445	argK	1	2.06E-04	1	2.95E-04	1	0.00067659	1	0.00059011
EG11159	argO	1	7.87E-04	1	6.62E-04	1	0.00026865	1	0.00023375
EG10490	argP	1	8.01E-05	1	9.17E-05	1	0.00013028	1	7.8094E-05
EG10070	argR	1	1.31E-03	1	1.08E-03	1	0.00026032	1	0.00021529
EG10071	argS	1	8.38E-04	1	5.91E-04	1	0.00084633	1	0.00056261
EG10072	argT	1	3.58E-04	1	3.79E-04	1	8.0823E-05	1	2.2746E-05
EG14290	ariR	1	2.00E-04	1	1.25E-04	1	0.00012398	1	0.00012406
EG14091	arnA	1	1.59E-04	1	1.69E-04	1	0.00035995	1	0.00025064
EG14089	arnB	1	2.48E-04	1	1.87E-04	1	0.00063694	1	0.00029358
EG14090	arnC	1	2.63E-04	1	3.87E-04	1	0.0002068	1	0.00020916

EG14092	arnD	1	4.10E-04	1	4.75E-04	1	0.00023972	1	0.00025504
EG14344	arnE	1	1.16E-04	1	1.38E-04	1	0.0005725	1	0.0006635
EG14094	arnF	1	5.23E-05	1	6.72E-05	1	4.6659E-05	1	2.6541E-05
EG14093	arnT	1	1.05E-04	1	6.06E-05	1	0.00023764	1	0.0001439
EG10073	aroA	1	3.78E-04	1	2.73E-04	1	0.00058885	1	0.00051497
EG10074	aroB	1	8.41E-05	1	1.23E-04	1	2.9233E-05	1	2.4993E-05
EG10075	aroC	1	3.91E-04	1	3.45E-04	1	0.000633	1	0.00061053
EG10076	aroD	1	7.07E-05	1	7.23E-05	1	5.9334E-05	1	2.5534E-05
EG10077	aroE	1	5.86E-05	1	3.16E-05	1	8.0798E-05	1	0.00026251
EG10078	aroF	1	2.86E-04	1	3.16E-04	1	5.3007E-05	1	6.7533E-05
EG10079	aroG	0	2.09E-06	0	3.28E-06	1	0.00029416	1	9.2464E-05
EG10080	aroH	1	1.64E-04	1	1.50E-04	1	0.00019059	1	0.0002098
EG10081	aroK	1	2.21E-05	1	3.19E-05	1	0.00021101	1	0.00018919
EG10082	aroL	1	4.62E-06	1	1.17E-05	1	0.00012258	1	4.1284E-05
EG10083	aroM	1	5.46E-06	1	6.71E-06	1	2.9698E-05	1	1.2955E-05
EG10084	aroP	1	2.95E-05	1	2.02E-05	1	1.4719E-05	0	3.2906E-06
EG11208	arpA	1	3.89E-04	1	3.87E-04	1	0.00011615	1	4.842E-05
EG13635	arrD	1	2.86E-04	1	2.00E-04	1	0.0004514	1	0.00076455
EG13829	arrQ	1	3.30E-04	1	3.72E-04	1	5.9614E-05	1	7.6134E-05
EG12236	arsB	1	3.10E-04	1	2.74E-04	1	0.00138619	1	0.00136781
EG12237	arsC	1	1.17E-04	1	9.59E-05	1	0.00027801	1	0.00025357
EG12235	arsR	1	7.36E-05	1	8.12E-05	1	0.00019917	1	0.00036579
EG11625	artI	1	3.82E-05	1	5.60E-05	1	5.0436E-05	1	3.1895E-05
EG11628	artJ	1	7.06E-04	1	7.15E-04	1	0.0003293	1	0.00030858
EG11627	artM	1	1.52E-04	1	1.66E-04	1	7.2761E-05	1	4.2184E-05
EG11624	artP	1	5.63E-04	1	6.02E-04	1	0.00033043	1	0.00056369
EG11626	artQ	1	1.32E-04	1	7.59E-05	1	0.00081415	1	0.00016376
EG10085	ascB	1	1.77E-04	1	5.98E-05	1	0.00067604	1	0.00081524
EG10086	ascF	1	7.21E-06	0	3.61E-06	1	0.00017321	1	0.00014608
EG10087	ascG	0	3.06E-07	0	-1.74E-07	1	6.2199E-05	1	4.4418E-05
EG10088	asd	1	7.69E-06	1	5.40E-06	1	0.00027593	1	0.00027218
EG10089	aslA	1	2.60E-04	1	2.79E-04	1	0.00142386	1	0.00197196
EG10090	aslB	1	6.33E-05	1	5.45E-05	1	0.00021938	1	8.0798E-05
EG11361	asmA	1	4.92E-05	1	2.27E-05	1	0.00023671	1	0.00040695
EG10091	asnA	1	3.21E-04	1	2.30E-04	1	0.00025522	1	0.000278
EG10092	asnB	1	8.98E-05	1	1.06E-04	1	0.00010892	1	7.8317E-05
EG10093	asnC	1	3.96E-04	1	3.12E-04	1	8.0687E-06	0	3.2172E-06
EG10094	asnS	1	2.20E-05	1	1.56E-05	1	0.00010501	1	8.2233E-05
EG10095	aspA	1	7.49E-05	1	4.51E-05	1	0.00029835	1	0.00020355
EG10096	aspC	1	3.43E-04	1	6.01E-04	1	0.00015765	1	0.0005229
EG10097	aspS	1	3.16E-05	1	1.96E-05	1	4.1654E-05	1	6.2859E-06
EG12149	asr	1	1.13E-04	1	7.99E-05	1	9.626E-05	1	8.0377E-05
EG13998	astA	1	1.02E-04	1	1.55E-04	1	0.00037698	1	9.5745E-05
EG13996	astB	1	5.35E-06	1	8.35E-06	1	3.5221E-05	1	4.0796E-05
EG13999	astC	1	7.77E-04	1	1.22E-03	1	0.00070313	1	0.00077513
EG13997	astD	0	1.44E-06	0	4.38E-06	0	8.0265E-07	0	1.0694E-06
EG13995	astE	1	1.27E-05	1	6.31E-06	1	4.5298E-05	1	0.0001147
EG11670	atoA	1	2.24E-05	1	2.89E-05	1	4.8739E-05	1	4.1517E-05
EG11672	atoB	1	2.26E-04	1	3.80E-04	1	0.00018609	1	0.00040994
EG11668	atoC	1	2.99E-04	1	1.65E-04	1	0.00023027	1	0.00028786
EG11669	atoD	1	8.04E-04	1	7.66E-04	1	0.00017304	1	0.00017182
EG11671	atoE	1	1.42E-04	1	1.41E-04	1	0.00018242	1	0.00051103
EG11667	atoS	1	3.71E-04	1	4.93E-04	1	0.00013236	1	1.2584E-05
EG10098	atpA	1	2.40E-04	1	3.98E-04	1	8.9469E-05	1	4.9925E-05
EG10099	atpB	1	2.89E-05	1	2.12E-05	1	0.00014131	1	6.0879E-05
EG10100	atpC	1	5.45E-04	1	5.16E-04	1	0.00026787	1	0.00025259
EG10101	atpD	0	5.47E-10	0	2.19E-06	1	6.8863E-05	1	8.6593E-05
EG10102	atpE	1	2.38E-04	1	2.76E-04	1	0.00154278	1	0.00081739
EG10103	atpF	1	3.97E-04	1	2.49E-04	1	0.00067319	1	0.00121731
EG10104	atpG	1	4.84E-06	0	2.21E-06	0	3.4538E-08	0	-1.914E-07
EG10105	atpH	1	1.42E-05	1	5.85E-06	1	6.1444E-05	1	0.00020795
EG10106	atpI	1	2.55E-05	1	2.41E-05	1	0.00030131	1	0.00017626
EG10107	avtA	1	1.38E-04	1	2.79E-04	1	0.00024626	1	5.91E-05
EG12695	azoR	1	4.30E-04	1	3.94E-04	1	0.00023899	1	8.4907E-05
EG11665	bacA	1	4.17E-05	1	3.42E-05	1	5.444E-05	1	8.6873E-05
EG11618	baeR	1	1.01E-04	1	3.68E-05	1	0.00011703	1	2.2647E-05
EG11617	baeS	1	1.03E-05	1	1.17E-05	1	0.00020983	1	0.00014342
EG12676	bamA	1	3.17E-04	1	3.25E-04	1	0.00045814	1	0.00049591
EG14208	bamB	1	1.62E-04	1	1.60E-04	1	0.0003812	1	0.00031073
EG10658	bamC	1	7.46E-06	1	9.25E-06	1	8.8836E-05	1	0.0001385
EG14222	bamD	1	6.27E-04	1	5.49E-04	1	0.00018509	1	0.0004408

EG11367	barA	1	2.38E-04	1	3.99E-04	1	0.0007166	1	0.00102069
EG11615	basR	1	1.99E-04	1	1.22E-04	1	7.612E-05	1	0.0003039
EG11614	basS	1	2.19E-04	1	2.96E-04	1	0.00010251	1	0.00031133
EG11360	bax	1	1.14E-04	1	4.76E-05	1	0.00142527	1	0.00084284
EG10108	bcp	1	7.63E-04	1	6.88E-04	1	0.00014441	1	8.8844E-05
EG11419	bcr	1	7.97E-04	1	6.40E-04	1	0.0005981	1	0.00074645
EG12260	bcsA	1	4.95E-05	1	2.07E-04	1	6.8839E-05	1	1.4444E-05
EG12259	bcsB	1	5.39E-06	0	9.68E-07	1	3.6957E-05	1	0.00013783
EG12257	bcsC	1	2.77E-04	1	2.72E-04	1	0.00015954	1	0.00051684
EG12263	bcsE	1	5.06E-04	1	2.78E-04	1	9.127E-05	1	8.5663E-05
EG12264	bcsF	1	3.47E-04	1	4.59E-04	1	0.0003252	1	0.00042213
EG12265	bcsG	1	1.72E-04	1	2.04E-04	1	7.018E-05	1	5.026E-05
EG12258	bcsZ	1	3.66E-06	0	3.25E-06	1	0.00012843	1	0.00047758
EG14301	bdm	1	5.18E-04	1	4.33E-04	1	0.00010833	1	0.0001202
EG10109	betA	1	2.08E-04	1	1.54E-04	1	0.00016908	1	0.00031862
EG10110	betB	1	1.52E-04	1	1.86E-04	1	0.00053092	1	0.00068857
EG10111	betI	1	2.08E-04	1	2.59E-04	1	0.00031402	1	0.00012426
EG10112	betT	1	7.16E-05	1	6.15E-05	1	5.8658E-05	1	8.5154E-05
EG11181	bfd	1	3.19E-05	1	1.60E-05	1	0.00025649	1	0.00017489
EG10113	bfr	1	4.64E-04	1	3.44E-04	1	0.00058363	1	0.0003111
EG13079	bglA	1	7.19E-05	1	1.32E-04	1	0.00014276	1	0.0001492
EG10114	bglB	1	4.15E-04	1	3.29E-04	1	0.00010068	1	6.7659E-05
EG10115	bglF	0	9.38E-07	0	1.29E-06	1	3.5822E-06	1	7.844E-06
EG10116	bglG	1	2.30E-04	1	1.69E-04	1	0.00039247	1	0.00030419
EG11364	bglH	1	6.63E-04	1	6.52E-04	1	0.00057765	1	0.00036777
EG12594	bglJ	1	2.42E-04	1	2.12E-04	1	6.2223E-05	1	3.2436E-05
EG12013	bglX	1	1.75E-05	1	8.92E-06	1	0.00044609	1	0.00025739
EG13436	bhsA	1	9.91E-04	1	8.33E-04	1	0.00023295	1	0.00010708
EG10117	bioA	1	8.90E-05	1	2.67E-04	1	6.374E-05	1	6.8175E-05
EG10118	bioB	1	3.68E-04	1	4.04E-04	1	7.7824E-06	0	4.3739E-06
EG10119	bioC	1	7.05E-06	0	4.25E-06	1	0.00034856	1	0.00030792
EG10120	bioD	1	4.78E-05	1	4.98E-05	1	0.00069582	1	0.00037443
EG10121	bioF	1	1.44E-04	1	1.09E-04	1	1.8296E-05	1	1.0193E-05
EG10122	bioH	1	1.90E-05	1	1.63E-05	1	0.00027659	1	0.00025797
EG10123	birA	1	8.94E-05	1	1.40E-04	1	4.6483E-06	1	7.3045E-06
EG10124	bisC	1	2.20E-04	1	2.25E-04	1	0.00029844	1	0.00036072
EG12474	blc	1	1.19E-04	1	1.62E-04	1	0.00053058	1	0.00032119
EG14389	blr	1	2.37E-04	1	2.26E-04	1	0.00019005	1	0.00016699
EG10125	bolA	1	4.44E-05	1	4.25E-05	1	9.4264E-05	1	9.1888E-05
EG13637	borD	1	2.78E-04	1	2.73E-04	1	8.5955E-05	1	3.6665E-05
EG12168	brnQ	1	3.38E-04	1	5.41E-04	1	0.00039308	1	0.00028178
EG13479	bssR	1	1.01E-04	1	1.74E-04	1	3.5117E-05	1	9.999E-06
EG14335	bssS	1	3.76E-05	1	2.97E-05	1	4.8583E-05	1	3.4748E-05
EG10126	btuB	1	1.52E-04	1	2.62E-04	1	0.0003507	1	0.00019388
EG10127	btuC	1	1.13E-03	1	1.32E-03	1	0.00014358	1	5.7237E-05
EG10128	btuD	1	1.72E-04	1	1.26E-04	1	0.00023775	1	0.00029435
EG10129	btuE	1	1.66E-04	1	2.08E-04	1	0.00010717	1	4.0611E-05
EG12334	btuF	1	1.37E-04	1	1.48E-04	1	0.00064143	1	0.00085429
EG10130	btuR	1	3.53E-04	1	4.45E-04	1	0.00088747	1	0.00053711
EG10131	cadA	1	4.94E-05	1	3.92E-05	1	0.00011963	1	0.00020465
EG10132	cadB	1	7.47E-05	1	5.46E-05	1	0.0001968	1	0.00012764
EG10133	cadC	1	3.70E-05	1	7.69E-05	1	0.00019928	1	0.00068273
EG11560	caiA	1	9.28E-05	1	1.13E-04	1	0.00016021	1	4.1343E-05
EG11559	caiB	1	1.63E-04	1	2.08E-04	1	0.00022491	1	0.00022998
EG11558	caiC	1	3.82E-06	1	6.44E-06	1	0.00018185	1	0.00013372
EG11557	caiD	1	3.57E-05	1	6.12E-05	1	8.375E-05	1	8.3405E-05
EG12608	caiE	1	3.22E-05	1	3.00E-05	1	2.1017E-05	1	2.4729E-05
EG13451	caiF	1	4.09E-04	1	4.49E-04	1	0.0005557	1	0.00114424
EG11561	caiT	1	3.25E-04	1	2.13E-04	1	0.00037008	1	0.00037122
EG12319	can	1	1.41E-05	1	5.60E-05	1	0.00045158	1	0.00040966
EG10134	carA	1	2.03E-04	1	1.48E-04	1	0.00038185	1	0.00044431
EG10135	carB	1	3.60E-04	1	4.82E-04	1	7.8258E-05	1	0.0001349
EG14264	cbl	1	3.77E-04	1	3.24E-04	1	4.1396E-05	1	1.7634E-05
EG12193	cbpA	1	6.52E-05	1	6.63E-05	1	0.00035448	1	0.00034867
EG12194	cbpM	1	2.94E-04	1	2.73E-04	1	7.7099E-05	1	0.00022892
EG11714	cbrA	1	4.54E-05	1	3.20E-05	1	0.00012339	1	9.4332E-05
EG11726	cbrB	1	1.42E-04	1	9.25E-05	1	0.00065179	1	0.00049186
EG11727	cbrC	1	2.92E-04	1	3.54E-04	1	8.2874E-05	1	8.9869E-05
EG10136	cca	1	7.81E-05	1	7.50E-05	1	6.6661E-05	1	4.7284E-05
EG12059	ccmA	1	1.30E-05	1	9.13E-06	1	0.000271	1	0.00015926
EG12058	ccmB	1	3.63E-04	1	4.60E-04	1	0.00021258	1	0.000128

EG12057	ccmC	1	1.82E-04	1	2.27E-04	1	4.6725E-05	1	2.4983E-05
EG12169	ccmD	1	1.30E-04	1	1.22E-04	1	0.00028985	1	0.00039726
EG12055	ccmE	1	6.12E-06	1	7.20E-06	1	3.2779E-05	1	0.00010813
EG12054	ccmF	1	3.74E-06	1	7.64E-06	1	6.6806E-05	1	7.296E-06
EG12053	ccmG	1	6.55E-05	1	6.61E-05	1	0.00015383	1	0.00016235
EG12052	ccmH	1	6.49E-06	1	5.23E-06	1	4.5582E-05	1	2.4313E-05
EG12335	cdaR	1	1.07E-04	1	5.35E-05	1	0.00029137	1	0.00018675
EG10137	cdd	1	4.99E-05	1	8.35E-05	1	0.00045158	1	0.00065923
EG10138	cdh	1	8.75E-05	1	1.50E-04	1	0.00027509	1	0.0006161
EG10139	cdsA	1	1.31E-04	1	1.95E-04	1	0.00054141	1	0.00103402
EG13992	cedA	1	7.55E-04	1	9.72E-04	1	0.00012327	1	0.00013196
EG11531	cfa	1	7.42E-05	1	1.40E-04	1	0.00016004	1	8.4262E-05
EG11753	chaA	1	5.76E-04	1	6.01E-04	1	0.00048503	1	0.00041286
EG12402	chaB	1	9.10E-04	1	5.69E-04	1	0.00020518	1	4.5903E-05
EG12403	chaC	1	2.44E-06	0	2.94E-06	1	2.0074E-05	0	3.8387E-06
EG10142	chbA	1	1.83E-05	1	7.03E-06	1	5.0257E-05	1	1.3893E-05
EG10140	chbB	1	1.20E-04	1	1.68E-04	1	0.00021562	1	4.782E-05
EG10141	chbC	1	1.67E-04	1	7.60E-04	1	0.00044247	1	0.00010506
EG10144	chbF	1	2.96E-05	1	2.40E-05	1	8.3596E-05	1	4.462E-05
EG12198	chbG	1	2.72E-04	1	2.34E-04	1	0.00011787	1	0.0001166
EG10143	chbR	1	3.59E-04	1	3.34E-04	1	8.9469E-05	1	0.00010808
EG10146	cheA	1	3.51E-05	1	6.67E-05	1	0.00048233	1	0.00049862
EG10147	cheB	1	8.52E-05	1	6.09E-05	1	2.0343E-05	1	3.9745E-05
EG10148	cheR	1	7.48E-04	1	3.12E-04	1	0.00022609	1	0.00045468
EG10149	cheW	1	1.63E-05	1	1.28E-05	1	0.00023744	1	0.00025455
EG10150	cheY	1	2.29E-05	1	1.80E-05	1	0.0002181	1	0.0001197
EG10151	cheZ	1	5.48E-04	1	5.62E-04	1	0.00039439	1	0.00032857
EG11237	chiA	1	1.30E-04	1	7.18E-05	1	0.00055923	1	0.00045871
EG13993	cho	1	6.38E-05	1	4.70E-05	1	0.00019552	1	0.00047013
EG11249	chpA	1	2.25E-05	1	3.00E-05	1	9.4937E-05	1	0.00013153
EG12096	chpB	1	1.06E-05	1	1.39E-05	1	0.00015305	1	0.0001191
EG10571	chpR	1	2.37E-05	1	1.26E-05	1	0.00012096	1	8.5787E-05
EG11250	chpS	1	8.37E-05	1	5.49E-05	1	0.00031212	1	0.00025481
EG10155	cirA	1	8.09E-05	1	6.78E-05	1	0.00046154	1	0.00023465
EG13645	citC	1	6.88E-04	1	4.52E-04	1	7.4895E-05	1	3.7126E-05
EG13543	citD	1	5.29E-05	1	5.25E-05	1	7.9423E-05	1	9.7826E-05
EG13542	citE	1	1.43E-04	1	1.52E-04	1	0.00015626	1	0.00020896
EG13541	citF	1	2.13E-04	1	1.46E-04	1	8.6007E-05	1	0.00011651
EG13539	citG	1	3.46E-04	1	4.98E-04	1	9.0262E-05	1	3.0349E-05
EG13538	citT	1	4.73E-04	1	3.27E-04	1	0.00070844	1	0.00098445
EG13540	citX	1	8.29E-05	1	6.57E-05	1	0.00015533	1	7.8465E-05
EG12331	clcA	1	3.06E-04	1	2.82E-04	1	0.00015113	1	0.00018763
EG13848	clcB	1	2.45E-03	1	1.14E-03	1	0.001156	1	0.00085206
EG13406	cld	1	4.32E-05	1	2.65E-05	1	7.983E-05	1	5.3606E-05
EG10156	clpA	1	2.35E-04	1	3.40E-04	1	4.1417E-05	1	4.4787E-05
EG10157	clpB	1	4.52E-04	1	4.87E-04	1	4.2948E-05	1	4.5027E-05
EG10158	clpP	1	2.52E-04	1	2.26E-04	1	8.7863E-05	1	0.00011629
EG14241	clpS	1	3.45E-06	0	1.69E-06	1	1.0268E-05	1	8.3089E-06
EG10159	clpX	1	3.11E-05	1	1.54E-05	1	0.00019732	1	0.00014005
EG11608	cls	1	5.13E-05	1	1.05E-04	1	4.6307E-05	1	0.00013793
EG11265	cmk	1	1.29E-05	1	9.85E-06	1	2.2336E-05	1	6.0162E-06
EG14033	cmoA	1	7.11E-05	1	1.97E-04	1	0.00044782	1	0.00063372
EG14034	cmoB	1	5.09E-06	1	1.11E-05	1	0.00014017	1	0.00015446
EG13696	cmr	1	1.00E-04	1	1.27E-04	1	0.00019998	1	0.00011288
EG11792	cmtA	1	4.50E-06	1	8.65E-06	1	0.00044591	1	0.00036312
EG11791	cmtB	1	7.30E-04	1	8.77E-04	1	0.00029687	1	0.00019334
EG14303	cnu	1	1.42E-03	1	9.31E-04	1	0.00018713	1	0.00047912
EG10922	coaA	1	3.75E-04	1	1.98E-04	1	0.00020597	1	0.00011005
EG11190	coaD	1	1.50E-04	1	2.69E-04	1	0.00050335	1	0.00049465
EG12312	coaE	1	6.38E-05	1	4.28E-05	1	3.9898E-05	1	1.2746E-05
EG13443	cobB	1	1.28E-04	1	9.56E-05	1	2.6567E-05	1	0.0001204
EG13240	cobC	1	1.62E-04	1	2.15E-04	1	7.0866E-06	0	1.6192E-06
EG12150	cobS	1	2.74E-05	1	2.61E-05	1	0.00013989	1	8.0062E-05
EG12151	cobT	1	4.74E-04	1	3.25E-04	1	7.5569E-05	1	2.5269E-05
EG13238	cobU	1	9.50E-06	1	9.97E-06	1	8.4112E-05	1	2.5391E-05
EG11326	codA	1	3.30E-04	1	3.34E-04	1	0.00055536	1	0.00045511
EG11327	codB	1	1.47E-05	1	1.08E-05	1	0.00021439	1	0.00024604
EG13216	cof	1	1.14E-04	1	1.00E-04	1	0.00022164	1	7.7562E-05
EG13246	copA	1	2.54E-04	1	4.60E-04	1	0.00058113	1	0.0002824
EG11463	corA	1	1.82E-04	1	1.71E-04	1	9.7291E-05	1	6.0306E-05
EG12187	cpdA	1	1.39E-04	1	1.18E-04	1	0.00011913	1	1.8244E-05

EG10160	cpdB	1	2.33E-04	1	4.47E-04	1	0.00023614	1	0.00019518
EG10161	cpsB	1	2.21E-05	1	2.57E-05	1	0.00014387	1	0.00014283
EG10162	cpsG	1	2.12E-04	1	8.58E-05	1	0.00090604	1	9.9298E-05
EG10163	cpxA	1	9.08E-05	1	1.32E-04	1	3.9302E-05	1	5.6535E-05
EG11872	cpxP	1	3.46E-04	1	3.78E-04	1	0.00062255	1	0.00045236
EG10020	cpxR	1	4.96E-05	1	2.38E-05	1	0.00013448	1	0.00026672
EG12209	crcB	1	1.77E-04	1	1.11E-04	1	0.0003766	1	0.00091815
EG11217	creA	1	1.50E-04	1	1.04E-04	1	3.053E-05	1	1.4998E-05
EG11218	creB	0	1.62E-06	0	1.50E-06	1	1.2442E-05	1	4.9456E-06
EG10730	creC	1	7.28E-05	1	1.14E-04	1	1.9269E-05	1	5.2579E-05
EG10145	creD	1	9.61E-04	1	7.50E-04	1	9.3968E-05	1	3.02E-05
EG11092	crl	1	2.81E-04	1	3.30E-04	1	0.00014317	1	0.00032507
EG10164	crp	1	5.11E-05	1	4.51E-05	1	7.627E-05	1	3.4218E-05
EG10165	crr	1	1.43E-04	1	1.25E-04	1	0.0001019	1	0.00010101
EG13082	csdA	1	3.65E-04	1	2.74E-04	1	0.00014687	1	9.1473E-05
EG13083	csdE	1	7.82E-05	1	7.18E-05	1	7.2218E-05	1	0.00010371
EG11489	csgA	1	4.06E-04	1	6.80E-04	1	0.00021989	1	5.8968E-05
EG12621	csgB	1	1.01E-04	1	1.29E-04	1	0.00015275	1	0.0003103
EG13414	csgC	1	2.09E-04	1	4.93E-04	1	0.00055164	1	0.0004545
EG13410	csgD	1	7.62E-05	1	1.58E-04	1	0.00026277	1	0.00025524
EG13411	csgE	1	4.84E-05	1	9.80E-05	1	1.116E-05	1	5.9825E-06
EG13412	csgF	1	4.33E-04	1	3.68E-04	1	0.00019376	1	0.000112
EG13413	csgG	1	3.43E-04	1	6.93E-04	1	0.00043548	1	0.0005711
EG13523	csiD	1	6.48E-04	1	4.00E-04	1	0.00035706	1	0.00035199
EG13418	csiE	1	2.07E-04	1	2.39E-04	1	0.00010955	1	2.8729E-05
EG12386	csiR	1	5.39E-04	1	4.54E-04	1	0.00011919	1	3.3483E-05
EG10166	cspA	1	2.49E-04	1	3.81E-04	1	0.00041074	1	0.00043392
EG12203	cspB	1	6.31E-05	1	8.41E-05	1	0.00012318	1	2.1714E-05
EG12204	cspC	1	6.05E-05	1	4.55E-05	1	7.5569E-05	1	6.0932E-05
EG11111	cspD	1	3.02E-06	0	2.22E-06	1	0.00025156	1	0.00018069
EG12179	cspE	1	1.97E-04	1	3.19E-04	1	0.00010574	1	0.00014195
EG12205	cspF	1	5.64E-04	1	6.14E-04	1	0.00029223	1	0.0004129
EG14243	cspG	1	7.44E-05	1	7.16E-05	1	0.0007707	1	0.00073785
EG14281	cspH	1	2.04E-04	1	4.96E-04	1	0.00032847	1	0.00021431
EG13877	cspI	1	1.84E-05	1	4.04E-05	1	0.00037373	1	0.00013052
EG11447	csrA	1	1.59E-04	1	1.99E-04	1	2.5534E-05	1	5.6095E-05
EG10018	csrD	1	4.82E-04	1	6.21E-04	1	2.5871E-05	1	2.6006E-05
EG10167	cstA	1	2.01E-04	1	2.22E-04	1	0.00016436	1	0.00035134
EG12318	cueO	1	6.47E-04	1	4.31E-04	1	0.00044579	1	0.0006006
EG13256	cueR	1	7.18E-04	1	6.74E-04	1	0.00025721	1	4.3396E-05
EG12367	cusA	1	1.04E-04	1	7.89E-05	1	0.00140638	1	0.00141038
EG14235	cusB	1	3.71E-04	1	2.93E-04	1	6.3574E-05	1	6.2611E-05
EG14233	cusC	1	3.23E-04	1	3.59E-04	1	0.00065775	1	0.00056767
EG14234	cusF	1	1.38E-04	1	1.29E-04	1	9.4291E-05	1	6.5293E-05
EG13851	cusR	1	1.88E-04	1	2.17E-04	1	9.3633E-06	1	8.2485E-06
EG13642	cusS	1	3.60E-05	1	2.75E-05	1	0.00023035	1	0.00046727
EG12177	cutA	1	1.76E-04	1	2.95E-04	1	0.00045537	1	0.00042412
EG12956	cutC	1	1.13E-05	0	4.21E-06	1	0.00032481	1	0.00040667
EG10169	cvpA	1	9.84E-05	1	6.37E-05	1	2.9556E-05	1	2.7079E-05
EG13896	cvrA	1	2.61E-04	1	2.42E-04	1	2.1598E-05	1	1.0069E-05
EG10170	cyaA	1	2.53E-04	1	2.97E-04	1	0.00019695	1	0.00014131
EG11653	cyaY	1	5.69E-05	1	1.22E-04	1	0.00029228	1	0.00048424
EG10172	cybB	1	8.49E-04	1	4.88E-04	1	0.00016342	1	8.3787E-05
EG12504	cycA	1	4.22E-05	1	1.49E-05	1	0.00010462	1	0.00011507
EG10173	cydA	1	1.92E-04	1	2.04E-04	1	0.00034497	1	0.00013259
EG10174	cydB	1	7.40E-05	1	6.21E-05	1	7.5694E-05	1	9.7136E-05
EG10012	cydC	1	3.16E-05	1	2.31E-05	1	0.00016494	1	0.00014815
EG11405	cydD	1	1.53E-04	1	1.02E-04	1	0.0002852	1	0.00021036
EG11421	cynR	1	2.41E-04	1	3.27E-04	1	0.000438	1	0.00015913
EG10175	cynS	1	6.60E-04	1	6.37E-04	1	1.305E-05	1	5.7525E-05
EG10176	cynT	1	7.83E-05	1	7.28E-05	1	0.00014409	1	0.00016765
EG10177	cynX	1	1.55E-04	1	2.25E-04	1	0.00023793	1	0.00027941
EG10178	cyoA	1	1.97E-04	1	1.07E-04	1	0.00018828	1	8.4984E-05
EG10179	cyoB	1	2.15E-04	1	2.34E-04	1	0.0003394	1	0.00047545
EG10180	cyoC	1	7.82E-05	1	6.70E-05	1	8.7837E-05	1	0.00032719
EG10181	cyoD	1	1.26E-05	1	1.70E-05	1	3.0953E-06	0	2.2129E-06
EG10182	cyoE	1	2.93E-04	1	2.06E-04	1	0.00016308	1	7.8435E-05
EG10183	cysA	1	3.26E-05	1	2.51E-05	1	5.3337E-06	0	1.4914E-06
EG10184	cysB	1	1.69E-04	1	1.21E-04	1	0.0001364	1	6.5775E-05
EG10185	cysC	1	1.41E-05	1	8.75E-06	1	4.2321E-05	1	3.6239E-05
EG10186	cysD	1	4.38E-05	1	3.56E-05	1	0.00011479	1	0.00016516

EG10187	cysE	1	1.26E-04	1	1.44E-04	1	6.5627E-05	1	0.00014813
EG10188	cysG	1	2.13E-04	1	4.00E-04	1	0.00015547	1	0.00016666
EG10189	cysH	1	3.31E-04	1	3.98E-04	1	6.4622E-05	1	7.5272E-05
EG10190	cysI	1	1.70E-05	1	1.23E-05	1	0.00017984	1	0.00012355
EG10191	cysJ	1	5.78E-05	1	1.51E-05	1	4.8583E-05	1	3.5803E-05
EG10192	cysK	1	5.12E-05	1	9.77E-05	1	9.5881E-05	1	0.00010831
EG10193	cysM	1	4.29E-04	1	3.77E-04	1	0.00027752	1	0.00016591
EG10194	cysN	1	5.28E-05	1	4.35E-05	1	8.5305E-05	1	5.9841E-05
EG10195	cysP	1	2.41E-04	1	1.46E-04	1	0.00028256	1	0.0002148
EG10043	cysQ	1	1.03E-04	1	5.98E-05	1	0.000113	1	0.00018989
EG10196	cysS	1	5.71E-05	1	1.20E-04	1	0.00020597	1	6.2895E-05
EG10197	cysU	1	1.59E-05	1	2.07E-05	1	0.00028019	1	0.00045995
EG10198	cysW	1	2.92E-05	1	5.88E-05	1	0.00012919	1	0.00039829
EG10003	cysZ	1	3.77E-04	1	2.35E-04	1	0.00016991	1	0.00038785
EG10200	cytR	1	5.02E-05	1	4.72E-05	1	2.6149E-05	1	4.7955E-05
EG10201	dacA	1	1.05E-03	1	9.43E-04	1	0.00023135	1	0.0001175
EG10202	dacB	1	5.70E-04	1	8.26E-04	1	0.00015113	1	6.2314E-05
EG10203	dacC	1	1.28E-04	1	1.10E-04	1	0.00076132	1	0.0004478
EG11893	dacD	1	7.85E-05	1	2.05E-04	1	0.00014216	1	0.00011821
EG11407	dadA	1	6.26E-05	1	5.71E-05	1	4.6571E-05	1	8.0332E-05
EG11408	dadX	1	2.81E-04	1	3.48E-04	1	0.00029228	1	0.00055932
EG10204	dam	1	1.99E-05	1	2.52E-05	1	6.2862E-05	1	4.2454E-05
EG11183	damX	1	3.24E-04	1	3.87E-04	1	0.00018552	1	0.00019946
EG10205	dapA	1	2.53E-04	1	2.68E-04	1	0.00048952	1	0.00078731
EG10206	dapB	1	1.92E-05	1	1.46E-05	1	3.4659E-05	1	2.033E-05
EG10207	dapD	1	1.93E-04	1	4.55E-04	1	9.3633E-06	0	2.4064E-06
EG10208	dapE	1	1.45E-04	1	2.04E-04	1	0.00016298	1	0.00032408
EG10209	dapF	1	1.74E-04	1	1.92E-04	1	0.0002983	1	0.00010853
EG10210	dbpA	1	1.39E-04	1	2.51E-04	1	9.1483E-05	1	0.00013023
EG11418	dcd	1	7.23E-06	1	7.88E-06	1	0.00012303	1	6.7882E-05
EG10211	dcm	1	2.68E-04	1	2.19E-04	1	0.00039275	1	0.00016979
EG10212	dcp	1	2.28E-04	1	3.52E-04	1	2.9921E-05	1	2.8183E-05
EG12218	dcrB	1	5.23E-05	1	4.67E-05	1	0.0001184	1	0.00020828
EG20044	dctA	1	9.56E-04	1	4.95E-04	1	0.00010949	1	9.4267E-05
EG11889	dctR	1	1.40E-05	1	2.22E-05	1	0.00049083	1	0.00026514
EG11225	dcuA	1	1.12E-04	1	4.50E-05	1	0.00025883	1	0.00014835
EG10006	dcuB	1	1.53E-04	1	3.84E-04	1	5.0683E-05	1	0.00020214
EG13545	dcuC	1	3.50E-05	1	5.00E-05	1	0.0002541	1	0.00032514
EG12818	dcuD	1	9.17E-04	1	6.49E-04	1	0.00065496	1	0.00078354
EG12464	dcuR	1	2.59E-04	1	1.86E-04	1	0.00011989	1	0.00036702
EG12465	dcuS	1	3.48E-04	1	3.69E-04	1	6.2909E-05	1	0.00015441
EG14038	dcyD	1	7.12E-04	1	6.80E-04	1	0.00023481	1	0.00023203
EG10213	ddlA	1	4.64E-06	0	2.13E-06	1	0.00021231	1	0.0001553
EG10214	ddlB	1	1.62E-05	1	2.91E-05	1	0.00011691	1	0.00015347
EG13790	ddpA	1	5.51E-04	1	3.48E-04	1	7.8385E-05	1	4.1879E-05
EG13789	ddpB	1	1.49E-04	1	1.41E-04	1	0.00033725	1	0.00027864
EG13788	ddpC	1	1.89E-05	1	9.00E-06	1	0.00031322	1	0.0003796
EG13787	ddpD	1	3.90E-04	1	2.55E-04	1	0.00014276	1	0.00020916
EG13786	ddpF	1	1.26E-04	1	7.58E-05	1	0.00011105	1	1.7293E-05
EG13791	ddpX	1	1.79E-04	1	3.49E-04	1	0.00050639	1	0.00059209
EG10215	deaD	1	2.19E-04	1	2.24E-04	1	0.00015947	1	5.409E-05
EG10216	dedA	1	5.04E-04	1	7.21E-04	1	0.00022495	1	0.00031727
EG10218	dedD	1	1.01E-05	0	3.48E-06	1	1.1051E-05	0	2.1646E-06
EG11440	def	1	8.22E-04	1	8.13E-04	1	0.00020492	1	0.00050908
EG10463	degP	1	3.34E-05	1	3.69E-05	1	0.00018349	1	0.00012119
EG12612	degQ	1	1.55E-04	1	2.38E-04	1	0.00021086	1	9.5599E-05
EG11652	degS	1	4.42E-04	1	4.72E-04	1	0.00093152	1	0.00144924
EG10219	deoA	1	7.48E-05	1	1.72E-04	1	4.7785E-05	1	2.9923E-05
EG10220	deoB	1	1.46E-04	1	1.81E-04	1	0.00045645	1	0.00073906
EG10221	deoC	1	1.66E-04	1	1.48E-04	1	0.00078475	1	0.00035098
EG10222	deoD	1	2.74E-05	1	2.30E-05	1	0.00032559	1	0.00067693
EG10223	deoR	1	5.65E-05	1	3.65E-05	1	0.00296668	1	0.00167462
EG14207	der	1	3.05E-05	1	3.09E-05	1	0.00022475	1	0.00023836
EG10004	dfp	1	1.31E-04	1	8.25E-05	1	0.00018338	1	9.9082E-05
EG10224	dgkA	1	2.10E-04	1	2.52E-04	1	0.00036275	1	0.0002303
EG11716	dgoA	1	7.30E-06	1	6.93E-06	1	0.00017349	1	0.00017503
EG20050	dgoD	1	3.08E-04	1	4.97E-04	1	5.4349E-05	1	0.0001337
EG11717	dgoK	1	5.82E-05	1	3.99E-05	1	0.0003505	1	0.00031163
EG11718	dgoR	1	9.76E-05	1	2.83E-04	1	0.00038195	1	0.00039864
EG11715	dgoT	0	1.75E-06	0	1.49E-06	1	9.1642E-05	1	8.6159E-05
EG13156	dgsA	1	3.75E-05	1	1.90E-05	1	0.00023063	1	0.00011283

EG10225	dgt	1	1.22E-04	1	8.35E-05	1	0.00022012	1	0.00049652
EG13901	dhaK	1	9.93E-04	1	8.05E-04	1	0.00010024	1	0.0001896
EG13900	dhaL	1	6.02E-06	0	4.40E-06	1	2.5238E-05	1	2.7151E-05
EG12399	dhaM	1	1.14E-05	1	6.97E-06	1	0.00010412	1	3.5147E-05
EG13902	dhaR	1	3.54E-05	1	3.73E-05	1	0.00036291	1	0.00054843
EG12780	diaA	1	1.49E-04	1	3.45E-04	1	0.00044348	1	0.00024813
EG10226	dicA	1	2.80E-04	1	1.71E-04	1	2.6308E-05	1	5.4374E-06
EG10227	dicB	1	7.60E-04	1	8.88E-04	1	9.3968E-05	1	8.0377E-05
EG10228	dicC	1	2.57E-04	1	2.21E-04	0	1.4199E-06	0	2.3983E-06
EG13141	dinB	1	1.75E-04	1	2.93E-04	1	0.00031608	1	0.00030279
EG11193	dinD	1	6.08E-04	1	6.78E-04	1	0.00022055	1	0.00013358
EG11491	dinF	0	4.02E-07	0	4.83E-06	1	0.0003073	1	0.00028667
EG11357	dinG	1	2.88E-04	1	1.50E-04	1	0.00027646	1	0.00072876
EG12670	dinI	1	7.76E-05	1	9.62E-05	1	0.00036405	1	0.0001556
EG13142	dinJ	1	8.62E-05	1	8.80E-05	1	0.00025467	1	0.00015948
EG14431	dinQ	0	9.76E-07	0	4.51E-08	1	8.0313E-05	1	7.2509E-05
EG12178	dipZ	1	6.59E-04	1	7.43E-04	1	0.00053256	1	0.00020179
EG11570	djlA	1	3.31E-06	0	2.20E-06	1	2.889E-05	1	2.4851E-05
EG13649	djlB	1	2.54E-05	1	4.44E-05	1	0.00011111	1	0.00015738
EG13652	djlC	1	4.37E-04	1	2.90E-04	1	0.00046483	1	0.00026693
EG13015	dkgA	1	1.63E-05	1	3.06E-05	1	4.8206E-05	1	6.7089E-06
EG11648	dkgB	1	1.70E-04	1	4.88E-04	1	0.00064855	1	0.00080958
EG10230	dksA	1	9.61E-05	1	1.78E-04	1	0.00072857	1	0.00048246
EG10231	dld	1	4.31E-04	1	3.88E-04	1	0.00018548	1	0.00033238
EG10232	dmsA	1	5.65E-05	1	4.68E-05	1	0.00015357	1	0.00027125
EG10233	dmsB	1	4.05E-04	1	5.19E-04	1	0.00037072	1	0.00016012
EG10234	dmsC	0	3.44E-07	0	5.34E-07	0	1.0081E-06	0	3.7157E-06
EG13847	dmsD	1	1.89E-04	1	2.36E-04	1	0.00023801	1	0.0002032
EG10235	dnaA	1	6.17E-04	1	7.53E-04	1	0.00015689	1	8.7856E-05
EG10236	dnaB	1	9.26E-06	1	2.16E-05	1	1.2866E-05	0	2.5598E-06
EG10237	dnaC	1	2.55E-05	1	4.97E-05	1	0.00016548	1	7.5637E-05
EG10238	dnaE	1	1.73E-04	1	1.13E-04	1	0.00044342	1	7.3559E-05
EG10239	dnaG	1	1.41E-04	1	1.74E-04	1	0.00018774	1	0.00017607
EG10240	dnaJ	1	3.63E-05	1	2.33E-05	1	8.7785E-05	1	0.00010408
EG10241	dnaK	1	1.45E-04	1	1.13E-04	1	0.00026609	1	0.00023006
EG10242	dnaN	1	4.89E-04	1	5.69E-04	1	0.00022503	1	0.00033527
EG10243	dnaQ	1	2.25E-04	1	1.17E-04	1	2.3154E-05	1	2.3246E-05
EG10244	dnaT	1	6.12E-05	1	3.19E-05	1	0.00014266	1	0.00028931
EG10245	dnaX	1	7.58E-05	1	6.73E-05	1	0.00013358	1	0.00018074
EG13792	dos	1	2.26E-04	1	2.50E-04	1	0.00020767	1	0.00016699
EG13544	dpiA	1	4.05E-04	1	3.60E-04	1	0.00028028	1	0.00031657
EG13646	dpiB	1	6.65E-04	1	4.67E-04	1	5.6321E-05	1	8.2006E-05
EG10248	dppA	1	1.41E-04	1	9.32E-05	1	3.9919E-05	1	1.8063E-05
EG12625	dppB	1	7.35E-05	1	6.28E-05	1	0.00065775	1	0.00076264
EG12626	dppC	1	3.93E-05	1	2.99E-05	1	0.00034821	1	0.00030048
EG12627	dppD	1	1.07E-05	1	2.00E-05	1	0.00022677	1	0.0001032
EG12628	dppF	1	3.89E-05	1	2.48E-05	1	9.3753E-05	1	8.9822E-05
EG11415	dps	1	7.35E-05	1	3.83E-05	1	7.1651E-05	1	0.00025623
EG11297	dsbA	1	1.74E-04	1	1.26E-04	1	0.00011246	1	1.4214E-05
EG11393	dsbB	1	1.90E-04	1	1.89E-04	1	1.2737E-05	1	6.5648E-06
EG11070	dsbC	1	6.80E-05	1	8.87E-05	1	0.00012909	1	0.00035159
EG13535	dsbG	1	7.66E-04	1	6.84E-04	1	0.00054911	1	0.00079277
EG10249	dsdA	1	1.96E-04	1	2.44E-04	1	5.2621E-05	1	3.9297E-05
EG13161	dsdC	1	1.63E-05	1	2.36E-05	1	0.00020341	1	0.00011359
EG10250	dsdX	1	8.33E-05	1	6.50E-05	1	9.5935E-05	1	5.6289E-05
EG12636	dsrB	0	1.67E-06	0	8.12E-07	1	3.5742E-05	1	2.618E-05
EG11852	dtd	1	3.22E-05	1	6.17E-05	1	0.00012104	1	9.4932E-05
EG12232	dtpB	1	4.38E-04	1	4.08E-04	1	0.0003789	1	0.00024734
EG11932	dusA	1	1.81E-04	1	1.70E-04	1	1.8315E-05	1	1.3064E-05
EG11311	dusB	1	2.66E-04	1	4.98E-04	1	0.00020945	1	0.00015839
EG12022	dusC	1	8.14E-06	1	6.85E-06	1	4.8739E-05	1	5.0273E-05
EG10251	dut	1	2.09E-04	1	3.18E-04	0	1.523E-06	1	5.3205E-06
EG12715	dxr	1	5.52E-05	1	4.40E-05	1	3.7391E-06	0	8.4736E-07
EG13612	dxs	1	1.53E-03	1	9.73E-04	1	0.00012443	1	9.9564E-05
EG11639	eamA	0	-2.66E-07	0	-1.17E-07	1	2.7345E-05	1	5.0298E-05
EG12445	eamB	1	5.61E-05	1	8.75E-05	1	0.00034366	1	0.00033555
EG10252	ebgA	1	4.66E-04	1	5.25E-04	1	9.0156E-05	1	7.6471E-05
EG10253	ebgC	1	3.90E-04	1	2.48E-04	1	0.0001338	1	8.193E-05
EG10254	ebgR	1	1.94E-05	1	1.98E-05	1	0.00025353	1	0.00011507
EG14372	ecnA	1	1.36E-04	1	2.26E-04	1	0.00011703	1	0.00011908
EG14345	ecnB	1	1.70E-04	1	1.34E-04	0	8.1976E-07	0	6.0221E-07

EG10255	eco	1	1.20E-04	1	1.20E-04	1	0.0001017	1	3.6149E-05
EG11973	ecpD	1	1.30E-03	1	6.51E-04	1	0.00017046	1	8.1219E-05
EG10256	eda	1	1.15E-04	1	1.56E-04	1	2.988E-05	1	1.965E-05
EG10257	edd	1	4.03E-04	1	3.03E-04	1	6.7264E-05	1	5.0074E-05
EG11735	efeB	1	1.43E-05	1	8.24E-06	1	0.0002211	1	8.0137E-05
EG13861	efeO	1	5.39E-04	1	3.31E-04	1	0.00030491	1	0.00012977
EG12099	efp	1	1.11E-04	1	2.94E-04	1	5.2689E-05	1	2.952E-05
EG13184	elaA	1	1.35E-04	1	2.95E-04	1	4.3902E-05	1	6.3383E-05
EG13185	elaB	1	2.99E-04	1	2.09E-04	1	0.00037959	1	0.00025905
EG14261	elaD	1	1.37E-03	1	1.10E-03	1	0.00049886	1	0.00046415
EG13885	elbA	1	3.14E-04	1	2.39E-04	1	7.617E-05	1	2.1172E-05
EG11383	elbB	1	4.39E-06	0	4.22E-06	1	0.00010635	1	1.139E-05
EG11354	emrA	1	6.69E-05	1	4.82E-05	1	1.1846E-05	1	2.7713E-05
EG11439	emrB	1	1.01E-04	1	1.20E-04	1	0.00029096	1	0.00049792
EG11693	emrD	1	4.65E-05	1	4.51E-05	1	0.00020537	1	0.00011466
EG10629	emrE	1	4.67E-04	1	2.82E-04	1	0.00029668	1	0.00029095
EG13282	emrK	1	3.53E-04	1	3.12E-04	1	0.00024395	1	0.00032582
EG13283	emrY	1	5.14E-04	1	8.03E-04	1	0.00018122	1	7.5024E-05
EG13897	emtA	1	3.36E-04	1	4.10E-04	1	0.00035309	1	0.00041465
EG11336	endA	1	1.30E-04	1	8.00E-05	1	0.00042514	1	0.00047459
EG10258	eno	1	1.11E-04	1	2.63E-04	1	8.0186E-05	1	1.2187E-05
EG10259	entA	1	2.44E-06	0	7.39E-07	1	1.3994E-05	1	5.3038E-06
EG10260	entB	1	6.93E-05	1	7.81E-05	1	3.441E-05	1	1.3857E-05
EG10261	entC	1	1.65E-04	1	1.22E-04	1	0.00017131	1	0.00013995
EG10262	entD	1	1.38E-04	1	9.94E-05	1	0.00023243	1	0.0002112
EG10263	entE	1	2.00E-04	1	2.99E-04	1	0.00017742	1	0.00016803
EG10264	entF	1	1.03E-04	1	8.64E-05	1	0.00046458	1	0.00050561
EG11104	entS	1	3.02E-05	1	2.29E-05	1	0.00041759	1	0.00019882
EG12297	envC	1	4.83E-05	1	4.01E-05	1	5.3143E-05	1	3.662E-05
EG11741	envR	1	1.51E-03	1	9.43E-04	1	0.00029055	1	8.0377E-05
EG10268	envY	1	5.17E-05	1	2.64E-05	1	0.00025947	1	9.9199E-05
EG10269	envZ	1	5.93E-05	1	7.56E-05	1	1.3883E-05	0	2.4548E-06
EG10368	epd	1	9.67E-06	1	1.16E-05	1	4.5035E-05	1	4.4096E-05
EG11613	eptA	1	1.03E-04	1	2.15E-04	1	0.00022641	1	0.0001072
EG12267	eptB	1	9.14E-05	1	2.00E-04	1	6.6613E-05	1	7.4907E-05
EG10270	era	1	1.60E-05	1	1.09E-05	1	9.9009E-05	1	7.437E-05
EG12682	erfK	1	8.60E-04	1	5.46E-04	1	0.00160776	1	0.00102002
EG12332	erpA	1	8.90E-05	1	4.37E-05	1	1.9135E-05	1	5.5127E-06
EG13634	essD	1	3.38E-05	1	3.20E-05	1	0.00052625	1	0.00067472
EG13831	essQ	1	1.73E-05	1	3.07E-05	1	0.00059368	1	0.00073123
EG11826	etk	1	5.93E-05	1	8.43E-05	1	0.00023948	1	0.00019811
EG13727	etp	1	4.84E-06	0	2.17E-06	1	1.5991E-05	1	1.4022E-05
EG14181	eutA	1	2.23E-05	1	4.56E-05	1	3.8221E-05	1	3.1485E-05
EG50006	eutB	1	1.32E-04	1	1.88E-04	1	0.00060854	1	0.00072164
EG50007	eutC	1	8.45E-05	1	6.58E-05	1	0.00015148	1	0.000102
EG14188	eutD	1	5.25E-05	1	6.06E-05	1	1.5691E-05	1	5.4291E-06
EG14185	eutE	1	7.34E-06	0	3.76E-06	1	4.845E-05	1	5.2566E-05
EG14183	eutG	1	7.04E-05	1	8.15E-05	1	1.7234E-05	1	2.9182E-05
EG14182	eutH	1	1.90E-04	1	2.37E-04	1	6.7481E-05	1	6.8329E-05
EG14184	eutJ	1	5.12E-05	1	2.69E-05	1	0.0004907	1	0.00030865
EG14170	eutK	1	8.00E-06	1	6.09E-06	1	2.5911E-05	1	5.6551E-06
EG14171	eutL	1	7.14E-04	1	4.32E-04	1	8.23E-06	0	4.6054E-06
EG14187	eutM	1	9.18E-06	1	5.04E-06	1	6.5053E-05	1	9.3605E-05
EG14186	eutN	0	1.34E-06	0	4.86E-06	1	2.1191E-05	1	1.6359E-05
EG14191	eutP	1	1.16E-04	1	9.11E-05	1	0.00030744	1	9.8768E-05
EG14190	eutQ	1	3.68E-05	1	3.06E-05	1	2.0016E-05	0	3.1277E-06
EG12190	eutR	1	1.78E-05	1	3.37E-05	1	0.00017238	1	0.00019301
EG14192	eutS	1	1.92E-04	1	1.75E-04	1	0.00030556	1	0.00044427
EG14189	eutT	1	1.07E-04	1	6.78E-05	1	4.8472E-05	1	0.00012842
EG11609	evgA	1	1.17E-04	1	7.31E-05	1	0.00014387	1	0.00010598
EG11610	evgS	1	9.32E-04	1	6.89E-04	1	0.00069202	1	0.00026198
EG10271	exbB	1	2.46E-04	1	2.88E-04	1	0.00045814	1	0.0005248
EG10272	exbD	1	2.13E-05	1	1.76E-05	1	3.5512E-05	1	4.3752E-05
EG14031	exoX	1	1.52E-04	1	1.47E-04	1	0.00048427	1	0.00079196
EG12739	exuR	1	1.39E-04	1	1.44E-04	1	0.00015844	1	0.00023569
EG12738	exuT	1	2.57E-05	1	1.32E-05	1	4.101E-05	1	2.9764E-05
EG10273	fabA	1	1.41E-04	1	2.13E-04	1	0.00013236	1	6.7492E-05
EG10274	fabB	1	1.78E-04	1	1.37E-04	1	0.00017554	1	0.00012404
EG11317	fabD	1	1.23E-04	1	7.25E-05	1	0.00025879	1	0.00063593
EG12606	fabF	1	1.08E-04	1	1.62E-04	1	0.00036782	1	0.00023833
EG11318	fabG	1	4.34E-05	1	7.20E-05	1	0.00013355	1	1.6839E-05

EG10277	fabH	1	1.38E-04	1	1.10E-04	1	0.00042826	1	0.00089757
EG11528	fabI	1	4.15E-05	1	9.20E-05	1	0.00023671	1	0.00014109
EG11394	fabR	1	3.27E-05	1	2.39E-05	1	4.2084E-05	1	3.4792E-05
EG11284	fabZ	1	1.40E-04	1	2.12E-04	1	0.0003405	1	0.00013623
EG10278	fadA	1	1.10E-04	1	1.37E-04	1	9.2763E-05	1	0.00026794
EG10279	fadB	1	5.07E-05	1	9.77E-05	1	0.00012303	1	8.9017E-05
EG11530	fadD	1	1.09E-04	1	1.57E-04	1	0.00042855	1	0.00064908
EG13145	fadE	1	2.70E-04	1	4.76E-04	1	0.00039198	1	0.00079115
EG12723	fadH	1	3.67E-04	1	5.77E-04	1	0.00014862	1	0.00016573
EG14128	fadI	1	9.24E-06	1	1.26E-05	1	0.00016134	1	0.00042762
EG14127	fadJ	1	4.18E-05	1	1.03E-04	1	7.2514E-05	1	4.1087E-05
EG12357	fadK	1	3.34E-04	1	3.03E-04	1	0.00082447	1	0.00093315
EG10280	fadL	1	8.36E-04	1	5.73E-04	1	0.00021159	1	2.8204E-05
EG10281	fadR	1	2.39E-05	1	3.41E-05	1	7.5894E-05	1	0.00019463
EG10282	fbaA	1	8.79E-05	1	8.95E-05	1	9.645E-05	1	7.4181E-05
EG14062	fbaB	1	4.62E-05	1	6.42E-05	1	0.00051806	1	0.00078146
EG10283	fbp	1	9.54E-04	1	1.03E-03	1	0.00017714	1	4.6883E-05
EG11788	fcl	1	2.80E-05	1	2.01E-05	1	0.00025139	1	0.00029464
EG11859	fdhD	1	1.58E-04	1	1.12E-04	1	7.3528E-05	1	2.6263E-05
EG10284	fdhE	1	2.40E-04	1	3.17E-04	1	9.2629E-05	1	0.0001189
EG10285	fdhF	1	5.06E-05	1	7.51E-05	1	0.00015233	1	0.0001055
EG11227	fdnG	1	3.21E-05	1	2.06E-05	1	0.00015321	1	8.0062E-05
EG11228	fdnH	1	4.11E-05	1	2.46E-05	1	6.9716E-05	1	5.1622E-05
EG11229	fdnI	1	1.10E-05	1	1.48E-05	1	0.00026921	1	0.00020201
EG11858	fdoG	1	1.25E-05	1	1.49E-05	1	0.00069955	1	0.0004789
EG11857	fdoH	1	1.24E-04	1	6.72E-05	1	0.00025998	1	0.00042946
EG11856	fdoI	1	1.38E-05	1	8.76E-06	1	1.3531E-05	1	2.6242E-05
EG13399	fdrA	1	9.87E-04	1	6.32E-04	1	0.00041599	1	0.00045328
EG11328	fdx	1	3.23E-04	1	2.69E-04	1	0.0001387	1	0.00010152
EG13179	feaB	1	1.12E-04	1	1.48E-04	1	0.00019798	1	0.00011308
EG13422	feaR	1	1.07E-04	1	3.18E-04	1	0.00014789	1	5.66E-05
EG10286	fecA	1	1.24E-04	1	2.87E-04	1	0.00043145	1	8.9506E-05
EG10287	fecB	1	2.38E-04	1	1.86E-04	1	0.00028448	1	0.00064701
EG10288	fecC	1	1.11E-04	1	1.24E-04	1	0.00012515	1	8.7731E-05
EG10289	fecD	1	3.18E-05	1	5.56E-05	1	3.5471E-05	1	1.8512E-05
EG10290	fecE	1	1.75E-04	1	1.42E-04	1	0.00023923	1	0.00024309
EG10291	fecI	1	7.03E-04	1	8.50E-04	1	0.00023364	1	0.00031576
EG10292	fecR	1	6.56E-04	1	5.61E-04	1	3.2635E-05	1	6.8904E-05
EG12101	feoA	1	1.58E-04	1	1.04E-04	1	0.00020843	1	0.00028046
EG12102	feoB	1	3.36E-04	1	3.20E-04	1	0.00039127	1	0.00022965
EG12933	feoC	1	1.53E-05	1	1.05E-05	1	8.2463E-05	1	0.00014763
EG10293	fepA	1	1.24E-04	1	2.11E-04	1	9.3968E-05	1	0.00017464
EG10294	fepB	1	2.73E-04	1	6.45E-04	1	2.1153E-05	1	1.3838E-05
EG10295	fepC	1	2.43E-04	1	1.84E-04	1	0.00032418	1	0.00016714
EG10296	fepD	1	1.46E-04	1	1.05E-04	1	0.0004293	1	0.0004127
EG10297	fepE	1	2.19E-04	1	8.67E-05	1	0.00072323	1	0.00095685
EG10298	fepG	1	2.56E-04	1	2.48E-04	1	0.00061726	1	0.00074987
EG10299	fes	1	9.14E-06	1	1.02E-05	1	0.00010841	1	0.00020601
EG10300	ffh	1	7.33E-04	1	6.25E-04	1	0.00024226	1	0.00031379
EG10301	fhlA	1	4.11E-04	1	3.35E-04	1	0.00089321	1	0.00056519
EG10302	fhuA	1	2.60E-04	1	1.36E-04	1	0.00031939	1	0.0003022
EG10303	fhuB	1	2.73E-05	1	2.87E-05	1	0.00043641	1	0.00020233
EG10304	fhuC	1	1.92E-03	1	1.01E-03	1	0.0007326	1	0.00147905
EG10305	fhuD	1	2.73E-04	1	2.55E-04	1	4.4948E-05	1	3.4803E-05
EG10306	fhuE	1	2.86E-04	1	2.78E-04	1	0.00028584	1	0.00015924
EG12595	fhuF	1	5.87E-04	1	5.63E-04	1	2.3331E-06	0	3.2631E-07
EG10307	fic	1	1.39E-05	1	1.46E-05	1	0.00013826	1	0.00011957
EG11873	fieF	1	1.21E-04	1	1.40E-04	1	0.00060122	1	0.00051237
EG10308	fimA	1	1.22E-03	1	1.19E-03	1	0.00034294	1	0.00054792
EG10309	fimB	1	1.83E-04	1	1.04E-04	1	0.00019728	1	6.7533E-05
EG10310	fimC	1	2.97E-04	1	2.14E-04	1	6.3289E-05	1	1.3893E-05
EG10311	fimD	1	6.04E-04	1	7.44E-04	1	7.2637E-05	1	8.2917E-06
EG10312	fimE	1	2.50E-04	1	3.00E-04	1	0.00014308	1	2.7235E-05
EG10313	fimF	1	9.62E-05	1	2.90E-04	1	0.00016137	1	7.7075E-05
EG10314	fimG	1	3.72E-05	1	1.69E-05	1	2.6447E-05	1	4.964E-05
EG10315	fimH	1	5.08E-04	1	3.79E-04	1	0.00067445	1	0.00093563
EG11974	fimI	1	7.91E-05	1	9.72E-05	1	8.8205E-05	1	8.4738E-05
EG11103	fimZ	1	4.74E-06	0	2.32E-06	1	9.2069E-05	1	6.7882E-05
EG10317	fis	1	1.17E-04	1	1.79E-04	1	3.8306E-05	1	2.7964E-05
EG13317	fiu	1	1.63E-03	1	9.25E-04	1	0.00036291	1	7.7266E-05
EG11562	fixA	1	6.33E-05	1	6.76E-05	1	0.00064586	1	0.00047409

EG11563	fixB	1	2.35E-04	1	3.98E-04	1	0.00015491	1	0.00033478
EG11564	fixC	1	4.58E-05	1	2.75E-05	1	1.9211E-05	1	9.1327E-06
EG11565	fixX	1	1.41E-04	1	1.08E-04	1	0.000146	1	5.6561E-05
EG12503	fklB	1	4.15E-04	1	5.70E-04	1	0.00039918	1	0.00023062
EG12900	fkpA	1	6.91E-05	1	5.38E-05	1	0.00048691	1	0.00054787
EG11080	fkpB	1	4.31E-04	1	4.56E-04	1	0.00028229	1	0.00029707
EG10318	fldA	1	5.42E-04	1	5.55E-04	1	0.00035706	1	0.00075702
EG12697	fldB	1	2.12E-04	1	2.17E-04	1	7.9144E-05	1	9.224E-05
EG20263	flgA	1	7.42E-05	1	9.27E-05	1	6.2554E-05	1	3.0499E-05
EG14266	flgB	1	9.00E-06	1	1.36E-05	1	3.4971E-05	1	1.4325E-05
EG14267	flgC	1	1.81E-04	1	1.65E-04	1	0.00012264	1	0.00030527
EG14268	flgD	1	1.48E-04	1	2.44E-04	1	0.00010554	1	0.00010979
EG14269	flgE	1	3.06E-04	1	2.57E-04	1	0.00034244	1	0.00016246
EG14270	flgF	1	1.63E-04	1	2.09E-04	1	0.00026259	1	0.00039995
EG14271	flgG	1	1.09E-04	1	3.81E-04	1	0.00022059	1	8.9964E-05
EG20264	flgH	1	9.10E-05	1	1.41E-04	1	0.000341	1	0.00018416
EG20265	flgI	1	2.43E-04	1	2.10E-04	1	5.57E-05	1	5.8074E-05
EG14272	flgJ	1	1.38E-05	1	1.27E-05	1	7.3132E-05	1	0.00015017
EG11967	flgK	1	9.35E-05	1	1.80E-04	1	0.0001196	1	0.00021583
EG11545	flgL	1	4.35E-05	1	6.46E-05	1	0.00028484	1	0.00018862
EG12664	flgM	1	3.84E-04	1	4.68E-04	1	0.00030928	1	0.00014912
EG12665	flgN	1	3.25E-04	1	2.28E-04	1	0.00067382	1	0.0008756
EG14273	flhA	1	1.60E-04	1	2.05E-04	1	0.00011981	1	7.6883E-05
EG14035	flhB	1	7.88E-05	1	4.06E-05	1	0.00030636	1	0.00026535
EG10319	flhC	1	4.44E-06	0	2.35E-06	1	0.00010129	1	4.1284E-05
EG10320	flhD	1	2.44E-04	1	2.33E-04	1	2.7045E-05	1	1.6651E-05
EG14013	flhE	1	1.03E-05	1	7.87E-06	1	0.0002437	1	0.00047912
EG11355	fliA	1	2.62E-04	1	2.42E-04	1	0.00046336	1	0.00081878
EG10321	fliC	1	6.62E-04	1	7.18E-04	1	2.7065E-05	1	4.431E-05
EG10841	fliD	1	1.28E-05	1	1.45E-05	1	1.1928E-05	0	2.3193E-07
EG11346	fliE	1	8.30E-06	1	1.41E-05	1	0.00018016	1	0.0001291
EG11347	fliF	1	9.60E-05	1	6.87E-05	1	0.00016037	1	0.00018397
EG11654	fliG	1	6.92E-05	1	4.51E-05	1	0.00012084	1	4.7479E-05
EG11656	fliH	1	6.08E-05	1	3.58E-05	1	0.00015413	1	0.00033712
EG20266	fliI	1	1.14E-04	1	1.09E-04	1	0.00039395	1	0.00051103
EG20267	fliJ	0	3.25E-07	0	9.60E-07	1	5.9512E-06	1	7.2533E-06
EG20268	fliK	1	6.58E-05	1	1.02E-04	1	9.8654E-05	1	0.00013647
EG10322	fliL	1	1.23E-05	1	7.35E-06	1	7.175E-05	1	8.4523E-05
EG10323	fliM	1	6.68E-04	1	7.97E-04	1	0.00031255	1	0.0002834
EG10324	fliN	1	7.61E-04	1	7.90E-04	1	0.00111541	1	0.00022303
EG11224	fliO	1	3.73E-04	1	8.78E-04	1	0.00044165	1	0.00067913
EG11975	fliP	1	2.69E-04	1	4.00E-04	1	0.00015044	1	0.00024768
EG11976	fliQ	1	2.73E-06	0	4.69E-07	1	4.9251E-05	1	4.2501E-05
EG11977	fliR	1	2.41E-04	1	2.22E-04	1	6.0668E-05	1	4.771E-05
EG11388	fliS	1	6.83E-06	1	7.51E-06	1	0.00022534	1	0.0003988
EG11389	fliT	1	4.93E-04	1	1.41E-03	1	0.00014206	1	0.0002046
EG12680	fliY	1	8.84E-05	1	7.25E-05	1	4.7409E-05	1	2.4496E-05
EG11356	fliZ	1	2.51E-04	1	3.48E-04	1	1.541E-05	1	9.2983E-06
EG10229	flk	1	4.55E-05	1	8.96E-05	1	0.0001433	1	0.00016075
EG12686	flu	1	1.71E-04	1	1.43E-04	1	0.00015429	1	7.8376E-05
EG13429	flxA	1	2.63E-04	1	2.73E-04	1	0.0003585	1	0.00014429
EG11268	fmt	1	4.70E-04	1	4.71E-04	1	0.00044112	1	0.00030523
EG10325	fnr	1	3.68E-04	1	3.57E-04	1	0.00010137	1	5.1911E-05
EG11258	focA	1	1.77E-04	1	3.15E-04	1	0.00035654	1	0.00037568
EG14220	focB	1	6.07E-05	1	5.45E-05	1	2.9334E-05	1	1.9834E-05
EG10326	folA	1	1.06E-04	1	9.17E-05	1	0.00062644	1	0.00049666
EG11673	folB	1	6.14E-06	1	1.01E-05	1	0.0001342	1	0.00013473
EG10327	folC	1	2.10E-04	1	1.61E-04	1	0.00023207	1	0.00043956
EG10328	folD	1	7.35E-05	1	9.08E-05	1	0.00038996	1	0.00024706
EG11375	folE	1	3.48E-05	1	4.16E-05	1	0.00022443	1	6.8091E-05
EG11374	folK	1	1.25E-05	1	1.31E-05	1	0.00013851	1	0.00012621
EG13189	folM	1	9.87E-06	1	1.07E-05	1	0.00010079	1	4.9578E-05
EG50011	folP	1	6.89E-04	1	8.62E-04	1	8.4967E-05	1	0.00015393
EG14263	folX	1	4.99E-04	1	4.16E-04	1	0.00027619	1	0.00037002
EG11518	fpr	1	6.65E-06	0	3.16E-06	1	7.1111E-05	1	9.5078E-05
EG14145	frc	1	4.05E-04	1	2.68E-04	1	0.00016298	1	0.00017012
EG10330	frdA	1	5.70E-05	1	4.13E-05	1	3.5784E-05	1	4.8273E-05
EG10331	frdB	1	2.06E-05	0	1.87E-06	1	3.5867E-05	1	6.5266E-05
EG10332	frdC	1	4.94E-04	1	4.63E-04	1	0.00017283	1	0.00020109
EG10333	frdD	1	6.83E-04	1	5.22E-04	1	0.0003415	1	0.00047445
EG10334	fre	1	1.18E-04	1	1.26E-04	1	0.00037548	1	0.00013061

EG12908	frlA	1	5.17E-05	1	4.73E-05	1	0.00036416	1	0.00047423
EG12909	frlB	1	2.73E-04	1	2.35E-04	1	0.00015541	1	0.00038125
EG12910	frlC	1	1.97E-05	1	2.08E-05	1	0.00046111	1	0.0004211
EG12912	frlD	1	4.91E-05	1	4.45E-05	1	1.2589E-05	1	2.812E-05
EG12913	frlR	1	7.14E-04	1	5.00E-04	1	0.00064525	1	0.00051742
EG50010	frmA	1	1.08E-03	1	9.71E-04	1	0.0002866	1	0.00055584
EG13295	frmB	1	5.44E-05	1	9.90E-05	1	0.00100807	1	0.00091228
EG13296	frmR	1	2.24E-04	1	4.36E-04	1	0.00039472	1	0.00010263
EG10335	frr	1	1.14E-04	1	9.13E-05	1	0.00071949	1	0.00061876
EG11091	frsA	1	6.94E-04	1	5.53E-04	1	0.00093072	1	0.00106909
EG10336	fruA	1	3.88E-05	1	7.91E-05	1	0.00036021	1	0.00022914
EG10005	fruB	1	1.21E-04	1	1.95E-04	1	0.00028882	1	0.00013115
EG10337	fruK	1	3.30E-05	1	2.31E-05	1	0.00014457	1	0.00027073
EG10338	fruR	1	5.45E-06	1	1.10E-05	1	3.8496E-05	1	1.181E-05
EG11864	frvA	1	5.84E-05	1	3.99E-05	1	0.00014473	1	2.2289E-05
EG11863	frvB	1	2.27E-05	1	1.83E-05	1	5.9054E-05	1	0.00010686
EG11861	frvR	1	3.18E-05	1	1.37E-05	1	0.0003477	1	0.00084798
EG11862	frvX	1	9.90E-05	1	6.29E-05	1	0.00028987	1	0.00039975
EG11909	frwB	1	1.21E-04	1	1.33E-04	1	0.00018864	1	0.00022327
EG11908	frwC	1	2.44E-04	1	2.47E-04	1	1.5916E-05	0	3.8223E-06
EG11912	frwD	0	1.34E-06	0	5.34E-07	1	4.4642E-05	1	7.2925E-05
EG14151	fryA	1	1.82E-05	1	7.86E-05	1	0.00020862	1	0.00012779
EG14155	fryB	1	1.27E-04	1	9.73E-05	1	7.4746E-05	1	1.933E-05
EG14154	fryC	1	1.65E-05	1	3.33E-05	1	0.00021289	1	0.00012098
EG13471	fsaA	1	1.34E-04	1	1.04E-04	1	6.3146E-05	1	2.737E-05
EG11905	fsaB	1	2.83E-04	1	2.01E-04	1	0.00029411	1	0.00029219
EG13268	fsr	1	3.29E-05	1	2.77E-05	1	0.00021182	1	0.00030136
EG10921	ftnA	1	5.01E-04	1	7.96E-04	1	0.0002857	1	0.00010058
EG13175	ftnB	1	2.54E-04	1	2.29E-04	1	0.00039368	1	0.00023695
EG10339	ftsA	1	2.66E-05	1	1.06E-05	1	5.0818E-05	1	8.4692E-05
EG13111	ftsB	1	4.76E-05	1	4.36E-05	1	5.46E-05	1	0.00010722
EG10340	ftsE	1	6.93E-05	1	1.00E-04	1	4.5123E-05	1	6.5335E-05
EG10341	ftsI	1	3.93E-05	1	3.13E-05	1	0.00020073	1	0.00028411
EG13226	ftsK	1	2.57E-04	1	1.58E-04	1	3.5137E-05	1	1.2719E-05
EG11086	ftsL	1	1.71E-05	1	2.09E-05	1	0.00040933	1	0.00042766
EG11529	ftsN	1	8.75E-05	1	5.44E-05	1	0.00021281	1	0.00017553
EG11376	ftsP	1	7.07E-05	1	4.88E-05	1	0.00015541	1	0.00029745
EG10342	ftsQ	1	1.08E-05	1	1.10E-05	1	0.00021071	1	0.0004836
EG10344	ftsW	1	7.58E-06	1	1.29E-05	1	0.0002822	1	0.00030194
EG10345	ftsX	1	1.61E-05	1	1.14E-05	1	2.2394E-05	1	3.5792E-05
EG10346	ftsY	1	1.83E-05	1	7.32E-06	1	0.00010512	1	0.00018083
EG10347	ftsZ	1	2.47E-04	1	2.10E-04	1	0.00010226	1	0.00013915
EG10348	fucA	1	8.44E-05	1	1.93E-04	1	0.00028755	1	0.00040986
EG10349	fucI	1	1.81E-04	1	1.55E-04	1	0.00011361	1	8.2006E-05
EG10350	fucK	1	9.33E-05	1	1.08E-04	1	0.00019431	1	0.00016979
EG10351	fucO	1	1.46E-05	1	1.29E-05	1	0.00010591	1	0.00010926
EG10352	fucP	1	7.28E-04	1	6.92E-04	1	0.00021856	1	0.00010244
EG10353	fucR	0	1.90E-06	0	1.52E-06	1	0.00028399	1	0.00029266
EG10355	fucU	1	3.23E-04	1	2.73E-04	1	9.1989E-05	1	2.4719E-05
EG10356	fumA	1	1.56E-04	1	5.65E-04	1	0.00054624	1	0.00080573
EG10357	fumB	1	3.23E-05	1	8.27E-05	1	0.00015795	1	0.00030599
EG10358	fumC	1	1.04E-05	1	6.56E-06	1	0.00016191	1	0.00021281
EG10359	fur	1	1.43E-03	1	5.73E-04	1	0.00047164	1	0.00041449
EG10360	fusA	1	5.14E-05	1	3.33E-05	1	2.3918E-05	1	1.1783E-05
EG12382	fxsA	1	1.55E-04	1	2.19E-04	1	0.00057673	1	0.00046411
EG11329	gabD	1	1.56E-04	1	1.67E-04	1	0.00013711	1	0.00013236
EG11330	gabP	1	1.11E-05	1	3.17E-05	1	4.9467E-06	1	1.4178E-05
EG10361	gabT	1	1.34E-04	1	3.88E-04	1	0.00039368	1	0.00018011
EG50009	gadA	1	1.42E-04	1	1.81E-04	1	0.00011151	1	0.00012326
EG11490	gadB	1	4.18E-05	1	2.80E-05	1	0.00024259	1	0.00021135
EG12456	gadC	1	2.26E-05	1	1.87E-05	1	0.00022819	1	0.00015075
EG11544	gadE	1	2.24E-04	1	1.34E-04	1	0.00028206	1	0.00017526
EG12242	gadW	1	4.87E-04	1	2.59E-04	1	0.00026427	1	0.00020623
EG12243	gadX	1	8.23E-04	1	8.44E-04	1	0.00024834	1	0.00034121
EG10362	galE	1	1.60E-04	1	2.58E-04	1	0.0001523	1	8.9332E-05
EG13578	galF	1	6.44E-05	1	8.21E-05	1	0.00010381	1	4.7662E-05
EG10363	galK	1	8.47E-05	1	1.97E-04	1	0.00121237	1	0.00149225
EG11698	galM	1	1.23E-05	1	7.17E-06	1	1.8448E-05	1	1.0131E-05
EG12148	galP	1	3.78E-05	1	6.97E-05	1	0.00032011	1	0.00043531
EG10364	galR	1	1.23E-04	1	1.63E-04	1	0.00028683	1	0.00030419
EG10365	galS	1	7.61E-04	1	7.38E-04	1	0.00025615	1	0.00020248

EG10366	galT	1	2.03E-04	1	3.03E-04	1	7.6596E-05	1	2.7328E-05
EG11319	galU	1	1.55E-04	1	7.24E-05	1	0.00039963	1	0.00028893
EG10367	gapA	1	1.97E-04	1	2.41E-04	1	0.00011407	1	0.00024278
EG12522	garD	1	2.13E-04	1	1.26E-04	1	0.00030997	1	0.0005413
EG11175	garK	1	3.36E-05	1	9.86E-05	1	4.6857E-05	1	0.00010951
EG10016	garL	1	1.61E-04	1	1.27E-04	1	0.00026109	1	0.00035811
EG12760	garP	1	1.79E-04	1	1.75E-04	1	0.00017984	1	0.00031116
EG11176	garR	0	8.42E-07	0	-2.71E-07	1	5.5104E-05	1	1.7359E-05
EG12414	gatA	1	6.06E-05	1	9.16E-05	1	0.00016701	1	0.00037933
EG12415	gatB	1	9.95E-05	1	5.55E-05	1	0.00018388	1	0.0003344
EG12416	gatC	1	1.68E-04	1	1.04E-04	1	0.00025611	1	0.00027549
EG12417	gatD	1	2.23E-04	1	3.49E-04	1	0.00061193	1	0.00054792
EG12419	gatY	1	5.53E-05	1	1.03E-04	1	3.5492E-05	1	7.2337E-05
EG12418	gatZ	1	1.05E-05	1	1.49E-05	1	6.1892E-05	1	4.6193E-05
EG10369	gcd	1	4.20E-04	1	6.45E-04	1	0.00038519	1	0.00034939
EG11583	gcl	1	1.63E-05	0	4.08E-06	1	0.00046949	1	0.0004365
EG11795	gcvA	1	7.83E-04	1	6.19E-04	1	0.0004019	1	0.00040278
EG10371	gcvH	1	2.13E-05	1	2.05E-05	1	0.00034225	1	0.00051853
EG11810	gcvP	1	3.24E-04	1	5.65E-04	1	0.00059346	1	0.00020077
EG11149	gcvR	1	1.04E-04	1	2.02E-04	1	0.00010348	1	0.00017977
EG11442	gcvT	1	2.79E-05	1	1.81E-05	1	6.2886E-05	1	0.00014714
EG10372	gdhA	1	1.24E-04	1	1.02E-04	1	0.00012339	1	4.9801E-05
EG13732	gfcA	1	1.52E-04	1	7.49E-05	1	4.3013E-05	1	0.00015683
EG13731	gfcB	1	3.93E-04	1	3.59E-04	1	0.00085563	1	0.00076481
EG13730	gfcC	1	9.55E-05	1	7.49E-05	1	0.00033146	1	0.00017019
EG13729	gfcD	1	6.63E-04	1	4.56E-04	1	0.0001648	1	0.00012381
EG13728	gfcE	1	4.07E-04	1	2.93E-04	1	6.5011E-05	1	0.00010965
EG10374	ggt	1	2.88E-04	1	2.83E-04	1	9.005E-05	1	0.00010475
EG13869	ghrA	1	1.98E-04	1	1.54E-04	1	0.00074852	1	0.00082933
EG12272	ghrB	1	5.34E-04	1	4.01E-04	1	7.7325E-05	1	4.0299E-05
EG10376	gidB	1	1.98E-05	1	7.33E-06	1	0.00024337	1	6.116E-05
EG12995	glcA	1	7.22E-05	1	3.81E-05	1	0.00091107	1	0.00067371
EG20080	glcB	1	5.07E-04	1	3.40E-04	1	7.2267E-05	1	4.5759E-05
EG12998	glcC	1	4.25E-05	1	3.26E-05	1	0.00023123	1	0.00026022
EG12997	glcD	1	9.06E-05	1	1.25E-04	1	0.00010038	1	5.6017E-05
EG12996	glcE	1	2.25E-05	1	2.19E-05	1	0.00010957	1	0.00019669
EG13291	glcF	1	7.03E-06	1	7.49E-05	1	0.00014273	1	0.00013374
EG12952	glcG	1	1.47E-04	1	1.63E-04	1	0.00020555	1	0.00013822
EG11904	gldA	1	1.47E-05	1	9.87E-06	1	0.00033497	1	0.00013608
EG11981	glf	1	2.14E-04	1	1.78E-04	1	0.00018271	1	2.8351E-05
EG10377	glgA	1	3.08E-06	0	4.30E-06	1	4.6197E-05	1	0.00012736
EG10378	glgB	1	2.71E-04	1	2.40E-04	1	0.00021531	1	0.00021397
EG10379	glgC	1	1.67E-04	1	1.34E-04	1	0.00019784	1	0.000144
EG10380	glgP	1	2.96E-04	1	7.63E-04	1	0.00041401	1	0.00022579
EG11381	glgS	1	8.50E-05	1	1.36E-04	1	0.00031876	1	0.00015127
EG10381	glgX	1	1.21E-05	1	4.01E-05	1	0.00018918	1	0.00014751
EG12957	glk	1	1.92E-04	1	1.33E-04	1	0.00040096	1	0.00040071
EG11553	glmM	1	1.25E-05	1	1.04E-05	1	3.4992E-05	1	9.2896E-06
EG10382	glmS	1	2.37E-05	1	1.30E-05	1	0.00016803	1	7.3689E-05
EG11198	glmU	1	6.27E-05	1	3.79E-05	1	0.00024494	1	0.00026437
EG10383	glnA	1	1.28E-05	1	1.40E-05	1	0.00032783	1	0.00042102
EG10384	glnB	1	1.39E-04	1	4.95E-05	1	0.00013686	1	0.00035025
EG11411	glnD	1	1.04E-04	1	6.62E-05	1	0.00066125	1	0.00127435
EG11602	glnE	1	2.26E-04	1	1.79E-04	1	3.7936E-05	1	0.00010817
EG10385	glnG	1	5.43E-06	1	9.92E-06	1	8.4035E-05	1	3.698E-05
EG10386	glnH	1	9.51E-05	1	6.55E-05	1	5.9591E-05	1	2.3447E-05
EG12191	glnK	1	2.17E-05	1	2.78E-05	1	7.0571E-05	1	4.431E-05
EG10387	glnL	1	6.83E-05	1	3.95E-05	1	2.7305E-05	1	1.172E-05
EG10388	glnP	1	8.53E-04	1	8.50E-04	1	0.00041645	1	0.00021859
EG10389	glnQ	1	1.76E-04	1	5.58E-04	1	0.00022153	1	0.00021246
EG10390	glnS	1	9.34E-04	1	9.23E-04	1	0.0004363	1	0.00038995
EG13421	gloA	1	2.32E-04	1	6.45E-04	1	0.00023545	1	0.0002652
EG13330	gloB	1	5.04E-04	1	5.35E-04	1	0.00061778	1	0.00031516
EG10391	glpA	1	1.74E-04	1	1.07E-04	1	0.00010952	1	9.9165E-05
EG10392	glpB	1	2.10E-05	1	1.29E-05	1	7.4248E-05	1	1.6266E-05
EG10393	glpC	1	1.26E-04	1	1.19E-04	1	3.6202E-05	1	5.5836E-05
EG10394	glpD	1	4.65E-05	1	5.48E-05	1	9.7264E-05	1	0.00026431
EG10395	glpE	1	6.59E-05	1	1.95E-04	1	9.9228E-05	1	0.00030865
EG10396	glpF	1	4.16E-04	1	5.69E-04	1	0.00023602	1	2.9785E-05
EG10397	glpG	1	4.09E-04	1	3.77E-04	1	0.00043448	1	0.00083603
EG10398	glpK	1	2.88E-04	1	2.23E-04	1	0.00012042	1	3.3384E-05

EG10399	glpQ	1	1.78E-04	1	3.52E-04	1	0.0005244	1	0.00016719
EG10400	glpR	1	9.41E-05	1	1.66E-04	1	0.00019005	1	0.00010298
EG10401	glpT	1	6.09E-05	1	1.99E-04	1	0.00011951	1	8.5725E-05
EG11517	glpX	1	2.64E-04	1	6.08E-04	1	1.5991E-05	1	5.8258E-05
EG10402	gltA	1	2.90E-04	1	1.65E-04	1	9.8271E-05	1	0.0001785
EG10403	gltB	1	4.19E-05	1	4.86E-05	1	6.0176E-05	1	5.9245E-05
EG10404	gltD	1	1.60E-04	1	1.26E-04	1	0.00017056	1	0.00018285
EG11514	gltF	1	2.95E-05	1	9.42E-06	1	0.00018695	1	9.8074E-05
EG12700	gltI	1	1.97E-04	1	2.89E-04	1	4.0239E-05	1	6.7089E-06
EG12661	gltJ	1	5.88E-05	1	1.29E-04	1	0.00152116	1	0.0013226
EG12662	gltK	1	1.43E-04	1	2.27E-04	1	8.664E-05	1	7.1151E-05
EG12663	gltL	1	6.72E-05	1	5.00E-05	1	0.00014922	1	0.00025417
EG10405	gltP	1	2.63E-05	1	5.99E-05	1	0.00036908	1	0.00029323
EG10406	gltS	1	1.12E-04	1	9.55E-05	1	0.00015377	1	0.00024122
EG10407	gltX	1	8.52E-05	1	2.36E-04	1	0.00011128	1	0.00030537
EG13621	glxK	1	5.29E-04	1	3.47E-04	1	0.00046263	1	0.00037968
EG13265	glxR	1	1.38E-05	1	1.10E-05	1	9.8463E-05	1	4.2583E-05
EG10408	glyA	1	6.37E-04	1	6.31E-04	1	0.00089731	1	0.0006916
EG10409	glyQ	1	3.02E-04	1	3.06E-04	1	0.00019541	1	0.00015044
EG10410	glyS	1	9.12E-05	1	1.51E-04	1	0.00035055	1	0.00012868
EG11787	gmd	1	4.10E-04	1	5.16E-04	1	0.00039401	1	0.0001304
EG11736	gmhB	1	3.00E-04	1	2.76E-04	1	8.2077E-05	1	0.00016222
EG10965	gmk	1	8.14E-04	1	9.64E-04	1	0.00024078	1	0.00082108
EG11789	gmm	1	1.03E-04	1	2.22E-04	1	0.00017784	1	0.00026204
EG13415	gmr	1	9.32E-04	1	6.16E-04	1	0.00017049	1	6.299E-05
EG10411	gnd	1	8.94E-06	1	1.29E-05	1	2.4252E-05	1	3.7273E-05
EG13233	gnsA	1	2.92E-04	1	2.97E-04	1	2.6487E-05	1	4.8044E-06
EG13837	gnsB	1	2.57E-04	1	3.86E-04	1	0.00015778	1	0.00011008
EG12629	gntK	1	4.42E-04	1	4.17E-04	1	4.1869E-05	1	5.5462E-05
EG12563	gntP	1	4.09E-04	1	3.07E-04	1	6.4527E-05	1	4.4275E-05
EG12630	gntR	1	9.73E-05	1	7.24E-05	1	0.00010779	1	6.1441E-05
EG12380	gntT	1	6.47E-04	1	7.39E-04	1	0.00014295	1	2.2567E-05
EG12631	gntU	1	1.02E-04	1	9.31E-05	1	0.00039286	1	0.0001344
EG12934	gntX	1	9.33E-05	1	1.09E-04	1	0.00021178	1	0.0002252
EG10412	gor	1	1.08E-04	1	6.23E-05	1	0.00019208	1	0.00033966
EG11871	gph	1	1.72E-04	1	1.98E-04	1	2.4488E-05	1	1.8858E-05
EG11699	gpmA	1	2.24E-04	1	1.27E-04	1	0.0002405	1	0.00033864
EG12296	gpmM	1	1.71E-04	1	1.78E-04	1	8.5825E-05	1	3.8247E-05
EG10413	gpp	1	9.02E-05	1	9.10E-05	1	0.00016188	1	0.00049325
EG20091	gpsA	1	1.18E-04	1	1.27E-04	1	0.00017418	1	0.00029149
EG10414	gpt	1	1.08E-04	1	2.63E-04	1	0.0001755	1	0.00040498
EG10415	greA	1	4.95E-06	1	6.73E-06	1	4.6367E-05	1	7.7104E-05
EG11578	greB	1	1.59E-04	1	1.55E-04	1	0.00015738	1	7.1522E-05
EG10599	groL	1	4.64E-05	1	7.96E-05	1	0.00021504	1	0.00012711
EG10600	groS	1	7.94E-05	1	2.80E-04	1	0.0001211	1	0.00047148
EG10416	grpE	1	6.37E-05	1	4.74E-05	1	0.00053581	1	0.00036386
EG10417	grxA	1	2.24E-05	1	1.46E-05	1	0.00050542	1	0.00091244
EG12688	grxB	1	1.43E-05	1	3.17E-05	1	0.00058327	1	0.00055263
EG12294	grxC	1	2.38E-04	1	2.99E-04	1	0.00022098	1	0.00010439
EG12181	grxD	1	3.39E-04	1	2.75E-04	1	0.00022847	1	0.0003903
EG10418	gshA	1	6.87E-06	1	7.56E-06	1	1.784E-05	1	2.2996E-05
EG10419	gshB	1	1.55E-04	1	1.02E-04	1	0.00025926	1	0.00054325
EG13472	gsiA	1	2.32E-05	1	2.31E-05	1	0.00010997	1	0.00011906
EG13473	gsiB	1	1.44E-05	1	6.85E-06	1	5.9335E-06	1	1.2638E-05
EG13474	gsiC	1	7.27E-05	1	1.67E-04	1	0.00020805	1	0.00030019
EG13475	gsiD	1	1.60E-05	1	1.12E-05	1	0.0001233	1	0.00013053
EG11102	gsk	1	1.57E-05	1	7.63E-06	1	0.00027245	1	0.00015054
EG12882	gsp	1	2.05E-05	1	1.78E-05	1	0.00054777	1	0.00081683
EG12888	gspA	1	3.42E-04	1	3.51E-04	1	8.2231E-05	1	5.7734E-05
EG11263	gspB	1	4.73E-05	1	6.87E-05	1	0.00014146	1	9.7251E-05
EG12889	gspC	1	4.06E-04	1	5.13E-04	1	0.00024955	1	0.00017491
EG12890	gspD	1	8.06E-04	1	7.19E-04	1	0.00022827	1	0.00015079
EG12891	gspE	1	2.77E-04	1	5.05E-04	1	2.2102E-05	1	1.1953E-05
EG12885	gspF	0	1.80E-06	0	1.64E-06	1	3.8073E-05	1	2.3437E-05
EG12886	gspG	1	4.67E-04	1	5.92E-04	1	0.00032554	1	0.00035829
EG12887	gspH	1	8.68E-06	1	9.12E-06	1	9.3915E-05	1	0.00015715
EG12892	gspI	1	4.47E-05	1	7.24E-05	1	0.00016031	1	0.00019833
EG12893	gspJ	1	4.28E-05	1	3.12E-05	1	0.00030327	1	0.0004099
EG12894	gspK	1	9.79E-05	1	1.51E-04	1	0.00010504	1	0.00017075
EG12895	gspL	1	3.27E-04	1	3.73E-04	1	7.3082E-05	1	6.4226E-05
EG12173	gspM	0	-2.85E-07	0	-1.82E-07	1	2.1908E-05	1	5.4588E-05

EG11359	gspO	1	2.54E-05	1	1.53E-04	1	0.00025438	1	7.4457E-05
EG12613	gst	1	5.58E-04	1	4.99E-04	1	0.00015305	1	0.00019956
EG10420	guaA	1	5.04E-04	1	3.77E-04	1	0.00028139	1	0.00032041
EG10421	guaB	1	1.51E-03	1	1.47E-03	1	0.00025467	1	0.00033913
EG10422	guaC	1	1.73E-04	1	2.44E-04	1	0.0001096	1	0.0001041
EG13066	guaD	1	1.18E-05	1	1.76E-05	1	1.0033E-05	0	1.5633E-06
EG13167	gudD	1	1.58E-05	1	2.38E-05	1	7.3974E-05	1	0.00011557
EG13169	gudP	1	1.41E-05	1	2.44E-05	1	0.00041571	1	0.0009431
EG13168	gudX	1	8.78E-06	1	1.06E-05	1	0.00055743	1	0.00061384
EG10972	gutM	1	6.97E-05	1	1.27E-04	1	0.00016117	1	0.00023864
EG10973	gutQ	1	9.02E-06	1	5.81E-06	1	1.992E-05	1	5.2478E-05
EG10423	gyrA	1	1.44E-05	1	1.16E-05	1	3.7251E-05	1	3.8235E-05
EG10424	gyrB	1	2.63E-04	1	1.21E-04	1	0.00019449	1	0.00011741
EG13459	hcaB	1	1.09E-04	1	1.10E-04	1	5.0458E-05	1	6.1602E-05
EG13458	hcaC	1	2.30E-05	1	1.32E-05	1	0.00035269	1	0.00018188
EG13460	hcaD	1	8.12E-06	1	9.61E-06	1	7.9971E-06	1	4.7214E-06
EG13456	hcaE	1	4.21E-04	1	4.01E-04	1	6.7191E-05	1	0.00013094
EG13457	hcaF	1	2.19E-04	1	1.92E-04	1	0.00046955	1	0.0006221
EG13455	hcaR	1	1.47E-05	1	1.64E-05	1	0.00027814	1	0.00056996
EG13454	hcaT	1	2.16E-04	1	1.55E-04	1	0.0005577	1	0.00071221
EG11755	hchA	1	1.58E-04	1	1.28E-04	1	0.00026791	1	0.00013178
EG13692	hcp	1	3.30E-04	1	3.94E-04	1	0.00028575	1	5.0746E-05
EG13691	hcr	1	2.60E-05	1	1.52E-05	1	7.6195E-05	1	0.00042816
EG14201	hda	1	1.87E-04	1	3.70E-04	1	0.00043723	1	0.00047617
EG11398	hdeA	1	2.79E-04	1	5.53E-04	1	0.00022086	1	4.2712E-05
EG11399	hdeB	1	1.39E-04	1	2.82E-04	1	0.00065744	1	0.00082667
EG11495	hdeD	1	5.21E-05	1	5.47E-05	1	0.00017686	1	5.9987E-05
EG11449	hdfR	1	1.28E-04	1	8.46E-05	1	0.00012692	1	0.00016807
EG10425	hdhA	1	3.33E-04	1	2.07E-04	1	0.00036484	1	0.00086115
EG10426	helD	1	4.14E-05	1	3.58E-05	1	5.3211E-05	1	0.00014596
EG10427	hemA	1	2.97E-04	1	3.19E-04	1	0.000452	1	0.00043777
EG10428	hemB	1	1.45E-04	1	2.67E-04	1	0.00022546	1	0.00013933
EG10429	hemC	1	7.26E-04	1	6.97E-04	1	8.1053E-05	1	7.3559E-05
EG10430	hemD	1	2.03E-05	1	2.58E-05	1	0.00032447	1	0.0003868
EG11543	hemE	1	3.97E-05	1	2.80E-05	1	0.00035402	1	4.4049E-05
EG12189	hemF	1	8.50E-04	1	8.08E-04	1	0.00022503	1	0.00042854
EG11485	hemG	1	9.66E-05	1	6.14E-05	1	0.00029682	1	9.1968E-05
EG10431	hemH	1	8.66E-05	1	2.28E-04	1	9.2736E-05	1	0.00013248
EG10432	hemL	1	1.16E-03	1	9.87E-04	1	0.00113111	1	0.00109617
EG11836	hemN	0	1.48E-06	0	6.16E-07	1	7.1233E-05	1	8.9411E-05
EG10433	hemX	1	3.28E-05	1	1.77E-05	1	0.00016939	1	0.00018454
EG10434	hemY	1	1.74E-04	1	2.09E-04	1	9.1589E-05	1	9.6333E-05
EG11083	hepA	1	3.82E-04	1	3.43E-04	1	7.7451E-05	1	0.00013696
EG11506	hflB	1	1.95E-04	1	2.11E-04	1	0.00059636	1	7.0938E-05
EG10435	hflC	1	4.68E-04	1	4.27E-04	1	0.00029297	1	0.00070037
EG11345	hflD	1	9.62E-05	1	2.04E-04	1	0.00060166	1	0.00067532
EG10436	hflK	0	9.60E-08	0	-4.33E-07	1	1.0051E-05	1	7.7839E-06
EG10437	hflX	1	1.64E-04	1	3.31E-04	1	0.00042376	1	0.00049028
EG10438	hfq	1	1.68E-04	1	2.20E-04	1	0.0001049	1	0.00025896
EG10439	hha	1	5.31E-05	1	1.13E-04	1	0.00011554	1	0.00015171
EG12172	hinT	1	7.11E-05	1	8.16E-05	1	9.5773E-05	1	9.7054E-05
EG10443	hipA	1	5.72E-05	1	9.24E-05	1	0.0002983	1	0.00036364
EG10442	hipB	1	8.56E-05	1	1.50E-04	1	0.00018552	1	4.1098E-05
EG10444	hisA	1	1.08E-04	1	1.84E-04	1	2.7725E-05	1	1.2367E-05
EG10445	hisB	1	3.94E-05	1	2.94E-05	1	0.0013623	1	0.00106355
EG10446	hisC	1	7.35E-04	1	5.75E-04	1	0.00018649	1	0.0001453
EG10447	hisD	1	5.01E-04	1	5.17E-04	1	4.6593E-05	1	6.6617E-05
EG10448	hisF	1	1.94E-05	1	2.24E-05	1	0.00012464	1	4.5566E-05
EG10449	hisG	1	1.75E-05	1	3.19E-05	1	0.00015924	1	0.00014261
EG10450	hisH	1	4.27E-05	1	3.93E-05	1	3.2409E-05	1	1.9079E-05
EG10451	hisI	1	1.30E-05	1	1.15E-05	1	2.9799E-05	1	1.963E-05
EG12124	hisJ	1	1.49E-04	1	1.44E-04	1	0.00036239	1	0.00024525
EG11269	hisL	1	3.03E-04	1	1.44E-04	1	7.7174E-05	1	5.8652E-05
EG10007	hisM	1	2.61E-05	1	1.75E-05	1	0.00014572	1	8.6702E-05
EG10452	hisP	1	6.53E-04	1	4.07E-04	1	0.00012488	1	0.00030465
EG12125	hisQ	1	2.16E-05	1	1.24E-05	1	3.5617E-05	1	2.0155E-05
EG10453	hisS	1	5.27E-04	1	7.12E-04	1	0.00040323	1	0.00020618
EG13243	hlyE	1	1.63E-04	1	2.72E-04	1	8.6999E-05	1	3.0659E-05
EG10456	hmp	1	6.68E-05	1	2.01E-04	1	0.00014575	1	0.00020057
EG10457	hns	1	1.32E-04	1	1.84E-04	1	0.00036494	1	0.00033071
EG12106	hofB	1	3.58E-04	1	2.37E-04	1	3.1059E-05	1	5.9536E-05

EG11798	hofC	0	9.76E-07	0	1.75E-07	1	7.4074E-06	0	2.4548E-06
EG12925	hofM	1	1.43E-04	1	8.37E-05	1	0.00057032	1	0.00022039
EG12924	hofN	1	6.17E-05	1	6.60E-05	1	0.00010137	1	3.0509E-05
EG12923	hofO	1	1.82E-04	1	1.65E-04	1	0.00010487	1	0.00032105
EG12922	hofP	1	4.48E-05	1	4.47E-05	1	5.5241E-05	1	0.00014579
EG12113	hofQ	1	9.36E-06	1	7.35E-06	1	0.00019563	1	0.00011179
EG12346	hokA	1	1.25E-03	1	7.23E-04	1	0.00038752	1	0.00028742
EG11240	hokB	1	4.02E-04	1	3.07E-04	1	0.00010838	1	8.9364E-05
EG10373	hokC	1	2.20E-04	1	1.65E-04	1	0.00042233	1	0.0005767
EG11130	hokD	1	1.50E-04	1	1.12E-04	0	-1.867E-07	0	-1.054E-07
EG14302	hokE	1	1.82E-04	1	2.73E-04	1	0.00019958	1	0.00014324
EG11412	holA	1	2.51E-05	1	4.78E-05	1	6.4622E-05	1	0.00010975
EG11500	holB	1	2.43E-05	1	2.38E-05	1	0.0001968	1	3.6037E-05
EG11413	holC	1	8.49E-05	1	6.79E-05	1	0.00030308	1	0.00028633
EG11414	holD	1	4.47E-05	1	7.63E-05	1	0.00042032	1	8.8389E-05
EG11505	holE	1	9.93E-06	1	2.61E-05	1	0.00013811	1	0.00017501
EG11681	hpf	1	3.01E-04	1	2.36E-04	1	1.1544E-05	1	6.0078E-06
EG20098	hpt	1	3.62E-04	1	7.27E-04	1	0.00030392	1	0.00029308
EG12936	hrpA	1	3.01E-04	1	5.38E-04	1	0.00039703	1	0.00048045
EG12329	hrpB	1	2.60E-04	1	4.91E-04	1	7.9449E-05	1	0.00011249
EG12130	hscA	1	6.31E-04	1	6.84E-04	1	0.00196715	1	0.00196946
EG12131	hscB	1	2.30E-04	1	3.93E-04	1	0.00059231	1	0.00115271
EG13653	hscC	1	1.55E-04	1	1.89E-04	1	0.00014947	1	0.00013678
EG10458	hsdM	1	1.86E-05	1	7.15E-06	0	8.8823E-07	0	2.2048E-06
EG10459	hsdR	1	3.85E-05	1	4.20E-05	1	8.902E-05	1	9.8437E-05
EG10460	hsdS	0	9.60E-08	0	1.67E-07	1	2.6964E-06	0	4.2501E-06
EG13181	hslJ	1	1.07E-04	1	6.49E-05	1	0.0002423	1	0.00031352
EG12930	hslO	1	1.58E-04	1	2.94E-04	1	0.00024087	1	0.00025666
EG12929	hslR	1	3.17E-05	1	1.68E-05	1	3.1876E-05	1	5.2667E-05
EG11881	hslU	1	7.08E-04	1	7.27E-04	1	8.0415E-05	1	0.00012214
EG11676	hslV	1	3.15E-05	1	2.94E-05	1	6.3123E-05	1	9.6628E-05
EG13724	hspQ	1	1.81E-04	1	1.34E-04	1	8.1309E-05	1	2.7255E-05
EG11732	hsrA	1	2.22E-05	1	3.03E-05	1	2.9354E-05	1	2.0437E-05
EG10461	htpG	1	5.76E-04	1	8.77E-04	1	0.00053366	1	0.00058547
EG10462	htpX	1	6.94E-04	1	6.45E-04	1	0.00061637	1	0.00031603
EG11972	htrE	1	3.61E-05	1	2.21E-05	1	0.0002728	1	0.00028818
EG12434	htrG	1	6.80E-04	1	8.92E-04	1	0.00031968	1	9.1345E-05
EG11188	htrL	1	1.43E-04	1	2.15E-04	1	9.0421E-05	1	6.2773E-05
EG10466	hupA	1	2.54E-04	1	2.05E-04	1	0.00096373	1	0.0010352
EG10467	hupB	1	9.35E-05	1	8.10E-05	1	0.00017162	1	0.00012846
EG10468	hyaA	1	1.51E-05	1	1.87E-05	1	6.6324E-05	1	7.2724E-05
EG10469	hyaB	1	7.27E-05	1	7.59E-05	1	1.1599E-05	1	2.3326E-05
EG10470	hyaC	1	2.61E-04	1	3.31E-04	1	8.5071E-05	1	0.00017396
EG10471	hyaD	1	5.19E-06	0	4.05E-06	1	2.6885E-05	1	2.5228E-05
EG10472	hyaE	1	6.81E-06	1	1.30E-05	1	7.4397E-05	1	0.00015545
EG10473	hyaF	1	3.48E-05	1	1.03E-04	1	0.00023964	1	0.00040651
EG11799	hybA	1	1.52E-04	1	2.70E-04	1	0.00013365	1	0.0001895
EG11800	hybB	1	1.78E-04	1	1.05E-04	1	5.3529E-05	1	2.1084E-05
EG11801	hybC	1	6.73E-04	1	5.35E-04	1	0.00053353	1	0.00027616
EG11802	hybD	1	1.32E-04	1	2.02E-04	1	0.00106553	1	0.00040426
EG11803	hybE	1	8.58E-06	1	6.54E-06	1	4.5626E-05	1	5.1735E-05
EG11804	hybF	1	1.31E-05	1	1.18E-05	1	8.1539E-05	1	6.2963E-05
EG11805	hybG	1	1.59E-05	1	7.95E-06	1	0.00025303	1	9.6873E-05
EG13006	hybO	1	5.93E-04	1	4.97E-04	1	5.3438E-05	1	5.4371E-05
EG10474	hycA	1	3.82E-04	1	4.42E-04	1	0.00027249	1	0.00022031
EG10475	hycB	1	6.38E-04	1	6.18E-04	1	0.00070004	1	0.00065487
EG10476	hycC	1	5.92E-05	1	7.74E-05	1	2.8789E-05	1	1.4887E-05
EG10477	hycD	1	7.93E-05	1	1.05E-04	1	4.388E-05	1	8.3481E-05
EG10478	hycE	1	3.21E-04	1	2.86E-04	1	0.00106308	1	0.00168944
EG10479	hycF	1	8.33E-05	1	7.24E-05	1	0.00035418	1	0.00019137
EG10480	hycG	1	4.85E-05	1	4.67E-05	1	0.00022499	1	0.00019621
EG10481	hycH	1	1.91E-04	1	4.68E-04	1	3.7841E-05	1	1.5054E-05
EG13396	hycI	1	1.43E-04	1	8.56E-05	1	2.2725E-05	1	1.5407E-05
EG11552	hydN	1	4.11E-04	1	3.37E-04	1	0.00028651	1	0.00039054
EG11150	hyfA	1	1.02E-04	1	6.99E-05	1	9.4613E-05	1	0.00042963
EG11282	hyfB	1	4.64E-05	1	5.75E-05	1	0.00017823	1	0.00014557
EG14211	hyfC	1	3.83E-04	1	2.35E-04	1	0.00024029	1	0.00010162
EG14212	hyfD	1	4.64E-05	1	3.60E-05	1	3.4082E-06	1	9.999E-06
EG14213	hyfE	1	7.01E-05	1	3.26E-05	1	5.3166E-05	1	0.00013763
EG14214	hyfF	1	1.04E-04	1	5.90E-05	1	0.00023147	1	0.00089062
EG14215	hyfG	1	2.53E-04	1	1.27E-04	1	0.00054924	1	0.00046397

EG14216	hyfH	1	2.33E-04	1	3.09E-04	1	0.00036747	1	0.00024819
EG14217	hyfI	1	1.33E-04	1	1.44E-04	1	7.3206E-05	1	9.6595E-05
EG14218	hyfJ	1	6.71E-06	1	8.19E-06	1	0.00011665	1	0.00061125
EG14219	hyfR	1	4.91E-05	1	4.73E-05	1	0.00049191	1	0.00038812
EG11584	hyi	1	2.89E-04	1	1.54E-04	1	0.0005526	1	0.00068833
EG10483	hypA	1	9.26E-05	1	1.13E-04	1	0.00017868	1	9.2624E-05
EG10484	hypB	1	5.56E-06	0	4.47E-06	1	0.00026695	1	0.00013432
EG10485	hypC	1	2.19E-06	0	2.10E-06	1	4.0838E-05	1	3.8383E-05
EG10486	hypD	1	1.08E-04	1	9.31E-05	1	0.00010836	1	8.5092E-05
EG10487	hypE	1	1.57E-05	1	5.44E-06	1	0.00027013	1	0.00018372
EG11551	hypF	1	7.54E-06	1	9.64E-06	1	6.6276E-05	1	3.1227E-05
EG13056	hyuA	1	3.60E-04	1	2.14E-04	1	0.0001311	1	8.5586E-05
EG12407	iaaA	1	2.65E-05	1	1.74E-05	1	0.0004058	1	0.0001261
EG12567	iadA	1	9.90E-05	1	2.34E-04	1	1.7783E-05	1	8.3089E-06
EG10488	iap	1	4.11E-04	1	5.50E-04	1	8.8257E-05	1	1.3027E-05
EG11534	ibpA	1	5.37E-04	1	6.90E-04	1	0.0001308	1	0.00051525
EG11535	ibpB	1	7.15E-04	1	5.76E-04	1	0.00026791	1	4.7247E-05
EG10489	icd	1	1.39E-05	1	8.83E-06	1	0.00013129	1	0.00023997
EG10491	iclR	1	1.41E-04	1	1.41E-04	1	0.00032088	1	0.00043888
EG13072	idi	1	3.60E-04	1	2.98E-04	1	0.00015051	1	4.468E-05
EG12541	idnD	1	5.39E-05	1	8.20E-05	1	0.00012276	1	0.00015851
EG12152	idnK	1	4.46E-06	0	2.95E-06	1	2.6388E-05	1	4.5494E-05
EG12540	idnO	1	6.36E-04	1	3.94E-04	1	0.00011312	1	8.5463E-05
EG12538	idnR	1	4.74E-05	1	3.43E-05	1	0.00016707	1	4.8102E-05
EG12539	idnT	1	1.43E-04	1	4.74E-05	1	0.00022106	1	0.0004114
EG10440	ihfA	1	2.42E-06	0	1.69E-06	1	0.00035541	1	5.1308E-05
EG10441	ihfB	1	4.09E-04	1	7.33E-04	1	0.00036872	1	0.00062696
EG10492	ileS	1	1.51E-04	1	2.74E-04	1	0.00057666	1	0.00108216
EG10493	ilvA	1	2.71E-06	0	3.11E-06	1	1.392E-05	1	5.4064E-05
EG10494	ilvB	0	1.32E-06	0	4.28E-07	1	0.00020718	1	0.00025004
EG10495	ilvC	1	1.94E-04	1	1.11E-04	1	0.00018882	1	0.0001625
EG10496	ilvD	1	2.00E-05	1	5.50E-05	1	1.4458E-05	1	5.137E-06
EG10497	ilvE	1	1.91E-04	1	1.56E-04	1	8.7287E-05	1	4.5542E-05
EG10499	ilvH	1	1.04E-05	1	5.26E-06	1	0.00016137	1	0.00019711
EG10500	ilvI	1	1.71E-05	1	1.89E-05	1	7.0154E-06	1	5.7641E-06
EG11270	ilvL	1	1.42E-05	1	7.06E-06	1	0.00015682	1	2.1675E-05
EG10501	ilvM	1	5.94E-04	1	4.51E-04	1	0.0001975	1	0.00042015
EG10502	ilvN	1	3.31E-05	1	6.27E-05	1	0.00025721	1	0.00015129
EG10503	ilvY	1	5.60E-04	1	5.90E-04	1	0.00035053	1	0.00036482
EG11569	imp	1	9.26E-05	1	1.18E-04	1	5.2237E-05	1	8.1869E-05
EG11422	inaA	1	9.69E-05	1	8.39E-05	1	8.8205E-05	1	8.7793E-05
EG10504	infA	1	1.14E-04	1	6.15E-05	1	0.00036411	1	0.00013308
EG10505	infB	1	2.83E-05	1	3.96E-05	1	0.0004095	1	0.00116908
EG10506	infC	1	3.39E-05	1	4.92E-05	1	4.5736E-05	1	4.7991E-05
EG11783	intA	1	3.41E-05	1	6.96E-05	1	8.9126E-05	1	5.8705E-05
EG10507	intD	1	3.61E-04	1	3.97E-04	1	0.00014964	1	0.00063928
EG12370	intE	1	5.15E-05	1	1.10E-04	1	0.00014696	1	6.2963E-05
EG13554	intF	1	2.61E-04	1	1.82E-04	1	3.7841E-05	1	5.5043E-06
EG13358	intR	1	4.50E-04	1	3.27E-04	1	2.8045E-05	1	1.0678E-05
EG12413	intS	1	4.16E-04	1	3.62E-04	1	5.9638E-05	1	5.9961E-05
EG14172	intZ	1	7.78E-06	1	7.57E-06	1	0.00011145	1	0.0001118
EG11256	iraP	1	2.02E-04	1	1.98E-04	1	0.00026765	1	0.00018607
EG12132	iscA	1	5.97E-05	1	3.64E-05	1	7.4746E-05	1	4.2995E-05
EG13397	iscR	1	3.00E-05	1	1.86E-05	1	5.5104E-05	1	6.379E-05
EG12677	iscS	1	3.67E-04	1	2.74E-04	1	0.00016629	1	0.00016803
EG13395	iscU	1	1.92E-04	1	9.29E-05	1	0.00016101	1	0.00013267
EG12311	iscX	1	4.47E-05	1	3.57E-05	1	0.00022621	1	0.00012183
EG10508	ispA	1	2.51E-04	1	2.02E-04	1	0.00011641	1	5.1948E-05
EG10017	ispB	1	1.91E-04	1	2.07E-04	1	0.00062016	1	0.00067609
EG13110	ispD	1	3.97E-05	1	4.80E-05	1	0.00024038	1	0.00021044
EG11294	ispE	1	5.59E-05	1	2.94E-05	1	0.00040134	1	0.00036509
EG11816	ispF	1	8.94E-06	1	8.13E-05	1	7.0106E-05	1	9.3042E-05
EG10370	ispG	1	1.56E-04	1	3.63E-04	1	0.00018239	1	0.00048645
EG11081	ispH	1	1.53E-05	1	1.28E-05	1	9.7155E-05	1	9.7152E-05
EG13329	ispU	1	4.31E-05	1	4.57E-05	1	0.00016235	1	0.00021637
EG11275	ivbL	1	5.77E-05	1	1.46E-04	1	0.00069549	1	0.00028253
EG13547	ivy	0	4.59E-07	0	9.11E-07	1	4.2127E-05	1	2.6603E-05
EG10509	katE	1	1.46E-05	1	7.41E-06	1	0.00037532	1	0.00077739
EG10511	katG	1	2.03E-04	1	1.20E-04	1	6.2957E-05	1	0.00011901
EG12768	kbaY	1	4.02E-05	1	2.43E-05	1	0.00018998	1	0.00022911
EG12763	kbaZ	1	1.42E-04	1	1.02E-04	1	6.534E-05	1	5.4435E-05

EG10512	kbl	1	5.28E-05	1	2.88E-05	1	7.846E-05	1	2.4516E-05
EG11606	kch	1	9.27E-05	1	5.65E-05	1	0.00047455	1	0.00010789
EG12253	kdgK	1	1.89E-04	1	2.45E-04	1	0.00015931	1	0.00035413
EG14018	kdgR	1	8.68E-05	1	1.21E-04	1	2.3487E-05	1	2.3336E-05
EG11869	kdgT	1	8.10E-06	0	3.99E-06	1	4.9407E-05	1	2.0985E-05
EG10513	kdpA	1	7.80E-06	1	1.11E-05	1	0.00040636	1	0.00075695
EG10514	kdpB	1	5.32E-05	1	2.82E-05	1	6.3289E-05	1	7.1964E-05
EG10515	kdpC	1	7.01E-05	1	6.26E-05	1	0.00031188	1	0.00043599
EG10516	kdpD	1	7.19E-06	0	3.76E-06	1	9.8708E-05	1	0.00012056
EG10517	kdpE	1	4.14E-04	1	3.31E-04	1	0.00013377	1	0.00022422
EG12126	kdpF	1	2.29E-05	1	1.52E-05	1	0.00010093	1	6.7589E-05
EG10518	kdsA	1	2.29E-04	1	2.27E-04	1	0.00015061	1	0.0002035
EG10519	kdsB	1	2.93E-05	1	3.70E-05	1	0.00013717	1	0.00010459
EG12804	kdsC	1	5.72E-06	1	3.10E-05	1	0.00013349	1	0.00012594
EG12803	kdsD	1	3.83E-05	1	2.46E-05	1	0.00022867	1	0.00030036
EG12361	kduD	1	8.33E-05	1	8.49E-05	1	0.00015217	1	0.00010865
EG13096	kduI	1	2.21E-04	1	1.21E-04	1	0.00013107	1	0.00086711
EG14240	kefA	1	1.36E-04	1	6.13E-04	1	0.00039709	1	0.00035369
EG20110	kefB	0	1.40E-06	0	9.35E-07	1	1.0395E-05	1	1.9756E-05
EG10521	kefC	0	1.62E-06	0	1.90E-06	1	0.00017335	1	0.00028579
EG11568	kefF	1	5.40E-04	1	4.60E-04	1	6.5508E-05	1	0.00017997
EG12902	kefG	1	1.16E-04	1	1.24E-04	1	0.00016091	1	0.00011068
EG10522	kgtP	1	2.58E-05	1	1.74E-05	1	0.0002344	1	0.00025262
EG12155	kilR	1	1.06E-03	1	1.34E-03	1	0.00040653	1	0.00053369
EG12570	kptA	1	2.24E-04	1	1.24E-04	1	8.9152E-05	1	1.7236E-05
EG10523	ksgA	1	2.77E-04	1	2.47E-04	1	0.00042055	1	0.0007311
EG11541	kup	1	2.05E-04	1	1.82E-04	1	7.9957E-05	1	5.6639E-05
EG10524	lacA	1	1.93E-04	1	3.71E-04	1	0.0008298	1	0.00094099
EG10525	lacI	1	2.17E-06	0	1.86E-06	1	9.6423E-05	1	9.0392E-05
EG10526	lacY	1	6.48E-04	1	5.16E-04	1	0.00178552	1	0.00176331
EG10527	lacZ	1	1.18E-04	1	1.76E-04		0		
EG10528	lamB	1	1.05E-04	1	7.71E-05	1	0.00021996	1	0.00021511
EG11900	lar	1	6.97E-04	1	5.56E-04	1	0.0002112	1	0.00029758
EG13898	ldcA	1	2.97E-04	1	3.39E-04	1	0.00032705	1	0.00021222
EG13219	ldcC	1	9.95E-05	1	8.77E-05	1	0.00011653	1	3.7397E-05
EG13186	ldhA	1	1.63E-05	1	3.21E-05	1	0.00014099	1	6.5871E-05
EG14403	ldrA	1	1.93E-04	1	3.30E-04	1	0.0005138	1	0.00057775
EG14404	ldrB	1	3.34E-04	1	1.79E-04	1	0.00051367	1	0.00079569
EG14405	ldrC	1	1.58E-04	1	2.54E-04	1	0.00039478	1	0.00053706
EG14406	ldrD	1	5.80E-05	1	7.15E-05	1	8.8205E-05	1	5.8481E-05
EG10529	lepA	1	3.38E-04	1	3.85E-04	1	6.5534E-06	1	1.1541E-05
EG10530	lepB	1	4.52E-05	1	3.77E-05	1	9.6396E-05	1	6.0839E-05
EG11226	leuA	1	2.16E-04	1	2.37E-04	1	6.2791E-05	1	1.9543E-05
EG11577	leuB	1	7.78E-06	1	5.34E-06	1	6.8742E-05	1	6.9255E-05
EG11576	leuC	1	1.08E-04	1	1.19E-04	1	0.00025131	1	0.00027101
EG11575	leuD	1	8.28E-06	0	3.77E-06	1	0.0001486	1	0.00027119
EG13505	leuE	1	5.59E-05	1	8.97E-05	1	0.00025603	1	0.00035602
EG11280	leuL	1	1.89E-04	1	2.44E-04	1	0.00085346	1	0.00039485
EG10531	leuO	1	6.70E-05	1	5.09E-05	1	0.00032754	1	4.7833E-05
EG10532	leuS	1	9.88E-05	1	2.59E-04	1	0.00019596	1	0.00016289
EG10533	lexA	1	6.09E-05	1	1.39E-04	1	0.00012348	1	8.9727E-05
EG12128	lgt	1	3.70E-04	1	7.55E-04	1	0.0016042	1	0.00131143
EG11548	lhr	1	9.16E-05	1	2.16E-04	1	0.00013574	1	0.0001437
EG10534	ligA	1	2.49E-05	1	2.48E-05	1	0.00013683	1	2.8561E-05
EG11334	ligB	1	1.82E-04	1	1.69E-04	1	0.00016714	1	9.0265E-05
EG12330	ligT	1	1.21E-03	1	8.85E-04	1	0.00037262	1	0.00038479
EG11306	lipA	1	8.60E-04	1	9.04E-04	1	0.00186563	1	0.00150915
EG11591	lipB	1	2.12E-04	1	6.12E-04	1	0.0002813	1	0.00010016
EG10535	lit	1	5.42E-04	1	3.81E-04	1	0.00056311	1	0.00022638
EG10536	livF	1	6.97E-04	1	6.19E-04	1	0.00021724	1	6.0293E-05
EG10537	livG	1	4.64E-05	1	4.03E-05	1	1.6724E-05	1	9.3245E-06
EG10538	livH	1	1.02E-04	1	2.18E-04	1	0.00017228	1	0.00021661
EG10539	livJ	1	8.94E-06	1	5.13E-06	1	6.8377E-05	1	2.0917E-05
EG10540	livK	1	1.93E-05	1	3.62E-05	1	0.00031094	1	0.00024041
EG10541	livM	1	1.11E-04	1	1.18E-04	1	0.0001092	1	0.00011786
EG11963	lldD	1	1.40E-04	1	1.48E-04	1	0.00044419	1	0.00069713
EG11961	lldP	1	1.33E-04	1	2.10E-04	1	6.5534E-06	1	2.0897E-05
EG11962	lldR	1	7.64E-06	1	1.76E-05	1	0.00063967	1	0.00078623
EG10168	lnt	1	2.24E-04	1	1.29E-04	1	2.0709E-05	1	2.8005E-05
EG12684	lolA	1	2.67E-04	1	2.11E-04	1	7.8612E-05	1	5.446E-05
EG11293	lolB	1	7.98E-04	1	8.07E-04	1	0.00055729	1	0.00030023

EG13439	lolC	1	1.01E-03	1	7.67E-04	1	0.00134946	1	0.00106088
EG13440	lolD	1	2.38E-06	0	1.29E-06	1	0.00022102	1	0.00038506
EG13441	lolE	1	5.31E-06	1	5.90E-06	1	0.00015083	1	0.00010152
EG10542	lon	1	5.88E-04	1	6.10E-04	1	0.00042762	1	0.00086391
EG13146	lpcA	1	2.66E-04	1	2.40E-04	1	8.3235E-05	1	9.6219E-05
EG10543	lpd	0	1.90E-06	1	4.95E-06	1	6.3099E-05	1	3.6272E-05
EG11796	lplA	1	6.11E-04	1	4.43E-04	1	0.00031412	1	0.00053627
EG12455	lplT	1	3.49E-05	1	4.90E-05	1	0.00017467	1	8.0332E-05
EG10544	lpp	1	6.11E-05	1	6.62E-05	1	0.00015567	1	0.00017667
EG12618	lptA	1	2.36E-04	1	2.49E-04	1	0.00066603	1	0.00104529
EG11680	lptB	1	4.78E-05	1	7.11E-05	1	0.0003324	1	0.00011033
EG10545	lpxA	1	2.98E-04	1	4.15E-04	1	0.00015305	1	0.00026066
EG10546	lpxB	1	1.12E-04	1	8.32E-05	1	0.00010579	1	0.00016894
EG10265	lpxC	1	4.45E-05	1	2.71E-05	1	0.0004058	1	0.00028448
EG10316	lpxD	1	6.00E-04	1	7.55E-04	1	0.00024095	1	0.00011662
EG12666	lpxH	1	3.03E-04	1	3.52E-04	1	0.00013309	1	3.6642E-05
EG11409	lpxK	1	7.31E-04	1	4.08E-04	1	0.00020428	1	0.00019983
EG10464	lpxL	1	1.02E-04	1	2.57E-04	1	0.00032204	1	0.00018007
EG10614	lpxM	1	4.37E-04	1	6.63E-04	1	0.00080691	1	0.00116525
EG12901	lpxP	1	1.06E-03	1	6.12E-04	1	7.2267E-05	1	0.00038294
EG14075	lpxT	1	2.28E-04	1	1.33E-04	1	0.00019234	1	0.00014306
EG12123	lrhA	1	6.23E-04	1	4.43E-04	1	6.4885E-05	1	6.1615E-05
EG10547	lrp	1	7.21E-06	1	1.16E-05	1	4.7497E-05	1	4.0172E-05
EG10548	lspA	1	2.44E-04	1	2.30E-04	1	0.00010787	1	0.00013029
EG13806	lsrA	1	4.42E-04	1	4.30E-04	1	0.00016027	1	0.00016479
EG13809	lsrB	1	7.82E-05	1	1.46E-04	1	0.00020304	1	0.0002747
EG13807	lsrC	1	7.63E-05	1	8.44E-05	1	0.00018118	1	0.00014563
EG13808	lsrD	1	1.55E-04	1	2.67E-04	1	0.00041594	1	0.00016992
EG13810	lsrF	1	5.44E-04	1	5.17E-04	1	0.00032021	1	0.00054767
EG13811	lsrG	1	3.95E-04	1	2.82E-04	1	0.00023993	1	0.00022598
EG13804	lsrK	1	4.76E-05	1	5.22E-05	1	0.00027881	1	0.00030921
EG13805	lsrR	1	9.73E-05	1	6.00E-05	1	0.00015406	1	6.1146E-05
EG13690	ltaE	1	3.61E-05	1	5.23E-05	1	0.00052486	1	0.00019291
EG12712	luxS	1	6.19E-05	1	6.39E-05	1	5.4463E-05	1	3.2871E-05
EG10549	lysA	1	1.70E-04	1	2.38E-04	1	0.00023752	1	6.1669E-05
EG10550	lysC	1	2.47E-04	1	5.49E-04	1	0.00014093	1	0.0002675
EG11337	lysP	1	6.52E-05	1	1.01E-04	1	0.00100157	1	0.00076304
EG10551	lysR	1	2.92E-05	1	6.04E-05	1	0.00012282	1	0.00025539
EG10552	lysS	1	7.16E-05	1	5.12E-05	1	2.7325E-05	0	2.4548E-06
EG10553	lysU	1	2.41E-04	1	2.65E-04	1	6.5534E-06	0	2.8189E-06
EG12284	lyx	0	7.27E-07	0	5.50E-07	1	1.6875E-05	1	1.2367E-05
EG14239	maa	1	1.31E-05	1	1.29E-05	1	0.00026277	1	0.00027464
EG13694	macA	1	1.26E-04	1	8.50E-05	1	0.0009265	1	0.00070369
EG13695	macB	1	7.90E-05	1	4.99E-05	1	4.7696E-05	1	4.964E-05
EG10948	maeA	1	2.63E-05	1	3.01E-05	1	0.0001454	1	2.5493E-05
EG14193	maeB	1	3.75E-04	1	6.72E-04	1	0.00012306	1	0.00020972
EG11288	mak	1	2.14E-04	1	3.50E-04	1	0.00044141	1	0.00030694
EG10554	malE	1	2.12E-04	1	1.67E-04	1	0.00029319	1	0.00058266
EG10555	malF	1	1.82E-05	1	1.16E-05	1	6.4813E-05	1	4.6834E-05
EG10556	malG	1	1.22E-04	1	9.65E-05	1	0.0003271	1	0.0001963
EG10557	malI	1	2.93E-04	1	3.04E-04	1	0.00012599	1	0.00016142
EG10558	malK	1	1.43E-05	1	6.85E-06	1	8.1744E-05	1	5.0447E-05
EG10559	malM	1	1.83E-04	1	5.55E-04	1	6.1609E-05	1	5.4537E-05
EG10560	malP	1	5.92E-04	1	4.57E-04	1	0.00010373	1	0.00014021
EG10561	malQ	0	9.95E-07	0	2.59E-06	1	8.6372E-05	1	0.00010732
EG11316	malS	1	4.20E-05	1	5.92E-05	1	0.00018498	1	0.00012753
EG10562	malT	1	1.17E-03	1	8.96E-04	1	0.00020862	1	0.00030589
EG10563	malX	1	2.32E-05	1	4.45E-05	1	0.00018122	1	0.00053661
EG10564	malY	1	1.86E-04	1	1.96E-04	1	2.6666E-05	1	4.9872E-06
EG10565	malZ	1	1.55E-04	1	9.53E-05	1	5.8805E-06	1	5.1453E-06
EG10566	manA	1	5.65E-04	1	3.69E-04	1	0.00040793	1	0.00044569
EG10567	manX	1	1.78E-04	1	1.75E-04	1	0.00020983	1	0.00011322
EG10568	manY	1	9.18E-05	1	1.73E-04	0	2.9015E-07	0	3.1844E-07
EG10569	manZ	1	5.84E-05	1	6.19E-05	1	4.0239E-05	1	2.2477E-05
EG13735	maoC	1	2.93E-04	1	2.38E-04	1	0.0002923	1	0.00026577
EG10570	map	1	1.39E-04	1	2.05E-04	1	0.00017693	1	0.00036075
EG11434	marA	1	5.68E-04	1	4.01E-04	1	0.00013745	1	6.7019E-05
EG11599	marB	1	1.22E-04	1	2.13E-04	1	6.6035E-05	1	0.00016166
EG11637	marC	1	1.80E-04	1	2.76E-04	1	0.0002724	1	0.00016222
EG11435	marR	1	2.40E-04	1	5.12E-04	1	0.00033855	1	0.00031419
EG14324	matA	1	5.22E-05	1	3.76E-05	1	6.896E-05	1	0.00018621

EG13565	matB	1	2.09E-05	1	2.28E-05	1	0.00013426	1	0.00015104
EG13564	matC	1	1.37E-04	1	1.45E-04	1	0.00060524	1	0.00038941
EG10572	mazG	1	2.01E-04	1	2.49E-04	1	0.00019329	1	0.00025041
EG13318	mcbA	1	1.04E-03	1	9.44E-04	1	0.00013294	1	0.00012973
EG13773	mcbR	1	4.59E-05	1	1.95E-05	1	0.00019467	1	2.5575E-05
EG10573	mcrA	1	1.36E-04	1	8.73E-05	1	0.00054863	1	0.00020825
EG10574	mcrB	1	6.10E-05	1	4.82E-05	1	0.00056891	1	0.00047826
EG10575	mcrC	1	1.11E-04	1	7.10E-05	1	9.789E-05	1	6.0452E-05
EG12656	mdaB	1	7.73E-04	1	6.75E-04	1	0.00010819	1	0.00021861
EG10576	mdh	1	3.64E-06	0	2.85E-06	1	4.7011E-05	1	1.716E-05
EG11622	mdlA	1	1.90E-04	1	8.68E-05	1	0.00019471	1	0.00017414
EG14374	mdlB	1	5.54E-05	1	1.21E-04	1	0.00025273	1	0.00014893
EG12591	mdoB	1	5.77E-04	1	4.52E-04	1	0.00042589	1	0.00054626
EG13876	mdoC	1	2.17E-04	1	4.35E-04	1	0.00015831	1	0.00030438
EG12859	mdoD	1	5.84E-05	1	5.03E-05	1	0.00019592	1	0.00064948
EG11885	mdoG	1	3.85E-05	1	7.35E-05	1	8.5227E-05	1	9.1457E-05
EG11886	mdoH	1	1.97E-05	1	5.77E-05	1	0.00017152	1	0.0002097
EG14056	mdtA	1	5.64E-05	1	4.70E-05	1	0.00019887	1	5.2213E-05
EG14057	mdtB	1	1.05E-05	1	5.93E-05	1	1.0705E-05	0	2.9813E-06
EG14058	mdtC	1	3.42E-05	1	6.72E-05	1	0.00014912	1	0.00020485
EG12136	mdtD	1	1.86E-04	1	5.54E-04	1	0.00027381	1	0.00025107
EG12240	mdtE	1	1.35E-04	1	3.25E-04	1	0.00034573	1	0.00052426
EG12241	mdtF	1	6.20E-04	1	6.31E-04	1	0.00012674	1	0.00039187
EG11343	mdtG	1	4.14E-04	1	3.51E-04	1	0.0004072	1	6.394E-05
EG13878	mdtH	1	8.62E-06	1	7.21E-06	1	3.2779E-05	1	6.3166E-05
EG13926	mdtI	1	6.95E-06	1	1.07E-05	1	0.00012755	1	0.00030052
EG13927	mdtJ	1	1.33E-04	1	8.23E-05	1	0.00015927	1	0.00019008
EG12400	mdtK	1	1.90E-04	1	2.56E-04	1	0.0004544	1	0.00107639
EG11720	mdtL	1	2.77E-04	1	4.63E-04	1	0.00016124	1	0.00034885
EG12576	mdtM	1	1.55E-04	1	1.31E-04	1	0.00184016	1	0.00237973
EG11954	mdtN	1	9.88E-04	1	5.71E-04	1	0.00016882	1	8.8797E-05
EG11953	mdtO	1	4.58E-06	1	8.23E-06	0	1.4371E-06	0	1.5553E-06
EG11952	mdtP	1	4.29E-05	1	4.90E-05	1	0.00019906	1	0.00011915
EG10577	melA	1	3.98E-04	1	4.54E-04	1	0.00055013	1	0.0005807
EG10578	melB	1	4.46E-06	0	3.14E-06	1	8.2951E-05	1	5.4345E-05
EG11230	melR	1	3.13E-04	1	6.65E-04	1	0.00040961	1	0.00027999
EG11880	menA	1	2.81E-04	1	3.30E-04	1	0.00013285	1	0.00033172
EG11368	menB	1	3.08E-04	1	1.58E-04	1	0.00019618	1	0.00022231
EG11532	menC	1	7.54E-06	1	5.96E-06	1	0.00020642	1	0.00024331
EG10579	menD	1	8.60E-05	1	2.90E-04	1	0.00077542	1	0.0005213
EG12437	menE	0	1.03E-06	0	2.52E-06	1	2.6271E-06	0	2.4144E-06
EG12362	menF	1	2.07E-04	1	1.17E-04	1	7.8739E-05	1	0.00010238
EG10580	mepA	1	3.26E-04	1	2.69E-04	1	0.00022613	1	0.00052353
EG10581	metA	1	6.43E-05	1	6.93E-05	1	6.4002E-05	1	0.00026738
EG10582	metB	1	1.54E-05	1	6.50E-06	1	0.00015521	1	7.5374E-05
EG10583	metC	1	3.06E-04	1	3.15E-04	1	0.00016409	1	2.206E-05
EG10584	metE	1	3.97E-04	1	6.43E-04	1	0.00012695	1	6.0586E-05
EG10585	metF	1	4.44E-04	1	4.91E-04	1	4.7387E-05	1	9.0788E-05
EG10586	metG	1	5.18E-04	1	7.08E-04	1	0.00014789	1	0.00017984
EG10587	metH	1	2.20E-05	1	1.40E-05	1	0.00022951	1	0.00024556
EG11737	metI	1	2.19E-06	0	1.44E-06	1	2.3604E-05	1	1.1247E-05
EG10588	metJ	1	1.76E-05	1	1.11E-05	1	6.0059E-05	1	2.3116E-05
EG10589	metK	1	3.13E-04	1	3.87E-04	1	0.00058306	1	0.00022345
EG10590	metL	1	9.42E-06	1	5.11E-06	1	2.0074E-05	1	1.6172E-05
EG11621	metN	1	1.57E-04	1	3.06E-04	1	3.2902E-05	1	1.3373E-05
EG11504	metQ	1	1.35E-04	1	2.12E-04	1	0.00014314	1	8.6624E-05
EG10591	metR	1	3.25E-04	1	1.96E-04	1	7.8208E-05	1	0.0001932
EG11619	mfd	1	2.46E-04	1	5.91E-04	1	0.00018041	1	7.7429E-05
EG10592	mglA	1	6.76E-05	1	4.36E-05	1	0.00014835	1	9.5094E-05
EG10593	mglB	1	4.19E-04	1	4.05E-04	1	0.00058885	1	0.00062115
EG10594	mglC	1	2.15E-04	1	2.04E-04	1	0.0005444	1	0.00039753
EG14383	mgrB	1	6.83E-06	1	6.22E-06	1	0.00017159	1	0.0001907
EG12307	mgsA	1	1.33E-04	1	1.68E-04	1	0.00064074	1	0.00032251
EG12525	mgtA	1	8.58E-04	1	5.71E-04	1	0.00135	1	0.00092474
EG20273	mhpA	1	1.06E-04	1	1.81E-04	1	0.00010991	1	0.00011001
EG20274	mhpB	1	3.97E-04	1	2.48E-04	1	0.0002632	1	0.0002491
EG20275	mhpC	1	6.20E-05	1	3.72E-05	1	2.5297E-05	1	8.8804E-06
EG14274	mhpD	1	7.37E-05	1	6.29E-05	1	6.5534E-06	1	1.4869E-05
EG13292	mhpE	1	1.59E-05	1	8.47E-06	1	0.00020095	1	0.00024242
EG13625	mhpF	1	1.56E-04	1	3.51E-04	1	0.00032773	1	4.329E-05
EG20276	mhpR	1	8.68E-04	1	7.82E-04	1	0.00022	1	0.00035471

EG13293	mhpT	1	2.79E-04	1	7.53E-04	1	6.0833E-05	1	9.7021E-05
EG10595	miaA	1	7.48E-05	1	5.19E-05	1	0.00038926	1	0.00065801
EG13657	miaB	1	2.14E-04	1	2.40E-04	1	5.5861E-05	1	0.00011092
EG10596	minC	1	2.07E-04	1	2.54E-04	1	0.00016221	1	0.00020129
EG10597	minD	1	9.84E-05	1	1.06E-04	1	0.00010742	1	2.6696E-05
EG10598	minE	1	6.66E-05	1	4.68E-05	1	0.00035871	1	0.00031023
EG11199	mioC	1	3.96E-05	1	2.71E-05	1	0.00012764	1	0.00021256
EG13492	mipA	1	5.83E-04	1	7.41E-04	1	0.00055992	1	0.00033161
EG12008	mlrA	1	2.26E-05	1	1.67E-05	1	0.0002242	1	0.00013653
EG13085	mltA	1	1.58E-05	1	1.53E-05	1	9.7237E-05	1	9.8008E-05
EG12699	mltB	1	1.08E-03	1	9.71E-04	1	0.00050853	1	0.00034026
EG12986	mltC	1	5.80E-05	1	3.49E-04	1	2.1733E-05	1	1.2178E-05
EG10246	mltD	1	6.13E-04	1	5.53E-04	1	0.00010118	1	0.00021302
EG11373	mltF	1	4.00E-04	1	3.86E-04	1	0.00028395	1	0.00014745
EG13343	mmuM	1	8.64E-05	1	3.73E-05	1	9.5098E-05	1	6.2895E-05
EG13342	mmuP	1	1.18E-03	1	8.87E-04	1	0.00129012	1	0.00134647
EG13235	mngA	1	2.06E-05	1	1.67E-05	1	0.00010546	1	0.00011318
EG13236	mngB	1	6.72E-05	1	4.02E-05	1	0.00014947	1	0.00016462
EG11109	mngR	0	8.23E-07	0	1.08E-06	1	0.00010692	1	8.6889E-05
EG11344	mnmA	1	2.03E-04	1	2.65E-04	1	0.00019655	1	0.00013653
EG14114	mnmC	1	1.83E-04	1	2.29E-04	1	0.00020687	1	0.00026941
EG10997	mnmE	1	1.63E-04	1	1.66E-04	1	8.8047E-06	0	3.2091E-06
EG10375	mnmG	1	6.39E-05	1	5.73E-05	1	0.00029356	1	0.00046624
EG14157	mntH	0	1.03E-06	0	1.21E-06	1	0.00011292	1	0.00021775
EG13322	mntR	1	1.32E-05	1	1.35E-05	1	0.00014412	1	0.00011556
EG11595	moaA	1	4.79E-05	1	5.06E-05	1	0.00084904	1	0.00112283
EG11596	moaB	1	1.34E-04	1	1.36E-04	1	0.00013077	1	0.00012353
EG11666	moaC	1	1.30E-04	1	1.38E-04	1	0.00012099	1	1.1819E-05
EG11597	moaD	1	4.09E-06	1	6.45E-06	1	3.0205E-05	1	1.6191E-05
EG11598	moaE	1	7.09E-06	1	8.67E-06	1	0.0002357	1	0.00024345
EG11829	mobA	1	2.77E-05	1	2.30E-05	1	1.3586E-05	1	2.6438E-05
EG11828	mobB	1	4.21E-05	1	4.27E-05	1	0.0006361	1	0.00067776
EG12427	modA	1	1.29E-04	1	3.61E-04	1	5.7429E-05	1	3.3472E-05
EG10002	modB	1	2.38E-04	1	2.32E-04	1	0.00046838	1	0.00055446
EG10152	modC	1	3.84E-05	1	3.48E-05	1	2.6248E-05	1	1.2529E-05
EG13227	modE	1	1.16E-04	1	3.45E-04	1	0.0003404	1	0.00019981
EG11677	modF	1	5.99E-04	1	6.53E-04	1	0.000113	1	0.00018011
EG10153	moeA	1	5.86E-04	1	4.14E-04	1	0.00031422	1	0.00052382
EG10154	moeB	0	7.85E-07	0	1.08E-06	1	1.4849E-05	1	9.5692E-06
EG11511	mog	1	1.05E-04	1	1.44E-04	0	9.7386E-07	0	1.213E-08
EG20260	mokB	1	3.92E-04	1	3.27E-04	1	0.00011421	1	0.00015602
EG12074	mokC	1	2.60E-04	1	2.82E-04	1	5.2034E-05	1	1.6773E-05
EG10601	motA	1	2.14E-04	1	1.38E-03	1	0.00118277	1	0.00096789
EG10602	motB	1	3.35E-04	1	2.11E-04	1	0.00019292	1	0.00012213
EG13906	mpaA	1	1.78E-05	1	1.71E-05	1	0.00029673	1	0.00011595
EG12440	mpl	1	1.04E-04	1	8.94E-05	1	9.2789E-05	1	8.9001E-05
EG13376	mppA	1	3.02E-04	1	4.61E-04	1	3.1549E-05	1	5.5707E-05
EG10603	mprA	1	2.57E-04	1	1.24E-04	1	0.00043366	1	0.00011441
EG12069	mqo	1	1.05E-04	1	7.75E-05	1	0.00011467	1	6.0146E-05
EG13023	mqsR	1	7.43E-05	1	1.34E-04	1	0.00074367	1	0.00062444
EG11085	mraW	1	2.34E-06	0	4.59E-06	1	0.00056061	1	0.00053088
EG10604	mraY	1	4.60E-05	1	3.85E-05	1	0.00017204	1	0.00022184
EG11084	mraZ	1	4.07E-06	0	3.10E-06	1	1.3494E-05	0	4.0606E-06
EG10748	mrcA	1	1.45E-04	1	9.72E-05	1	7.9423E-05	1	4.1447E-05
EG10605	mrcB	1	6.65E-06	1	5.26E-06	1	0.0001154	1	0.00011556
EG10606	mrdA	1	3.08E-04	1	3.47E-04	1	3.8348E-05	1	5.1546E-05
EG10607	mrdB	1	2.23E-04	1	2.77E-04	1	0.0002027	1	0.00016185
EG10608	mreB	1	2.33E-04	1	4.70E-04	1	0.0008497	1	0.00063327
EG10609	mreC	1	2.16E-04	1	1.50E-04	1	8.931E-05	1	0.0001124
EG10610	mreD	1	2.73E-06	0	2.60E-06	1	1.0014E-05	1	2.0555E-05
EG10611	mrp	1	2.85E-04	1	3.97E-04	1	0.00024267	1	0.00049172
EG10612	mrr	1	2.51E-04	1	3.37E-04	1	0.0002238	1	0.00015475
EG10613	msbA	1	2.14E-04	1	1.87E-04	1	0.00024705	1	4.8334E-05
EG11180	mscL	1	3.67E-04	1	2.71E-04	1	5.1225E-06	0	2.9813E-06
EG11160	mscS	1	3.15E-05	1	3.82E-05	1	8.902E-05	1	8.5092E-05
EG11433	msrA	1	5.10E-04	1	4.51E-04	1	8.2617E-05	1	6.6936E-05
EG12394	msrB	1	1.87E-04	1	1.40E-04	1	0.00063201	1	0.00080689
EG11338	msyB	1	4.10E-04	1	3.59E-04	1	0.00036249	1	0.00032125
EG13377	mtfA	1	1.75E-04	1	2.97E-04	1	0.00044668	1	0.00063735
EG12808	mtgA	1	1.34E-04	1	9.94E-05	1	9.4022E-05	1	8.3003E-06
EG10615	mtlA	1	1.76E-04	1	2.54E-04	1	0.00032495	1	0.00061384

EG10616	mtlD	1	3.71E-05	1	1.04E-04	1	2.5376E-05	1	8.8013E-05
EG11965	mtlR	1	3.45E-05	1	3.88E-05	1	9.9447E-05	1	5.176E-05
EG11090	mtn	1	8.09E-05	1	9.03E-05	1	0.00027805	1	0.00033952
EG10617	mtr	1	2.85E-04	1	2.74E-04	1	0.00022188	1	0.00031549
EG12717	mug	1	2.03E-04	1	1.55E-04	1	0.00024539	1	0.00027787
EG10618	mukB	1	2.42E-05	1	6.00E-05	1	9.5287E-05	1	3.2664E-05
EG11252	mukE	1	8.30E-06	1	6.57E-06	1	8.0313E-05	1	0.00018397
EG12165	mukF	1	1.01E-04	1	7.33E-05	1	4.3855E-06	0	1.8674E-06
EG11358	murA	1	1.11E-05	1	7.89E-06	1	6.041E-05	1	0.00012719
EG11205	murB	1	1.45E-04	1	1.25E-04	1	0.00016636	1	8.0843E-05
EG10619	murC	1	7.86E-05	1	1.12E-04	1	0.00104317	1	0.0002184
EG10620	murD	1	8.20E-06	1	8.61E-06	1	5.1335E-05	1	2.7671E-05
EG10621	murE	1	3.24E-05	1	2.99E-05	1	3.3232E-05	1	6.8957E-06
EG10622	murF	1	3.50E-05	1	5.69E-05	1	0.00013306	1	0.00014907
EG10623	murG	0	1.36E-06	0	3.33E-06	0	1.3673E-07	0	-2.93E-07
EG11204	murI	1	6.64E-05	1	7.91E-05	1	5.3984E-05	1	2.1467E-05
EG14163	murP	1	1.32E-04	1	7.82E-05	1	0.00014068	1	8.864E-05
EG14162	murQ	1	9.20E-04	1	8.68E-04	1	4.0026E-05	1	0.00014291
EG10624	mutH	1	2.59E-04	1	2.61E-04	1	0.0002332	1	0.00016921
EG11281	mutL	1	2.23E-04	1	3.98E-04	1	0.00039334	1	0.00056446
EG10329	mutM	1	9.18E-04	1	9.00E-04	1	0.00032233	1	0.0002779
EG10625	mutS	1	4.35E-04	1	5.99E-04	1	0.00012554	1	5.4832E-05
EG10626	mutT	1	4.32E-05	1	5.94E-05	1	0.00011444	1	6.5926E-05
EG10627	mutY	1	1.58E-04	1	3.90E-04	1	0.00033557	1	0.00037708
EG14265	nac	1	7.86E-04	1	4.77E-04	1	0.00012247	1	4.8912E-05
EG10630	nadA	1	6.70E-05	1	5.97E-05	1	8.9971E-05	1	3.3384E-05
EG10631	nadB	1	7.03E-05	1	3.23E-05	1	0.0001392	1	6.1294E-05
EG11546	nadC	1	7.40E-04	1	6.61E-04	0	5.6327E-07	0	3.0951E-06
EG13241	nadD	1	2.67E-04	1	3.42E-04	1	4.5101E-05	1	5.3288E-06
EG10663	nadE	1	2.04E-05	1	2.09E-05	1	3.7188E-05	1	5.9854E-05
EG12192	nadK	1	3.54E-04	1	2.88E-04	1	3.5033E-05	1	2.4313E-05
EG11335	nadR	1	2.37E-04	1	1.39E-04	1	5.46E-05	1	1.8254E-05
EG10632	nagA	1	1.13E-04	1	1.78E-04	1	0.0002363	1	0.00019407
EG10633	nagB	1	1.34E-04	1	1.02E-04	1	7.7854E-05	1	0.00013409
EG10636	nagC	1	1.04E-04	1	1.33E-04	1	0.00015002	1	0.00010297
EG10634	nagD	1	6.26E-04	1	6.92E-04	1	0.00012807	1	0.00029101
EG10635	nagE	1	2.01E-04	1	1.47E-04	1	0.00068288	1	0.00077241
EG13442	nagK	1	8.78E-06	1	9.04E-06	1	7.9334E-05	1	3.0019E-05
EG13433	nagZ	1	7.76E-06	0	3.79E-06	1	5.7846E-05	1	6.6147E-05
EG10637	nanA	1	5.56E-04	1	4.02E-04	1	3.1018E-05	1	2.5503E-05
EG12389	nanC	1	2.87E-04	1	4.18E-04	1	8.4708E-05	1	5.6082E-05
EG12816	nanE	1	3.25E-05	1	1.69E-05	1	0.00040636	1	0.00019667
EG12815	nanK	1	4.78E-05	1	5.52E-05	1	0.00043841	1	0.00036874
EG12562	nanM	1	4.29E-04	1	4.78E-04	1	0.00010844	1	0.00011534
EG12817	nanR	1	2.16E-04	1	1.11E-04	1	0.00015435	1	0.00017991
EG20145	nanT	1	3.51E-04	1	3.08E-04	1	0.0005377	1	0.00025999
EG12067	napA	1	8.73E-05	1	4.71E-05	1	0.00015103	1	9.973E-05
EG12061	napB	1	2.77E-05	1	1.89E-05	1	0.00026152	1	0.00014583
EG12060	napC	1	3.91E-05	1	2.76E-05	1	3.2327E-05	1	1.2412E-05
EG12143	napD	1	1.89E-04	1	1.41E-04	1	0.00013584	1	0.00011249
EG12068	napF	1	2.56E-04	1	2.24E-04	1	0.00020461	1	0.0002707
EG12064	napG	1	6.91E-05	1	6.71E-05	1	7.4546E-05	1	0.0001553
EG12062	napH	0	4.59E-07	0	4.77E-07	1	2.9391E-06	0	5.5485E-07
EG10638	narG	1	5.01E-05	1	7.55E-05	1	5.2916E-05	1	6.4964E-05
EG10639	narH	1	7.02E-05	1	1.75E-04	1	0.00011922	1	5.0285E-05
EG10640	narI	1	1.44E-04	1	2.15E-04	1	4.3511E-05	1	3.963E-05
EG10641	narJ	1	1.70E-04	1	3.45E-04	1	0.00012503	1	0.00037099
EG10642	narK	1	1.33E-04	1	1.14E-04	1	3.206E-05	1	1.5388E-05
EG10643	narL	1	4.36E-04	1	2.78E-04	1	0.00070615	1	0.00080333
EG11527	narP	1	1.14E-03	1	1.41E-03	1	0.0001646	1	0.00035181
EG11460	narQ	1	6.76E-05	1	4.72E-05	1	0.00052426	1	0.00162275
EG12153	narU	1	5.72E-04	1	6.07E-04	1	0.00016507	1	0.00023476
EG10644	narV	1	7.15E-05	1	4.17E-05	1	6.7047E-05	1	6.1093E-05
EG10645	narW	1	7.21E-05	1	4.73E-05	1	3.2964E-05	1	1.6069E-05
EG10646	narX	1	1.74E-04	1	2.61E-04	1	1.6894E-05	1	6.3315E-05
EG10647	narY	1	9.73E-05	1	1.65E-04	1	0.00013116	1	0.00010857
EG10648	narZ	1	1.05E-03	1	6.86E-04	1	0.00014828	1	0.00018955
EG10649	ndh	1	9.77E-06	1	5.87E-06	1	7.4546E-05	1	8.6826E-05
EG10650	ndk	1	2.21E-04	1	1.75E-04	1	7.4472E-05	1	7.013E-05
EG13237	nei	1	1.99E-05	1	1.72E-05	1	1.7556E-05	1	1.4878E-05
EG13546	nemA	1	2.25E-06	0	7.80E-07	1	7.4198E-05	1	1.9369E-05

EG13947	nemR	1	8.43E-04	1	3.17E-04	1	0.00048446	1	0.00031389
EG11689	nepI	1	7.49E-05	1	1.10E-04	1	6.1869E-05	1	3.2784E-05
EG11915	nfi	1	6.78E-05	1	3.21E-05	1	0.00028359	1	0.00027993
EG10651	nfo	1	5.58E-05	1	1.13E-04	1	9.8954E-05	1	0.00022584
EG11740	nfrA	1	7.84E-06	1	1.26E-05	1	2.292E-05	1	2.2717E-05
EG11739	nfrB	1	3.04E-04	1	5.76E-04	1	0.00010577	1	0.00010881
EG11261	nfsA	1	6.69E-04	1	5.25E-04	1	0.00030876	1	0.00016719
EG20151	nfsB	1	6.07E-05	1	4.33E-05	1	8.9733E-05	1	3.6082E-05
EG12935	nfuA	1	6.70E-04	1	4.66E-04	1	0.0005011	1	0.00058451
EG10652	nhaA	1	8.08E-04	1	6.12E-04	1	0.00043512	1	0.00016453
EG11392	nhaB	1	4.74E-06	1	6.15E-06	1	1.8791E-05	1	1.8445E-05
EG11078	nhaR	1	2.23E-04	1	2.01E-04	1	0.00045978	1	0.00050998
EG13780	nhoA	1	7.19E-05	1	9.22E-05	1	0.00013248	1	0.00015192
EG12075	nikA	1	3.11E-04	1	9.88E-04	1	0.00145963	1	0.00096893
EG12076	nikB	1	9.86E-05	1	1.97E-04	1	0.000291	1	0.0006357
EG12077	nikC	1	1.99E-04	1	1.54E-04	1	0.00010112	1	0.00024127
EG12078	nikD	1	5.89E-05	1	1.80E-04	1	6.6854E-05	1	5.66E-05
EG12079	nikE	1	2.41E-04	1	1.71E-04	1	0.00012178	1	0.00010349
EG11519	nikR	1	2.89E-05	1	3.47E-05	1	5.7521E-05	1	9.248E-05
EG14286	ninE	1	2.46E-04	1	4.75E-04	1	0.00060634	1	0.00076462
EG10653	nirB	1	1.65E-04	1	1.42E-04	1	0.00013043	1	0.00010589
EG10654	nirC	1	3.02E-04	1	2.94E-04	1	0.00028987	1	0.00020077
EG10655	nirD	1	1.87E-04	1	1.71E-04	1	0.0011432	1	0.0008701
EG10657	nlpA	1	1.02E-04	1	1.86E-04	1	0.00018857	1	0.00040346
EG11133	nlpC	1	5.47E-05	1	3.53E-05	1	5.2034E-05	1	5.2756E-05
EG12111	nlpD	1	3.15E-04	1	2.45E-04	1	0.00044301	1	0.00052324
EG12137	nlpE	1	2.83E-06	0	4.57E-06	1	0.00019332	1	2.7255E-05
EG12371	nlpI	1	1.02E-04	1	1.32E-04	1	4.7188E-05	1	4.9257E-05
EG11635	nohB	1	4.06E-04	1	2.05E-04	1	0.00017998	1	0.00028392
EG12108	norR	1	8.90E-05	1	7.46E-05	1	0.00033028	1	8.2673E-05
EG12963	norV	1	6.80E-05	1	9.19E-05	1	0.00041707	1	0.00040937
EG12450	norW	1	3.21E-05	1	2.41E-05	1	1.1288E-05	1	1.1774E-05
EG12147	npr	1	3.49E-04	1	2.72E-04	1	0.00013739	1	3.0317E-05
EG10660	nrdA	1	4.02E-05	1	6.41E-05	1	0.00174199	1	0.00190482
EG10661	nrdB	1	9.56E-05	1	1.05E-04	1	0.00010751	1	0.00010987
EG11417	nrdD	1	6.90E-05	1	1.01E-04	1	0.0003107	1	0.00026708
EG20257	nrdE	1	1.32E-04	1	8.88E-05	1	0.00016521	1	0.00025689
EG12381	nrdF	1	2.62E-04	1	2.53E-04	1	0.00032974	1	0.00025394
EG12523	nrdG	1	2.94E-04	1	3.80E-04	1	0.00021794	1	0.00033621
EG13286	nrdH	1	3.27E-04	1	6.40E-04	1	0.00041724	1	0.00037378
EG13287	nrdI	1	1.68E-04	1	1.54E-04	1	0.00011743	1	7.6545E-05
EG11320	nrdR	1	1.05E-04	1	8.82E-05	1	0.00048177	1	0.0001452
EG11781	nrfA	1	1.73E-04	1	2.19E-04	1	7.7401E-05	1	9.8305E-05
EG11945	nrfB	1	4.83E-05	1	4.39E-05	0	6.4872E-07	0	7.8403E-07
EG11946	nrfC	1	4.34E-05	1	3.82E-05	1	8.9126E-05	1	2.9372E-05
EG11947	nrfD	1	1.02E-04	1	5.67E-05	1	0.00058213	1	0.00053112
EG11948	nrfE	1	5.63E-05	1	9.55E-05	1	9.4129E-05	1	2.5054E-05
EG11949	nrfF	1	8.54E-06	1	5.24E-06	1	6.317E-05	1	0.00010076
EG11950	nrfG	1	5.15E-05	1	4.91E-05	1	0.00014757	1	0.00024534
EG11212	nsrR	1	4.75E-04	1	4.99E-04	1	0.00113908	1	0.00086391
EG10662	nth	1	1.43E-04	1	1.77E-04	1	9.8353E-05	1	0.00013606
EG11138	nudB	1	4.26E-05	1	5.80E-05	1	0.00013187	1	0.00010263
EG11702	nudC	1	8.31E-05	1	1.34E-04	1	0.00024325	1	0.00046995
EG12926	nudE	1	1.52E-04	1	3.07E-04	1	0.00022298	1	0.00024511
EG12184	nudF	1	2.68E-04	1	2.73E-04	1	0.00017487	1	0.0002616
EG14009	nudG	1	1.51E-04	1	8.38E-05	1	0.00060093	1	0.0007469
EG13275	nudI	1	4.73E-04	1	3.83E-04	1	2.7785E-05	1	1.4776E-05
EG13446	nudJ	1	5.78E-05	1	6.72E-05	1	5.3984E-05	1	4.4991E-05
EG12410	nudK	1	8.10E-05	1	2.18E-04	1	0.00099711	1	0.00140818
EG12693	nudL	1	1.95E-04	1	2.88E-04	1	0.00012244	1	5.7904E-05
EG12082	nuoA	1	3.51E-04	1	5.77E-04	1	0.0002216	1	0.00015721
EG12083	nuoB	1	2.53E-04	1	2.44E-04	1	0.00018168	1	0.00018919
EG12084	nuoC	1	3.36E-04	1	2.48E-04	1	0.00028769	1	0.00028972
EG12086	nuoE	1	7.76E-05	1	1.54E-04	1	6.3075E-05	1	0.00022451
EG11774	nuoF	1	4.57E-05	1	8.13E-05	1	0.00015699	1	0.00012891
EG12087	nuoG	1	4.30E-04	1	5.25E-04	1	0.00037863	1	0.00046526
EG12088	nuoH	1	1.02E-05	1	7.19E-06	1	8.2797E-05	1	7.5827E-05
EG12089	nuoI	1	2.97E-05	1	2.72E-05	1	4.763E-05	1	7.7473E-05
EG12090	nuoJ	1	2.48E-05	1	3.41E-05	1	1.5578E-05	1	6.7683E-06
EG12091	nuoK	1	2.02E-05	1	1.87E-05	1	0.00013037	1	7.2882E-05
EG12092	nuoL	1	5.44E-04	1	4.00E-04	1	0.00025985	1	0.00027221

EG11773	nuoM	1	2.08E-04	1	2.80E-04	1	5.7382E-05	1	5.8363E-05
EG12093	nuoN	1	9.36E-04	1	9.26E-04	1	0.00010562	1	5.2263E-05
EG11971	nupC	1	1.88E-04	1	4.96E-04	1	0.00012934	1	0.00013921
EG10664	nupG	1	1.07E-03	1	8.67E-04	1	0.00014584	1	0.00014358
EG12029	nupX	1	2.33E-05	1	2.79E-05	1	0.00040257	1	6.7924E-05
EG10665	nusA	1	2.73E-04	1	2.32E-04	1	0.00019416	1	0.00012774
EG10666	nusB	1	4.82E-04	1	3.74E-04	1	0.00035438	1	0.00030668
EG10667	nusG	1	2.58E-05	1	3.02E-05	1	0.00042204	1	0.00056374
EG12795	obgE	1	3.47E-06	0	1.91E-06	1	8.011E-05	1	0.00010093
EG12425	ogrK	1	6.50E-04	1	5.81E-04	1	0.00023039	1	0.00018984
EG10668	ogt	1	1.86E-05	1	2.16E-05	1	8.5591E-05	1	0.00014306
EG10669	ompA	1	4.15E-05	1	2.65E-05	1	0.00035577	1	0.00076659
EG10670	ompC	1	8.11E-05	1	9.50E-05	1	0.00047238	1	0.00039312
EG10671	ompF	1	4.49E-05	1	4.18E-05	1	0.00013236	1	0.00011324
EG13428	ompG	1	8.00E-06	1	7.28E-06	1	0.0004995	1	0.00048889
EG13374	ompL	1	4.56E-04	1	4.87E-04	1	0.00020552	1	0.0003681
EG13375	ompN	1	2.82E-04	1	3.65E-04	1	0.00026991	1	0.00016635
EG10672	ompR	1	4.29E-04	1	3.63E-04	1	0.00056318	1	0.00075045
EG10673	ompT	1	1.06E-03	1	7.56E-04	1	0.00022964	1	0.00034416
EG11124	ompW	1	1.63E-04	1	1.48E-04	1	7.4795E-05	1	0.00013115
EG12135	ompX	1	8.52E-04	1	5.82E-04	1	0.00207479	1	0.00176451
EG10674	oppA	1	5.05E-04	1	5.74E-04	1	0.00014905	1	7.1964E-05
EG10675	oppB	1	2.14E-04	1	1.83E-04	1	9.378E-05	1	5.0534E-05
EG10676	oppC	1	1.34E-05	1	1.95E-05	1	0.00028557	1	0.00020278
EG10677	oppD	1	8.04E-06	1	1.59E-05	1	6.6228E-05	1	0.00030214
EG10678	oppF	1	1.44E-04	1	2.13E-04	1	0.00126361	1	0.00149975
EG20005	oriC	1	9.10E-05	1	7.34E-05	1	0.00049815	1	0.00037956
EG12480	orn	1	9.62E-05	1	7.63E-05	1	8.4604E-05	1	0.00023266
EG10679	osmB	1	1.30E-04	1	2.03E-04	1	9.119E-05	1	0.00010535
EG10680	osmC	1	2.30E-04	1	1.68E-04	1	0.00020244	1	0.00037035
EG10044	osmE	1	1.54E-04	1	1.28E-04	1	8.1462E-05	1	0.00019159
EG12012	osmF	1	1.65E-04	1	1.97E-04	1	0.00033611	1	0.00012655
EG11391	osmY	1	4.96E-04	1	3.21E-04	1	0.00032132	1	0.0003249
EG11751	otsA	1	1.86E-04	1	1.76E-04	1	0.00017342	1	0.00015991
EG11752	otsB	1	1.72E-04	1	1.09E-04	1	2.8971E-05	1	1.1363E-05
EG14143	oxc	1	1.42E-04	1	2.23E-04	1	0.00026991	1	0.00066998
EG10681	oxyR	1	1.32E-04	1	6.24E-05	1	0.00037299	1	0.00051545
EG13736	paaA	1	2.67E-04	1	1.68E-04	1	0.00022376	1	0.00015013
EG14299	paaB	1	3.80E-05	1	3.19E-05	1	0.00024152	1	6.8539E-05
EG13737	paaC	1	5.76E-04	1	6.28E-04	1	1.7007E-05	0	3.5765E-06
EG13738	paaD	1	1.25E-05	1	5.15E-06	1	0.00011014	1	7.8065E-05
EG13739	paaE	1	2.27E-04	1	2.67E-04	1	0.00010275	1	6.3518E-05
EG13740	paaF	1	5.26E-05	1	6.70E-05	1	4.0603E-05	1	7.1222E-05
EG13741	paaG	1	1.29E-04	1	1.56E-04	1	0.00029439	1	0.00018974
EG13742	paaH	0	1.07E-06	0	1.10E-07	1	5.8658E-05	1	3.3757E-05
EG13743	paaI	1	6.99E-05	1	5.39E-05	1	0.0005487	1	0.00023712
EG13744	paaJ	1	7.95E-05	1	8.29E-05	1	0.00023283	1	0.00026066
EG13745	paaK	1	1.43E-04	1	1.11E-04	1	7.7249E-05	1	0.00018692
EG13746	paaX	1	1.78E-04	1	3.74E-04	1	0.00011837	1	0.00023905
EG13747	paaY	1	2.23E-04	1	1.59E-04	1	9.0845E-05	1	0.00018862
EG10682	pabA	1	4.39E-04	1	4.58E-04	1	7.3107E-05	1	0.00010989
EG10683	pabB	1	1.31E-04	1	2.83E-04	1	0.00039588	1	0.00097968
EG11493	pabC	1	1.79E-04	1	2.38E-04	1	1.4607E-05	1	1.7113E-05
EG11922	pagB	1	2.33E-04	1	1.57E-04	1	0.00036578	1	0.0005388
EG12180	pagP	1	4.26E-04	1	5.95E-04	1	0.00092021	1	0.00018229
EG10684	pal	1	6.11E-04	1	2.85E-04	1	7.2094E-05	1	0.00028972
EG11675	panB	1	7.57E-05	1	4.82E-05	1	0.00022951	1	0.00015777
EG11746	panC	1	3.46E-04	1	4.62E-04	1	0.00020661	1	0.00021005
EG11747	panD	1	4.23E-05	1	4.44E-05	1	5.6252E-05	1	7.9912E-05
EG13271	panE	1	4.29E-06	0	3.15E-06	1	0.00030599	1	0.00026839
EG10685	panF	1	5.24E-05	1	4.25E-05	1	0.00057454	1	0.00043375
EG10686	parC	1	1.34E-04	1	7.48E-05	1	2.2005E-05	1	1.0705E-05
EG10687	parE	1	3.22E-04	1	2.06E-04	1	0.00046544	1	0.00048067
EG14210	pbpC	1	3.66E-06	1	5.38E-06	1	1.2277E-05	1	1.0307E-05
EG12015	pbpG	1	1.30E-04	1	1.23E-04	1	0.00075658	1	0.00073951
EG10688	pck	1	5.56E-05	1	5.87E-05	1	1.7973E-05	1	5.162E-06
EG10689	pcm	1	2.42E-06	1	7.26E-06	1	0.00013739	1	4.0959E-05
EG10690	pcnB	1	1.21E-04	1	2.53E-04	1	0.00015223	1	0.00012964
EG11088	pdhR	1	7.30E-05	1	7.01E-05	1	0.00040955	1	0.00014312
EG10691	pdxA	1	4.15E-05	1	2.98E-05	1	2.8307E-05	1	1.6041E-05
EG10692	pdxB	1	2.39E-04	1	1.62E-04	1	0.00042843	1	0.00050281

EG11487	pdxH	1	1.67E-04	1	2.30E-04	1	2.6268E-05	1	2.1339E-05
EG10693	pdxJ	1	5.08E-04	1	4.24E-04	1	0.00026974	1	0.00028402
EG12642	pdxK	1	7.40E-05	1	1.43E-04	1	0.00026458	1	0.00011247
EG13940	pdxY	1	6.37E-04	1	2.58E-04	1	0.00080582	1	0.00077766
EG10694	pepA	1	2.38E-05	1	1.66E-05	1	0.0002541	1	0.00031146
EG12310	pepB	1	2.21E-04	1	1.37E-04	1	0.00012431	1	0.00012519
EG10695	pepD	1	2.55E-04	1	3.85E-04	1	0.00063254	1	0.0004116
EG11920	pepE	1	2.45E-04	1	2.02E-04	1	0.0001022	1	6.9354E-05
EG10696	pepN	1	9.69E-04	1	9.01E-04	1	0.00011295	1	7.9374E-05
EG10697	pepP	1	1.55E-05	1	1.21E-05	1	7.8897E-06	0	3.9866E-06
EG10698	pepQ	1	2.58E-04	1	2.47E-04	1	5.2034E-05	1	3.8771E-05
EG11549	pepT	1	6.41E-04	1	3.22E-04	1	0.00015495	1	4.7637E-05
EG13340	perR	1	3.91E-04	1	2.98E-04	1	6.0504E-05	1	9.1138E-05
EG10699	pfkA	1	1.57E-05	1	1.15E-05	1	0.00012725	1	9.2624E-05
EG10700	pfkB	1	1.43E-04	1	2.52E-04	1	0.0006224	1	0.00039805
EG10028	pflA	1	4.52E-05	1	4.01E-05	1	0.00055632	1	0.0002432
EG10701	pflB	1	8.80E-05	1	8.30E-05	1	8.5227E-05	1	2.2816E-05
EG11911	pflC	1	9.70E-05	1	7.51E-05	1	5.7174E-05	1	1.4795E-05
EG11910	pflD	1	7.62E-04	1	6.43E-04	1	0.0006884	1	0.00037254
EG13865	pgaA	1	1.95E-04	1	1.97E-04	1	0.00012635	1	0.00011359
EG13864	pgaB	1	3.27E-04	1	1.56E-04	1	7.637E-05	1	0.00016328
EG13863	pgaC	1	2.37E-04	1	3.93E-04	1	0.00032989	1	0.00103166
EG13862	pgaD	1	4.92E-04	1	4.18E-04	1	0.00013046	1	0.00017371
EG10702	pgi	1	3.24E-04	1	3.44E-04	1	0.0001116	1	4.0762E-05
EG10703	pgk	1	2.48E-04	1	2.85E-04	1	0.00026449	1	0.00066579
EG13231	pgl	1	2.74E-04	1	5.80E-04	1	0.00023091	1	0.00021263
EG12144	pgm	1	9.99E-05	1	1.18E-04	1	0.00038486	1	0.00015073
EG10704	pgpA	1	1.12E-04	1	8.48E-05	1	8.4656E-05	1	0.00022144
EG10705	pgpB	1	1.31E-05	1	1.44E-05	1	3.3954E-05	1	6.7004E-06
EG10706	pgsA	1	2.96E-04	1	3.56E-04	1	8.2437E-05	1	8.7107E-05
EG10707	pheA	0	7.51E-07	0	3.92E-06	1	0.00011781	1	0.00022129
EG11271	pheL	1	7.75E-04	1	7.01E-04	1	8.011E-05	1	0.00033057
EG11272	pheM	1	3.57E-04	1	6.59E-04	1	9.8353E-05	1	3.924E-05
EG10708	pheP	1	1.36E-05	1	6.24E-06	1	0.00014014	1	7.2868E-05
EG10709	pheS	1	1.52E-04	1	1.13E-04	1	0.00016816	1	0.00017555
EG10710	pheT	1	1.70E-04	1	3.82E-04	1	0.00010793	1	0.00020828
EG10713	phnC	1	3.45E-04	1	2.80E-04	1	0.0001454	1	0.00069445
EG10714	phnD	1	2.94E-04	1	4.62E-04	1	0.00033925	1	0.00040394
EG10715	phnF	1	3.12E-04	1	2.87E-04	1	4.7807E-05	1	0.00017079
EG10716	phnG	1	7.58E-05	1	1.93E-04	1	4.9363E-05	1	4.3137E-05
EG10717	phnH	1	3.80E-05	1	1.06E-04	1	0.00028846	1	0.00054697
EG10718	phnI	1	5.90E-06	1	7.03E-06	1	3.2343E-06	0	2.7946E-06
EG10719	phnJ	1	5.78E-05	1	7.64E-05	1	0.0007114	1	0.00064425
EG10720	phnK	1	5.85E-04	1	5.00E-04	1	0.00012509	1	8.0707E-05
EG10721	phnL	1	1.63E-04	1	1.62E-04	1	0.00016779	1	0.00020261
EG10722	phnM	1	1.79E-05	1	1.09E-05	1	0.00023187	1	0.00021599
EG10723	phnN	0	1.76E-06	0	3.00E-06	1	3.4182E-05	1	4.9467E-05
EG10724	phnO	1	2.99E-04	1	4.77E-04	1	1.5111E-05	1	9.7269E-06
EG10725	phnP	1	1.61E-05	1	1.53E-05	1	5.7915E-05	1	3.6923E-05
EG10727	phoA	1	3.78E-04	1	4.75E-04	1	0.00013648	1	0.00012791
EG10728	phoB	1	2.25E-04	1	1.76E-04	1	0.00044247	1	0.00024706
EG10729	phoE	1	4.56E-05	1	3.45E-05	1	0.00034699	1	0.00014889
EG11734	phoH	1	6.12E-06	1	1.07E-05	1	0.00010955	1	0.00022568
EG10731	phoP	1	1.52E-04	1	1.61E-04	1	0.00039341	1	0.00039524
EG10732	phoQ	1	1.95E-04	1	2.09E-04	1	0.00039165	1	0.00078912
EG10733	phoR	1	1.52E-05	1	1.21E-05	1	0.00010655	1	6.7436E-05
EG10735	phoU	1	8.57E-04	1	7.15E-04	1	0.00028197	1	0.00018365
EG12917	php	1	1.62E-03	1	1.32E-03	1	0.00027355	1	0.00067752
EG10736	phr	1	4.41E-05	1	8.58E-05	1	3.8306E-05	1	5.1221E-05
EG10737	pinE	1	2.28E-04	1	2.63E-04	1	0.00012677	1	0.00011976
EG13824	pinQ	1	5.63E-04	1	6.42E-04	1	0.00011117	1	7.3559E-05
EG13372	pinR	1	3.80E-04	1	5.09E-04	1	5.5035E-05	1	3.6082E-05
EG12230	pitA	1	4.88E-04	1	5.45E-04	1	0.00017389	1	0.00018779
EG12883	pitB	1	2.28E-04	1	3.55E-04	1	0.00020424	1	0.0002546
EG10738	pldA	1	6.60E-05	1	6.25E-05	1	4.5079E-05	1	2.1025E-05
EG10739	pldB	1	7.99E-05	1	5.75E-05	1	0.00019537	1	0.00010956
EG10740	plsB	1	7.72E-04	1	1.24E-03	1	0.0001281	1	0.00028253
EG11377	plsC	1	4.70E-04	1	3.31E-04	1	0.00053447	1	0.00018815
EG11437	plsX	0	1.96E-06	0	2.52E-06	1	5.8628E-06	1	1.3309E-05
EG10741	pmbA	1	8.07E-04	1	9.87E-04	1	0.00073319	1	0.00029643
EG12671	pmrD	1	2.71E-04	1	2.21E-04	1	0.00025261	1	9.2352E-05

EG11135	pncA	1	1.66E-04	1	4.29E-04	1	0.00011528	1	0.00018183
EG10742	pncB	1	6.30E-04	1	5.34E-04	1	0.00013964	1	0.00029114
EG10743	pnp	1	3.30E-04	1	2.84E-04	1	0.0008372	1	0.00052363
EG10744	pntA	1	1.06E-04	1	2.40E-04	1	0.00023489	1	0.00034288
EG10745	pntB	1	6.12E-05	1	9.97E-05	1	8.9667E-06	0	3.6666E-06
EG11700	pnuC	1	2.67E-05	1	1.58E-05	1	0.00024622	1	0.00018908
EG10746	polA	1	2.49E-04	1	2.34E-04	1	0.00020721	1	0.00051737
EG10747	polB	1	1.25E-05	1	7.64E-06	1	0.0001277	1	0.0003973
EG10749	potA	1	1.15E-04	1	1.77E-04	1	0.0001968	1	0.00017981
EG10750	potB	1	3.13E-04	1	3.40E-04	1	0.0001521	1	0.00020099
EG10751	potC	1	1.19E-05	1	1.71E-05	1	0.00025467	1	0.00046705
EG10752	potD	0	1.28E-06	0	5.10E-07	1	0.00012701	1	0.00035417
EG10753	potE	1	3.40E-04	1	4.50E-04	1	0.00107842	1	0.00041042
EG11629	potF	1	4.06E-05	1	5.04E-05	1	0.00019398	1	0.00020114
EG11630	potG	1	9.26E-05	1	1.11E-04	1	0.00034265	1	0.00067663
EG11631	potH	1	2.06E-05	1	1.42E-05	0	5.8036E-07	0	2.665E-06
EG11632	potI	1	2.32E-04	1	3.27E-04	1	0.00028197	1	0.00028371
EG11211	poxA	1	6.45E-05	1	1.20E-04	1	0.00025505	1	0.00045502
EG10754	poxB	1	1.18E-04	1	2.14E-04	1	0.0005877	1	0.00028564
EG10755	ppa	1	3.85E-04	1	5.92E-04	1	0.00045338	1	0.00042226
EG10756	ppc	1	3.27E-05	1	2.09E-05	1	0.00010068	1	0.00014532
EG12081	ppdA	1	6.42E-04	1	6.70E-04	1	0.00033151	1	5.9868E-05
EG11156	ppdB	1	1.11E-05	1	1.43E-05	1	0.00030514	1	0.00016484
EG11154	ppdC	1	1.56E-04	1	2.82E-04	1	0.00010864	1	0.00024359
EG12107	ppdD	1	1.55E-05	1	1.10E-05	1	6.1939E-05	1	0.00023866
EG14026	pphA	1	9.25E-05	1	1.94E-04	1	0.00019984	1	0.00027962
EG13102	pphB	1	1.46E-05	1	4.29E-05	1	0.0001726	1	6.5156E-05
EG10757	ppiA	1	1.79E-03	1	1.87E-03	1	0.00027429	1	0.00013432
EG10758	ppiB	1	1.44E-04	1	3.04E-04	1	0.00012846	1	0.00018727
EG12352	ppiC	1	7.09E-04	1	5.85E-04	1	0.00054135	1	0.00039884
EG13249	ppiD	1	5.86E-05	1	5.18E-05	1	0.00013254	1	2.4871E-05
EG11510	ppk	1	4.92E-05	1	2.85E-05	1	2.1017E-05	1	1.1247E-05
EG12992	pppA	1	4.02E-04	1	5.93E-04	1	0.00010633	1	5.3567E-05
EG10759	pps	1	6.11E-04	1	4.59E-04	1	0.00014799	1	0.00018948
EG11761	pptA	1	1.06E-03	1	1.02E-03	1	0.00015947	1	0.000297
EG11403	ppx	1	2.80E-04	1	6.06E-04	1	0.00011907	1	0.00022691
EG12965	pqiA	1	7.13E-04	1	6.73E-04	1	0.00045116	1	0.00018353
EG12966	pqiB	1	2.51E-05	1	1.75E-05	1	0.00057652	1	0.00082758
EG11744	pqqL	1	2.28E-04	1	3.56E-04	1	4.8162E-05	1	1.9844E-05
EG10760	prc	1	1.45E-04	1	1.66E-04	1	0.00018406	1	0.00030984
EG10761	prfA	1	7.96E-04	1	1.02E-03	1	0.00069857	1	0.00114589
EG10762	prfB	1	2.82E-04	1	5.70E-04	1	0.00046294	1	0.00044729
EG12114	prfC	1	2.45E-04	1	4.45E-04	1	4.2991E-05	1	4.2501E-05
EG10763	priA	1	9.29E-04	1	8.56E-04	1	0.00018634	1	0.00045665
EG10764	priB	1	1.84E-04	1	2.32E-04	1	5.1943E-05	1	8.5818E-05
EG10765	priC	1	1.24E-04	1	1.40E-04	1	0.00105055	1	0.00083327
EG12365	prkB	1	5.00E-05	1	5.04E-05	1	7.2662E-05	1	8.0227E-05
EG11441	prlC	1	6.82E-04	1	8.46E-04	1	0.00016014	1	0.00042958
EG11497	prmA	1	1.11E-04	1	2.44E-04	1	0.00047029	1	0.00016921
EG12449	prmB	1	2.80E-04	1	2.92E-04	1	0.0001665	1	4.5075E-05
EG12424	prmC	1	2.52E-05	1	1.27E-05	1	3.2101E-05	1	3.671E-05
EG10767	proA	1	4.93E-06	0	3.82E-06	1	0.00052672	1	0.00027282
EG10768	proB	1	1.44E-04	1	1.18E-04	1	0.00025273	1	0.00033945
EG10769	proC	1	1.44E-05	1	8.27E-06	1	2.8709E-05	1	2.2936E-05
EG11612	proP	1	3.07E-04	1	2.80E-04	1	9.0739E-05	1	0.00016081
EG12866	proQ	1	1.60E-03	1	1.21E-03	1	0.00172154	1	0.00111526
EG10770	proS	1	1.24E-04	1	6.66E-05	1	5.3347E-05	1	0.0002971
EG10771	proV	1	1.70E-03	1	1.25E-03	1	0.00039165	1	0.000186
EG10772	proW	1	4.96E-05	1	4.61E-05	1	7.73E-05	1	8.3955E-05
EG10773	proX	1	2.62E-04	1	6.76E-04	1	0.00029379	1	0.00023025
EG13609	proY	0	6.70E-07	0	-3.12E-07	1	8.747E-05	1	3.8008E-05
EG13601	prpB	1	1.96E-04	1	1.78E-04	1	0.00308526	1	0.00083858
EG11756	prpC	1	1.38E-04	1	1.99E-04	1	2.3644E-05	1	2.4405E-05
EG13603	prpD	1	1.28E-03	1	1.00E-03	1	0.00017683	1	0.00013215
EG13604	prpE	1	2.25E-04	1	1.29E-04	1	0.00011343	1	0.00040522
EG13600	prpR	1	3.45E-04	1	2.59E-04	1	6.7796E-05	1	0.0002122
EG10774	prs	1	2.84E-04	1	3.03E-04	1	2.1453E-05	1	2.0603E-05
EG10775	psd	1	1.18E-04	1	1.61E-04	1	5.8078E-05	1	2.811E-05
EG11209	psiE	1	8.06E-05	1	1.19E-04	1	0.00027513	1	0.00034284
EG11401	psiF	1	6.23E-05	1	6.06E-05	1	0.00055888	1	0.00084021
EG10776	pspA	1	4.27E-04	1	3.13E-04	1	0.00019577	1	0.00016602

EG10777	pspB	1	7.29E-04	1	8.36E-04	1	0.00023773	1	0.00023773
EG10778	pspC	0	1.30E-06	0	7.14E-07	1	9.0606E-05	1	0.00012876
EG10779	pspD	1	1.99E-05	1	1.31E-05	1	0.00018918	1	0.00012589
EG10780	pspE	1	2.17E-04	1	2.06E-04	1	0.00055302	1	0.00034957
EG12344	pspF	1	1.89E-04	1	2.98E-04	1	7.9372E-05	1	0.00011377
EG11933	pspG	1	7.20E-04	1	1.03E-03	1	0.00029411	1	0.00016863
EG10781	pssA	1	2.02E-04	1	2.96E-04	1	0.00044112	1	0.00027956
EG10782	pstA	1	4.43E-05	1	4.20E-05	1	0.00026747	1	0.00017092
EG10783	pstB	1	5.73E-04	1	5.24E-04	1	6.3836E-05	1	3.916E-05
EG10784	pstC	1	3.09E-04	1	2.03E-04	1	0.00010694	1	0.00028673
EG10734	pstS	1	2.24E-04	1	5.51E-04	1	0.00032476	1	0.0002964
EG12033	psuG	1	4.28E-04	1	5.06E-04	1	0.00035556	1	0.00036006
EG11646	psuK	1	4.50E-05	1	2.56E-05	1	0.00034326	1	0.00022118
EG12032	psuT	1	3.06E-06	1	4.99E-06	1	0.00010728	1	0.00010073
EG20173	pta	1	4.91E-04	1	5.85E-04	1	0.00047331	1	0.00039639
EG10785	pth	1	3.87E-05	1	1.91E-05	1	9.7536E-05	1	7.8986E-05
EG10786	ptrA	1	2.26E-04	1	3.69E-04	1	0.00089	1	0.00050163
EG11004	ptrB	1	9.91E-04	1	1.06E-03	1	6.8717E-05	1	2.8047E-05
EG11906	ptsA	1	3.18E-05	1	1.96E-05	0	5.9744E-07	0	9.1868E-07
EG10787	ptsG	1	2.28E-04	1	2.25E-04	1	0.00039522	1	0.00025073
EG10788	ptsH	1	1.73E-04	1	2.23E-04	1	5.8938E-05	1	0.00021294
EG10789	ptsI	1	2.54E-04	1	1.56E-04	1	0.00022376	1	0.00015997
EG11682	ptsN	1	5.88E-04	1	6.23E-04	1	4.3359E-05	1	4.3456E-05
EG12188	ptsP	1	8.74E-06	1	2.57E-05	1	2.1695E-05	1	8.1968E-06
EG10790	purA	1	1.35E-05	1	1.43E-05	1	0.00021392	1	0.00046389
EG11314	purB	1	3.66E-05	1	2.33E-05	1	0.00010912	1	3.8851E-05
EG10791	purC	1	3.96E-04	1	3.20E-04	1	2.6507E-05	1	6.7598E-06
EG10792	purD	1	4.20E-05	1	4.84E-05	1	0.00010779	1	3.7997E-05
EG10793	purE	1	1.94E-04	1	4.01E-04	1	0.0002676	1	0.0002425
EG10794	purF	1	4.59E-05	1	2.85E-05	1	0.00049988	1	0.00035297
EG10795	purH	1	4.42E-04	1	6.22E-04	1	0.00015603	1	0.00067472
EG10796	purK	1	2.17E-06	0	3.23E-06	1	0.00021504	1	0.00017885
EG10797	purL	1	2.14E-04	1	1.55E-04	1	0.00025231	1	0.00032459
EG10798	purM	1	5.29E-04	1	6.85E-04	1	0.00050104	1	0.0001782
EG10799	purN	1	1.22E-04	1	3.34E-04	1	0.00013494	1	0.00020583
EG10800	purR	1	7.03E-05	1	7.80E-05	1	0.00016054	1	6.3641E-05
EG11809	purT	1	1.27E-04	1	1.31E-04	1	0.00021891	1	0.00037541
EG11819	purU	1	2.05E-05	1	3.79E-05	1	0.00067858	1	0.00056219
EG10801	putA	1	7.64E-06	1	7.41E-06	1	1.2258E-05	1	1.1971E-05
EG10802	putP	1	2.92E-04	1	1.87E-04	1	0.00017505	1	0.00038205
EG13908	puuA	1	2.18E-04	1	1.00E-03	1	8.2848E-05	1	5.9987E-05
EG11822	puuB	1	1.47E-04	1	3.34E-04	1	0.0003568	1	0.00014522
EG10036	puuC	1	4.85E-04	1	2.48E-04	1	0.00011077	1	0.00020618
EG13909	puuD	1	8.94E-05	1	5.41E-05	1	0.00106978	1	0.00060414
EG13187	puuE	1	3.06E-04	1	3.10E-04	1	0.00025653	1	0.00047144
EG13907	puuP	1	1.29E-04	1	1.10E-04	1	0.00020903	1	0.00017731
EG12431	puuR	1	2.79E-05	1	2.74E-05	1	2.3663E-05	1	6.1509E-06
EG10803	pykA	1	9.34E-05	1	4.95E-05	1	0.00011942	1	0.00015444
EG10804	pykF	1	3.35E-05	1	1.53E-05	1	0.00014292	1	0.00014451
EG10805	pyrB	1	9.99E-05	1	5.25E-05	1	0.00015422	1	8.3695E-05
EG10806	pyrC	1	7.30E-05	1	1.67E-04	1	0.00126975	1	0.00062618
EG10807	pyrD	1	3.01E-04	1	2.84E-04	1	0.00010872	1	0.00028564
EG10808	pyrE	1	3.56E-04	1	3.32E-04	1	0.00021922	1	0.00015862
EG10809	pyrF	1	3.10E-04	1	3.22E-04	1	0.00010935	1	0.00037047
EG10810	pyrG	1	1.04E-04	1	7.49E-05	0	9.7386E-07	1	9.3071E-06
EG11539	pyrH	1	7.63E-04	1	5.64E-04	1	0.0002117	1	0.0001803
EG10811	pyrI	1	1.16E-04	1	1.14E-04	1	0.00034598	1	0.00020558
EG11279	pyrL	1	4.97E-05	1	5.05E-05	1	0.00045996	1	0.00029486
EG13258	qmcA	1	7.51E-05	1	2.00E-04	1	3.4555E-05	1	1.9737E-05
EG11492	qor	1	7.54E-05	1	1.30E-04	1	0.00048421	1	0.00097285
EG13026	qseB	1	2.15E-04	1	2.39E-04	1	0.00010949	1	7.7251E-05
EG13027	qseC	1	1.55E-03	1	1.66E-03	1	0.00048919	1	0.00047473
EG10812	queA	1	6.99E-05	1	2.70E-04	1	0.00052499	1	0.00019708
EG13252	queC	1	1.77E-04	1	1.56E-04	1	9.0447E-05	1	0.00023454
EG13173	queF	1	1.36E-03	1	1.06E-03	1	0.00118071	1	0.00046357
EG13633	quuD	1	2.20E-04	1	1.71E-04	1	5.5539E-05	1	6.0826E-05
EG13832	quuQ	1	2.60E-04	1	1.46E-04	1	0.00025299	1	0.00013284
EG10813	racC	1	7.60E-05	1	7.40E-05	1	0.00041645	1	0.00023019
EG13360	racR	1	5.10E-05	1	2.53E-05	1	1.9173E-05	1	1.2133E-05
EG11296	radA	1	5.14E-05	1	3.89E-05	1	0.00026109	1	0.00038144
EG11151	raiA	1	2.70E-04	1	1.79E-04	1	5.5769E-05	1	0.00015465

EG12690	rarA	1	4.27E-04	1	4.50E-04	1	2.8367E-05	1	1.4196E-05
EG11466	rarD	1	6.96E-04	1	6.42E-04	1	0.0006126	1	0.00091723
EG11731	ravA	1	1.17E-04	1	9.31E-05	1	0.00049077	1	0.00037663
EG12223	rbbA	1	1.62E-05	1	1.54E-05	1	5.6989E-05	1	4.1447E-05
EG11178	rbfA	1	3.08E-06	0	3.46E-06	1	5.9194E-05	1	6.0359E-05
EG14260	rbn	1	3.35E-04	1	2.48E-04	1	0.00035024	1	0.00028745
EG10814	rbsA	1	2.16E-04	1	1.50E-04	1	6.2294E-05	1	0.0001386
EG10815	rbsB	1	2.51E-04	1	2.75E-04	1	0.00025632	1	0.00022558
EG10816	rbsC	1	1.64E-04	1	2.05E-04	1	0.00012446	1	0.0004696
EG10817	rbsD	1	3.23E-05	1	2.08E-05	1	0.00012075	1	8.8154E-05
EG10818	rbsK	1	7.21E-06	1	6.99E-06	1	8.9574E-05	1	5.9709E-05
EG10819	rbsR	1	1.11E-05	1	8.67E-06	1	4.3511E-05	1	2.5289E-05
EG14071	rcnA	1	1.94E-05	1	3.54E-05	1	5.1177E-05	1	0.00012743
EG14070	rcnR	1	6.05E-04	1	7.11E-04	1	0.00043635	1	0.0003861
EG10820	rcsA	1	7.74E-04	1	6.64E-04	1	0.00031584	1	0.00016422
EG10821	rcsB	1	1.79E-04	1	1.11E-04	1	0.00076791	1	0.00082891
EG10822	rcsC	1	2.07E-04	1	4.07E-04	1	0.00021532	1	0.00035203
EG12385	rcsD	1	1.52E-04	1	2.99E-04	1	5.0593E-05	1	3.2165E-05
EG11502	rcsF	1	1.70E-04	1	3.73E-04	1	0.00020805	1	0.00036542
EG12982	rdgB	1	2.69E-04	1	3.66E-04	1	0.00010126	1	3.8179E-05
EG12158	rdgC	1	5.78E-05	1	7.24E-05	1	0.00012312	1	0.00025121
EG11831	rdoA	1	3.93E-04	1	6.57E-04	1	0.0001981	1	0.00048746
EG10823	recA	1	8.30E-06	1	1.23E-05	1	0.00012943	1	0.00016444
EG10824	recB	1	2.60E-04	1	3.18E-04	1	7.5344E-05	1	1.9214E-05
EG10825	recC	1	9.26E-05	1	7.89E-05	1	0.00108509	1	0.00086094
EG10826	recD	1	6.93E-05	1	5.09E-05	1	0.00010847	1	6.1897E-05
EG10827	recE	1	6.28E-04	1	4.04E-04	1	9.1164E-05	1	0.00010511
EG10828	recF	1	1.52E-04	1	1.17E-04	1	3.7377E-05	1	8.9127E-05
EG10829	recG	1	1.67E-05	1	1.68E-05	1	8.6973E-05	1	4.0091E-05
EG10830	recJ	1	7.84E-04	1	9.03E-04	1	6.9618E-05	1	0.00019317
EG10831	recN	1	3.76E-04	1	3.46E-04	1	0.0003388	1	8.5416E-05
EG10832	recO	1	8.14E-06	1	1.12E-05	1	0.00010836	1	9.9248E-05
EG10833	recQ	1	1.99E-04	1	1.52E-04	1	3.282E-05	1	1.8244E-05
EG10834	recR	1	2.60E-04	1	1.65E-04	1	0.00025603	1	0.0003161
EG11899	recT	1	5.13E-05	1	3.10E-05	1	0.00020043	1	0.00010777
EG12080	recX	1	3.86E-04	1	5.42E-04	1	0.00021616	1	7.9657E-05
EG10835	relA	1	6.61E-05	1	4.13E-05	1	0.00010635	1	0.00015465
EG10836	relB	1	1.01E-04	1	1.46E-04	1	0.00029137	1	0.00025288
EG11131	relE	1	1.55E-05	1	7.06E-06	1	6.5196E-05	1	8.4078E-05
EG11129	rem	0	1.34E-06	0	1.34E-06	1	0.00026687	1	0.00033238
EG10837	rep	1	1.44E-03	1	8.99E-04	1	0.00032739	1	0.00049223
EG11351	rfaB	1	3.44E-04	1	4.85E-04	1	5.0167E-05	1	4.0287E-05
EG11189	rfaC	1	1.48E-05	1	1.15E-05	1	0.00011621	1	6.4403E-05
EG10838	rfaD	1	3.76E-04	1	2.65E-04	1	0.00029636	1	0.00023065
EG13416	rfaE	1	1.04E-05	1	2.04E-05	1	6.782E-05	1	4.0854E-05
EG12210	rfaF	1	3.02E-05	1	4.17E-05	1	3.5408E-05	1	2.394E-05
EG11339	rfaG	1	1.02E-04	1	1.32E-04	1	0.00014533	1	0.00012506
EG10839	rfaH	1	8.18E-05	1	6.36E-05	1	1.923E-05	1	1.5314E-05
EG11352	rfaI	1	4.17E-04	1	4.69E-04	1	0.00018452	1	0.00010351
EG11353	rfaJ	1	1.46E-04	1	1.48E-04	1	0.00018463	1	0.00012576
EG11424	rfaL	1	7.19E-04	1	2.89E-04	1	0.00012368	1	8.2324E-05
EG11340	rfaP	1	4.79E-05	1	4.30E-05	1	0.00070126	1	0.0007902
EG11341	rfaQ	1	5.93E-05	1	8.52E-05	1	8.3647E-05	1	0.00019005
EG11350	rfaS	1	1.23E-04	1	1.49E-04	1	0.00014146	1	0.00011924
EG11425	rfaY	1	1.71E-04	1	1.47E-04	1	0.00038449	1	0.00032565
EG11426	rfaZ	1	3.31E-05	1	1.05E-05	1	0.000215	1	0.00010492
EG11978	rfbA	1	8.11E-05	1	5.97E-05	1	7.7023E-05	1	4.8347E-05
EG12412	rfbB	1	1.25E-04	1	1.40E-04	1	0.00021231	1	0.00022417
EG11979	rfbC	1	3.75E-04	1	2.36E-04	1	0.00010339	1	3.4648E-05
EG12411	rfbD	1	4.15E-06	0	1.98E-06	1	3.8052E-05	1	1.857E-05
EG11980	rfbX	1	2.52E-04	1	3.03E-04	1	7.4422E-05	1	4.2102E-05
EG11982	rfc	1	1.98E-04	1	2.93E-04	1	0.00031617	1	0.00032847
EG10840	rfe	1	3.94E-04	1	2.48E-04	1	9.2763E-05	1	2.5207E-05
EG11456	rffA	1	2.33E-05	1	1.41E-05	1	3.4369E-05	1	1.4214E-05
EG11455	rffC	1	5.69E-04	1	8.52E-04	1	0.00017683	1	5.0248E-05
EG11452	rffD	1	5.42E-05	1	4.71E-05	1	0.00018929	1	0.00012566
EG11451	rffE	1	7.49E-05	1	6.37E-05	1	0.00025231	1	0.00056147
EG11453	rffG	1	1.25E-05	1	9.16E-06	1	1.0686E-05	0	4.3574E-06
EG11454	rffH	1	1.36E-05	1	1.57E-05	1	3.9387E-05	1	1.2367E-05
EG11458	rffM	1	9.36E-05	1	1.08E-04	1	0.00017287	1	0.0001705
EG14320	rffT	1	1.08E-03	1	8.63E-04	1	0.00019219	1	0.00057675

EG11867	rhaA	1	8.98E-05	1	3.64E-05	1	6.4169E-05	1	9.1122E-05
EG11868	rhaB	1	2.27E-04	1	2.15E-04	1	0.00015204	1	3.9826E-05
EG11866	rhaD	1	9.10E-05	1	3.56E-05	1	6.996E-05	1	4.8089E-05
EG11865	rhaM	1	4.26E-05	1	3.74E-05	1	4.0047E-05	1	5.181E-05
EG10842	rhaR	1	4.57E-04	1	5.07E-04	1	0.00021907	1	9.0154E-05
EG10843	rhaS	1	7.85E-04	1	1.11E-03	1	2.6089E-05	1	1.3045E-05
EG11313	rhaT	0	2.68E-07	0	-4.25E-07	1	8.6428E-06	0	3.8223E-06
EG10844	rhlB	1	5.58E-04	1	4.29E-04	1	0.00060086	1	0.00020767
EG11235	rhlE	1	4.40E-05	1	3.66E-05	1	4.271E-05	1	3.286E-05
EG10845	rho	1	9.64E-04	1	8.70E-04	1	4.7696E-05	1	3.9263E-05
EG10846	rhsA	1	5.24E-05	1	3.37E-05	1	2.7484E-06	0	5.7063E-07
EG10847	rhsB	1	5.76E-06	1	7.52E-06	1	3.3748E-05	1	1.4702E-05
EG10848	rhsC	1	3.96E-06	0	4.40E-06	1	7.8182E-06	0	2.9894E-06
EG10849	rhsD	0	8.23E-07	0	1.26E-08	1	2.7065E-05	1	2.5647E-05
EG12134	rhtA	1	1.04E-04	1	5.16E-05	1	0.00028457	1	0.00026633
EG11469	rhtB	1	2.02E-04	1	3.00E-04	1	0.00014639	1	0.00032805
EG11468	rhtC	1	7.20E-05	1	1.32E-04	1	0.00015719	1	4.9739E-05
EG11331	ribA	1	7.62E-04	1	7.19E-04	1	0.00028251	1	0.00047545
EG10465	ribB	1	2.44E-03	1	1.70E-03	1	0.00056075	1	0.00058643
EG11406	ribC	1	1.05E-04	1	1.35E-04	1	0.00017665	1	0.00011734
EG11321	ribD	0	2.00E-06	0	1.25E-06	1	1.2774E-05	1	8.2054E-06
EG11322	ribE	1	1.21E-04	1	1.58E-04	1	7.6394E-06	1	2.8173E-05
EG11079	ribF	1	3.61E-06	0	2.35E-06	1	0.00046893	1	0.00010617
EG12701	rihA	1	6.40E-05	1	7.19E-05	1	0.0005537	1	0.00057996
EG12030	rihB	1	1.40E-05	1	2.89E-05	1	0.00029673	1	0.00038665
EG11082	rihC	1	8.71E-04	1	1.02E-03	1	0.00116506	1	0.00057366
EG10850	rimI	1	2.42E-04	1	1.62E-04	1	0.00011037	1	4.5242E-05
EG10851	rimJ	1	8.69E-05	1	1.77E-04	1	0.00035413	1	0.00049797
EG10852	rimK	1	3.12E-06	0	4.34E-06	1	5.5447E-05	1	8.339E-05
EG10853	rimL	1	2.64E-04	1	4.24E-04	1	0.00013636	1	0.00027336
EG11153	rimM	1	1.43E-04	1	1.28E-04	1	0.00022157	1	0.0003534
EG12840	rimN	1	1.08E-03	1	8.62E-04	1	0.00027571	1	0.00015817
EG12483	rlmB	1	1.82E-05	1	3.51E-05	1	0.00034381	1	0.00019851
EG13319	rlmF	1	2.57E-04	1	1.08E-04	1	0.00012831	1	3.7815E-05
EG12726	rlmG	1	1.92E-04	1	2.43E-04	1	0.00022987	1	0.00021656
EG13717	rlmL	1	6.64E-05	1	3.87E-05	1	0.00034065	1	0.00019135
EG12401	rlmN	1	2.99E-04	1	3.91E-04	1	0.00035829	1	0.0002377
EG10854	rlpA	0	1.42E-06	1	5.60E-06	1	0.00016258	1	0.0002495
EG10855	rlpB	1	1.11E-04	1	1.27E-04	1	6.9009E-05	1	7.0087E-05
EG12609	rluA	1	2.81E-06	0	2.64E-06	1	8.3555E-06	0	1.3638E-06
EG12433	rluB	1	6.75E-06	1	5.51E-06	1	2.4823E-05	1	9.036E-05
EG11118	rluC	1	3.79E-04	1	2.95E-04	1	8.1028E-05	1	0.0001829
EG12098	rluD	1	5.45E-05	1	8.57E-05	1	0.00035336	1	0.0003305
EG13447	rluE	1	3.76E-04	1	5.29E-04	1	0.00021736	1	0.0002913
EG11921	rluF	1	8.63E-04	1	1.32E-03	1	0.00052334	1	0.00081635
EG50004	rmf	1	5.76E-05	1	9.89E-05	1	7.502E-05	1	0.00020676
EG11472	rmuC	1	2.07E-04	1	1.78E-04	1	0.00054788	1	0.00025993
EG10856	rna	1	1.33E-03	1	1.06E-03	1	0.00077411	1	0.00135429
EG11620	rnb	1	2.50E-04	1	3.70E-04	1	0.00039935	1	0.00070436
EG10857	rnc	1	4.74E-04	1	8.77E-04	1	0.00013633	1	3.0456E-05
EG10858	rnd	1	5.42E-05	1	5.73E-05	1	7.1454E-05	1	0.00021102
EG10859	rne	1	5.08E-04	1	8.86E-04	1	0.00078883	1	0.0010703
EG11299	rng	1	1.57E-04	1	1.36E-04	1	0.00012626	1	0.00017733
EG10860	rnhA	1	4.68E-04	1	3.78E-04	1	0.0001847	1	0.00022491
EG10861	rnhB	1	4.15E-05	1	5.89E-05	1	0.00049764	1	0.00029092
EG12637	rnk	1	1.32E-04	1	1.76E-04	1	0.00021082	1	0.00031586
EG13200	rnlA	1	2.95E-05	1	2.97E-05	1	1.8906E-05	1	5.2238E-05
EG10862	rnpA	1	4.77E-04	1	4.14E-04	1	0.00029904	1	0.00039132
EG11259	rnr	1	3.19E-04	1	2.60E-04	1	0.00032223	1	0.00036494
EG11547	rnt	1	2.68E-04	1	4.73E-04	1	9.5098E-05	1	0.00011487
EG11366	rob	1	7.68E-06	1	5.43E-06	1	0.00057815	1	0.00030651
EG13221	rof	1	1.32E-03	1	8.62E-04	1	0.00051773	1	0.00040869
EG11960	rpe	1	1.49E-04	1	1.17E-04	1	0.000269	1	0.00021151
EG11443	rpiA	1	3.88E-04	1	4.41E-04	1	0.00047275	1	0.0004997
EG11827	rpiB	1	5.54E-04	1	4.72E-04	1	0.00017763	1	5.4999E-05
EG12459	rpiR	1	1.03E-05	1	1.02E-05	1	0.00046336	1	0.00027968
EG10864	rplA	0	4.21E-07	0	4.36E-07	1	0.00019769	1	0.00045336
EG10865	rplB	1	5.12E-05	1	6.90E-05	1	0.0001508	1	7.8837E-05
EG10866	rplC	1	3.97E-05	1	6.70E-05	1	0.00035953	1	0.00015611
EG10867	rplD	1	5.86E-06	1	6.78E-06	1	0.00017574	1	0.00040852
EG10868	rplE	1	3.21E-04	1	2.45E-04	1	4.5582E-05	1	6.7269E-05

EG10869	rplF	1	1.93E-04	1	1.22E-04	1	0.00028615	1	0.00078093
EG10870	rplI	1	1.30E-04	1	1.41E-04	1	0.00033339	1	0.00068147
EG10871	rplJ	1	4.61E-04	1	3.43E-04	1	0.00015083	1	0.00013692
EG10872	rplK	1	3.39E-05	1	2.42E-05	1	0.00015725	1	3.768E-05
EG10873	rplL	1	5.28E-04	1	5.55E-04	1	0.00057808	1	0.00012594
EG10874	rplM	1	4.56E-04	1	5.59E-04	1	0.00019695	1	0.00022681
EG10875	rplN	1	1.46E-04	1	2.84E-04	1	0.00014156	1	3.5803E-05
EG10876	rplO	1	1.52E-05	1	2.23E-05	1	0.00011875	1	6.9537E-05
EG10877	rplP	1	1.29E-04	1	8.86E-05	1	8.308E-05	1	0.00014239
EG10878	rplQ	1	7.62E-05	1	8.68E-05	1	0.00036893	1	0.00032391
EG10879	rplR	1	6.54E-05	1	5.81E-05	1	6.027E-05	1	7.317E-05
EG10880	rplS	1	9.69E-05	1	5.16E-05	1	5.2395E-05	1	5.8757E-05
EG10881	rplT	1	2.48E-04	1	1.26E-04	1	0.000147	1	0.00018007
EG50001	rplU	1	5.35E-05	1	5.51E-05	1	0.0002461	1	0.0002757
EG10882	rplV	1	1.32E-04	1	8.17E-05	1	0.0002761	1	2.7734E-05
EG10883	rplW	1	3.54E-05	1	9.36E-05	1	3.9345E-05	1	9.5517E-05
EG10884	rplX	1	1.67E-04	1	1.10E-04	1	0.00031507	1	0.00022547
EG10885	rplY	1	6.30E-05	1	7.18E-05	1	6.4115E-06	1	5.187E-06
EG50002	rpmA	1	7.86E-06	1	7.85E-06	1	0.00019248	1	0.00038987
EG10886	rpmB	1	9.41E-05	1	5.01E-05	1	0.00060188	1	0.00099543
EG10887	rpmC	1	8.28E-05	1	6.70E-05	1	0.00035623	1	0.00014696
EG10888	rpmD	1	7.78E-05	1	4.73E-05	1	0.00011641	1	0.00018208
EG10889	rpmE	1	3.48E-04	1	3.54E-04	1	7.0816E-05	1	4.1354E-05
EG10890	rpmF	1	1.38E-05	1	2.46E-05	1	0.00011987	1	0.00020633
EG10891	rpmG	1	9.05E-05	1	7.44E-05	1	4.0325E-05	1	8.1054E-05
EG10892	rpmH	1	5.60E-04	1	5.48E-04	1	0.00014342	1	2.3046E-05
EG11231	rpmI	1	4.05E-04	1	3.18E-04	1	0.00029466	1	0.00011852
EG11232	rpmJ	1	5.96E-04	1	4.24E-04	1	0.00016225	1	9.9215E-05
EG10893	rpoA	1	3.73E-05	1	5.40E-05	1	0.00099203	1	0.0010132
EG10894	rpoB	1	1.03E-04	1	7.79E-05	1	0.00051721	1	0.00050381
EG10895	rpoC	1	1.70E-04	1	1.46E-04	1	0.00021558	1	0.00048342
EG10896	rpoD	1	1.16E-04	1	6.61E-05	1	6.4646E-05	1	9.6072E-05
EG11897	rpoE	0	4.02E-07	0	1.43E-07	0	5.6327E-07	0	1.9263E-07
EG10897	rpoH	1	3.39E-04	1	2.94E-04	1	0.00035855	1	0.00080772
EG10898	rpoN	1	1.23E-04	1	9.00E-05	1	0.0003713	1	0.00041711
EG10510	rpoS	1	4.51E-05	1	5.52E-05	1	0.00027478	1	0.00033338
EG10899	rpoZ	1	1.53E-04	1	1.59E-04	1	0.00010742	1	6.9649E-05
EG13091	rppH	1	1.37E-04	1	9.72E-05	1	0.00029315	1	0.00014579
EG10900	rpsA	1	2.76E-04	1	3.15E-04	1	0.00020386	1	0.00011115
EG10901	rpsB	1	8.44E-05	1	6.12E-05	1	0.00012931	1	0.00032272
EG10902	rpsC	1	8.29E-05	1	1.60E-04	1	0.00010038	1	4.9343E-05
EG10903	rpsD	1	1.49E-05	1	1.20E-05	1	3.3789E-05	1	2.6892E-05
EG10904	rpsE	1	1.04E-05	1	1.40E-05	1	7.9398E-05	1	0.00010035
EG10905	rpsF	1	3.02E-05	1	1.55E-05	1	1.2589E-05	1	9.1066E-06
EG10906	rpsG	1	1.12E-04	1	1.03E-04	1	4.9988E-05	1	7.5534E-05
EG10907	rpsH	1	5.43E-05	1	5.90E-05	1	8.3905E-05	1	7.587E-05
EG10908	rpsI	1	1.97E-04	1	1.64E-04	1	0.0006576	1	0.00076811
EG10909	rpsJ	1	2.87E-04	1	5.53E-04	1	0.00023554	1	0.00056674
EG10910	rpsK	1	1.12E-04	1	9.23E-05	1	0.00018452	1	0.00035033
EG10911	rpsL	1	8.49E-05	1	5.27E-05	1	0.0003253	1	0.00032719
EG10912	rpsM	1	1.58E-04	1	3.07E-04	1	0.00041548	1	0.0005623
EG10913	rpsN	1	2.38E-04	1	2.70E-04	1	0.00013961	1	0.00019562
EG10914	rpsO	1	7.08E-04	1	4.56E-04	1	0.00050213	1	0.00082408
EG10915	rpsP	1	1.42E-04	1	1.56E-04	1	0.00034095	1	0.00059096
EG10916	rpsQ	1	4.66E-06	1	2.39E-05	1	0.00013181	1	8.7778E-05
EG10917	rpsR	1	1.96E-04	1	2.30E-04	1	0.00021166	1	0.00028452
EG10918	rpsS	1	4.37E-04	1	3.29E-04	1	0.00064303	1	0.00052539
EG10919	rpsT	1	1.13E-04	1	1.78E-04	1	0.00033666	1	0.00074742
EG10920	rpsU	1	1.03E-04	1	1.19E-04	1	6.6421E-06	0	2.6569E-06
EG11879	rraA	1	1.39E-04	1	3.59E-04	1	0.00055853	1	0.00063231
EG12453	rraB	1	1.53E-05	1	8.19E-06	1	9.4129E-05	1	4.1133E-05
EG12207	rrmA	1	2.09E-04	1	2.06E-04	1	8.8757E-05	1	0.00014403
EG11507	rrmJ	1	6.66E-05	1	9.96E-05	1	0.00019369	1	0.00015328
EG11738	rsd	1	7.30E-04	1	5.71E-04	1	1.7556E-05	1	8.7502E-06
EG12341	rseA	1	9.41E-05	1	1.30E-04	1	7.9144E-05	1	4.9975E-05
EG13177	rseB	1	1.69E-04	1	3.48E-04	1	0.00026122	1	8.5555E-05
EG13178	rseC	1	5.54E-06	1	1.62E-05	1	1.6423E-05	0	4.5144E-06
EG12436	rseP	1	2.87E-05	1	9.57E-05	1	0.00078617	1	0.00039253
EG12479	rsgA	1	1.03E-04	1	1.45E-04	1	5.1357E-05	1	0.00012985
EG12163	rsmB	1	2.51E-04	1	2.02E-04	1	0.00013537	1	0.00029483
EG12596	rsmC	1	1.17E-04	1	3.37E-04	1	0.00031785	1	0.00037644

EG10343	rsmD	1	3.70E-04	1	2.23E-04	1	1.3938E-05	1	2.074E-05
EG12366	rsmE	1	1.24E-05	1	1.15E-05	1	3.9642E-05	1	3.4361E-05
EG14023	rsmF	1	7.42E-04	1	5.23E-04	1	0.00011355	1	0.00016876
EG12451	rspA	1	2.68E-05	1	5.76E-05	1	0.00074078	1	0.00034185
EG12452	rspB	1	3.16E-05	1	2.29E-05	1	0.00012671	1	7.912E-05
EG12120	rssA	1	2.49E-05	1	1.48E-05	1	0.00046385	1	0.00048168
EG12121	rssB	1	2.36E-05	1	1.85E-05	1	0.00013568	1	0.00019135
EG13190	rstA	1	6.14E-04	1	6.72E-04	1	8.6947E-05	1	0.00020288
EG11233	rstB	1	9.00E-04	1	9.23E-04	1	0.00084764	1	0.00097912
EG12044	rsuA	1	1.19E-04	1	2.51E-04	1	0.00013254	1	0.00017104
EG13933	rsxA	1	1.91E-04	1	1.14E-04	1	0.00043262	1	0.00051013
EG13934	rsxB	1	5.05E-05	1	3.75E-05	1	4.0532E-06	0	1.9155E-06
EG13935	rsxC	1	5.60E-04	1	4.99E-04	1	7.6747E-05	1	0.00013451
EG13936	rsxD	1	6.46E-05	1	6.91E-05	1	0.00012503	1	0.00021192
EG13938	rsxE	1	1.03E-04	1	6.62E-05	1	0.00014112	1	0.00012625
EG13937	rsxG	1	2.29E-04	1	2.90E-04	1	1.8096E-05	1	2.9722E-05
EG12938	rtcA	0	1.71E-06	0	1.84E-06	1	3.7391E-06	0	7.7612E-07
EG12939	rtcB	1	2.83E-04	1	4.59E-04	1	0.00013671	1	4.4477E-05
EG12356	rtcR	1	1.50E-04	1	2.77E-04	1	0.00052321	1	0.00011935
EG14077	rtn	1	6.51E-04	1	8.09E-04	1	0.00019497	1	0.00055334
EG11247	rumA	1	2.10E-05	1	1.26E-05	1	0.00038481	1	0.00033814
EG13427	rumB	1	7.68E-05	1	4.15E-05	1	0.0003782	1	0.00057633
EG20283	rusA	1	3.63E-05	1	2.32E-05	1	9.5908E-05	1	6.6327E-05
EG13859	rutA	1	9.83E-05	1	1.17E-04	1	0.00011546	1	0.00019956
EG13858	rutB	1	5.47E-05	1	1.27E-04	1	8.6711E-05	1	0.0001699
EG13857	rutC	1	2.93E-04	1	3.24E-04	1	0.00033676	1	0.00069238
EG13856	rutD	1	1.56E-05	1	9.35E-06	1	0.00031527	1	0.0003668
EG13855	rutE	1	1.18E-04	1	1.82E-04	1	1.4179E-05	0	3.6011E-06
EG13854	rutF	1	1.25E-04	1	9.99E-05	1	0.00022357	1	0.0002772
EG13853	rutG	1	5.25E-05	1	4.85E-05	1	0.00041975	1	0.00024066
EG12301	rutR	0	7.69E-08	0	9.85E-07	1	1.9077E-05	1	1.2412E-05
EG10923	ruvA	1	1.81E-04	1	6.20E-04	1	0.00040865	1	0.00054105
EG10924	ruvB	1	8.20E-05	1	8.50E-05	1	0.00052354	1	0.00064196
EG10925	ruvC	1	1.07E-05	1	1.28E-05	1	3.4244E-05	1	3.7691E-05
EG14380	rzoD	1	7.08E-05	1	5.74E-05	1	8.9126E-05	1	0.00011219
EG14381	rzoR	1	1.20E-04	1	1.06E-04	1	0.00020653	1	0.00032081
EG13636	rzpD	1	2.65E-05	1	1.08E-04	1	0.00010323	1	4.9801E-05
EG13817	sad	1	1.62E-04	1	2.54E-04	1	0.00049534	1	0.00021578
EG12025	sanA	1	9.53E-05	1	7.32E-05	1	0.00010717	1	5.0908E-05
EG20254	sapA	1	9.15E-04	1	7.02E-04	1	9.3646E-05	1	0.00021133
EG20255	sapB	1	6.80E-05	1	1.54E-04	1	0.00022915	1	0.0002587
EG20256	sapC	1	6.26E-05	1	1.07E-04	1	0.00035346	1	0.00022268
EG12304	sapD	1	1.83E-04	1	1.43E-04	1	0.00018502	1	7.4951E-05
EG12305	sapF	1	2.63E-04	1	5.09E-04	1	0.00038947	1	0.00045713
EG10926	sbcB	1	4.11E-04	1	5.35E-04	1	8.5409E-05	1	1.3829E-05
EG10927	sbcC	1	4.30E-05	1	9.90E-05	1	0.00016251	1	3.8338E-05
EG11094	sbcD	1	1.46E-04	1	9.84E-05	1	0.00018463	1	0.00036098
EG10928	sbmA	1	1.32E-04	1	1.88E-04	1	0.00025177	1	0.00033509
EG11892	sbmC	1	5.69E-04	1	2.98E-04	1	0.00025679	1	0.00016547
EG10929	sbp	1	3.90E-06	0	4.67E-06	1	7.6245E-05	1	3.3144E-05
EG11444	scpA	1	7.38E-06	1	2.36E-05	1	0.00029	1	0.00029181
EG12972	scpB	1	4.64E-04	1	4.52E-04	1	0.00070984	1	0.00068435
EG12973	scpC	1	5.21E-05	1	4.84E-05	1	0.00015508	1	0.00010673
EG10930	sdaA	1	4.56E-05	1	2.49E-05	1	0.00057631	1	0.0003035
EG11623	sdaB	1	9.01E-04	1	8.15E-04	1	0.00026427	1	0.00037318
EG12142	sdaC	1	1.77E-05	1	1.75E-05	1	0.00010303	1	0.00037073
EG10931	sdhA	1	1.45E-05	1	1.75E-05	1	0.00010994	1	0.00011256
EG10932	sdhB	1	6.01E-05	1	8.68E-05	1	0.00011134	1	0.00015494
EG10933	sdhC	1	4.48E-04	1	3.18E-04	1	0.00044752	1	7.681E-05
EG10934	sdhD	1	3.76E-04	1	5.01E-04	1	0.0002062	1	0.00056137
EG10935	sdiA	1	5.47E-05	1	9.76E-05	1	6.4694E-05	1	0.00010454
EG10936	secA	1	5.36E-04	1	7.89E-04	1	0.00012443	1	8.1537E-05
EG10937	secB	1	2.48E-04	1	2.38E-04	1	0.00038179	1	2.7338E-05
EG10938	secD	1	9.66E-04	1	5.77E-04	1	0.00023019	1	0.00033179
EG10939	secE	0	5.36E-07	0	2.16E-07	0	-6.45E-07	0	-7.137E-07
EG10940	secF	1	7.74E-05	1	7.52E-05	1	0.00064112	1	0.00072239
EG12095	secG	1	1.25E-04	1	2.03E-04	1	0.00025005	1	0.00011457
EG11087	secM	1	4.36E-05	1	3.12E-05	1	0.00010551	1	0.00028903
EG10766	secY	1	2.05E-05	1	2.05E-05	1	7.5994E-05	1	6.9635E-05
EG10941	selA	1	3.37E-04	1	1.94E-04	1	0.00054277	1	0.00061174
EG10942	selB	1	9.41E-06	1	1.34E-05	1	0.00041452	1	0.00049891

EG10943	selD	1	3.68E-04	1	3.87E-04	1	8.2231E-05	1	0.00021612
EG12197	seqA	1	1.32E-04	1	1.72E-04	1	5.8938E-05	1	6.3423E-05
EG10944	serA	1	9.69E-06	1	8.23E-06	1	0.00023768	1	0.00015636
EG10945	serB	1	9.87E-05	1	4.73E-05	1	0.00021562	1	0.00030504
EG10946	serC	1	2.67E-05	1	1.37E-05	1	0.0001378	1	0.00014524
EG10947	serS	1	5.33E-04	1	3.90E-04	1	0.00017756	1	7.5637E-05
EG11754	setA	1	1.23E-04	1	2.52E-04	1	0.00023882	1	0.0004901
EG12034	setB	1	3.27E-04	1	4.51E-04	1	0.0001507	1	0.00030419
EG11687	setC	1	3.01E-04	1	2.40E-04	1	0.00010852	1	0.00011552
EG13881	sfmA	1	5.06E-05	1	8.07E-05	1	5.0324E-05	1	2.4922E-05
EG13882	sfmC	1	8.43E-04	1	3.89E-04	1	6.3004E-05	1	6.4431E-05
EG13883	sfmD	1	3.15E-04	1	1.98E-04	1	0.00010881	1	8.96E-05
EG12388	sfmF	1	2.82E-05	1	2.90E-05	1	4.2559E-05	1	7.2997E-05
EG13884	sfmH	1	7.68E-04	1	6.28E-04	1	0.00035706	1	0.00023916
EG10949	sfsA	0	8.42E-07	0	-1.74E-07	1	0.00021744	1	0.00026633
EG10656	sfsB	1	3.89E-04	1	4.59E-04	1	7.9677E-05	1	9.581E-05
EG12287	sgbE	1	3.29E-06	0	4.12E-06	1	0.00010946	1	0.00011272
EG12285	sgbH	1	3.36E-03	1	2.34E-03	1	0.00034472	1	0.00033043
EG12286	sgbU	1	5.91E-05	1	3.81E-05	1	0.00028557	1	7.5315E-05
EG12554	sgcA	1	2.31E-05	1	2.71E-05	1	0.00010731	1	3.8874E-05
EG14343	sgcB	1	1.48E-04	1	2.10E-04	1	0.00016241	1	3.5769E-05
EG12556	sgcC	1	4.58E-04	1	5.90E-04	1	0.00020983	1	0.00018855
EG12553	sgcE	1	1.93E-04	1	1.68E-04	1	3.6327E-05	1	2.4658E-05
EG12555	sgcQ	1	1.81E-05	1	8.07E-06	1	0.00024119	1	0.00018257
EG12552	sgcR	1	1.41E-04	1	2.23E-04	1	4.4664E-05	1	0.00013186
EG12557	sgcX	1	3.46E-05	1	4.43E-05	1	0.00019493	1	0.00064174
EG12094	sgrR	1	6.74E-04	1	8.61E-04	1	0.00010804	1	9.2352E-05
EG14467	sgrT	1	8.52E-04	1	7.54E-04	1	0.00074053	1	0.00035646
EG20205	shiA	1	7.46E-04	1	8.65E-04	1	0.00029678	1	0.0003868
EG12154	sieB	1	2.30E-04	1	3.77E-04	1	0.00106052	1	0.00131835
EG12216	sirA	1	5.16E-04	1	3.17E-04	1	0.00011875	1	0.00015747
EG14126	sixA	1	3.39E-06	0	4.36E-06	1	0.00054549	1	0.00052705
EG10455	skp	1	1.99E-05	1	1.70E-05	1	0.00050445	1	0.00040957
EG11191	slmA	1	5.31E-06	1	5.34E-06	1	0.0002122	1	0.00021575
EG11890	slp	1	3.63E-04	1	5.87E-04	1	0.00027783	1	8.4139E-05
EG10950	slt	1	8.04E-05	1	8.95E-05	1	0.00014716	1	0.00038221
EG13408	slyA	1	1.17E-04	1	6.36E-05	1	0.00034989	1	0.00021431
EG13409	slyB	1	2.92E-05	1	2.69E-05	1	3.5387E-05	1	6.1924E-05
EG11663	slyD	1	4.55E-04	1	2.69E-04	1	0.00030416	1	0.00034072
EG11664	slyX	1	4.42E-06	0	2.38E-06	1	1.6197E-05	1	6.269E-06
EG11604	smf	1	9.77E-06	1	1.32E-05	1	4.3902E-05	1	8.2036E-05
EG11605	smg	1	5.26E-04	1	3.32E-04	1	0.00072066	1	0.00084548
EG10952	smpA	1	1.16E-04	1	1.34E-04	1	0.00022871	1	0.00026726
EG11782	smpB	1	2.34E-04	1	2.36E-04	1	0.00016619	1	0.00021992
EG12167	smtA	1	2.38E-04	1	2.60E-04	1	0.00022911	1	0.00012821
EG10953	sodA	1	4.51E-04	1	4.21E-04	1	9.4937E-05	1	6.7033E-05
EG10954	sodB	1	4.14E-04	1	3.40E-04	1	0.00033138	1	0.00022467
EG13419	sodC	1	7.16E-05	1	1.26E-04	1	0.00023911	1	0.00016611
EG10955	sohA	1	8.69E-04	1	7.94E-04	1	0.00016561	1	6.2112E-05
EG10956	sohB	1	3.86E-04	1	3.97E-04	1	0.00015422	1	0.00011052
EG12669	solA	1	3.63E-05	1	5.51E-05	1	0.00011315	1	0.00036572
EG10957	soxR	1	1.09E-04	1	9.73E-05	1	0.00020147	1	0.00030746
EG10958	soxS	1	2.70E-04	1	3.61E-04	1	0.00041006	1	0.00026989
EG10959	speA	1	1.35E-03	1	9.71E-04	1	4.8828E-05	1	0.00012043
EG10960	speB	1	5.34E-04	1	5.55E-04	1	0.00053199	1	0.00072888
EG10961	speC	1	5.23E-04	1	6.55E-04	1	0.00013895	1	0.00045928
EG10962	speD	1	1.22E-04	1	3.62E-04	1	4.3793E-05	1	4.0218E-05
EG10963	speE	1	9.32E-06	1	1.07E-05	1	9.378E-05	1	5.4064E-05
EG10964	speF	1	1.53E-03	1	1.08E-03	1	3.4099E-05	1	0.00010665
EG12447	speG	1	3.29E-04	1	2.25E-04	1	0.00093122	1	0.00078126
EG10966	spoT	1	1.04E-04	1	6.77E-05	1	9.9803E-05	1	0.00025893
EG10968	sppA	1	4.87E-04	1	4.40E-04	1	0.00021389	1	0.00035774
EG14076	spr	1	1.61E-04	1	2.21E-04	1	7.9982E-05	1	0.0001085
EG13490	spy	1	3.77E-04	1	5.94E-04	1	0.00043326	1	0.00072636
EG11508	sra	1	2.57E-04	1	3.32E-04	1	0.0003205	1	0.00022372
EG10969	srlA	1	1.11E-04	1	1.28E-04	1	6.1609E-05	1	8.8631E-06
EG10970	srlB	1	1.45E-03	1	1.13E-03	1	0.00018652	1	0.00012658
EG10971	srlD	1	2.20E-05	1	2.26E-05	1	2.8166E-05	1	1.2973E-05
EG14373	srlE	1	3.66E-06	0	1.68E-06	1	7.1233E-05	1	5.2074E-05
EG10974	srlR	1	5.95E-04	1	2.10E-04	1	0.00026639	1	0.00017772
EG10975	srmB	1	9.85E-05	1	5.64E-05	1	4.3598E-05	1	2.6727E-05

EG10976	ssb	1	3.97E-05	1	3.10E-05	1	0.00010317	1	6.6216E-05
EG13120	sscR	1	7.79E-04	1	7.52E-04	1	7.6722E-05	1	0.00024828
EG11600	sseA	1	5.13E-04	1	5.52E-04	1	2.0593E-05	1	9.3856E-06
EG11601	sseB	1	2.84E-04	1	3.87E-04	1	0.00015564	1	5.6159E-05
EG13062	ssnA	1	1.69E-04	1	1.61E-04	1	0.00019314	1	0.00011112
EG10977	sspA	1	2.08E-04	1	1.99E-04	1	5.8589E-05	1	2.2428E-05
EG10978	sspB	1	8.63E-04	1	6.62E-04	1	0.00010381	1	0.00024519
EG12732	sstT	1	7.63E-05	1	9.82E-05	1	0.0001923	1	0.00024819
EG13707	ssuA	1	6.81E-05	1	1.40E-04	1	9.5287E-05	1	0.00019233
EG12358	ssuB	1	9.45E-05	1	1.25E-04	1	0.00013355	1	7.0285E-05
EG13705	ssuC	0	1.98E-06	0	2.08E-06	1	0.00028696	1	0.00026393
EG13706	ssuD	1	3.12E-04	1	2.65E-04	1	0.00017224	1	0.0001042
EG13708	ssuE	1	1.72E-04	1	1.03E-04	1	3.6139E-05	1	6.8077E-05
EG13370	stfR	0	1.94E-06	0	1.41E-06	1	4.3155E-06	1	7.3545E-05
EG11428	sthA	1	5.30E-04	1	5.29E-04	1	0.00089799	1	0.00064655
EG11554	stpA	1	5.26E-04	1	5.43E-04	1	9.4937E-05	1	0.00012598
EG10979	sucA	1	1.24E-05	1	8.89E-06	1	1.5653E-05	1	1.8656E-05
EG10980	sucB	1	3.10E-04	1	5.23E-04	1	0.00021435	1	0.00013428
EG10981	sucC	1	1.28E-04	1	2.24E-04	1	0.00045056	1	0.00035195
EG10982	sucD	1	1.77E-05	1	3.03E-05	1	0.00039615	1	0.00061037
EG11378	sufA	1	1.19E-04	1	1.69E-04	1	0.00017942	1	8.1099E-05
EG13965	sufB	1	2.49E-05	1	3.44E-05	1	0.00029867	1	0.00028592
EG13964	sufC	1	2.00E-04	1	3.57E-04	1	0.00076297	1	0.000902
EG13963	sufD	1	1.73E-05	1	1.16E-05	1	0.00017049	1	0.00014751
EG13961	sufE	1	6.79E-05	1	7.09E-05	1	0.0001556	1	0.00012518
EG13962	sufS	1	2.35E-05	1	2.69E-05	1	8.6216E-05	1	7.6604E-05
EG11616	sugE	1	1.03E-04	1	7.29E-05	1	0.00014339	1	0.0001907
EG10983	suhB	1	6.07E-05	1	1.05E-04	1	0.00040967	1	0.00020911
EG10984	sulA	1	3.08E-04	1	3.25E-04	1	0.00024226	1	0.00035961
EG10985	surA	1	1.56E-03	1	1.68E-03	1	0.000923	1	0.00103284
EG11817	surE	1	7.11E-05	1	4.75E-05	1	0.00030603	1	0.00019949
EG13720	sxy	1	1.63E-04	1	2.66E-04	1	3.1222E-05	1	2.6294E-05
EG12959	syd	1	6.01E-04	1	5.75E-04	1	0.00023736	1	0.0001832
EG12584	symE	1	9.20E-05	1	1.29E-04	1	0.00047728	1	0.00058276
EG11372	tadA	1	3.54E-05	1	1.63E-05	1	0.00062016	1	0.00070516
EG10986	tag	1	5.23E-06	1	5.76E-06	1	7.7099E-05	1	2.1398E-05
EG11797	talA	1	1.66E-03	1	1.59E-03	1	0.00019208	1	0.00013469
EG11556	talB	1	4.06E-04	1	4.37E-04	1	0.00023147	1	0.00015286
EG13812	tam	1	5.07E-04	1	6.50E-04	1	0.00032891	1	0.00165297
EG10987	tap	1	2.26E-03	1	1.49E-03	1	0.00067066	1	0.00059515
EG10988	tar	1	5.51E-05	1	3.23E-05	1	0.00026092	1	0.00018461
EG13093	tas	1	1.09E-04	1	7.15E-05	1	8.9733E-05	1	0.00010091
EG11478	tatA	1	1.83E-04	1	1.02E-04	1	0.0003372	1	0.00031757
EG14322	tatB	1	9.71E-05	1	7.71E-05	1	3.0347E-05	1	1.7425E-05
EG11479	tatC	1	1.83E-04	1	3.74E-04	1	0.00011919	1	5.0161E-05
EG11481	tatD	1	1.50E-04	1	1.57E-04	1	0.00013361	1	0.00010083
EG11305	tatE	1	5.11E-05	1	3.51E-05	1	3.6978E-05	1	3.6935E-05
EG13300	tauA	1	4.80E-04	1	5.14E-04	1	0.00015689	1	0.00033245
EG13299	tauB	1	1.55E-04	1	2.92E-04	1	0.00018792	1	0.0002663
EG13301	tauC	1	2.45E-04	1	2.11E-04	1	3.3108E-05	1	3.0264E-05
EG12423	tauD	1	1.13E-05	1	2.36E-05	1	5.2893E-05	1	3.7895E-05
EG11574	tbpA	1	7.13E-05	1	1.45E-04	1	0.00028796	1	0.00020909
EG10989	tdcA	1	8.76E-05	1	1.30E-04	1	0.00035223	1	0.00049834
EG10990	tdcB	1	3.75E-04	1	3.75E-04	1	0.00025139	1	0.00023459
EG10991	tdcC	1	3.41E-04	1	1.75E-04	1	0.00018285	1	0.00035675
EG11172	tdcD	1	1.49E-04	1	1.73E-04	1	6.8596E-05	1	4.5242E-05
EG12758	tdcE	1	3.85E-04	1	3.49E-04	1	0.00015564	1	0.00012007
EG12757	tdcF	1	6.99E-05	1	1.00E-04	1	0.00023095	1	9.8569E-05
EG12756	tdcG	1	3.87E-04	1	4.81E-04	1	0.00021903	1	0.0004247
EG10992	tdcR	1	3.29E-04	1	1.62E-04	1	0.00014055	1	8.4093E-05
EG10993	tdh	1	1.22E-05	1	1.61E-05	1	3.114E-05	1	2.8445E-05
EG10994	tdk	1	3.22E-04	1	2.58E-04	1	0.0004655	1	0.00048912
EG11883	tehA	1	1.94E-04	1	1.97E-04	1	0.00010412	1	6.7673E-05
EG11884	tehB	1	4.91E-04	1	4.66E-04	1	0.001767	1	0.00181879
EG11542	tesA	1	7.08E-04	1	5.94E-04	1	0.00041023	1	0.00023006
EG10995	tesB	1	7.70E-05	1	4.13E-05	1	0.00022004	1	0.00025724
EG11120	tfaE	1	7.54E-05	1	5.89E-05	1	0.00043501	1	0.00034677
EG13825	tfaQ	1	2.01E-04	1	2.79E-04	1	0.00033537	1	0.00014594
EG13371	tfaR	1	3.16E-04	1	1.63E-04	1	0.00075074	1	0.00058925
EG10996	tgt	1	4.40E-05	1	5.19E-05	1	0.00018345	1	0.00011267
EG11585	thiC	1	3.85E-04	1	3.71E-04	1	0.00029872	1	0.00015446

EG14068	thiD	1	2.29E-04	1	1.98E-04	1	0.00014703	1	0.00017048
EG11586	thiE	1	6.78E-05	1	1.01E-04	1	0.00018009	1	0.00023052
EG11587	thiF	1	1.19E-04	1	1.43E-04	1	9.4856E-05	1	0.00019996
EG11589	thiG	1	1.11E-05	1	1.17E-05	1	0.00015521	1	0.00015073
EG11590	thiH	1	4.29E-05	1	5.79E-05	1	0.00023594	1	0.00025876
EG13273	thiI	1	7.45E-05	1	9.36E-05	1	1.5541E-05	1	1.2982E-05
EG13432	thiK	1	5.06E-05	1	9.09E-05	1	6.5484E-05	1	5.0372E-05
EG20227	thiL	1	1.08E-04	1	8.22E-05	1	0.00027284	1	0.00036945
EG14069	thiM	1	2.78E-05	1	2.73E-05	1	0.00012686	1	0.00029048
EG11573	thiP	1	4.91E-06	0	2.68E-06	1	3.9175E-05	1	1.8733E-05
EG11572	thiQ	1	2.86E-04	1	3.25E-04	1	0.00030481	1	0.00065174
EG14363	thiS	1	3.35E-05	1	4.86E-05	1	7.5244E-05	1	0.0001945
EG10998	thrA	1	1.22E-05	1	1.72E-05	1	9.127E-05	1	0.00010767
EG10999	thrB	1	4.56E-05	1	4.72E-05	1	0.00040518	1	0.00065993
EG11000	thrC	1	6.19E-04	1	3.83E-04	1	9.6694E-05	1	3.7997E-05
EG11277	thrL	1	1.49E-04	1	9.78E-05	1	8.4604E-05	1	4.431E-05
EG11001	thrS	1	1.90E-04	1	2.61E-04	1	0.00016643	1	1.3446E-05
EG11002	thyA	1	4.41E-04	1	4.93E-04	1	0.00010442	1	0.00031246
EG11003	tig	1	9.16E-05	1	8.25E-05	1	1.4012E-05	1	1.2629E-05
EG13220	tilS	1	1.84E-04	1	2.13E-04	1	0.00059556	1	0.00087369
EG14402	tisB	1	4.67E-05	1	4.70E-05	1	0.00011217	1	0.00049358
EG11427	tktA	1	2.65E-04	1	3.97E-04	1	0.00036176	1	0.00061152
EG12100	tktB	1	5.57E-04	1	6.01E-04	1	0.00015155	1	0.00051209
EG12826	tldD	1	1.36E-04	1	2.12E-04	1	0.00033616	1	0.00046211
EG12302	tmk	1	1.00E-04	1	9.92E-05	1	0.00017221	1	0.00013337
EG11005	tnaA	1	5.61E-04	1	5.01E-04	1	0.00045555	1	0.00045643
EG11006	tnaB	1	6.25E-04	1	7.17E-04	1	0.00013986	1	0.00012563
EG11276	tnaC	1	7.80E-04	1	6.25E-04	1	0.00082199	1	0.00048461
EG11007	tolA	1	6.94E-05	1	6.80E-05	1	7.9347E-05	1	8.4201E-05
EG11008	tolB	0	1.53E-06	0	4.69E-07	1	0.00032214	1	0.00050812
EG11009	tolC	1	2.18E-04	1	4.76E-04	1	0.00103082	1	0.00083165
EG11010	tolQ	1	1.02E-03	1	7.80E-04	1	0.00020503	1	0.00056705
EG11011	tolR	1	5.96E-06	0	3.49E-06	1	5.1245E-05	1	5.6808E-05
EG12429	tomB	1	4.20E-04	1	6.67E-04	1	0.00032398	1	0.00033569
EG11012	tonB	1	4.58E-04	1	6.10E-04	1	0.00169691	1	0.00109768
EG11013	topA	1	8.45E-05	1	6.10E-05	1	0.00018125	1	0.00030783
EG11014	topB	1	1.43E-05	1	2.81E-05	1	3.3232E-05	1	4.097E-05
EG11814	torA	1	4.52E-05	1	3.21E-05	1	8.9178E-05	1	7.4529E-05
EG11815	torC	1	2.33E-04	1	3.13E-04	1	0.00013001	1	8.6624E-05
EG12195	torD	0	4.40E-07	0	1.02E-07	1	0.00016024	1	0.00022949
EG14411	torI	1	4.10E-04	1	4.60E-04	1	0.00028683	1	0.00028745
EG12615	torR	1	3.24E-04	1	3.55E-04	1	0.00068985	1	0.00056379
EG12617	torS	1	2.78E-04	1	3.58E-04	1	0.0005487	1	0.0005182
EG12616	torT	1	1.62E-04	1	2.04E-04	1	0.00026397	1	0.00045288
EG13277	torY	1	1.38E-04	1	1.68E-04	1	0.00021454	1	0.00024947
EG13276	torZ	1	1.06E-04	1	1.05E-04	1	0.00022708	1	7.768E-05
EG11015	tpiA	1	1.49E-04	1	1.15E-04	1	0.00011014	1	3.3987E-05
EG13939	tppB	1	2.28E-04	1	6.77E-04	1	0.00041141	1	0.00044165
EG11016	tpr	1	1.94E-05	1	1.75E-05	1	4.5626E-05	1	1.8063E-05
EG12672	tpx	1	5.73E-04	1	5.83E-04	1	2.2277E-05	1	1.1238E-05
EG13928	tqsA	1	1.96E-04	1	9.01E-05	1	9.6071E-05	1	8.1642E-05
EG11017	treA	1	6.43E-04	1	8.71E-04	1	0.00020289	1	0.00033047
EG12127	treB	1	9.27E-04	1	8.45E-04	1	7.1086E-05	1	0.00010442
EG11402	treC	1	4.90E-04	1	3.99E-04	1	0.00123451	1	0.00113691
EG12245	treF	1	2.60E-04	1	3.45E-04	1	0.00013272	1	0.0001675
EG12202	treR	1	6.02E-05	1	4.94E-05	1	8.3621E-05	1	0.00026842
EG11018	trg	1	1.80E-04	1	1.11E-04	1	2.9051E-05	1	1.8254E-05
EG11019	trkA	1	1.70E-05	1	1.93E-05	0	1.1453E-06	0	3.3418E-07
EG11020	trkG	1	2.56E-04	1	3.05E-04	1	0.00019824	1	0.00017252
EG11021	trkH	1	8.08E-05	1	8.66E-05	1	0.00034135	1	0.00042896
EG11022	trmA	1	6.84E-05	1	1.14E-04	1	0.00014197	1	6.5225E-05
EG11023	trmD	1	1.67E-04	1	1.17E-04	1	0.00011009	1	9.7547E-05
EG10967	trmH	1	2.50E-04	1	5.43E-04	1	0.00016912	1	0.00011662
EG11779	trmI	1	2.68E-04	1	4.55E-04	1	0.00022963	1	0.00023514
EG13452	trmJ	1	1.08E-04	1	1.21E-04	1	5.5424E-05	1	2.739E-05
EG11024	trpA	1	2.69E-04	1	1.59E-04	1	0.00029701	1	0.00029
EG11025	trpB	1	4.81E-05	1	3.68E-05	1	0.00026298	1	0.00036953
EG11026	trpC	1	2.60E-05	1	1.73E-05	1	8.5539E-05	1	2.9425E-05
EG11027	trpD	1	7.80E-05	1	1.56E-04	1	0.00044793	1	0.00083964
EG11028	trpE	1	1.85E-04	1	2.11E-04	1	0.0002801	1	4.9331E-05
EG11274	trpL	1	1.13E-04	1	1.57E-04	1	0.00010683	1	0.00010371

EG11029	trpR	1	2.56E-06	1	6.06E-06	1	0.00020435	1	0.00025164
EG11030	trpS	1	2.31E-04	1	2.99E-04	1	0.00028462	1	0.00056944
EG10454	truA	1	2.20E-04	1	4.30E-04	1	0.00019634	1	0.00012301
EG11177	truB	1	6.42E-05	1	6.00E-05	1	5.4349E-05	1	3.8065E-05
EG13171	truC	1	6.31E-05	1	2.75E-05	1	2.8186E-05	1	2.213E-05
EG13109	truD	1	2.44E-05	1	3.03E-05	1	6.0387E-05	1	4.316E-05
EG11031	trxA	1	4.47E-04	1	5.89E-04	1	0.00012063	1	0.00036736
EG11032	trxB	1	1.02E-04	1	1.72E-04	1	0.0001322	1	8.4969E-05
EG11887	trxC	1	3.23E-04	1	5.08E-04	1	9.4452E-05	1	0.00022213
EG11033	tsf	1	6.03E-05	1	6.19E-05	1	0.00023919	1	0.00062411
EG11262	tsgA	1	2.59E-04	1	4.91E-04	1	0.00051015	1	0.00034437
EG11034	tsr	1	3.10E-04	1	3.09E-04	1	0.00040357	1	0.00052382
EG11035	tsx	1	2.46E-04	1	3.47E-04	1	6.9862E-05	1	9.317E-05
EG13357	ttcA	1	1.83E-04	1	5.08E-04	1	0.00031302	1	0.00029476
EG11168	ttdA	1	5.54E-05	1	5.11E-05	1	7.5219E-05	1	7.1707E-05
EG11169	ttdB	1	4.54E-04	1	6.88E-04	1	0.00014254	1	0.00022263
EG12694	ttdR	1	3.28E-04	1	4.87E-04	1	8.0129E-05	1	0.0001797
EG12393	ttdT	1	4.81E-05	1	1.11E-04	1	5.7059E-05	1	5.9656E-05
EG11036	tufA	1	1.60E-04	1	4.12E-04	1	0.00014027	1	6.791E-05
EG11037	tufB	1	3.69E-04	1	3.25E-04	1	0.00046838	1	0.00027312
EG11038	tus	1	4.38E-04	1	6.77E-04	1	8.5097E-05	1	0.00013923
EG13140	tynA	1	2.81E-05	1	3.02E-05	1	6.4115E-06	0	4.2336E-06
EG11837	typA	1	2.03E-04	1	3.60E-04	1	0.00077455	1	0.00079237
EG11039	tyrA	1	1.09E-04	1	4.27E-05	1	7.159E-05	1	4.2748E-05
EG11040	tyrB	1	2.34E-04	1	4.27E-04	1	0.00029237	1	0.00027573
EG11041	tyrP	1	2.74E-05	1	3.59E-05	1	7.1209E-05	1	5.8061E-05
EG11042	tyrR	1	1.40E-04	1	4.14E-04	1	0.00018659	1	0.00061444
EG11043	tyrS	1	9.59E-06	1	5.76E-06	1	0.0002342	1	0.00010383
EG11370	ubiA	1	1.01E-04	1	1.20E-04	1	0.00030636	1	0.00013657
EG11476	ubiB	1	4.97E-05	1	3.98E-05	1	0.00055549	1	0.00043072
EG11369	ubiC	1	4.98E-04	1	5.50E-04	1	0.00060796	1	0.00075865
EG11396	ubiD	1	2.28E-04	1	1.13E-04	1	0.00053635	1	0.00053093
EG11473	ubiE	1	6.83E-05	1	6.80E-05	1	0.00032871	1	0.00025302
EG13658	ubiF	1	2.48E-04	1	2.71E-04	1	0.00015119	1	0.00012738
EG11143	ubiG	1	1.38E-04	1	7.57E-05	1	0.00069784	1	0.00080985
EG11324	ubiH	0	2.09E-06	0	1.57E-06	1	2.4705E-05	1	1.8283E-05
EG11044	ubiX	1	1.87E-04	1	1.08E-04	1	0.00024128	1	0.00019072
EG12133	ucpA	1	6.41E-06	0	3.00E-06	1	7.7854E-05	1	3.4947E-05
EG11701	udk	1	9.58E-05	1	1.79E-04	1	0.00023344	1	8.394E-05
EG11045	udp	1	1.85E-03	1	1.11E-03	1	0.00034537	1	0.00051075
EG13407	ugd	1	1.07E-04	1	9.48E-05	1	4.5692E-05	0	3.3232E-06
EG11046	ugpA	1	1.52E-04	1	1.64E-04	1	9.3834E-05	1	0.00045053
EG11047	ugpB	1	7.47E-05	1	7.49E-05	1	4.009E-05	1	1.7501E-05
EG11048	ugpC	1	3.14E-06	0	2.68E-06	1	2.99E-05	1	1.7834E-05
EG11049	ugpE	1	3.33E-04	1	1.61E-04	1	0.00022792	1	0.00054873
EG11050	ugpQ	1	6.83E-05	1	1.14E-04	1	0.00017446	1	0.00022957
EG11051	uhpA	1	2.81E-04	1	4.69E-04	1	0.00026109	1	0.00040007
EG11052	uhpB	1	3.53E-04	1	3.98E-04	1	0.00018395	1	0.00042292
EG11053	uhpC	1	2.80E-04	1	1.90E-04	1	0.00038029	1	0.00026263
EG11054	uhpT	1	1.25E-04	1	1.64E-04	1	0.0002593	1	0.00028648
EG11055	uidA	1	3.02E-04	1	2.24E-04	1	0.00016141	1	0.00020518
EG12668	uidC	1	9.06E-05	1	5.03E-05	1	0.00103736	1	0.00075565
EG12667	uidR	1	1.12E-04	1	3.02E-04	1	5.5838E-05	1	0.00010354
EG12493	ulaA	1	4.98E-04	1	5.61E-04	1	3.6244E-05	1	5.5063E-05
EG12494	ulaB	1	3.15E-05	1	3.51E-05	1	6.0082E-05	1	3.625E-05
EG12495	ulaC	1	1.56E-04	1	1.16E-04	1	0.00018246	1	0.00022504
EG12496	ulaD	1	2.64E-05	1	1.61E-05	1	0.00010203	1	7.0257E-05
EG12497	ulaE	1	3.86E-04	1	3.18E-04	1	0.00051826	1	0.00034015
EG12498	ulaF	0	7.85E-07	0	2.08E-06	1	4.7011E-05	1	3.1453E-05
EG12492	ulaG	1	4.30E-04	1	3.54E-04	1	0.00023199	1	0.00015989
EG12491	ulaR	1	2.58E-04	1	3.13E-04	1	8.9126E-05	1	6.3722E-05
EG11056	umuC	1	5.44E-05	1	6.79E-05	1	0.00010181	1	5.9722E-05
EG11057	umuD	1	3.68E-04	1	3.25E-04	1	0.0003295	1	0.00054929
EG11058	ung	1	4.31E-06	0	3.22E-06	1	3.8179E-05	1	5.0958E-05
EG14465	uof	1	7.90E-04	1	6.41E-04	1	0.00010428	1	8.2233E-05
EG11332	upp	1	5.56E-06	0	1.68E-06	1	6.683E-05	1	3.0435E-05
EG12129	uraA	1	4.48E-04	1	3.37E-04	1	0.00013233	1	0.00011861
EG11059	usg	1	1.86E-05	1	2.68E-05	1	0.0001108	1	0.00015299
EG11060	ushA	1	1.20E-05	1	7.07E-06	1	0.00026376	1	0.00022925
EG11390	uspA	1	5.57E-04	1	3.68E-04	1	8.4273E-06	0	2.8697E-07
EG12231	uspB	1	1.32E-05	1	1.59E-05	1	4.865E-05	1	6.9466E-05

EG12862	uspC	1	1.67E-05	1	3.38E-05	1	7.9093E-05	1	5.0086E-05
EG11877	uspD	1	1.92E-04	1	2.13E-04	1	4.5166E-05	1	3.6272E-05
EG11246	uspE	1	9.65E-04	1	8.91E-04	1	0.00080817	1	0.0003221
EG12674	uspF	1	6.23E-04	1	4.23E-04	1	1.2148E-05	0	3.4212E-06
EG12683	uspG	1	2.69E-04	1	1.17E-04	1	0.00022784	1	4.6314E-05
EG13134	uup	1	1.60E-04	1	1.65E-04	1	0.00060217	1	0.00081089
EG11061	uvrA	1	5.68E-06	1	7.71E-06	1	2.4095E-05	1	3.196E-05
EG11062	uvrB	1	1.56E-04	1	1.14E-04	1	0.00024993	1	0.00012404
EG11063	uvrC	1	6.04E-05	1	5.10E-05	1	0.00025425	1	0.00049994
EG11064	uvrD	1	6.32E-05	1	6.14E-05	1	0.00028415	1	0.00018557
EG11140	uvrY	1	4.42E-04	1	4.00E-04	1	0.0001927	1	0.00068441
EG12734	uxaA	1	1.90E-04	1	1.55E-04	1	0.00024001	1	0.00014551
EG11065	uxaB	1	3.28E-04	1	3.36E-04	1	0.00029475	1	0.00020345
EG12737	uxaC	1	1.04E-03	1	6.11E-04	1	0.00081143	1	0.00050955
EG11066	uxuA	1	1.99E-05	1	1.92E-05	1	0.0003507	1	0.00026577
EG20248	uxuB	1	9.74E-05	1	9.08E-05	1	0.00035387	1	0.00017104
EG20249	uxuR	1	1.57E-05	1	9.48E-06	1	0.00034745	1	0.00016331
EG14276	vacJ	1	5.92E-05	1	2.65E-05	1	6.1044E-05	1	8.4339E-05
EG11067	valS	1	6.32E-05	1	5.41E-05	1	0.00020065	1	0.00059043
EG13994	ves	1	7.76E-05	1	8.11E-05	1	4.8117E-05	1	0.00012895
EG11730	viaA	1	1.80E-05	1	2.16E-05	1	4.4599E-05	1	7.6854E-05
EG11333	visC	1	5.01E-05	1	3.75E-05	1	3.6244E-05	1	2.0809E-05
EG11068	vsr	1	2.56E-05	1	2.91E-05	1	0.00083091	1	0.00045814
EG10520	waaA	1	1.14E-03	1	8.22E-04	1	8.3054E-05	1	2.2956E-05
EG11423	waaU	1	2.75E-04	1	5.14E-04	1	0.00028364	1	0.00026307
EG11983	wbbI	1	5.10E-04	1	5.42E-04	1	0.0002027	1	0.00013438
EG11984	wbbJ	1	1.14E-04	1	1.44E-04	1	7.4472E-05	1	3.0552E-05
EG11985	wbbK	1	1.29E-04	1	1.87E-04	1	0.0002781	1	0.00024186
EG13569	wcaA	1	3.20E-04	1	2.26E-04	1	0.00027048	1	2.9319E-05
EG13570	wcaB	1	1.13E-04	1	1.47E-04	1	4.7009E-06	1	5.6551E-06
EG13571	wcaC	0	-9.48E-08	0	-6.05E-08	1	3.774E-06	0	2.5517E-06
EG13572	wcaD	1	5.01E-05	1	7.08E-05	1	0.00033452	1	0.00023745
EG13573	wcaE	1	9.20E-05	1	2.69E-04	1	0.00039924	1	0.00048388
EG13574	wcaF	1	9.83E-05	1	9.27E-05	1	0.00025887	1	0.00029098
EG11790	wcaI	1	8.20E-05	1	6.71E-05	1	0.00028489	1	0.00047274
EG13575	wcaJ	1	3.88E-04	1	3.40E-04	1	6.355E-05	1	3.2079E-05
EG13577	wcaK	1	5.02E-05	1	4.16E-05	1	0.00016687	1	7.8882E-05
EG12652	wcaL	1	2.98E-05	1	2.56E-05	1	4.1117E-05	1	3.9171E-05
EG12651	wcaM	1	8.72E-04	1	6.85E-04	1	5.8031E-05	1	4.5015E-05
EG12274	wecH	1	2.38E-04	1	4.96E-04	1	6.0223E-05	1	6.5816E-05
EG11540	wrbA	1	8.28E-05	1	6.50E-05	1	0.00025696	1	0.00014708
EG13566	wza	1	3.87E-04	1	2.98E-04	1	8.1258E-05	1	1.4141E-05
EG13567	wzb	1	3.07E-04	1	2.03E-04	1	0.00074469	1	0.00092106
EG13568	wzc	1	6.65E-06	1	5.64E-06	1	0.00011214	1	6.3044E-05
EG13576	wzxC	1	4.50E-06	1	9.96E-06	1	3.6181E-05	1	1.964E-05
EG11486	wzxE	1	2.06E-05	1	1.23E-05	1	0.0003378	1	0.00024876
EG11457	wzyE	1	6.08E-05	1	8.71E-05	1	2.9152E-05	1	1.7236E-05
EG11295	wzzE	1	1.46E-04	1	1.15E-04	1	2.1949E-06	0	2.366E-06
EG20250	xapA	1	1.69E-04	1	6.86E-05	1	0.0002852	1	0.00014862
EG13159	xapB	1	9.99E-06	1	2.37E-05	1	0.00011566	1	0.00024799
EG11146	xapR	1	3.36E-04	1	1.92E-04	1	3.4701E-05	1	6.2018E-05
EG13049	xdhA	0	8.23E-07	0	2.57E-07	1	4.2805E-06	0	2.9244E-06
EG13050	xdhB	1	2.13E-04	1	3.12E-04	1	0.00020767	1	0.00038182
EG13051	xdhC	1	2.65E-04	1	3.06E-04	1	0.00020805	1	0.00030885
EG13064	xdhD	1	3.36E-04	1	4.54E-04	1	6.7506E-05	1	8.5926E-05
EG11069	xerC	1	2.63E-04	1	2.34E-04	1	0.00015659	1	8.3481E-05
EG11071	xerD	1	5.93E-05	1	4.54E-05	1	5.2237E-05	1	2.7328E-05
EG14245	xisE	1	1.48E-03	1	1.11E-03	1	0.00019798	1	5.3924E-05
EG11072	xseA	1	8.42E-04	1	5.90E-04	1	4.0282E-05	1	3.6037E-05
EG11098	xseB	1	3.27E-05	1	3.99E-05	1	0.00019081	1	8.938E-05
EG11073	xthA	1	4.06E-04	1	7.18E-04	1	0.00035536	1	0.00022171
EG11074	xylA	1	4.64E-04	1	3.66E-04	1	0.000395	1	0.00012126
EG11075	xylB	1	4.46E-06	0	1.43E-06	1	0.000107	1	3.5536E-05
EG11076	xylE	1	1.83E-04	1	8.62E-05	1	1.2884E-05	1	1.2223E-05
EG20252	xylF	1	3.79E-05	1	2.38E-05	1	8.5981E-05	1	3.7815E-05
EG12275	xylG	1	1.48E-05	1	7.67E-06	1	0.00015659	1	0.0001389
EG12276	xylH	1	5.77E-05	1	1.83E-04	1	0.00088051	1	0.00126422
EG20253	xylR	1	1.43E-03	1	9.15E-04	1	0.00019861	1	0.00012155
EG10011	yaaA	1	2.21E-04	1	1.62E-04	1	0.00028314	1	6.6216E-05
EG11512	yaaH	1	1.62E-05	1	9.53E-06	1	9.7373E-05	1	5.5668E-05
EG11513	yaaI	1	1.38E-03	1	1.00E-03	1	0.00031862	1	0.000208

EG11555	yaaJ	1	3.08E-04	1	2.72E-04	1	0.00019219	1	0.00011645
EG11566	yaaU	1	9.38E-04	1	9.60E-04	1	0.00031838	1	0.00045871
EG14340	yaaW	1	2.18E-04	1	1.24E-04	1	7.1725E-05	1	0.00017783
EG14384	yaaX	1	1.00E-04	1	1.60E-04	1	9.1989E-05	1	0.00022536
EG14386	yaaY	1	5.54E-05	1	5.70E-05	1	0.00034371	1	0.00073028
EG11571	yabI	1	9.79E-04	1	8.29E-04	1	0.00029862	1	0.00034695
EG11089	yacC	1	8.68E-05	1	7.15E-05	1	0.00050671	1	0.00049703
EG12313	yacF	1	7.78E-05	1	4.77E-05	1	0.00021296	1	0.00010763
EG12314	yacG	1	5.52E-06	0	2.33E-06	1	0.00029087	1	0.0001515
EG12315	yacH	1	1.41E-04	1	1.63E-04	1	0.00035479	1	0.00048154
EG12605	yacL	1	2.76E-05	1	3.95E-05	1	2.8146E-05	1	6.008E-05
EG11362	yadB	1	2.46E-04	1	3.74E-04	1	0.00063815	1	0.00089629
EG11678	yadC	1	3.64E-04	1	2.50E-04	1	0.000113	1	7.915E-05
EG11748	yadD	1	2.61E-04	1	3.30E-04	1	2.0593E-05	1	1.2928E-05
EG11749	yadE	1	1.16E-04	1	3.30E-04	1	0.00038158	1	0.00142959
EG12320	yadG	1	2.30E-04	1	1.13E-04	1	0.00016288	1	0.00038159
EG12321	yadH	1	3.05E-05	1	4.65E-05	1	0.00010723	1	7.8896E-05
EG12322	yadI	1	4.12E-05	1	3.96E-05	1	1.6687E-05	1	6.4802E-06
EG12325	yadK	1	2.00E-04	1	3.51E-04	1	0.00042474	1	0.00026313
EG12326	yadL	1	9.12E-04	1	7.15E-04	1	9.8517E-05	1	5.612E-05
EG12327	yadM	1	7.27E-05	1	1.07E-04	1	0.000112	1	3.4693E-05
EG12328	yadN	1	1.17E-04	1	8.84E-05	1	0.00013578	1	5.3771E-05
EG12333	yadS	1	1.58E-04	1	1.72E-04	1	0.00026406	1	0.00036661
EG11503	yaeB	1	2.54E-04	1	1.47E-04	1	0.00022262	1	0.00047409
EG12138	yaeF	1	6.63E-04	1	6.81E-04	1	1.9843E-05	1	1.1416E-05
EG12336	yaeH	1	5.47E-04	1	7.13E-04	1	0.000104	1	4.7918E-05
EG12337	yaeI	1	2.95E-04	1	2.89E-04	1	0.00063179	1	0.00076745
EG12354	yaeJ	1	4.84E-05	1	1.15E-04	1	0.00026049	1	0.00012561
EG13222	yaeP	1	9.89E-06	0	4.66E-06	1	0.00022522	1	0.00024013
EG13223	yaeQ	1	1.56E-04	1	1.74E-04	1	0.0001487	1	0.0001736
EG13224	yaeR	1	7.66E-06	1	5.66E-06	1	3.0306E-05	1	1.6284E-05
EG11649	yafC	1	2.07E-04	1	2.67E-04	1	0.0001214	1	0.00028517
EG11650	yafD	1	9.20E-05	1	7.96E-05	1	3.2101E-05	1	2.3829E-05
EG11651	yafE	1	9.77E-05	1	8.99E-05	1	0.00013973	1	0.00024745
EG13147	yafJ	1	1.26E-05	1	1.56E-05	1	0.00020285	1	0.00042321
EG13148	yafK	1	4.25E-04	1	2.56E-04	1	0.00056082	1	0.00035253
EG13149	yafL	1	2.44E-04	1	4.21E-04	1	0.00046709	1	0.0002457
EG13150	yafM	1	6.61E-04	1	7.45E-04	1	4.4686E-05	1	1.5249E-05
EG13151	yafN	1	9.58E-04	1	9.00E-04	1	0.0015335	1	0.00089412
EG13152	yafO	1	2.97E-05	1	3.03E-05	1	0.00039095	1	0.00020891
EG13153	yafP	1	2.23E-04	1	2.00E-04	1	0.00050555	1	0.00078113
EG13154	yafQ	1	7.35E-05	1	9.71E-05	1	0.00044889	1	0.00017383
EG13331	yafS	1	9.15E-05	1	1.50E-04	1	0.00014374	1	0.00030855
EG13332	yafT	1	1.13E-04	1	1.59E-04	1	0.00012912	1	2.1172E-05
EG13334	yafV	1	2.37E-04	1	5.96E-04	1	0.00022317	1	9.8735E-05
EG13335	yafW	1	2.75E-06	0	4.84E-06	1	1.1178E-05	1	1.3055E-05
EG13336	yafX	1	2.32E-04	1	3.82E-04	1	0.00018359	1	0.00022715
EG13337	yafY	1	1.41E-03	1	1.49E-03	1	0.00032011	1	0.00034612
EG13338	yafZ	1	2.41E-04	1	2.45E-04	1	0.00047041	1	0.00024368
EG12338	yagA	1	1.74E-04	1	2.48E-04	1	3.206E-05	1	1.1327E-05
EG13344	yagE	1	4.83E-05	1	4.01E-05	1	1.7078E-05	1	1.8829E-05
EG13345	yagF	1	5.26E-05	1	6.91E-05	1	0.00018864	1	0.00029394
EG13346	yagG	1	3.73E-04	1	3.71E-04	1	0.00012925	1	0.00015787
EG13347	yagH	0	1.90E-06	0	2.84E-06	1	0.0001037	1	9.16E-05
EG13349	yagI	1	8.63E-04	1	8.58E-04	1	0.00043548	1	0.00051593
EG13549	yagJ	0	1.32E-06	0	8.04E-07	0	4.9494E-07	0	-2.462E-07
EG13550	yagK	1	1.24E-04	1	2.25E-04	1	0.00058014	1	0.00015196
EG13551	yagL	1	6.58E-05	1	4.81E-05	1	1.8925E-05	1	3.8509E-05
EG13552	yagM	1	3.18E-04	1	5.49E-04	1	0.00015272	1	9.7876E-05
EG13553	yagN	1	8.78E-05	1	1.07E-04	1	3.8771E-05	1	5.0086E-05
EG13555	yagP	1	1.26E-04	1	1.66E-04	1	3.055E-05	1	2.402E-05
EG13556	yagQ	1	3.49E-04	1	2.45E-04	1	0.0001128	1	6.6728E-05
EG13557	yagR	1	1.84E-05	1	1.40E-05	1	0.00024759	1	0.00022624
EG13558	yagS	1	3.79E-04	1	5.54E-04	1	3.0042E-05	1	6.4485E-05
EG13559	yagT	1	1.17E-04	1	2.19E-04	1	0.00020533	1	0.00030331
EG13560	yagU	1	1.01E-04	1	7.56E-05	1	8.4915E-05	1	4.9628E-05
EG13561	yagV	1	1.60E-05	1	1.92E-05	1	0.00034085	1	0.00027345
EG13562	yagW	1	5.30E-05	1	9.06E-05	1	9.0765E-05	1	0.00024267
EG13563	yagX	1	5.62E-05	1	3.60E-05	1	0.00038589	1	0.00047717
EG11236	yahA	1	1.33E-04	1	2.38E-04	1	0.0002251	1	0.00084641
EG13586	yahB	1	2.71E-04	1	2.22E-04	1	1.7764E-05	0	2.1807E-06

EG13587	yahC	1	2.99E-05	1	8.38E-05	1	8.6059E-05	1	9.0201E-05
EG13588	yahD	1	2.69E-04	1	2.97E-04	1	0.00023687	1	0.00025227
EG13589	yahE	0	1.30E-06	0	7.14E-07	0	8.7111E-07	0	8.6321E-07
EG13590	yahF	1	2.40E-04	1	3.25E-04	1	0.00064932	1	0.00056117
EG13591	yahG	1	1.68E-04	1	2.60E-04	1	0.00040195	1	0.00075493
EG13593	yahI	1	3.64E-06	1	8.91E-06	1	0.00063133	1	0.00083617
EG13594	yahJ	1	4.56E-05	1	3.93E-05	1	0.00026427	1	0.00045267
EG13595	yahK	1	4.52E-04	1	3.94E-04	1	2.8769E-05	1	1.5165E-05
EG13596	yahL	1	4.68E-05	1	2.45E-05	1	0.00028072	1	0.00010162
EG13597	yahM	1	9.34E-06	1	5.55E-06	1	0.00028341	1	0.00020628
EG13598	yahN	1	2.82E-04	1	2.88E-04	1	0.00031704	1	0.0003217
EG13599	yahO	1	1.17E-04	1	1.14E-04	1	0.0001521	1	0.000204
EG11093	yaiA	1	2.20E-04	1	3.58E-04	1	0.00076279	1	0.00047635
EG12159	yaiE	1	7.73E-04	1	5.79E-04	1	0.00025845	1	0.00061433
EG13176	yaiI	1	8.35E-05	1	1.38E-04	1	0.00050471	1	0.00056163
EG13294	yaiL	1	1.00E-04	1	5.76E-05	1	0.00015135	1	0.00010517
EG13297	yaiO	1	1.86E-04	1	3.90E-04	0	1.6434E-06	0	2.576E-06
EG13298	yaiP	1	1.31E-04	1	3.34E-04	1	0.00206064	1	0.00189189
EG13302	yaiS	1	4.29E-05	1	6.05E-05	1	0.0001935	1	0.00012891
EG13607	yaiV	1	1.19E-04	1	1.24E-04	1	0.00012362	1	0.00016049
EG13608	yaiW	1	1.38E-05	1	1.76E-05	1	0.00030641	1	0.00026414
EG14279	yaiY	1	5.54E-04	1	3.32E-04	1	0.00061267	1	0.00053547
EG14280	yaiZ	1	2.69E-04	1	1.43E-04	1	0.0003402	1	0.00019828
EG11096	yajC	1	8.77E-05	1	8.96E-05	1	8.0211E-05	1	3.2068E-05
EG11097	yajD	1	1.27E-04	1	8.82E-05	1	0.0002451	1	0.00014901
EG12182	yajG	1	1.07E-04	1	1.53E-04	1	0.00017728	1	0.00028623
EG12874	yajI	1	8.14E-04	1	7.64E-04	1	0.00107056	1	0.00064059
EG13272	yajL	1	2.49E-05	1	2.53E-05	1	0.00020854	1	0.00024924
EG13611	yajO	1	1.73E-04	1	1.70E-04	1	0.00033935	1	0.00030191
EG13613	yajQ	1	3.31E-04	1	4.12E-04	1	0.00088051	1	0.00109122
EG13614	yajR	1	1.56E-04	1	1.74E-04	1	0.00031555	1	0.00035119
EG11099	ybaA	1	1.04E-04	1	1.49E-04	1	3.7272E-05	1	4.0403E-05
EG11100	ybaB	1	3.45E-05	1	4.21E-05	1	0.00019629	1	0.00019308
EG13217	ybaE	1	2.53E-04	1	1.98E-04	1	0.00051439	1	0.00020543
EG12454	ybaK	1	9.36E-04	1	9.69E-04	1	8.0033E-05	1	5.6795E-05
EG12623	ybaL	1	3.88E-05	1	2.29E-05	1	0.00019847	1	6.2598E-05
EG12830	ybaM	1	2.58E-04	1	3.03E-04	1	0.00015161	1	4.7357E-05
EG12843	ybaN	1	3.92E-04	1	4.99E-04	1	0.00010568	1	0.00013967
EG13218	ybaO	1	8.10E-05	1	1.29E-04	1	0.00014825	1	0.00011636
EG13244	ybaP	1	6.45E-06	1	1.53E-05	1	0.00011197	1	0.00034505
EG13245	ybaQ	1	3.44E-05	1	1.15E-04	1	0.00023287	1	0.00058696
EG13247	ybaS	1	3.54E-05	1	1.83E-05	1	9.6748E-05	1	0.00010407
EG13248	ybaT	1	6.03E-05	1	4.06E-05	1	9.1423E-06	1	9.7444E-06
EG13250	ybaV	1	9.62E-05	1	4.57E-05	1	0.00011989	1	0.00011886
EG13251	ybaW	1	7.89E-04	1	3.67E-04	1	0.0002042	1	0.00057209
EG13253	ybaY	1	1.77E-05	1	1.88E-05	1	5.7944E-05	1	2.951E-05
EG13254	ybaZ	1	1.74E-04	1	2.46E-04	1	0.00025823	1	0.00043969
EG11657	ybbA	1	1.38E-05	1	1.35E-05	1	1.9862E-05	1	9.9199E-05
EG11768	ybbB	1	7.56E-05	1	1.70E-04	1	7.2144E-05	1	2.5903E-05
EG11769	ybbC	1	2.50E-04	1	1.87E-04	1	5.547E-05	1	3.5025E-05
EG13257	ybbJ	1	7.82E-05	1	3.74E-05	1	0.00033151	1	0.00021516
EG13259	ybbL	1	1.69E-04	1	1.41E-04	1	0.00013187	1	0.00010509
EG13260	ybbM	1	2.54E-04	1	1.90E-04	1	0.00010384	1	0.00011926
EG13261	ybbN	1	5.48E-04	1	3.90E-04	1	0.00010532	1	7.5155E-05
EG13262	ybbO	1	6.13E-05	1	1.08E-04	1	5.5677E-05	1	4.1716E-05
EG13263	ybbP	1	7.62E-06	1	6.90E-06	1	7.7879E-05	1	9.5631E-05
EG13618	ybbW	1	7.63E-05	1	9.28E-05	1	9.5017E-05	1	0.00010507
EG13620	ybbY	1	3.83E-05	1	3.01E-05	1	0.00097358	1	0.00060414
EG12384	ybcF	1	2.77E-05	1	2.76E-05	1	1.9613E-05	1	7.9385E-06
EG12448	ybcH	1	2.05E-03	1	1.16E-03	1	0.00025072	1	0.00011258
EG12708	ybcI	1	1.07E-04	1	4.48E-04	1	0.0005427	1	0.00048401
EG12879	ybcJ	1	2.39E-05	1	2.46E-05	1	0.00052513	1	0.0004316
EG13627	ybcK	1	2.24E-04	1	1.99E-04	1	0.00013309	1	0.00016626
EG13628	ybcL	1	1.05E-04	1	6.21E-05	1	0.00012288	1	9.3993E-05
EG13629	ybcM	1	1.26E-04	1	9.00E-05	1	0.00033691	1	0.00017589
EG13630	ybcN	1	3.51E-04	1	4.09E-04	1	0.00042445	1	0.00043905
EG13631	ybcO	0	-9.48E-08	0	-6.67E-07	1	2.183E-05	1	1.7691E-05
EG13638	ybcV	1	6.52E-04	1	5.56E-04	1	0.00035731	1	0.00037111
EG13639	ybcW	1	3.87E-04	1	2.48E-04	1	0.00052785	1	0.00027376
EG11105	ybdB	1	3.12E-05	1	5.69E-05	1	2.4774E-05	1	4.6531E-05
EG11107	ybdD	1	8.63E-05	1	6.86E-05	1	0.00015041	1	0.00010774

EG12619	ybdF	1	1.87E-05	1	4.36E-05	1	4.7453E-05	1	8.9948E-05
EG12620	ybdG	1	8.00E-05	1	7.83E-05	1	0.00027381	1	0.00013337
EG12692	ybdH	1	1.49E-03	1	1.78E-03	1	0.00024152	1	0.00015267
EG13643	ybdJ	1	1.31E-04	1	1.84E-04	1	7.1062E-05	1	5.4205E-05
EG13644	ybdK	1	1.59E-04	1	1.23E-04	1	6.3955E-05	1	7.6163E-05
EG13531	ybdL	1	8.65E-04	1	9.24E-04	1	7.2469E-06	1	1.036E-05
EG13532	ybdM	1	3.67E-05	1	2.13E-05	1	4.2429E-05	1	3.0937E-05
EG13533	ybdN	1	3.15E-04	1	4.47E-04	1	4.0774E-05	1	0.00010172
EG13534	ybdO	1	3.00E-04	1	1.46E-04	1	0.00035152	1	0.00030753
EG13537	ybdR	1	2.66E-04	1	3.41E-04	1	0.00015904	1	0.00043295
EG14353	ybdZ	1	1.45E-04	1	1.26E-04	1	0.00016912	1	0.00046513
EG11254	ybeA	1	1.71E-05	1	1.33E-05	1	0.00034689	1	0.00019392
EG11255	ybeB	1	2.37E-04	1	2.47E-04	1	2.8045E-05	1	1.882E-05
EG11592	ybeD	1	7.85E-04	1	8.45E-04	1	0.0001902	1	0.00028526
EG11594	ybeF	1	4.98E-04	1	4.97E-04	1	8.9548E-05	1	0.00011368
EG12851	ybeL	1	5.17E-05	1	5.05E-05	1	4.9318E-05	1	1.32E-05
EG13647	ybeQ	1	3.17E-04	1	1.90E-04	1	8.0619E-05	1	3.3264E-05
EG13648	ybeR	1	2.06E-04	1	1.03E-04	1	0.00016211	1	9.7136E-05
EG13650	ybeT	1	5.06E-04	1	5.86E-04	1	0.0001461	1	2.4871E-05
EG13651	ybeU	1	3.35E-05	1	2.87E-05	1	0.0001668	1	0.00016622
EG13654	ybeX	1	6.29E-06	0	3.00E-06	1	0.00015547	1	0.00011409
EG13655	ybeY	1	1.27E-05	1	2.36E-05	1	1.3771E-05	1	3.5781E-05
EG13656	ybeZ	1	8.30E-06	0	4.16E-06	1	0.00020495	1	0.0003462
EG11521	ybfA	1	1.05E-03	1	1.05E-03	1	0.00012247	1	0.00036419
EG11522	ybfB	1	2.26E-04	1	2.64E-04	1	0.00039237	1	0.0004127
EG11523	ybfC	1	7.36E-04	1	4.49E-04	1	0.00032229	1	0.0003304
EG11524	ybfD	1	3.18E-04	1	3.95E-04	1	0.00021404	1	0.0001309
EG11775	ybfE	1	4.73E-05	1	6.84E-05	1	0.00015145	1	0.0001227
EG11776	ybfF	1	2.23E-05	1	3.83E-05	1	0.00049356	1	0.00031539
EG12869	ybfK	1	4.38E-04	1	4.23E-04	1	3.8877E-05	1	8.5046E-05
EG13659	ybfM	1	2.98E-04	1	2.59E-04	1	0.00024905	1	0.0002205
EG13660	ybfN	1	3.99E-04	1	3.81E-04	1	4.1503E-05	1	6.5648E-06
EG14158	ybfP	1	1.68E-04	1	3.36E-04	1	0.00024513	1	0.00063945
EG14419	ybfQ	1	2.36E-04	1	3.64E-04	1	0.00030034	1	0.00013653
EG11108	ybgA	1	3.16E-03	1	1.83E-03	1	0.00032074	1	0.00045638
EG11110	ybgC	1	1.39E-04	1	1.43E-04	1	0.00059087	1	0.00029758
EG12359	ybgD	1	1.13E-03	1	1.41E-03	1	0.00014556	1	0.0001453
EG12395	ybgE	1	2.33E-04	1	2.49E-04	1	0.00018652	1	0.00010918
EG12854	ybgF	1	8.67E-04	1	9.01E-04	1	8.8021E-05	1	5.5256E-05
EG13304	ybgH	1	3.41E-04	1	3.96E-04	1	0.00017411	1	0.00039019
EG13305	ybgI	1	5.44E-05	1	7.26E-05	1	4.0774E-05	1	8.4569E-05
EG13306	ybgJ	1	6.86E-05	1	4.20E-05	1	0.00028742	1	0.0004017
EG13307	ybgK	1	5.76E-06	1	7.11E-06	1	3.9484E-06	0	3.9455E-06
EG13308	ybgL	1	4.49E-05	1	4.73E-05	1	0.0001098	1	0.00016276
EG13311	ybgO	1	5.68E-05	1	4.35E-05	1	8.0594E-05	1	0.00010737
EG13312	ybgP	1	1.50E-04	1	1.56E-04	1	0.0006484	1	0.00040583
EG13313	ybgQ	1	2.04E-03	1	1.11E-03	1	6.5002E-06	1	5.7641E-06
EG13663	ybgS	1	5.72E-05	1	9.10E-05	1	0.0003614	1	0.00026245
EG14329	ybgT	1	4.54E-05	1	2.52E-05	1	0.0003426	1	0.00022321
EG11239	ybhA	1	1.07E-04	1	2.88E-04	1	0.00011644	1	0.00024066
EG11238	ybhB	1	2.38E-05	1	2.17E-05	1	0.00033141	1	0.00046026
EG12875	ybhC	1	2.72E-04	1	5.16E-04	1	7.2637E-05	1	4.2854E-05
EG13230	ybhD	1	2.70E-04	1	9.36E-04	1	0.00029775	1	0.00048236
EG13314	ybhF	0	1.80E-06	0	2.97E-07	1	0.00014828	1	3.1614E-05
EG13315	ybhG	1	2.89E-05	1	1.92E-05	1	4.1439E-05	1	2.9892E-05
EG13664	ybhH	1	2.36E-04	1	1.70E-04	1	5.8078E-05	1	4.7503E-05
EG13665	ybhI	1	3.85E-04	1	2.67E-04	1	5.1087E-05	1	9.1202E-05
EG13666	ybhJ	1	1.25E-04	1	1.92E-04	1	0.000678	1	0.00056209
EG13667	ybhK	1	1.37E-04	1	2.08E-04	1	0.00037442	1	0.00016543
EG13668	ybhL	1	1.65E-04	1	1.07E-04	1	6.8523E-05	1	0.00019991
EG13669	ybhM	1	3.04E-04	1	1.72E-04	1	0.00014011	1	7.3401E-05
EG13670	ybhN	0	3.63E-07	0	4.28E-07	1	5.9866E-06	1	5.2787E-06
EG13671	ybhO	1	6.33E-05	1	4.46E-05	1	0.00014815	1	0.00014846
EG13672	ybhP	1	7.44E-04	1	7.57E-04	1	0.00012919	1	0.00029266
EG13673	ybhQ	0	2.87E-07	0	-7.67E-08	1	0.00021604	1	0.0001057
EG13674	ybhR	1	2.78E-04	1	2.22E-04	1	0.00018221	1	0.00012503
EG13675	ybhS	1	1.38E-04	1	1.15E-04	1	9.3084E-05	1	0.00023684
EG14328	ybhT	1	3.86E-05	1	1.15E-04	1	0.00122328	1	0.00126642
EG14453	ybhU	1	5.45E-04	1	4.69E-04	1	0.00014883	1	9.3654E-05
EG11579	ybiA	1	1.79E-03	1	1.99E-03	1	0.00023752	1	8.4861E-05
EG11580	ybiB	1	1.11E-04	1	1.27E-04	1	0.00010079	1	7.2251E-05

EG11581	ybiC	1	1.43E-04	1	2.16E-04	1	0.00042233	1	0.00014951
EG12406	ybiH	1	2.66E-04	1	3.21E-04	1	0.00020635	1	7.6677E-05
EG12421	ybiI	1	4.88E-05	1	9.40E-05	1	0.00026331	1	0.00056101
EG12422	ybiJ	1	1.70E-04	1	5.06E-04	1	0.00090132	1	0.00070516
EG13320	ybiO	1	8.12E-05	1	5.24E-05	1	0.00019566	1	0.00021005
EG13321	ybiP	1	2.05E-04	1	3.15E-04	1	3.6076E-05	1	8.3787E-05
EG13323	ybiR	1	8.17E-04	1	4.09E-04	1	0.00030108	1	0.00070646
EG13324	ybiS	1	7.06E-04	1	6.30E-04	1	0.00019913	1	0.00030687
EG13325	ybiT	1	6.66E-04	1	6.85E-04	1	0.00020737	1	0.00042883
EG13326	ybiU	1	1.61E-04	1	9.20E-05	1	0.00061193	1	0.00011189
EG13327	ybiV	1	4.37E-04	1	2.26E-04	1	0.0004019	1	0.00044238
EG13328	ybiW	1	7.96E-05	1	1.70E-04	1	0.00016589	1	0.0002757
EG13316	ybiX	1	1.65E-04	1	1.39E-04	1	0.00070672	1	0.00061594
EG13470	ybiY	1	2.28E-04	1	3.18E-04	1	0.00173752	1	0.00082968
EG12842	ybjC	1	2.84E-04	1	3.64E-04	1	0.0002005	1	0.00015892
EG13425	ybjD	1	4.35E-06	1	5.28E-06	1	5.3098E-05	1	6.8749E-05
EG13426	ybjE	1	6.36E-04	1	5.22E-04	1	0.00025836	1	0.00012027
EG13676	ybjG	1	3.30E-04	1	7.06E-04	1	0.00010228	1	0.00047899
EG13677	ybjH	1	3.36E-04	1	2.69E-04	1	0.00013122	1	0.00018023
EG13678	ybjI	1	1.15E-04	1	5.99E-05	1	5.2916E-05	1	5.0447E-05
EG13679	ybjJ	1	4.76E-04	1	7.94E-04	1	0.00074409	1	0.00045036
EG13680	ybjK	1	3.72E-05	1	8.64E-05	1	1.2571E-05	1	8.9239E-06
EG13681	ybjL	1	1.89E-04	1	2.93E-04	1	0.0002965	1	0.00035033
EG13682	ybjM	1	2.48E-04	1	2.23E-04	1	1.6536E-05	1	2.5965E-05
EG13683	ybjN	1	3.23E-04	1	3.78E-04	1	0.0003167	1	0.00025533
EG13684	ybjO	1	1.67E-04	1	1.91E-04	1	0.00034472	1	0.00052729
EG13685	ybjP	1	5.24E-04	1	8.33E-04	1	0.00057165	1	0.00048086
EG13686	ybjQ	1	5.20E-04	1	3.39E-04	1	0.00037906	1	0.00029932
EG13688	ybjS	0	3.63E-07	0	2.73E-06	1	1.4831E-05	1	9.3944E-06
EG13689	ybjT	1	7.52E-06	1	1.53E-05	1	0.00014304	1	0.00011772
EG13693	ybjX	1	1.43E-03	1	8.55E-04	1	0.00033368	1	9.09E-05
EG11241	ycaC	1	1.60E-04	1	1.57E-04	1	1.3734E-05	1	5.1037E-06
EG11242	ycaD	1	1.39E-03	1	1.45E-03	1	0.00018649	1	0.0001671
EG12375	ycaI	1	3.24E-04	1	3.71E-04	1	0.00028665	1	0.00019572
EG12702	ycaK	1	2.11E-04	1	1.90E-04	1	0.00020199	1	6.5926E-05
EG13133	ycaL	1	5.02E-04	1	3.99E-04	1	0.00019684	1	0.00018461
EG13697	ycaM	1	1.80E-04	1	1.15E-04	1	0.00022617	1	5.0074E-05
EG13698	ycaN	1	5.71E-04	1	8.34E-04	1	0.00014899	1	0.0004511
EG13699	ycaO	1	2.57E-04	1	1.90E-04	1	0.00075289	1	0.00116171
EG13700	ycaP	1	1.65E-05	1	7.52E-06	1	0.00022439	1	9.1568E-05
EG13701	ycaQ	1	3.16E-05	1	3.65E-05	1	0.00018185	1	0.00071919
EG14287	ycaR	1	2.52E-04	1	2.07E-04	1	0.00031402	1	0.00010414
EG11253	ycbB	1	3.92E-04	1	4.35E-04	1	0.00014799	1	0.00024641
EG12166	ycbC	1	4.10E-04	1	2.84E-04	1	0.00025064	1	7.175E-05
EG12397	ycbF	1	1.64E-04	1	3.57E-04	1	0.00021216	1	0.0005923
EG12855	ycbG	1	2.37E-04	1	3.69E-04	1	0.0005586	1	0.00067955
EG13702	ycbJ	1	5.57E-05	1	4.70E-05	1	8.1335E-05	1	4.3266E-05
EG13703	ycbK	1	3.95E-04	1	4.43E-04	1	8.1924E-05	1	0.0001677
EG13704	ycbL	1	4.86E-04	1	5.27E-04	1	0.00060539	1	0.00113491
EG13709	ycbQ	1	2.38E-05	1	2.20E-05	1	0.00026518	1	0.00020934
EG13710	ycbR	1	2.46E-04	1	2.04E-04	1	0.00061482	1	0.00033614
EG13711	ycbS	1	8.26E-04	1	7.63E-04	1	8.0977E-05	1	5.505E-05
EG13712	ycbT	1	7.77E-04	1	4.65E-04	1	0.00014216	1	0.00041245
EG13713	ycbU	1	2.54E-04	1	3.31E-04	1	0.00013217	1	0.00031754
EG13714	ycbV	1	3.12E-05	1	2.25E-05	1	0.00021813	1	0.00010403
EG13715	ycbW	1	6.69E-06	1	6.07E-06	1	0.00010557	1	0.00011864
EG13716	ycbX	1	7.34E-05	1	1.25E-04	1	0.00032686	1	0.00037469
EG13718	ycbZ	1	2.49E-04	1	2.65E-04	1	0.00022251	1	0.00052661
EG11113	yccA	1	2.63E-04	1	1.91E-04	0	-3.056E-07	0	-5.192E-07
EG11114	yccB	1	1.19E-04	1	1.06E-04	1	0.00030617	1	0.00042499
EG12196	yccE	1	4.49E-04	1	4.88E-04	1	0.00032964	1	0.00064076
EG12306	yccF	1	1.12E-03	1	6.71E-04	1	0.00093828	1	0.00049042
EG12703	yccJ	1	5.10E-05	1	3.25E-05	1	7.9474E-05	1	3.9171E-05
EG12876	yccK	1	9.12E-05	1	1.08E-04	1	0.00079479	1	0.00072661
EG13234	yccM	1	6.21E-06	0	4.56E-06	1	2.9819E-05	1	8.1084E-05
EG13721	yccS	1	3.74E-04	1	6.98E-04	1	0.00010761	1	0.00026281
EG13722	yccT	1	3.57E-05	1	4.67E-05	1	0.0006913	1	0.00092282
EG13723	yccU	1	3.82E-04	1	2.86E-04	1	6.9716E-05	1	0.00010529
EG13725	yccW	1	1.21E-04	1	1.27E-04	1	6.9618E-05	1	4.8813E-05
EG13726	yccX	1	4.51E-05	1	3.03E-05	1	0.00022432	1	0.00027717
EG13866	ycdT	1	7.26E-05	1	3.77E-05	1	2.1385E-05	0	2.4064E-06

EG13867	ycdU	1	6.80E-04	1	4.73E-04	1	0.00012779	1	4.1692E-05
EG13870	ycdX	1	2.07E-04	1	2.28E-04	1	0.00055653	1	0.00059612
EG13871	ycdY	1	1.51E-04	1	3.17E-04	1	0.00010861	1	4.0692E-05
EG13872	ycdZ	1	2.69E-04	1	5.70E-04	1	0.00014327	1	0.00052202
EG11116	yceA	1	3.43E-04	1	2.73E-04	1	0.00134476	1	0.00164142
EG11117	yceB	1	1.10E-04	1	9.55E-05	1	0.00101128	1	0.00113673
EG11119	yceD	1	5.18E-05	1	1.30E-04	1	0.00027277	1	0.00039524
EG11438	yceF	1	2.92E-04	1	3.02E-04	1	0.00023243	1	0.00028408
EG11494	yceG	1	6.73E-04	1	6.06E-04	1	0.00059224	1	0.00068213
EG11537	yceH	1	5.93E-04	1	4.95E-04	1	6.2246E-05	1	0.00025556
EG11820	yceI	1	5.04E-04	1	3.70E-04	0	1.6778E-06	0	2.9163E-06
EG12659	yceJ	1	1.27E-03	1	1.20E-03	1	0.00095683	1	0.00078073
EG12689	yceK	1	9.91E-06	1	5.27E-06	1	5.2599E-05	1	3.7149E-05
EG13879	yceM	1	6.82E-05	1	1.21E-04	1	3.4763E-05	1	5.5037E-05
EG13880	yceN	1	6.93E-05	1	6.99E-05	1	8.0823E-05	1	3.8794E-05
EG14334	yceO	1	2.33E-04	1	4.93E-05	1	0.00026342	1	0.00040836
EG14413	yceQ	1	2.43E-04	1	1.98E-04	1	0.00110102	1	0.00140402
EG11430	ycfD	1	9.65E-05	1	5.70E-05	1	0.00029613	1	0.00041091
EG12303	ycfH	1	1.89E-04	1	3.84E-04	1	3.4659E-05	1	4.7894E-05
EG12444	ycfJ	1	5.70E-05	1	1.11E-04	1	0.00015377	1	0.00016838
EG12877	ycfK	1	3.13E-04	1	4.25E-04	1	0.00079854	1	0.00165599
EG13430	ycfL	1	1.61E-05	1	1.65E-05	1	0.00010467	1	0.0001729
EG13431	ycfM	1	2.41E-04	1	2.98E-04	1	0.00025147	1	0.00022949
EG13434	ycfP	1	2.40E-04	1	2.24E-04	1	9.6531E-05	1	0.00019647
EG13435	ycfQ	1	8.65E-04	1	7.72E-04	1	0.00014973	1	3.1668E-05
EG13437	ycfS	1	6.25E-04	1	8.33E-04	1	0.00230291	1	0.002203
EG13438	ycfT	1	4.15E-04	1	3.02E-04	1	0.00024672	1	0.00023673
EG13444	ycfZ	1	7.38E-05	1	1.76E-04	1	0.00054542	1	0.0004192
EG11516	ycgB	1	2.02E-05	1	1.13E-05	1	0.00014273	1	0.00033047
EG13886	ycgE	0	9.57E-07	0	3.63E-07	1	2.5238E-05	1	6.0835E-06
EG13887	ycgF	1	6.45E-05	1	1.72E-04	1	0.0005546	1	0.00074722
EG13888	ycgG	1	4.27E-04	1	2.78E-04	1	5.0873E-06	0	4.4482E-06
EG13891	ycgJ	1	9.02E-05	1	5.36E-05	1	0.00019365	1	0.00023994
EG13892	ycgK	1	7.39E-04	1	4.44E-04	1	0.00012608	1	0.00040756
EG13893	ycgL	1	3.47E-04	1	3.46E-04	1	4.0603E-05	1	1.9002E-05
EG13894	ycgM	1	2.48E-05	1	3.14E-05	1	9.3137E-05	1	9.0534E-05
EG13895	ycgN	1	2.57E-05	1	2.44E-05	1	0.00031193	1	0.00049056
EG13899	ycgR	1	1.53E-04	1	2.75E-04	1	0.00040346	1	0.00018262
EG13903	ycgV	1	5.15E-05	1	1.05E-04	1	0.00018879	1	0.00010723
EG14244	ycgX	1	1.35E-04	1	1.62E-04	1	6.1939E-05	1	0.0001153
EG14275	ycgY	1	1.40E-03	1	1.02E-03	1	0.00030514	1	0.00013294
EG14288	ycgZ	1	1.68E-04	1	2.97E-04	1	0.00068503	1	0.00057017
EG11251	ychA	1	2.49E-05	1	1.18E-05	1	4.6373E-05	1	2.0564E-05
EG11342	ychE	1	8.12E-04	1	6.49E-04	1	0.00043894	1	0.00087296
EG11404	ychF	1	1.14E-04	1	1.87E-04	1	0.00042503	1	0.0004825
EG11533	ychH	1	2.16E-05	1	2.65E-05	1	0.00020326	1	0.0001895
EG12119	ychJ	1	1.23E-03	1	1.40E-03	1	0.00017557	1	0.00031596
EG12392	ychM	1	1.42E-03	1	1.02E-03	1	9.9968E-05	1	5.5914E-05
EG12404	ychN	1	7.04E-04	1	6.14E-04	1	0.00176817	1	0.00156086
EG12405	ychO	1	6.81E-04	1	5.74E-04	1	6.8839E-05	1	7.1123E-05
EG14293	ychQ	1	1.83E-04	1	1.92E-04	1	0.00061083	1	0.00092236
EG14416	ychS	0	-1.14E-07	0	-3.62E-08	0	5.8036E-07	0	-5.426E-07
EG11121	yciA	1	1.54E-03	1	1.75E-03	1	0.0007166	1	0.0010862
EG11122	yciB	1	3.82E-04	1	3.14E-04	1	0.00035464	1	0.00031352
EG11123	yciC	1	4.07E-04	1	3.34E-04	1	3.9135E-06	0	2.9813E-06
EG11125	yciE	1	9.99E-04	1	5.26E-04	1	0.00071552	1	0.00096701
EG11126	yciF	1	1.42E-03	1	1.25E-03	1	3.8031E-05	1	1.0581E-05
EG11127	yciG	1	3.45E-05	1	1.74E-05	1	0.00011508	1	0.00020861
EG11128	yciH	1	7.94E-05	1	1.65E-04	1	0.00025417	1	9.7021E-05
EG11607	yciI	1	4.15E-04	1	2.20E-04	1	0.00027249	1	0.00066732
EG11759	yciK	1	1.02E-04	1	7.05E-05	1	0.00015534	1	7.3906E-05
EG12691	yciM	1	4.34E-05	1	5.78E-05	1	1.541E-05	1	7.4675E-05
EG12868	yciN	1	1.06E-04	1	2.52E-04	1	0.00010841	1	4.4465E-05
EG12967	yciO	1	6.56E-05	1	5.90E-05	1	4.2818E-05	1	8.3848E-05
EG12969	yciQ	1	7.48E-05	1	5.53E-05	1	0.00016898	1	0.00011108
EG13904	yciS	1	2.25E-04	1	4.19E-04	1	0.00023858	1	0.00019361
EG13905	yciT	1	3.09E-04	1	3.14E-04	1	1.8829E-05	1	6.9042E-06
EG14256	yciU	1	4.56E-04	1	3.39E-04	1	0.00073394	1	0.00056627
EG14257	yciV	1	1.00E-04	1	9.07E-05	1	0.00027009	1	0.00036138
EG14262	yciW	1	7.51E-05	1	1.10E-04	1	0.00013584	1	6.1562E-05
EG14351	yciX	1	3.59E-06	1	5.56E-06	1	1.6122E-05	1	6.3534E-06

EG14393	yciY	1	2.87E-06	0	1.17E-06	0	1.7811E-06	0	1.8754E-06
EG14460	yciZ	1	1.13E-03	1	1.48E-03	1	0.00081224	1	0.00036212
EG12653	ycjD	1	2.06E-04	1	3.85E-04	1	3.9898E-05	1	1.1604E-05
EG12870	ycjF	1	8.95E-04	1	4.30E-04	1	0.0001667	1	0.00025118
EG13228	ycjG	1	2.84E-04	1	1.69E-04	1	0.00010706	1	9.4899E-05
EG13910	ycjM	1	5.59E-05	1	4.33E-05	1	0.00015868	1	0.00011315
EG13911	ycjN	1	2.74E-04	1	3.94E-04	1	0.00185373	1	0.0015742
EG13912	ycjO	1	2.09E-04	1	1.36E-04	1	3.7714E-05	1	1.4702E-05
EG13913	ycjP	1	7.79E-04	1	6.59E-04	1	9.0156E-05	1	9.4721E-05
EG13914	ycjQ	1	1.86E-05	1	1.69E-05	1	6.2317E-05	1	4.0994E-05
EG13915	ycjR	1	6.00E-05	1	2.93E-05	1	0.00032069	1	0.00030126
EG13916	ycjS	1	5.53E-05	1	4.36E-05	1	3.0998E-05	1	1.5994E-05
EG13917	ycjT	1	1.94E-05	1	4.09E-05	1	0.00017529	1	0.00025765
EG13918	ycjU	1	6.49E-05	1	3.51E-05	1	7.116E-05	1	7.3444E-05
EG13920	ycjW	1	5.38E-05	1	3.45E-05	1	6.1256E-05	1	9.8553E-05
EG13921	ycjX	1	4.27E-05	1	2.79E-05	1	4.9274E-05	1	5.2478E-05
EG13922	ycjY	1	2.75E-04	1	2.00E-04	1	7.1258E-05	1	3.3954E-05
EG13923	ycjZ	1	1.50E-04	1	2.31E-04	1	0.00033985	1	0.00012318
EG11901	ydaC	1	5.17E-04	1	5.38E-04	1	1.4402E-05	1	7.3814E-06
EG12156	ydaE	1	3.60E-04	1	6.16E-04	1	0.00023984	1	0.0002041
EG12157	ydaF	1	2.06E-04	1	2.27E-04	1	1.7215E-05	1	1.1559E-05
EG12174	ydaG	1	1.55E-04	1	1.45E-04	1	4.5604E-05	1	5.0971E-05
EG13354	ydaL	1	1.24E-03	1	9.65E-04	1	0.00049089	1	0.00040893
EG13355	ydaM	1	1.27E-04	1	9.93E-05	1	0.00013445	1	0.00029932
EG13356	ydaN	1	8.60E-06	1	5.07E-06	1	0.00010359	1	0.00031647
EG13359	ydaQ	1	8.58E-06	1	1.16E-05	1	8.3054E-05	1	4.5843E-05
EG13361	ydaS	1	3.64E-04	1	5.26E-04	1	0.0001268	1	0.00024728
EG13362	ydaT	1	6.71E-04	1	4.83E-04	1	0.00026961	1	0.0002947
EG13363	ydaU	1	1.20E-03	1	9.68E-04	1	0.00030843	1	0.00035559
EG13364	ydaV	1	1.03E-05	1	6.85E-06	1	0.00028188	1	0.00012918
EG11309	ydbC	1	1.45E-04	1	3.03E-04	1	0.00027197	1	0.00032469
EG11310	ydbD	1	3.86E-04	1	2.40E-04	1	0.00096549	1	0.00099788
EG13180	ydbH	1	2.59E-04	1	2.34E-04	1	0.00013202	1	7.1779E-05
EG13182	ydbJ	0	7.85E-07	0	-6.86E-08	1	1.9097E-05	1	1.1595E-05
EG13183	ydbK	1	5.69E-05	1	5.90E-05	1	7.6998E-05	1	0.00010232
EG13733	ydbL	1	1.02E-04	1	2.41E-04	1	0.00020706	1	6.4417E-05
EG11219	ydcA	1	2.98E-04	1	1.90E-04	1	0.00019813	1	6.9494E-05
EG11526	ydcC	1	8.18E-05	1	1.09E-04	1	0.0005768	1	0.00031943
EG11760	ydcD	1	2.81E-04	1	4.10E-04	1	0.00018817	1	0.00020067
EG12110	ydcF	1	1.96E-04	1	2.66E-04	1	0.00063239	1	0.00056261
EG12865	ydcH	1	1.91E-04	1	2.57E-04	1	0.0003663	1	0.00015933
EG13752	ydcI	1	2.50E-04	1	5.87E-04	1	0.00094488	1	0.00101478
EG13753	ydcJ	1	1.54E-05	1	9.71E-06	1	3.3562E-05	1	1.6745E-05
EG13754	ydcK	1	4.08E-04	1	3.04E-04	1	0.00011517	1	0.00010858
EG13755	ydcL	1	1.82E-04	1	5.33E-04	1	0.00035264	1	7.5155E-05
EG13756	ydcM	1	5.85E-04	1	6.19E-04	1	1.3161E-05	1	6.5968E-05
EG13757	ydcN	1	1.61E-04	1	1.15E-04	1	0.00034447	1	8.9317E-05
EG13758	ydcO	1	1.40E-04	1	1.92E-04	1	3.8369E-05	1	7.7237E-05
EG13759	ydcP	1	1.27E-04	1	4.14E-04	1	0.0004854	1	0.00100873
EG13760	ydcQ	1	7.56E-05	1	7.97E-05	1	0.00013022	1	0.00025637
EG13761	ydcR	1	3.58E-04	1	4.90E-04	1	0.00015413	1	6.752E-05
EG13762	ydcS	1	1.56E-04	1	9.99E-05	1	1.7026E-05	0	1.6592E-06
EG13763	ydcT	1	1.18E-05	1	1.23E-05	1	0.00023187	1	0.00085221
EG13764	ydcU	1	7.11E-06	1	8.56E-06	1	1.9326E-05	1	1.9456E-05
EG13765	ydcV	1	2.57E-04	1	1.92E-04	1	9.0027E-06	1	5.1037E-06
EG13766	ydcW	1	2.89E-05	1	1.58E-05	1	2.9334E-05	1	3.236E-05
EG13767	ydcX	1	1.92E-04	1	2.92E-04	1	0.00023777	1	0.00064506
EG13768	ydcY	1	3.30E-05	1	2.86E-05	1	0.00024136	1	7.3213E-05
EG13769	ydcZ	1	5.19E-04	1	4.20E-04	1	0.00036405	1	0.00021256
EG11742	yddA	1	1.30E-03	1	8.65E-04	1	0.00023091	1	0.00029697
EG11743	yddB	1	2.80E-04	1	2.38E-04	1	1.9058E-05	0	1.2204E-06
EG11825	yddE	1	2.65E-04	1	3.25E-04	1	0.00032301	1	0.00066385
EG12713	yddG	1	6.26E-05	1	4.17E-05	1	0.0001298	1	0.00013896
EG13779	yddH	1	4.33E-04	1	6.42E-04	1	0.00041265	1	0.00036308
EG13781	yddJ	1	2.54E-04	1	2.52E-04	1	0.00078272	1	0.00082891
EG13784	yddM	1	6.50E-05	1	7.87E-05	1	3.3232E-05	1	1.207E-05
EG13793	yddV	1	1.26E-04	1	7.93E-05	1	6.1538E-05	1	3.4715E-05
EG13794	yddW	1	9.96E-05	1	1.66E-04	1	0.00020514	1	0.00029368
EG11636	ydeA	1	1.79E-04	1	1.84E-04	1	0.00095817	1	0.00240133
EG11640	ydeE	1	7.61E-04	1	1.30E-03	1	0.0014482	1	0.00073326
EG11643	ydeH	1	1.26E-04	1	7.27E-05	1	3.7567E-05	1	2.7162E-05

EG11644	ydeI	1	4.64E-04	1	4.23E-04	1	0.00010137	1	2.5105E-05
EG11645	ydeJ	1	7.68E-05	1	8.66E-05	1	6.7481E-05	1	1.2819E-05
EG11780	ydeK	1	3.64E-04	1	1.55E-04	1	0.00012819	1	9.9913E-05
EG13795	ydeM	1	4.76E-04	1	5.05E-04	1	0.00102075	1	0.00072478
EG13796	ydeN	1	1.04E-04	1	1.18E-04	1	0.0001359	1	3.7691E-05
EG13797	ydeO	1	4.82E-04	1	3.42E-04	1	0.000672	1	0.00056261
EG13798	ydeP	1	1.34E-05	1	1.32E-05	1	6.6516E-05	1	0.00016116
EG13799	ydeQ	1	9.22E-04	1	5.16E-04	1	0.00038953	1	0.00014455
EG13800	ydeR	1	6.35E-05	1	4.35E-05	1	0.00024817	1	0.0004518
EG13801	ydeS	1	2.08E-04	1	3.10E-04	1	0.0001056	1	4.5988E-05
EG13803	ydeU	0	-2.66E-07	0	-5.22E-07	1	1.2792E-05	1	8.811E-06
EG11300	ydfA	1	3.63E-04	1	4.02E-04	1	0.0002162	1	0.00012863
EG11301	ydfB	1	3.34E-05	1	2.77E-05	1	0.00025185	1	0.00060495
EG11303	ydfD	1	5.77E-05	1	2.00E-04	1	0.00141461	1	0.00073606
EG12345	ydfG	1	1.35E-05	1	6.97E-06	1	0.0003271	1	0.00058685
EG13820	ydfH	1	2.93E-04	1	4.25E-04	1	0.000196	1	0.00020727
EG13821	ydfI	1	4.85E-04	1	6.76E-04	1	0.00063952	1	0.00022504
EG13823	ydfK	1	5.15E-04	1	4.21E-04	1	7.7829E-05	1	2.2438E-05
EG13826	ydfN	1	4.00E-06	1	5.35E-06	1	4.567E-05	1	3.0445E-05
EG13827	ydfO	1	7.35E-05	1	9.50E-05	1	0.00012485	1	3.5447E-05
EG13828	ydfP	1	7.78E-05	1	8.47E-05	1	0.00012659	1	7.9508E-05
EG13830	ydfR	1	4.71E-05	1	3.22E-05	1	2.0741E-06	0	3.1032E-06
EG13833	ydfU	1	6.39E-04	1	4.35E-04	1	0.00019281	1	5.8074E-05
EG13834	ydfV	1	9.58E-04	1	7.68E-04	1	0.00044728	1	0.00014121
EG13835	ydfW	1	3.92E-06	1	5.59E-06	1	0.00020623	1	0.00019375
EG13836	ydfX	1	9.26E-06	1	4.89E-06	1	7.0522E-05	1	7.4995E-05
EG13838	ydfZ	1	1.23E-04	1	1.54E-04	1	0.00053005	1	0.00041563
EG12457	ydgA	1	4.08E-04	1	4.54E-04	1	0.00050691	1	0.00034695
EG13191	ydgC	0	7.08E-07	0	3.37E-06	1	0.00018359	1	7.5301E-05
EG13925	ydgD	1	1.72E-03	1	1.33E-03	1	0.00071751	1	0.00022473
EG13929	ydgH	1	2.24E-05	1	1.38E-05	1	4.567E-05	1	2.2041E-05
EG13930	ydgI	1	3.96E-04	1	3.46E-04	1	0.00046117	1	0.00045651
EG13931	ydgJ	1	2.15E-06	0	3.96E-06	1	0.00022617	1	9.8107E-05
EG13932	ydgK	1	2.61E-06	0	3.61E-06	1	5.2984E-06	0	1.7792E-06
EG14462	ydgU	1	1.49E-04	1	1.49E-04	1	0.00059115	1	0.00042466
EG11488	ydhA	1	2.28E-04	1	2.65E-04	1	6.51E-05	1	3.5458E-05
EG12140	ydhB	1	1.50E-04	1	1.42E-04	1	0.00036966	1	0.00041355
EG12141	ydhC	1	1.38E-04	1	7.54E-05	1	0.00014735	1	0.00019545
EG13420	ydhF	1	2.60E-04	1	1.84E-04	1	0.00053165	1	0.00051574
EG13943	ydhI	1	6.19E-04	1	5.99E-04	1	0.00056555	1	0.00035873
EG13944	ydhJ	1	5.73E-04	1	8.74E-04	1	0.00123339	1	0.0005086
EG13945	ydhK	1	4.42E-06	1	1.13E-05	1	0.00018203	1	0.00018718
EG13946	ydhL	1	2.80E-05	1	1.05E-05	1	1.2148E-05	1	6.9042E-06
EG13949	ydhO	1	1.08E-04	1	8.20E-05	1	0.00029595	1	0.00023247
EG13950	ydhP	1	9.16E-05	1	8.42E-05	1	0.00012354	1	7.9299E-05
EG13951	ydhQ	1	4.27E-05	1	3.72E-05	1	6.6516E-05	1	6.2166E-05
EG13952	ydhR	1	5.02E-04	1	5.13E-04	1	0.00018182	1	0.00051017
EG13953	ydhS	1	1.31E-04	1	1.32E-04	1	0.00012734	1	0.00027601
EG13954	ydhT	1	1.85E-05	1	3.29E-05	1	4.3294E-05	1	5.5256E-05
EG13955	ydhU	1	2.13E-05	1	6.58E-05	1	0.00079515	1	0.00058155
EG13956	ydhV	1	6.93E-06	0	3.71E-06	1	5.6805E-05	1	3.3614E-05
EG13957	ydhW	1	6.25E-06	1	9.98E-06	1	0.00030975	1	0.00023301
EG13958	ydhX	0	1.01E-08	0	-3.62E-08	1	2.294E-05	1	3.9676E-05
EG13959	ydhY	1	5.37E-05	1	8.10E-05	1	0.00016396	1	0.0005767
EG13960	ydhZ	1	3.54E-05	1	6.31E-05	1	0.00012958	1	6.0906E-05
EG11132	ydiA	1	3.80E-04	1	2.00E-04	1	0.00016349	1	6.5692E-05
EG11234	ydiB	1	1.31E-04	1	1.05E-04	1	0.00052798	1	0.00031276
EG12391	ydiE	1	2.28E-04	1	2.28E-04	1	0.00011957	1	6.3817E-05
EG12432	ydiF	1	3.01E-04	1	2.13E-04	1	0.00034983	1	0.00040579
EG13967	ydiH	1	1.88E-04	1	3.45E-04	1	0.00039593	1	0.00067449
EG13968	ydiI	1	1.49E-05	1	1.10E-05	1	0.0002085	1	0.00014205
EG13969	ydiJ	1	3.01E-04	1	4.18E-04	1	0.00017766	1	0.00010864
EG13970	ydiK	1	1.53E-04	1	1.55E-04	1	0.00016154	1	8.0948E-05
EG13971	ydiL	1	1.91E-04	1	3.88E-04	1	0.00026644	1	0.0006118
EG13972	ydiM	1	3.84E-04	1	2.71E-04	1	0.000283	1	4.236E-05
EG13973	ydiN	1	3.03E-04	1	2.81E-04	1	7.8764E-05	1	6.226E-05
EG13974	ydiO	1	6.78E-05	1	4.56E-05	1	3.774E-06	0	2.3499E-06
EG13975	ydiP	1	8.21E-05	1	1.06E-04	1	2.7185E-05	1	1.6359E-05
EG13976	ydiQ	1	1.80E-04	1	2.34E-04	1	0.00049822	1	0.00091594
EG13977	ydiR	1	1.17E-04	1	1.92E-04	1	0.00010423	1	0.00026944
EG13978	ydiS	0	5.59E-07	0	2.92E-06	1	0.00015672	1	0.00027975

EG13979	ydiT	1	6.40E-05	1	3.63E-05	1	0.00015851	1	0.0001171
EG13980	ydiU	1	1.58E-04	1	3.39E-04	1	1.8049E-05	1	7.2107E-06
EG13981	ydiV	1	3.53E-04	1	1.99E-04	1	8.2385E-05	1	0.0002176
EG13984	ydiY	1	6.63E-06	1	2.14E-05	1	6.336E-05	1	1.4776E-05
EG13985	ydiZ	1	2.37E-04	1	2.09E-04	1	0.00014039	1	6.8315E-05
EG11134	ydjA	1	2.91E-04	1	1.50E-04	1	0.00277697	1	0.0014498
EG12369	ydjE	1	1.62E-04	1	8.25E-05	1	0.00033171	1	0.00065266
EG13482	ydjF	0	6.31E-07	0	5.50E-07	1	1.822E-05	1	7.6895E-06
EG13483	ydjG	1	1.23E-04	1	1.56E-04	1	0.00035402	1	0.00038847
EG13484	ydjH	1	5.58E-04	1	3.58E-04	1	7.0253E-05	1	5.1634E-05
EG13485	ydjI	1	5.35E-04	1	4.22E-04	1	0.00011907	1	8.9427E-05
EG13486	ydjJ	1	6.96E-05	1	6.56E-05	1	0.00018445	1	0.00022979
EG13487	ydjK	1	1.17E-03	1	9.35E-04	1	0.00012855	1	0.00011054
EG13488	ydjL	1	1.71E-05	1	1.34E-05	1	9.5801E-06	0	3.552E-06
EG13989	ydjM	1	2.34E-04	1	3.39E-04	1	0.00127758	1	0.00154892
EG13990	ydjN	1	3.09E-04	1	2.99E-04	1	0.00091712	1	0.00048278
EG13991	ydjO	1	1.07E-04	1	2.08E-04	1	2.1404E-05	1	6.6835E-06
EG14000	ydjX	1	1.39E-04	1	2.19E-04	1	0.00032578	1	0.00051444
EG14001	ydjY	1	5.94E-06	1	2.44E-05	1	0.00041873	1	0.0004727
EG14002	ydjZ	1	4.26E-04	1	4.25E-04	1	0.00013174	1	0.00010018
EG13489	yeaC	1	4.25E-04	1	3.66E-04	1	1.4049E-05	1	5.4542E-06
EG12679	yeaD	1	3.63E-04	1	5.83E-04	1	0.00021477	1	6.5857E-05
EG13491	yeaE	1	1.10E-04	1	1.04E-04	1	0.00036704	1	0.00079889
EG13493	yeaG	1	1.58E-04	1	1.32E-04	1	0.00013426	1	0.00012324
EG13494	yeaH	0	9.38E-07	0	-1.58E-07	1	9.0739E-05	1	7.7606E-05
EG13495	yeaI	1	2.54E-04	1	2.76E-04	1	0.00010706	1	3.0927E-05
EG13496	yeaJ	1	4.89E-04	1	6.48E-04	1	0.0002071	1	6.7478E-05
EG13497	yeaK	1	4.08E-05	1	1.02E-04	1	0.00015495	1	9.3654E-05
EG13498	yeaL	1	4.78E-04	1	5.16E-04	1	0.00089204	1	0.00070911
EG13499	yeaM	1	3.25E-04	1	2.00E-04	1	0.00052572	1	0.00045906
EG13500	yeaN	1	3.92E-04	1	3.29E-04	1	0.00033835	1	0.00020194
EG13501	yeaO	1	5.84E-06	1	1.61E-05	1	2.7705E-05	1	1.036E-05
EG13502	yeaP	1	3.39E-04	1	3.01E-04	1	0.00013144	1	5.6172E-05
EG13503	yeaQ	1	8.39E-05	1	4.08E-05	1	0.00035943	1	0.0004142
EG13504	yeaR	1	4.70E-04	1	5.26E-04	1	1.969E-05	1	2.4243E-05
EG13506	yeaT	1	3.51E-04	1	6.13E-04	1	0.00018839	1	4.6422E-05
EG13507	yeaU	0	6.89E-07	0	1.77E-06	1	0.00039538	1	0.00024976
EG13508	yeaV	1	8.78E-05	1	7.32E-05	1	0.00040379	1	0.00074073
EG13509	yeaW	1	4.86E-05	1	3.85E-05	1	0.00018253	1	0.0001181
EG13510	yeaX	1	5.50E-04	1	4.13E-04	1	0.00034351	1	0.00055212
EG13511	yeaY	0	2.09E-06	1	6.36E-06	1	0.00045464	1	0.00041978
EG13512	yeaZ	1	6.77E-04	1	8.45E-04	1	0.0001172	1	0.00010497
EG10013	yebA	1	4.83E-04	1	5.20E-04	1	0.00028796	1	0.00023858
EG11136	yebB	1	1.23E-04	1	2.41E-04	1	0.00017816	1	0.00026051
EG11137	yebC	1	2.34E-05	1	1.80E-05	1	0.00050329	1	0.00078818
EG11806	yebE	1	1.31E-04	1	1.51E-04	1	0.00060473	1	0.00048677
EG11807	yebF	1	6.37E-05	1	4.03E-05	1	0.00064051	1	0.00071352
EG11808	yebG	1	3.30E-05	1	2.22E-05	1	0.00018767	1	0.00020717
EG12860	yebK	1	2.20E-04	1	2.55E-04	1	0.00073058	1	0.00080971
EG14012	yebN	1	3.17E-04	1	3.39E-04	1	6.621E-05	1	3.4163E-05
EG14014	yebO	1	3.74E-06	0	2.19E-06	1	0.00162944	1	0.00104359
EG14019	yebQ	1	1.42E-04	1	1.47E-04	1	7.3082E-05	1	2.0564E-05
EG14020	yebR	1	1.35E-05	1	3.13E-05	1	0.00056249	1	0.00059407
EG14021	yebS	1	4.40E-04	1	3.95E-04	1	0.00018897	1	2.4516E-05
EG14022	yebT	1	9.61E-06	0	4.40E-06	1	0.00040273	1	0.00051622
EG14024	yebV	1	7.92E-06	1	6.85E-06	1	1.1379E-05	0	2.1485E-06
EG14025	yebW	1	3.41E-05	1	8.45E-05	1	0.00012867	1	0.00016484
EG14027	yebY	1	1.72E-03	1	1.63E-03	1	8.113E-05	1	6.7938E-05
EG14028	yebZ	1	1.30E-05	1	5.63E-06	1	0.00013736	1	0.00013576
EG11139	yecA	1	3.24E-06	0	2.22E-06	1	4.2948E-05	1	1.0537E-05
EG12347	yecC	1	8.41E-05	1	9.13E-05	1	0.0001988	1	0.00036123
EG12378	yecD	1	7.81E-05	1	1.54E-04	1	0.00059759	1	0.00097013
EG12379	yecE	1	6.80E-05	1	9.67E-05	1	0.0002101	1	0.00025692
EG12861	yecF	1	6.90E-04	1	9.56E-04	1	0.00012716	1	4.2536E-05
EG12863	yecH	1	1.32E-04	1	1.12E-04	1	0.00047597	1	0.00029652
EG13242	yecJ	1	3.05E-04	1	5.13E-04	1	0.00043075	1	0.00028874
EG13405	yecM	1	9.38E-05	1	6.83E-05	1	2.3213E-05	1	3.7555E-05
EG14032	yecN	1	5.68E-04	1	4.18E-04	1	0.00013671	1	0.00041658
EG14036	yecR	1	3.99E-04	1	3.46E-04	1	8.9627E-05	1	7.7828E-05
EG14037	yecS	1	3.37E-04	1	5.96E-04	1	0.00014406	1	0.00027242
EG14316	yecT	1	1.86E-04	1	1.51E-04	1	0.00052347	1	0.00034777

EG11141	yedA	1	7.22E-04	1	5.70E-04	1	0.00036234	1	0.000178
EG11659	yedD	1	2.88E-04	1	2.32E-04	1	9.9091E-05	1	0.00021627
EG11660	yedE	1	1.02E-04	1	5.89E-05	1	0.00031056	1	0.00039242
EG11661	yedF	1	6.49E-05	1	3.78E-05	1	0.00020121	1	0.00045367
EG12709	yedI	1	1.56E-04	1	1.14E-04	1	0.00065279	1	0.00042641
EG12710	yedJ	1	1.76E-05	1	1.12E-05	1	0.00012247	1	0.0001183
EG13278	yedK	1	1.76E-04	1	1.80E-04	1	0.00015981	1	0.00041156
EG13279	yedL	1	9.61E-05	1	1.56E-04	1	0.00058028	1	0.00060017
EG14039	yedP	1	6.29E-05	1	3.38E-05	1	0.00033955	1	0.00025646
EG14040	yedQ	1	2.92E-05	1	2.48E-05	1	3.7062E-05	1	6.3206E-05
EG14041	yedR	1	2.06E-04	1	1.15E-04	1	8.5071E-05	1	0.00023756
EG14044	yedV	1	4.19E-04	1	4.69E-04	1	8.6737E-05	1	0.0001925
EG14045	yedW	1	2.72E-04	1	2.98E-04	1	5.0952E-05	1	6.941E-05
EG14046	yedX	1	6.83E-04	1	4.72E-04	1	7.4024E-05	1	7.6193E-05
EG14047	yedY	1	1.76E-04	1	2.50E-04	1	0.00053581	1	0.00047758
EG14048	yedZ	1	2.09E-05	1	2.55E-05	1	0.00061585	1	0.00060283
EG11891	yeeA	1	4.90E-05	1	3.98E-05	1	0.00033995	1	0.00024002
EG11894	yeeD	1	9.87E-06	1	8.12E-06	1	0.00059462	1	0.00060283
EG11895	yeeE	1	1.07E-03	1	9.93E-04	1	0.00013992	1	6.6451E-05
EG11896	yeeF	1	7.29E-05	1	7.44E-05	1	0.00021817	1	0.00028623
EG13378	yeeJ	1	7.96E-06	1	7.43E-06	1	5.0481E-05	1	8.0417E-06
EG13382	yeeN	1	2.02E-04	1	2.89E-04	1	9.5719E-05	1	4.0912E-05
EG13383	yeeO	1	4.68E-05	1	7.09E-05	1	4.1095E-05	1	0.00012264
EG13385	yeeR	1	1.73E-04	1	2.47E-04	1	0.00033004	1	0.00019072
EG13386	yeeS	1	1.61E-05	1	1.31E-05	1	0.00022129	1	0.00014283
EG13387	yeeT	1	1.31E-03	1	1.45E-03	1	6.8232E-05	1	0.0003172
EG13388	yeeU	1	5.65E-04	1	6.09E-04	1	0.00043128	1	0.00027261
EG13389	yeeV	1	1.49E-04	1	1.94E-04	1	0.00193799	1	0.00158546
EG13391	yeeX	1	5.28E-05	1	3.67E-05	1	0.00011502	1	9.3718E-05
EG13392	yeeY	1	3.81E-05	1	3.63E-05	1	0.00012422	1	3.0916E-05
EG13393	yeeZ	1	3.59E-06	0	4.16E-06	1	3.269E-06	0	2.5113E-06
EG12844	yefM	1	1.45E-04	1	1.18E-04	1	0.00019245	1	0.00031616
EG12200	yegD	1	3.36E-04	1	2.72E-04	1	0.00046172	1	0.0001863
EG12396	yegE	1	2.50E-04	1	5.67E-04	1	0.00016409	1	6.1629E-05
EG14051	yegH	1	2.30E-04	1	3.77E-04	1	0.00017889	1	0.00047604
EG14052	yegI	1	2.99E-04	1	1.88E-04	1	0.00031987	1	0.00038267
EG14053	yegJ	1	1.49E-04	1	3.51E-04	1	6.0387E-05	1	0.00012549
EG14054	yegK	0	2.07E-06	0	1.32E-06	1	1.4514E-05	1	1.7151E-05
EG14055	yegL	1	1.30E-04	1	2.42E-04	1	0.00019143	1	0.00028808
EG14059	yegP	1	5.25E-04	1	3.57E-04	1	8.8704E-05	1	0.00029019
EG14060	yegQ	1	5.60E-05	1	7.75E-05	1	0.00088457	1	0.00083018
EG14061	yegR	1	2.97E-04	1	4.00E-04	1	0.00044686	1	0.0006544
EG14367	yegS	1	3.78E-04	1	1.64E-04	1	0.00013886	1	0.00013465
EG14063	yegT	1	8.05E-05	1	5.35E-05	1	0.00082658	1	0.00046937
EG14064	yegU	1	1.00E-05	1	1.59E-05	1	0.00035085	1	0.00045717
EG14065	yegV	1	3.90E-05	1	2.43E-05	1	9.3325E-05	1	6.9791E-05
EG14066	yegW	1	3.29E-05	1	5.91E-05	1	6.1987E-05	1	4.9517E-05
EG14067	yegX	1	6.56E-04	1	5.32E-04	1	0.0001848	1	8.2279E-05
EG11987	yehA	1	4.43E-04	1	3.53E-04	1	0.00062128	1	0.00036024
EG11988	yehB	1	4.81E-04	1	3.61E-04	1	0.00033502	1	0.00073053
EG11989	yehC	1	8.62E-05	1	7.75E-05	1	5.1808E-05	1	8.281E-05
EG11990	yehD	1	6.54E-04	1	6.08E-04	1	5.165E-05	1	8.7329E-06
EG11991	yehE	1	6.49E-05	1	3.83E-05	1	0.00036919	1	0.00020495
EG11995	yehI	1	6.71E-06	1	4.93E-06	1	0.00020835	1	0.00010025
EG11997	yehK	1	2.96E-06	0	1.33E-06	1	0.00019096	1	0.00020777
EG11998	yehL	1	1.12E-03	1	8.22E-04	1	0.00027903	1	0.00134605
EG11999	yehM	1	6.21E-05	1	7.76E-05	1	0.00017714	1	0.00038999
EG12002	yehP	1	3.79E-04	1	3.66E-04	1	4.0047E-05	1	2.3678E-05
EG12004	yehR	1	8.54E-04	1	6.65E-04	1	0.00038368	1	0.00037796
EG12005	yehS	1	3.37E-04	1	5.16E-04	1	0.00056975	1	0.00048682
EG12006	yehT	1	1.50E-04	1	2.02E-04	1	0.00036604	1	0.00029445
EG12007	yehU	1	4.25E-04	1	6.77E-04	1	0.00149276	1	0.00180556
EG12009	yehW	1	9.87E-05	1	5.49E-05	1	1.9997E-05	1	1.3382E-05
EG12010	yehX	1	6.31E-04	1	5.75E-04	1	0.00013942	1	0.00014334
EG12011	yehY	1	1.19E-03	1	9.61E-04	1	0.00037623	1	0.00025721
EG11289	yeiA	1	1.38E-04	1	2.00E-04	1	0.0003073	1	0.00089584
EG11290	yeiB	1	1.91E-05	1	2.52E-05	1	1.731E-05	1	6.1186E-05
EG12105	yeiE	1	1.45E-05	1	3.17E-05	1	0.00015478	1	0.00042462
EG12026	yeiG	1	2.42E-05	1	1.91E-05	1	0.00054863	1	0.000504
EG12027	yeiH	1	1.38E-04	1	2.70E-04	1	0.00013842	1	4.1798E-05
EG12028	yeiI	1	4.31E-05	1	2.62E-05	1	4.2667E-05	1	2.1064E-05

EG12031	yeiL	1	1.54E-03	1	1.09E-03	1	0.00040218	1	0.00033938
EG12035	yeiP	1	2.50E-05	1	7.39E-05	1	0.00028282	1	0.00016684
EG12036	yeiQ	1	9.45E-04	1	9.96E-04	1	0.00035131	1	0.00023337
EG12104	yeiR	1	1.75E-05	1	1.07E-05	1	0.0002387	1	0.00014817
EG14073	yeiS	1	4.26E-04	1	5.52E-04	1	8.015E-06	0	2.2532E-06
EG14074	yeiT	1	1.38E-04	1	7.81E-05	1	0.00022979	1	0.00018958
EG14375	yeiW	1	3.53E-05	1	5.74E-05	1	3.5784E-05	1	2.3557E-05
EG12037	yejA	1	2.27E-04	1	4.34E-04	1	0.00029793	1	0.00023079
EG12038	yejB	1	2.50E-05	1	1.47E-05	1	6.753E-05	1	5.0808E-05
EG12040	yejE	1	4.80E-05	1	4.31E-05	1	0.00041838	1	0.00042064
EG12041	yejF	1	5.14E-04	1	6.55E-04	1	0.00068424	1	0.0006025
EG12042	yejG	1	2.23E-04	1	1.86E-04	1	0.0003021	1	0.00027683
EG12045	yejH	1	3.78E-04	1	3.02E-04	1	0.00035218	1	0.0006746
EG12048	yejK	1	3.45E-05	1	9.26E-05	1	0.00026557	1	0.00031066
EG12043	yejL	1	9.37E-05	1	2.40E-04	1	0.00028696	1	0.0003024
EG12049	yejM	1	8.45E-05	1	6.01E-05	1	0.00013046	1	0.00011591
EG11142	yfaA	0	2.02E-06	0	2.36E-06	1	4.9318E-05	1	0.00012832
EG12323	yfaD	1	4.60E-04	1	5.63E-04	1	5.7105E-05	1	2.1724E-05
EG12360	yfaE	1	1.43E-04	1	2.17E-04	1	1.5316E-05	1	2.1084E-05
EG12850	yfaL	1	6.85E-04	1	5.31E-04	1	4.2731E-05	1	6.5954E-05
EG14078	yfaP	1	4.59E-04	1	7.77E-04	1	0.00050723	1	0.00048986
EG14079	yfaQ	1	7.15E-06	1	7.91E-06	1	4.2623E-05	1	4.547E-05
EG14082	yfaT	0	1.71E-06	0	1.67E-07	1	4.1439E-05	1	3.5703E-05
EG14083	yfaU	1	1.88E-05	1	1.85E-05	1	0.00012683	1	3.8782E-05
EG14084	yfaV	1	1.83E-04	1	1.98E-04	1	0.00088263	1	0.00038898
EG14085	yfaW	1	4.01E-05	1	3.86E-05	1	5.0885E-05	1	5.7891E-05
EG14086	yfaX	1	3.57E-04	1	8.11E-04	1	2.5614E-05	1	6.3281E-06
EG14087	yfaY	1	2.93E-05	1	1.49E-05	1	0.0011331	1	0.00127989
EG14088	yfaZ	1	1.40E-04	1	2.01E-04	1	0.00039368	1	0.00052671
EG12438	yfbB	1	3.44E-05	1	3.47E-05	1	0.00015791	1	9.6988E-05
EG14095	yfbK	1	2.98E-04	1	2.37E-04	1	0.00011641	1	7.0017E-05
EG14096	yfbL	1	5.92E-05	1	9.91E-05	1	2.9981E-05	1	1.9495E-05
EG14097	yfbM	1	1.13E-04	1	1.04E-04	1	0.00010495	1	3.6138E-05
EG14098	yfbN	1	1.63E-05	1	1.74E-05	1	0.00013584	1	5.8586E-05
EG14099	yfbO	1	1.89E-04	1	2.60E-04	1	6.8135E-05	1	6.1602E-05
EG14100	yfbP	1	2.15E-04	1	1.43E-04	1	7.0332E-06	1	6.2015E-06
EG14101	yfbQ	1	4.00E-04	1	3.91E-04	1	0.00066079	1	0.00014109
EG14102	yfbR	1	2.33E-04	1	4.61E-04	1	0.00036447	1	9.5876E-05
EG14103	yfbS	1	3.39E-04	1	3.23E-04	1	4.8273E-05	1	2.8803E-05
EG14104	yfbT	1	4.51E-05	1	7.85E-05	1	0.00028439	1	0.00018552
EG14105	yfbU	1	5.78E-04	1	4.79E-04	1	0.00024934	1	0.00011837
EG14106	yfbV	1	1.06E-03	1	1.08E-03	1	0.00031203	1	0.00021338
EG11144	yfcA	1	7.29E-05	1	8.23E-05	1	0.00010356	1	8.4907E-05
EG12607	yfcC	1	1.66E-03	1	1.23E-03	1	0.00011738	1	0.00033398
EG14107	yfcD	1	8.03E-05	1	6.39E-05	1	0.000339	1	0.00027385
EG14108	yfcE	1	4.24E-05	1	4.50E-05	1	0.00071099	1	0.00058356
EG14109	yfcF	1	2.73E-04	1	2.55E-04	1	0.00021674	1	0.00026054
EG14110	yfcG	1	1.50E-04	1	2.56E-04	1	0.00046875	1	0.00041331
EG14111	yfcH	1	2.48E-05	1	3.84E-05	1	0.00021562	1	0.00036754
EG14112	yfcI	1	1.73E-04	1	1.46E-04	1	0.00013442	1	6.9044E-05
EG14113	yfcJ	1	1.00E-03	1	6.86E-04	1	3.2864E-06	1	4.8293E-06
EG14115	yfcL	1	2.92E-05	1	4.59E-05	1	0.0001081	1	0.00021689
EG14116	yfcM	1	1.86E-05	1	4.82E-05	1	0.00033492	1	0.00036897
EG14117	yfcN	1	3.47E-05	1	3.19E-05	1	7.3478E-05	1	2.1981E-05
EG14118	yfcO	1	7.78E-04	1	5.47E-04	1	0.00056548	1	0.00043413
EG14119	yfcP	1	1.50E-05	1	1.99E-05	1	0.00118713	1	0.00109351
EG14120	yfcQ	1	3.72E-04	1	2.71E-04	1	0.00023019	1	0.00025377
EG14121	yfcR	0	2.11E-07	0	-3.44E-07	1	3.9092E-06	0	2.5598E-06
EG14122	yfcS	1	3.37E-04	1	2.79E-04	1	3.7483E-05	1	2.9319E-05
EG14125	yfcV	1	2.33E-04	1	3.78E-04	1	0.00011878	1	5.9206E-05
EG14129	yfcZ	1	8.62E-05	1	1.00E-04	1	0.00016738	1	0.00039128
EG12420	yfdC	1	1.24E-04	1	1.96E-04	1	0.00026122	1	0.00043731
EG13284	yfdE	1	3.40E-04	1	4.71E-04	1	0.00054774	1	0.00053152
EG14130	yfdF	1	1.64E-04	1	2.48E-04	1	0.00010881	1	4.9208E-05
EG14131	yfdG	1	2.55E-04	1	2.77E-04	1	0.00026596	1	0.00024435
EG14132	yfdH	1	5.28E-04	1	2.80E-04	1	0.00011761	1	0.00023065
EG14133	yfdI	1	1.45E-04	1	1.13E-04	1	0.00015735	1	0.00011672
EG14135	yfdK	1	3.18E-06	0	3.00E-06	1	8.1104E-05	1	0.0002049
EG12949	yfdN	1	1.23E-04	1	5.17E-05	1	0.00020371	1	0.00015564
EG14138	yfdP	1	8.66E-06	1	9.37E-06	1	0.00012172	1	0.00014277
EG14139	yfdQ	1	7.76E-04	1	9.88E-04	1	0.00021868	1	0.00015845

EG14140	yfdR	1	2.24E-04	1	2.04E-04	1	0.00017161	1	0.00037148
EG14141	yfdS	1	1.16E-04	1	7.65E-05	1	0.00071478	1	0.00069524
EG14142	yfdT	1	2.28E-03	1	1.73E-03	1	0.00018753	1	0.00010018
EG14144	yfdV	1	3.37E-04	1	2.08E-04	1	0.00049261	1	0.00083702
EG14146	yfdX	1	1.12E-04	1	6.81E-05	1	0.00034633	1	0.00027772
EG14147	yfdY	1	1.77E-04	1	1.86E-04	1	0.00024643	1	0.00069184
EG14198	yfdZ	1	2.28E-05	1	2.44E-05	1	4.362E-05	1	0.00014167
EG11145	yfeA	1	2.67E-04	1	2.43E-04	1	9.0747E-06	0	3.2906E-06
EG11431	yfeC	1	3.12E-04	1	2.33E-04	1	0.00025311	1	0.00035043
EG11432	yfeD	1	2.65E-04	1	4.72E-04	1	0.0005852	1	0.0003398
EG12376	yfeH	1	6.70E-04	1	5.78E-04	1	0.00016561	1	0.00013627
EG12644	yfeK	1	1.97E-04	1	3.00E-04	1	0.00010543	1	0.00021387
EG13160	yfeN	1	7.86E-04	1	5.78E-04	1	0.00027912	1	0.00035932
EG14156	yfeO	1	1.68E-04	1	1.40E-04	1	0.00021554	1	0.00045682
EG14159	yfeR	1	1.50E-04	1	1.65E-04	1	6.9277E-05	1	1.1069E-05
EG14160	yfeS	1	2.85E-04	1	1.97E-04	1	0.00012131	1	0.00010698
EG14161	yfeT	1	1.05E-04	1	7.71E-05	1	0.00023211	1	0.00034473
EG14164	yfeW	1	9.26E-04	1	9.05E-04	1	1.0686E-05	1	2.8037E-05
EG14165	yfeX	1	3.59E-04	1	5.26E-04	1	0.00013269	1	0.00019463
EG14166	yfeY	1	4.58E-05	1	5.40E-05	1	0.00025248	1	0.00035308
EG14167	yfeZ	1	1.17E-04	1	1.15E-04	1	0.00035147	1	0.00046687
EG11147	yffB	1	2.54E-04	1	1.54E-04	1	0.00046642	1	0.00045801
EG14173	yffL	1	8.14E-04	1	4.36E-04	1	1.47E-05	1	6.3365E-06
EG14174	yffM	1	1.71E-05	1	2.38E-05	1	0.00018306	1	0.00011168
EG14175	yffN	1	1.31E-04	1	3.40E-04	1	0.00039384	1	0.00054868
EG14176	yffO	1	4.11E-06	0	2.55E-06	1	0.00013612	1	4.468E-05
EG14177	yffP	1	1.26E-03	1	9.28E-04	1	0.00022684	1	0.00017715
EG14178	yffQ	1	1.31E-04	1	9.85E-05	1	0.00038481	1	0.00032812
EG14179	yffR	1	6.30E-05	1	6.31E-05	1	0.00013297	1	0.00022158
EG14180	yffS	1	2.36E-04	1	1.77E-04	1	8.4397E-05	1	8.0933E-05
EG10015	yfgA	1	1.54E-04	1	1.49E-04	1	0.00022855	1	0.00017259
EG14199	yfgC	1	8.96E-05	1	7.48E-05	1	5.4852E-05	1	2.6841E-05
EG14200	yfgD	1	1.63E-04	1	2.98E-04	1	0.00013272	1	7.4835E-05
EG14202	yfgF	1	3.06E-04	1	2.36E-04	1	5.8078E-05	1	6.0492E-05
EG14203	yfgG	1	3.35E-04	1	3.38E-04	1	2.5297E-05	1	2.0272E-05
EG14204	yfgH	1	8.52E-04	1	9.70E-04	1	0.00024502	1	0.00044729
EG14205	yfgI	1	6.90E-05	1	1.05E-04	1	0.00010223	1	3.0115E-05
EG14206	yfgJ	1	9.72E-05	1	1.43E-04	1	0.00011781	1	7.7355E-05
EG14209	yfgM	1	2.24E-05	1	1.15E-05	1	2.0568E-06	0	4.7597E-07
EG14221	yfgO	1	2.24E-04	1	3.06E-04	1	0.00133833	1	0.00101337
EG11285	yfhA	1	3.12E-04	1	3.87E-04	1	0.00035886	1	0.00017866
EG11371	yfhB	1	8.47E-05	1	1.13E-04	1	0.00053675	1	0.00023629
EG12139	yfhG	1	2.16E-04	1	2.01E-04	1	6.3218E-05	1	0.00012339
EG12308	yfhH	1	6.11E-05	1	4.73E-05	1	0.00036898	1	0.00038102
EG13461	yfhK	1	5.98E-04	1	7.91E-04	1	0.00035284	1	0.00028818
EG13215	yfhL	1	2.08E-04	1	2.88E-04	1	0.0001872	1	0.00010987
EG13394	yfhM	1	3.02E-05	1	3.14E-05	1	2.8246E-05	1	1.0096E-05
EG13453	yfhR	1	5.23E-05	1	1.11E-04	1	4.6549E-05	1	0.00012696
EG11152	yfiB	1	3.16E-04	1	3.63E-04	1	1.7196E-05	1	4.2242E-05
EG11538	yfiC	1	2.08E-04	1	5.79E-04	1	0.0005234	1	0.00028711
EG11784	yfiD	1	1.26E-04	1	1.06E-04	1	1.7272E-05	1	4.2454E-05
EG11785	yfiE	1	3.99E-04	1	2.38E-04	1	9.1802E-05	1	7.6339E-05
EG11786	yfiF	1	3.94E-06	1	5.92E-06	1	7.4024E-05	1	4.4453E-05
EG12097	yfiH	1	3.38E-05	1	3.45E-05	1	0.00011668	1	0.00017535
EG12446	yfiL	1	2.94E-04	1	3.73E-04	1	0.0002797	1	0.00021547
EG12857	yfiM	1	1.37E-03	1	9.85E-04	1	0.00033542	1	0.00013969
EG12880	yfiN	1	3.33E-04	1	2.44E-04	1	5.4669E-05	1	5.3542E-05
EG14223	yfiP	1	2.19E-04	1	3.64E-04	1	0.00103213	1	0.00014235
EG14224	yfiQ	0	1.19E-06	0	2.43E-06	1	0.00031843	1	0.00055604
EG14225	yfiR	1	2.69E-04	1	2.62E-04	1	0.00012852	1	4.7393E-05
EG12442	yfjD	1	1.10E-03	1	7.64E-04	1	3.1018E-05	0	3.5274E-06
EG13192	yfjF	0	2.05E-06	0	2.06E-06	1	3.5366E-05	1	5.176E-05
EG13193	yfjG	1	2.46E-04	1	3.00E-04	1	0.00044926	1	0.00089136
EG13194	yfjH	1	1.80E-05	1	3.30E-05	1	0.00019296	1	0.00010663
EG13195	yfjI	1	5.90E-05	1	3.80E-05	1	7.1222E-06	1	2.2477E-05
EG13196	yfjJ	1	4.59E-05	1	7.89E-05	1	0.00065985	1	0.00112274
EG13197	yfjK	1	1.10E-04	1	8.90E-05	1	5.6851E-05	1	2.0048E-05
EG13198	yfjL	1	1.56E-04	1	1.17E-04	0	4.9494E-07	0	1.4994E-06
EG13199	yfjM	0	6.70E-07	0	6.08E-07	1	2.9941E-05	1	3.0072E-05
EG13201	yfjO	1	7.74E-05	1	5.61E-05	1	0.00018359	1	6.1602E-05
EG13202	yfjP	1	4.13E-04	1	3.61E-04	1	0.0002556	1	0.00018155

EG13203	yfjQ	1	6.00E-04	1	5.85E-04	1	0.00029128	1	0.00023062
EG13204	yfjR	1	9.82E-05	1	5.80E-05	1	0.00015373	1	0.00025544
EG13205	yfjS	1	1.68E-04	1	1.60E-04	1	0.00038904	1	0.00040703
EG13206	yfjT	1	1.43E-03	1	7.14E-04	1	6.896E-05	1	4.0102E-05
EG13209	yfjW	1	3.74E-04	1	5.26E-04	1	0.00010159	1	3.9458E-05
EG13210	yfjX	1	1.46E-04	1	2.39E-04	1	0.00024776	1	9.3541E-05
EG13211	yfjY	1	8.06E-04	1	7.65E-04	1	0.00033418	1	0.00015349
EG13212	yfjZ	1	6.67E-06	1	5.13E-06	1	6.1491E-05	1	3.1722E-05
EG12201	ygaC	1	8.22E-05	1	1.02E-04	1	9.3432E-05	1	0.00010813
EG12698	ygaD	1	1.73E-05	1	1.07E-05	1	4.3186E-05	1	2.0927E-05
EG12387	ygaF	1	2.85E-04	1	4.01E-04	1	0.00029041	1	0.00028742
EG12940	ygaH	1	4.19E-05	1	4.17E-05	1	1.0014E-05	0	3.9044E-06
EG13285	ygaM	1	5.96E-05	1	4.32E-05	1	8.4604E-05	1	4.5422E-05
EG13288	ygaP	1	2.47E-04	1	3.19E-04	1	0.00051152	1	0.00029413
EG12675	ygaU	1	1.91E-05	1	1.15E-05	1	5.7706E-05	1	0.00012655
EG13524	ygaV	1	1.23E-04	1	3.78E-04	1	0.0006735	1	0.00090932
EG13525	ygaW	1	5.35E-04	1	4.76E-04	1	0.00016308	1	0.00041095
EG13528	ygaZ	1	3.39E-03	1	2.48E-03	1	0.00018976	1	0.00025104
EG11287	ygbA	1	1.41E-03	1	9.95E-04	1	0.00012761	1	8.3054E-05
EG12707	ygbE	1	5.66E-04	1	7.62E-04	1	3.8984E-05	1	4.8592E-05
EG12845	ygbF	1	2.33E-05	1	2.64E-05	1	2.2686E-05	1	2.1428E-05
EG13103	ygbI	1	9.06E-06	1	5.30E-06	1	0.0001315	1	0.00017324
EG13104	ygbJ	0	7.69E-08	0	1.26E-06	1	0.00035897	1	0.00012758
EG13105	ygbK	1	5.66E-05	1	1.42E-04	1	5.5746E-05	1	0.00023577
EG13106	ygbL	1	1.52E-04	1	8.23E-05	1	0.00012846	1	0.00021143
EG13107	ygbM	1	1.98E-04	1	2.80E-04	1	0.00027399	1	0.00025199
EG13108	ygbN	1	4.87E-04	1	3.44E-04	1	0.00013876	1	0.00012154
EG13114	ygbT	1	5.22E-04	1	5.41E-04	1	0.0001739	1	7.2036E-05
EG12634	ygcB	1	3.87E-05	1	5.81E-05	1	0.00022067	1	0.00015967
EG13033	ygcE	1	1.21E-04	1	5.54E-05	1	0.00010864	1	6.5816E-05
EG13034	ygcF	1	2.42E-05	1	1.51E-05	1	0.00012357	1	7.4573E-05
EG13035	ygcG	1	3.19E-04	1	2.55E-04	1	0.00037623	1	0.00027861
EG13115	ygcH	1	5.16E-04	1	4.19E-04	1	0.00047053	1	0.00069457
EG13116	ygcI	1	4.63E-05	1	4.61E-05	1	0.00014517	1	0.00024267
EG13117	ygcJ	1	4.76E-04	1	5.68E-04	1	0.00063815	1	0.00112455
EG13118	ygcK	1	2.36E-04	1	1.67E-04	1	0.00036109	1	5.9735E-05
EG13119	ygcL	1	2.85E-04	1	3.08E-04	1	1.158E-05	1	1.1363E-05
EG13121	ygcN	0	-6.47E-07	0	-8.76E-07	1	0.00015236	1	0.00021161
EG13122	ygcO	1	9.40E-05	1	8.88E-05	1	0.00018962	1	8.0002E-05
EG13123	ygcP	1	3.58E-04	1	4.16E-04	1	0.00010869	1	0.00016852
EG13124	ygcQ	1	2.02E-04	1	2.01E-04	1	0.0002181	1	0.00011505
EG13125	ygcR	1	1.07E-05	1	5.98E-05	1	9.7563E-05	1	8.2263E-05
EG13126	ygcS	1	1.17E-04	1	8.86E-05	1	0.00037056	1	0.00022831
EG13128	ygcU	1	5.06E-04	1	3.88E-04	1	0.00036567	1	0.00011815
EG13130	ygcW	1	4.39E-04	1	2.99E-04	1	0.00100178	1	0.00046034
EG11155	ygdB	1	6.19E-05	1	4.74E-05	1	0.00024942	1	0.00026154
EG11793	ygdD	1	5.80E-04	1	6.36E-04	1	0.00072407	1	0.00101777
EG11794	ygdE	1	1.66E-04	1	1.49E-04	1	7.0866E-06	1	1.1122E-05
EG12372	ygdG	1	6.31E-04	1	5.78E-04	1	0.00032984	1	0.00046803
EG12373	ygdH	1	7.20E-05	1	1.92E-04	1	1.5766E-05	1	1.8044E-05
EG13081	ygdI	1	1.05E-03	1	5.51E-04	1	0.00040944	1	0.00021013
EG13084	ygdL	1	1.38E-04	1	1.95E-04	1	4.8695E-05	0	3.6584E-06
EG13092	ygdQ	1	1.54E-04	1	9.42E-05	1	0.00027346	1	0.0006978
EG13076	ygdR	1	8.34E-06	1	6.34E-06	1	0.00010515	1	7.7016E-05
EG14446	ygdT	1	6.14E-05	1	7.29E-05	1	0.00013901	1	5.2667E-05
EG11157	ygeA	1	6.55E-05	1	5.17E-05	1	4.5692E-05	1	2.8487E-05
EG13037	ygeG	1	3.97E-04	1	3.86E-04	1	0.00036265	1	8.5154E-05
EG13038	ygeH	1	1.66E-04	1	1.77E-04	1	6.0434E-05	1	1.5639E-05
EG13039	ygeI	1	6.86E-04	1	7.40E-04	1	6.5292E-05	1	1.6538E-05
EG13048	ygeR	1	7.28E-06	1	5.06E-06	1	0.00019614	1	0.00013969
EG13052	ygeV	1	1.46E-04	1	1.61E-04	1	3.4286E-05	1	5.9417E-05
EG13053	ygeW	1	1.92E-04	1	1.25E-04	1	0.00021713	1	0.00060457
EG13054	ygeX	1	5.55E-04	1	3.61E-04	1	0.00016416	1	0.00013446
EG13055	ygeY	1	1.07E-03	1	7.83E-04	1	0.00038985	1	0.00030039
EG11158	ygfA	1	4.04E-04	1	2.00E-04	1	9.8381E-05	1	8.3818E-05
EG11323	ygfB	1	1.85E-04	1	3.63E-04	1	0.00029489	1	9.973E-05
EG12971	ygfF	1	9.05E-05	1	8.49E-05	1	8.852E-05	1	6.6686E-05
EG12974	ygfI	1	1.48E-05	1	1.59E-05	1	6.522E-05	1	4.6822E-05
EG13060	ygfJ	0	7.69E-08	0	1.97E-06	1	0.00072975	1	0.00028505
EG13061	ygfK	1	4.76E-05	1	7.89E-05	1	4.2731E-05	1	1.7085E-05
EG13063	ygfM	1	4.25E-05	1	2.14E-05	1	0.00043273	1	0.00036264

EG13065	ygfO	1	5.90E-04	1	4.65E-04	1	0.0002336	1	0.00017974
EG13067	ygfQ	1	6.00E-04	1	1.01E-03	1	3.319E-05	1	3.955E-05
EG13069	ygfS	1	1.40E-04	1	2.16E-04	1	0.00011439	1	0.00012023
EG13070	ygfT	1	4.90E-05	1	1.13E-04	1	0.00069388	1	0.00084934
EG13071	ygfU	1	4.38E-05	1	2.07E-05	1	0.00028787	1	0.00025686
EG13074	ygfX	1	9.34E-06	1	8.93E-06	1	5.3666E-05	1	8.3867E-06
EG13075	ygfY	0	3.83E-07	0	2.07E-06	1	0.00016342	1	0.00011797
EG12685	ygfZ	1	1.63E-04	1	5.19E-04	1	0.00131024	1	0.00048778
EG11161	yggC	1	6.19E-05	1	6.87E-05	1	0.00014096	1	0.00010033
EG11162	yggD	1	6.33E-05	1	1.15E-04	1	0.00069833	1	0.00053048
EG11244	yggE	1	1.21E-05	1	1.46E-05	1	7.5769E-05	1	6.1133E-05
EG11245	yggF	1	1.68E-05	1	1.89E-05	1	1.4365E-05	1	0.00010412
EG11291	yggG	1	1.39E-04	1	1.44E-04	1	0.00031968	1	0.00031014
EG12122	yggI	1	1.23E-04	1	1.95E-04	1	0.00020274	1	0.00037242
EG12443	yggL	1	1.44E-04	1	1.46E-04	1	0.00012686	1	5.1496E-05
EG12704	yggM	1	1.95E-05	1	4.35E-05	1	0.00038061	1	0.0005992
EG12705	yggN	1	1.38E-04	1	1.12E-04	1	0.00016619	1	3.8566E-05
EG12976	yggP	1	1.60E-04	1	1.98E-04	1	0.0002112	1	0.00010499
EG12978	yggR	1	2.46E-04	1	3.79E-04	1	1.3401E-05	1	5.496E-06
EG12979	yggS	1	1.23E-04	1	1.90E-04	1	7.7174E-05	1	8.0933E-05
EG12980	yggT	1	2.38E-04	1	3.06E-04	1	0.00034927	1	0.00066532
EG12981	yggU	1	9.73E-05	1	8.53E-05	1	0.00010423	1	7.9016E-05
EG12983	yggW	1	1.15E-04	1	1.34E-04	1	0.00021392	1	0.00013838
EG12984	yggX	1	1.57E-04	1	9.45E-05	1	2.8588E-05	1	9.117E-05
EG11292	yghA	1	8.82E-05	1	1.71E-04	1	9.789E-05	1	2.6129E-05
EG11824	yghB	1	1.43E-05	1	8.98E-06	1	7.2588E-05	1	3.8531E-05
EG12988	yghD	1	3.84E-06	0	2.59E-06	1	5.6275E-05	1	3.5247E-05
EG12991	yghG	1	1.25E-04	1	6.58E-05	1	6.8523E-05	1	2.075E-05
EG12994	yghJ	1	5.93E-04	1	3.75E-04	1	0.0003703	1	9.6939E-05
EG13001	yghQ	0	-1.71E-07	0	-4.33E-07	1	6.7216E-05	1	3.908E-05
EG13002	yghR	1	3.42E-05	1	8.28E-05	1	0.0001931	1	0.00054606
EG13003	yghS	1	1.10E-03	1	8.94E-04	1	0.00022361	1	0.00012829
EG13004	yghT	1	7.05E-05	1	2.73E-05	1	0.00014323	1	3.916E-05
EG13005	yghU	1	2.95E-05	1	5.80E-05	1	0.00016325	1	9.2384E-05
EG13007	yghW	1	4.62E-05	1	4.66E-05	1	7.3182E-06	1	2.7079E-05
EG13010	yghZ	1	4.26E-05	1	4.94E-05	1	0.00020416	1	5.5372E-05
EG11164	ygiB	1	4.64E-04	1	2.89E-04	1	0.0002599	1	0.00011087
EG11165	ygiC	0	8.42E-07	0	9.38E-08	1	4.2559E-05	1	1.6106E-05
EG11166	ygiD	1	5.75E-04	1	1.04E-03	1	0.0003015	1	4.5554E-05
EG11603	ygiF	1	3.47E-03	1	2.15E-03	1	1.202E-05	1	7.0573E-06
EG11674	ygiH	1	4.18E-04	1	4.07E-04	1	0.00067035	1	0.00066145
EG12363	ygiL	1	3.35E-04	1	2.86E-04	1	6.935E-05	1	4.6628E-05
EG12657	ygiN	1	4.07E-04	1	3.10E-04	1	7.5169E-05	1	3.183E-05
EG13019	ygiQ	1	3.67E-04	1	5.71E-04	1	0.00050652	1	0.0003314
EG13021	ygiS	1	9.38E-05	1	1.25E-04	1	0.00011274	1	0.00012163
EG13022	ygiT	1	2.83E-05	1	3.51E-05	1	0.00032306	1	0.00016525
EG13024	ygiV	1	5.43E-04	1	3.48E-04	1	0.00030843	1	0.00019351
EG13025	ygiW	1	1.97E-04	1	2.54E-04	1	0.00012985	1	0.00038209
EG13028	ygiZ	1	5.06E-04	1	3.80E-04	1	0.00023846	1	0.00031336
EG11171	ygjD	1	6.74E-05	1	4.33E-05	1	1.5902E-05	1	4.4013E-05
EG12718	ygjG	1	3.08E-05	1	5.05E-05	1	0.00026187	1	0.00049596
EG12719	ygjH	1	1.09E-05	1	6.57E-06	1	7.5694E-05	1	3.2339E-05
EG12720	ygjI	1	1.65E-04	1	3.75E-04	1	5.6736E-05	1	0.0002078
EG12721	ygjJ	1	7.73E-05	1	1.17E-04	1	0.00020507	1	0.00056307
EG12722	ygjK	1	7.43E-05	1	1.49E-04	1	0.00027699	1	9.338E-05
EG12724	ygjM	1	1.64E-04	1	1.51E-04	1	0.00024531	1	0.00010968
EG12725	ygjN	1	4.23E-04	1	3.35E-04	1	0.00063861	1	0.00067075
EG12727	ygjP	1	5.16E-05	1	6.70E-05	1	0.00031075	1	0.00081185
EG12728	ygjQ	1	1.05E-03	1	1.37E-03	1	1.0923E-05	1	1.9128E-05
EG12729	ygjR	1	3.62E-04	1	4.20E-04	1	0.00029802	1	8.1915E-05
EG12733	ygjV	1	6.78E-05	1	4.20E-05	1	0.00013901	1	0.00043447
EG11173	yhaB	1	4.45E-04	1	5.24E-04	1	0.00056096	1	0.00033705
EG11174	yhaC	1	7.77E-04	1	5.65E-04	1	0.0005238	1	0.00033019
EG12747	yhaH	1	9.78E-05	1	4.79E-05	1	0.00060071	1	0.00037005
EG12748	yhaI	1	3.36E-04	1	3.70E-04	1	6.2814E-05	1	7.3199E-05
EG12749	yhaJ	1	1.43E-05	0	4.69E-06	1	7.5719E-05	1	1.734E-05
EG12750	yhaK	1	3.51E-04	1	2.04E-04	1	0.00028475	1	0.00026503
EG12751	yhaL	1	4.66E-06	0	2.27E-06	1	3.4597E-05	1	6.7186E-05
EG12752	yhaM	1	1.40E-03	1	1.51E-03	1	0.00029655	1	0.00017001
EG12754	yhaO	1	1.26E-04	1	8.56E-05	1	0.00011384	1	7.9269E-05
EG12761	yhaV	1	1.98E-05	1	1.75E-05	1	0.00024013	1	0.00039191

EG11179	yhbC	1	8.71E-05	1	8.77E-05	1	0.00042187	1	0.00033976
EG11499	yhbE	1	5.78E-06	1	5.21E-06	1	1.7158E-05	1	1.6237E-05
EG12146	yhbJ	1	6.06E-05	1	4.15E-05	1	0.00057137	1	0.00027197
EG12784	yhbO	1	1.09E-03	1	1.13E-03	1	2.0902E-05	1	3.7759E-05
EG12785	yhbP	1	1.07E-04	1	1.65E-04	1	0.0001532	1	0.0001097
EG12786	yhbQ	1	2.47E-04	1	2.89E-04	1	0.00011881	1	0.0003801
EG12788	yhbS	1	2.17E-04	1	1.39E-04	1	8.8073E-05	1	5.3237E-05
EG12789	yhbT	1	6.25E-04	1	5.01E-04	1	0.00022039	1	0.00032936
EG12790	yhbU	1	2.73E-04	1	3.31E-04	1	0.00013812	1	0.0001031
EG12791	yhbV	1	4.51E-05	1	5.37E-05	1	4.5145E-05	1	4.4251E-05
EG12792	yhbW	1	3.08E-03	1	1.67E-03	1	0.00042572	1	0.000523
EG12793	yhbX	1	7.91E-04	1	3.21E-04	1	0.00036359	1	0.00034935
EG12794	yhbY	1	8.53E-05	1	6.18E-05	1	0.00014986	1	0.00016657
EG11515	yhcA	1	1.47E-04	1	5.40E-04	1	0.00040412	1	0.00054515
EG12614	yhcB	1	2.25E-05	1	2.50E-05	1	0.00011852	1	0.00019535
EG12809	yhcC	1	2.09E-04	1	3.64E-04	1	0.00020922	1	0.00046318
EG12810	yhcD	1	2.27E-04	1	2.20E-04	1	0.00022597	1	0.0001601
EG12812	yhcF	1	2.88E-04	1	2.76E-04	1	0.00078484	1	0.00060626
EG12813	yhcG	1	2.81E-04	1	2.63E-04	1	0.00032842	1	0.00031063
EG12814	yhcH	1	2.79E-05	1	3.51E-05	1	5.593E-05	1	3.0712E-05
EG12819	yhcM	1	4.12E-05	1	3.07E-05	1	2.8407E-05	0	3.9044E-06
EG12820	yhcN	1	3.53E-04	1	2.45E-04	1	2.4252E-05	1	1.2991E-05
EG12821	yhcO	1	9.91E-06	1	2.95E-05	1	0.00015709	1	8.9711E-05
EG11298	yhdE	1	1.89E-04	1	1.40E-04	1	0.00020518	1	0.00023542
EG11315	yhdH	1	8.91E-04	1	8.72E-04	1	0.00060334	1	0.00031811
EG11498	yhdJ	0	6.89E-07	0	7.39E-07	1	0.00018477	1	8.1385E-05
EG11968	yhdL	1	1.28E-04	1	7.42E-05	1	2.601E-05	1	1.2928E-05
EG11970	yhdN	1	4.52E-04	1	4.11E-04	1	0.00063777	1	0.00060267
EG12827	yhdP	1	4.80E-06	0	3.90E-06	1	5.8982E-06	0	4.3821E-06
EG12831	yhdT	1	1.68E-05	1	4.36E-05	1	7.9613E-06	0	1.5074E-06
EG12832	yhdU	1	8.69E-04	1	9.53E-04	1	0.00038282	1	0.00027695
EG12833	yhdV	1	9.07E-05	1	2.41E-04	1	0.00017287	1	0.0003385
EG12835	yhdX	1	3.48E-04	1	7.22E-04	1	0.00071173	1	0.00073281
EG12836	yhdY	1	4.93E-04	1	4.77E-04	1	0.00011723	1	0.00018965
EG12837	yhdZ	1	4.99E-05	1	2.39E-05	1	8.7391E-05	1	0.00011366
EG12896	yheL	1	4.61E-04	1	3.60E-04	1	0.00060722	1	0.00124595
EG12897	yheM	1	4.33E-05	1	2.45E-05	1	0.00015544	1	0.00015836
EG12898	yheN	1	4.90E-05	1	8.20E-05	1	9.2763E-05	1	0.00011763
EG12899	yheO	1	1.61E-04	1	3.24E-04	1	0.00011145	1	0.0002109
EG12903	yheS	1	3.71E-04	1	2.08E-04	1	0.00051243	1	0.00063792
EG12904	yheT	1	5.84E-06	0	3.77E-06	1	3.6694E-06	0	1.8273E-06
EG12905	yheU	1	5.93E-05	1	1.18E-04	1	0.00045724	1	0.00016318
EG14364	yheV	1	8.04E-06	1	1.05E-05	1	3.8285E-05	1	4.8506E-05
EG11182	yhfA	1	1.43E-05	1	1.52E-05	1	4.1761E-05	1	4.4561E-05
EG12374	yhfG	1	2.35E-04	1	1.53E-04	1	9.5908E-05	1	4.3823E-05
EG12906	yhfK	1	6.02E-05	1	5.26E-05	1	0.00048008	1	0.00075331
EG12907	yhfL	1	1.16E-04	1	9.69E-05	1	0.00013488	1	9.0043E-05
EG12914	yhfS	1	5.31E-05	1	3.06E-05	1	0.00012635	1	0.00018153
EG12915	yhfT	1	7.61E-05	1	5.62E-05	1	2.5713E-05	1	1.0918E-05
EG12916	yhfU	1	1.70E-04	1	1.59E-04	1	0.00029114	1	0.00045704
EG12918	yhfW	1	3.49E-06	1	6.13E-06	1	2.9799E-05	1	2.128E-05
EG12919	yhfX	1	1.51E-04	1	1.87E-04	1	0.0003508	1	0.00012119
EG12920	yhfY	1	1.40E-05	1	1.31E-05	1	0.0001669	1	9.8702E-05
EG12921	yhfZ	1	4.70E-04	1	3.97E-04	1	0.00040765	1	0.00034917
EG11750	yhgA	1	9.15E-05	1	6.36E-05	1	0.00011822	1	8.6655E-05
EG12931	yhgE	1	1.38E-04	1	1.94E-04	1	2.1037E-05	1	1.2647E-05
EG12932	yhgF	1	3.58E-05	1	7.79E-05	1	6.879E-05	1	9.2032E-05
EG12941	yhgN	1	2.90E-04	1	2.59E-04	1	7.9449E-05	1	7.706E-05
EG11184	yhhA	1	3.74E-04	1	4.35E-04	1	0.00040759	1	0.00049619
EG11520	yhhH	1	4.75E-04	1	2.27E-04	1	0.00012831	1	0.00017535
EG11525	yhhI	1	3.71E-04	1	6.82E-04	1	9.6667E-05	1	2.0359E-05
EG11767	yhhJ	1	2.55E-05	1	2.16E-05	1	0.00041901	1	0.00061345
EG12211	yhhK	1	7.39E-05	1	1.01E-04	1	0.0001031	1	0.00019065
EG12212	yhhL	1	2.14E-04	1	2.82E-04	1	0.00023817	1	0.00020891
EG12213	yhhM	1	1.22E-03	1	1.29E-03	1	0.00026518	1	0.00014665
EG12214	yhhN	1	7.18E-05	1	4.77E-05	1	0.00035407	1	0.00058128
EG12217	yhhQ	1	9.71E-05	1	3.15E-04	1	0.0006856	1	0.00072876
EG12219	yhhS	1	9.33E-05	1	1.36E-04	1	0.00069122	1	0.00073612
EG12220	yhhT	1	5.64E-04	1	3.62E-04	1	1.5485E-05	1	1.2964E-05
EG12943	yhhW	1	4.28E-05	1	3.88E-05	1	0.00015874	1	0.00014235
EG12944	yhhX	1	1.10E-03	1	8.40E-04	1	0.00024193	1	0.00014498

EG12945	yhhY	1	3.20E-06	0	1.10E-06	1	6.3406E-06	0	4.9174E-07
EG12946	yhhZ	1	4.75E-05	1	1.33E-04	1	0.00034755	1	0.00017935
EG11400	yhiD	1	6.09E-04	1	4.98E-04	1	0.00012273	1	0.00063446
EG12224	yhiI	1	6.69E-06	0	4.79E-06	0	1.2482E-06	0	1.2284E-06
EG12225	yhiJ	1	3.67E-04	1	6.32E-04	1	0.00111738	1	0.00040808
EG12228	yhiM	1	1.76E-04	1	1.22E-04	1	0.00022609	1	0.00026675
EG12229	yhiN	1	2.17E-04	1	2.78E-04	1	0.00037183	1	0.00049656
EG12233	yhiQ	1	2.95E-04	1	2.71E-04	1	7.7124E-05	1	6.0852E-05
EG12234	yhiR	1	3.02E-04	1	5.48E-04	1	2.5579E-06	1	5.0204E-06
EG12244	yhjA	1	2.11E-05	1	2.68E-05	1	5.0145E-05	1	0.00010253
EG12246	yhjB	1	1.93E-04	1	1.85E-04	1	0.00025505	1	0.00011001
EG12247	yhjC	1	6.75E-05	1	3.28E-05	1	0.00024095	1	0.00011073
EG12248	yhjD	1	6.95E-05	1	1.22E-04	1	0.00013699	1	0.00017457
EG12249	yhjE	1	7.26E-04	1	6.27E-04	1	0.00040046	1	0.00052319
EG12251	yhjG	1	3.01E-05	1	3.32E-05	1	0.00012318	1	7.1294E-05
EG12252	yhjH	1	2.10E-04	1	1.74E-04	1	0.00011401	1	3.1098E-05
EG12254	yhjJ	1	1.69E-05	1	1.27E-05	1	0.00013049	1	0.00022895
EG12256	yhjK	1	2.57E-05	1	2.10E-05	1	9.1962E-05	1	1.0395E-05
EG12262	yhjR	1	1.68E-05	1	4.34E-05	1	2.2316E-05	1	5.3455E-06
EG12266	yhjV	1	1.76E-04	1	2.58E-04	1	0.00058756	1	0.00043038
EG12268	yhjX	1	4.39E-04	1	4.81E-04	1	0.00038341	1	8.4569E-05
EG12269	yhjY	1	1.14E-04	1	1.79E-04	1	0.00058914	1	0.00058271
EG11186	yiaA	1	2.82E-04	1	1.45E-04	1	0.00011108	1	0.00013716
EG11267	yiaB	1	3.19E-04	1	1.98E-04	1	0.00018645	1	8.0963E-05
EG12270	yiaC	1	4.48E-06	0	2.04E-06	1	4.086E-05	1	7.7414E-05
EG12271	yiaD	1	2.33E-04	1	1.15E-04	1	8.236E-05	1	8.4969E-05
EG12273	yiaF	1	1.66E-05	1	1.51E-05	1	0.00036052	1	0.00020886
EG12624	yiaG	1	1.05E-04	1	7.93E-05	1	0.00044544	1	0.00045612
EG12278	yiaJ	1	2.60E-06	0	1.74E-06	1	0.00020786	1	0.0001175
EG12279	yiaK	1	3.28E-04	1	2.72E-04	1	5.3825E-05	1	1.6566E-05
EG12280	yiaL	1	7.68E-06	1	6.57E-06	1	8.5669E-05	1	0.00030376
EG12281	yiaM	1	4.63E-04	1	3.95E-04	1	0.00014276	1	0.00013965
EG12282	yiaN	1	2.61E-04	1	3.99E-04	1	0.00023878	1	0.0003504
EG12283	yiaO	1	8.17E-05	1	1.91E-04	1	0.00043741	1	0.00039552
EG12288	yiaT	1	1.18E-03	1	7.07E-04	1	0.00108497	1	0.00110568
EG12289	yiaU	1	1.85E-04	1	1.18E-04	1	2.6308E-05	1	1.2882E-05
EG12290	yiaV	1	5.47E-05	1	5.29E-04	1	0.00020957	1	0.00019574
EG12291	yiaW	1	4.80E-04	1	5.79E-04	1	0.00015994	1	0.00060359
EG12293	yiaY	1	6.33E-04	1	5.62E-04	1	0.00023842	1	0.00013541
EG11187	yibA	1	3.18E-04	1	2.52E-04	1	0.0001718	1	0.00016442
EG11266	yibD	1	7.11E-05	1	5.56E-05	1	9.491E-05	1	0.0001013
EG11762	yibF	1	1.47E-03	1	1.33E-03	1	0.00013315	1	0.00018437
EG11763	yibG	1	9.44E-04	1	5.79E-04	1	0.00025709	1	0.00055911
EG11764	yibH	1	4.78E-05	1	4.29E-05	1	0.00031098	1	0.00059209
EG11765	yibI	1	1.39E-05	0	4.60E-06	1	0.00025751	1	0.00036564
EG11888	yibK	1	5.41E-05	1	2.90E-05	1	0.00057588	1	0.00055717
EG11964	yibL	1	1.74E-04	1	3.78E-04	1	4.5013E-05	1	4.4847E-05
EG12295	yibN	1	1.44E-03	1	1.13E-03	1	0.00026475	1	8.9537E-05
EG12298	yibQ	1	2.47E-04	1	2.23E-04	1	0.00068256	1	0.00024401
EG14397	yibT	1	1.84E-05	1	1.80E-05	1	5.5264E-05	1	3.8201E-05
EG14438	yibV	1	2.51E-04	1	2.00E-04	1	0.00048302	1	0.00066774
EG11192	yicC	1	1.69E-04	1	1.62E-04	1	8.9548E-05	1	0.00013905
EG11194	yicE	1	3.60E-05	1	3.07E-05	1	0.0004666	1	0.00067259
EG11683	yicG	1	5.75E-04	1	6.64E-04	1	0.00041395	1	0.00019528
EG11684	yicH	1	1.00E-03	1	5.83E-04	1	0.00103518	1	0.00041441
EG11685	yicI	1	3.22E-04	1	3.51E-04	1	0.00019666	1	0.00010624
EG11686	yicJ	1	9.67E-06	1	6.28E-06	1	0.00028593	1	0.00033234
EG11688	yicL	1	1.44E-05	1	2.01E-05	1	3.2573E-05	1	1.0608E-05
EG11690	yicN	1	9.44E-05	1	7.57E-05	1	0.00016362	1	0.00010829
EG11691	yicO	1	2.71E-04	1	1.95E-04	1	1.7764E-05	1	1.9572E-05
EG11312	yicR	1	1.32E-04	1	1.18E-04	1	6.4026E-05	1	1.6144E-05
EG14429	yicS	1	1.45E-03	1	1.23E-03	1	0.00019227	1	8.7122E-05
EG11195	yidA	1	6.51E-05	1	3.69E-05	1	0.00050749	1	0.00033314
EG11196	yidB	1	2.06E-05	1	1.17E-05	1	4.1224E-05	1	5.0397E-05
EG11197	yidC	1	1.24E-04	1	1.16E-04	1	0.00105963	1	0.0006711
EG11348	yidD	1	1.18E-05	1	1.18E-05	1	7.0841E-05	1	6.3817E-05
EG11536	yidE	1	1.33E-04	1	1.41E-04	1	0.00015991	1	8.7543E-05
EG11694	yidF	1	7.74E-05	1	4.54E-05	1	0.00081134	1	0.00095661
EG11695	yidG	1	4.28E-05	1	3.19E-05	1	0.00061422	1	0.00072661
EG11696	yidH	1	6.43E-04	1	5.70E-04	1	0.00023215	1	0.00011094
EG11697	yidI	1	9.22E-05	1	9.90E-05	1	0.00050194	1	0.00014761

EG11705	yidJ	1	2.87E-04	1	5.16E-04	1	0.00014847	1	0.00016525
EG11706	yidK	1	6.16E-05	1	7.61E-05	1	0.00015861	1	6.1133E-05
EG11707	yidL	1	2.14E-04	1	2.34E-04	1	2.5218E-05	1	2.3658E-05
EG11711	yidP	1	7.05E-05	1	7.25E-05	1	9.7291E-05	1	6.8791E-05
EG11712	yidQ	1	7.61E-04	1	7.11E-04	1	0.00016001	1	0.00027855
EG11713	yidR	1	2.49E-04	1	1.86E-04	1	0.00022736	1	0.0003775
EG11719	yidX	1	1.69E-04	1	2.51E-04	1	0.00034826	1	0.00048255
EG11721	yidZ	1	2.42E-04	1	1.18E-04	1	8.1898E-05	1	5.9762E-05
EG11722	yieE	1	4.21E-05	1	7.11E-05	1	0.00012572	1	6.572E-05
EG11723	yieF	1	8.12E-06	1	1.25E-05	1	0.00011424	1	5.4422E-05
EG11724	yieG	1	1.59E-04	1	1.39E-04	1	0.00017266	1	0.00013059
EG11725	yieH	1	3.60E-05	1	2.76E-05	1	0.00013055	1	0.00021786
EG11728	yieK	1	3.72E-04	1	2.84E-04	1	0.00017121	1	0.00017852
EG11729	yieL	1	3.56E-04	1	4.98E-04	1	0.00012773	1	0.00024407
EG11733	yieP	1	3.01E-04	1	5.06E-04	1	0.00016017	1	0.00010363
EG11260	yifB	1	1.52E-04	1	2.66E-04	1	0.00028005	1	0.00030779
EG11450	yifE	1	8.57E-05	1	5.90E-05	1	9.8876E-06	1	2.1035E-05
EG11459	yifK	1	9.43E-05	1	9.25E-05	1	1.1397E-05	1	6.7428E-06
EG12353	yifL	1	1.57E-04	1	7.64E-05	1	0.00010414	1	0.00014543
EG11201	yigA	1	8.84E-06	1	7.22E-06	1	6.4312E-05	1	4.1879E-05
EG11202	yigB	1	1.89E-05	1	2.34E-05	0	3.4132E-07	0	2.9484E-07
EG11462	yigE	1	1.77E-04	1	9.45E-05	0	-1.867E-07	0	-1.21E-07
EG11464	yigF	1	1.28E-04	1	1.14E-04	1	3.0489E-05	1	1.2918E-05
EG11465	yigG	1	1.35E-04	1	2.57E-04	1	7.3875E-05	1	3.9699E-05
EG11467	yigI	1	3.09E-04	1	1.64E-04	1	0.00035664	1	0.00012542
EG11470	yigL	1	1.84E-04	1	2.43E-04	1	0.00067358	1	0.00089203
EG11471	yigM	1	6.22E-04	1	7.13E-04	1	0.00033785	1	0.00037107
EG11474	yigP	1	5.90E-05	1	4.40E-05	1	0.00020196	1	0.00023033
EG11484	yigZ	0	-5.67E-08	0	-7.67E-08	1	0.00033542	1	0.00025463
EG11203	yihA	1	2.12E-04	1	3.63E-04	1	0.00011094	1	0.00013886
EG11830	yihD	1	1.91E-04	1	1.17E-04	1	4.3576E-05	1	4.1692E-05
EG11832	yihF	1	2.63E-05	1	3.46E-05	1	0.000234	1	4.6012E-05
EG11833	yihG	1	1.07E-03	1	7.70E-04	1	0.00025412	1	0.00056798
EG11835	yihI	1	6.03E-05	1	4.17E-05	1	0.00022819	1	0.00026328
EG11838	yihL	1	6.55E-05	1	5.31E-05	1	3.8073E-05	1	8.9869E-05
EG11839	yihM	1	2.10E-04	1	2.33E-04	1	0.00013823	1	8.2461E-05
EG11840	yihN	1	1.04E-04	1	1.62E-04	1	0.00026782	1	0.00020787
EG11841	yihO	1	8.05E-05	1	1.13E-04	1	0.00033995	1	0.00015267
EG11842	yihP	1	4.40E-05	1	5.48E-05	1	6.8038E-05	1	6.6811E-05
EG11843	yihQ	1	3.17E-04	1	3.25E-04	1	0.00066618	1	0.00053845
EG11844	yihR	1	4.19E-04	1	6.20E-04	1	8.2488E-05	1	3.4295E-05
EG11845	yihS	1	4.07E-05	1	1.85E-05	1	0.00027907	1	0.00011142
EG11846	yihT	1	1.15E-04	1	8.22E-05	1	2.0902E-05	1	2.4648E-05
EG11847	yihU	1	4.43E-05	1	4.74E-05	1	8.1744E-05	1	4.0172E-05
EG11848	yihV	1	4.89E-05	1	1.12E-04	1	0.00246949	1	0.00107666
EG11849	yihW	1	1.15E-03	1	8.13E-04	1	0.0007259	1	0.00148903
EG11850	yihX	1	7.04E-04	1	6.91E-04	1	0.00014077	1	0.00021856
EG11851	yihY	1	1.77E-04	1	1.17E-04	1	0.00021585	1	0.00013957
EG11853	yiiD	1	1.25E-05	1	1.40E-05	1	0.00025455	1	0.00019497
EG11854	yiiE	1	2.19E-04	1	1.81E-04	1	6.1845E-05	1	7.6648E-05
EG11855	yiiF	1	2.44E-04	1	2.19E-04	1	0.00013808	1	0.00014145
EG11860	yiiG	1	1.08E-03	1	5.26E-04	1	0.00014511	1	5.2062E-05
EG11870	yiiM	1	1.23E-04	1	7.39E-05	1	3.9026E-05	1	1.9611E-05
EG11874	yiiQ	1	2.79E-06	0	1.31E-06	1	0.00101967	1	0.00107709
EG11875	yiiR	1	2.45E-04	1	1.64E-04	1	0.00017183	1	0.00013663
EG11876	yiiS	1	4.26E-04	1	3.72E-04	1	6.4646E-05	1	2.9003E-05
EG11878	yiiU	1	4.82E-04	1	4.89E-04	1	0.00022641	1	0.00015868
EG11882	yiiX	1	1.26E-03	1	1.60E-03	1	0.00031212	1	0.00068477
EG11395	yijD	1	8.38E-05	1	7.30E-05	1	6.1515E-05	1	0.00010749
EG11902	yijE	1	1.38E-04	1	1.03E-04	1	0.00012919	1	0.00011994
EG11903	yijF	1	3.18E-04	1	2.76E-04	1	0.00029306	1	0.00027938
EG11913	yijO	1	1.96E-04	1	3.16E-04	1	0.00072315	1	0.00064546
EG11914	yijP	1	1.02E-03	1	6.71E-04	1	6.5723E-05	1	7.4646E-05
EG11206	yjaA	1	2.18E-04	1	2.14E-04	1	2.9374E-05	1	3.6362E-05
EG11207	yjaB	1	2.18E-05	1	1.88E-05	1	6.0481E-05	1	6.2706E-05
EG11916	yjaG	1	3.09E-04	1	1.97E-04	1	0.00045086	1	0.00048645
EG11917	yjaH	1	5.66E-05	1	3.14E-05	1	0.00034296	1	6.3518E-05
EG11429	yjaZ	1	1.74E-05	1	1.57E-05	1	0.00016084	1	0.00024438
EG11919	yjbB	1	6.44E-05	1	1.00E-04	1	0.00024099	1	0.00025351
EG11923	yjbE	1	1.18E-03	1	8.50E-04	1	0.00051028	1	0.00025073
EG11924	yjbF	1	1.10E-03	1	6.37E-04	1	6.9399E-05	1	0.00021128

EG11925	yjbG	1	3.26E-04	1	3.75E-04	1	0.00010709	1	9.4106E-05
EG11926	yjbH	1	4.63E-05	1	2.58E-04	1	0.00024556	1	0.00044716
EG11928	yjbJ	1	6.77E-05	1	1.10E-04	1	0.00101837	1	0.00140764
EG11930	yjbL	1	9.53E-05	1	1.83E-04	1	1.7518E-05	1	1.7806E-05
EG11931	yjbM	1	5.73E-05	1	4.82E-05	1	0.00015695	1	7.6839E-05
EG11935	yjbQ	1	5.82E-05	1	5.57E-05	1	0.00093042	1	0.00042097
EG11936	yjbR	1	3.28E-05	1	2.81E-05	1	0.00010325	1	6.6714E-05
EG14350	yjbS	1	1.97E-04	1	1.13E-04	1	0.00022266	1	0.00015001
EG14459	yjbT	1	4.98E-04	1	4.52E-04	1	0.0013084	1	0.00082226
EG11937	yjcB	1	1.57E-05	1	8.74E-06	1	0.00014925	1	8.6733E-05
EG11938	yjcC	1	2.09E-04	1	2.34E-04	1	9.5206E-05	1	0.00012248
EG11939	yjcD	1	1.55E-04	1	1.47E-04	1	0.00048995	1	0.00028018
EG11940	yjcE	1	5.91E-05	1	1.38E-04	1	0.0004508	1	0.00036009
EG11941	yjcF	1	1.36E-04	1	3.66E-04	1	4.3273E-05	1	7.8882E-05
EG11943	yjcH	0	3.44E-07	0	1.32E-06	1	9.0182E-05	1	6.0386E-05
EG11951	yjcO	1	7.67E-04	1	8.90E-04	1	0.00024226	1	0.00010195
EG11955	yjcS	1	4.60E-04	1	7.98E-04	1	0.00031188	1	6.9649E-05
EG12460	yjcZ	1	3.11E-04	1	3.45E-04	1	1.1672E-05	1	1.5816E-05
EG11210	yjdA	1	3.04E-04	1	1.88E-04	1	0.00045374	1	0.00020191
EG12176	yjdC	1	2.04E-04	1	1.87E-04	1	0.00020248	1	0.00038688
EG12463	yjdF	1	1.17E-03	1	1.05E-03	1	0.00016521	1	0.00027221
EG12466	yjdI	1	4.62E-06	0	4.20E-06	1	3.5096E-05	1	1.9941E-05
EG12467	yjdJ	1	6.83E-06	1	5.88E-06	1	0.00012324	1	5.7459E-05
EG12468	yjdK	1	1.38E-04	1	2.20E-04	1	0.00011808	1	0.00028321
EG12469	yjdL	1	1.59E-04	1	2.50E-04	1	0.00030749	1	0.00018143
EG10711	yjdM	1	5.13E-04	1	7.20E-04	1	0.00053844	1	0.00054843
EG10712	yjdN	1	7.14E-05	1	1.13E-04	1	0.00032185	1	0.00042474
EG14342	yjdO	1	1.30E-04	1	1.98E-04	1	7.8309E-05	1	2.5279E-05
EG14407	yjdP	1	7.09E-04	1	8.43E-04	1	0.00152487	1	0.00184053
EG11757	yjeE	1	6.47E-04	1	9.34E-04	1	8.747E-05	1	0.00010558
EG11758	yjeF	1	6.12E-04	1	5.84E-04	1	8.4811E-05	1	3.098E-05
EG12470	yjeH	1	1.94E-05	1	1.53E-05	1	0.00015051	1	0.00015956
EG12471	yjeI	1	3.16E-06	0	4.31E-06	1	0.00014964	1	0.00021524
EG12472	yjeJ	1	5.55E-05	1	3.98E-05	1	0.00022388	1	0.0001617
EG12473	yjeK	1	1.18E-05	1	1.38E-05	1	0.00014244	1	7.33E-05
EG12475	yjeM	1	9.53E-05	1	1.10E-04	1	9.9557E-05	1	3.8326E-05
EG12476	yjeN	1	2.52E-06	0	2.79E-06	1	0.00013879	1	7.5578E-05
EG12477	yjeO	0	3.06E-07	0	4.36E-07	1	0.00037183	1	0.00070473
EG12478	yjeP	1	1.13E-04	1	1.11E-04	1	8.0441E-05	1	8.3864E-05
EG12481	yjeS	1	1.26E-04	1	1.44E-04	1	0.00010901	1	0.00014209
EG12482	yjeT	1	8.49E-05	1	7.73E-05	1	0.00021573	1	0.00019022
EG11812	yjfC	1	6.55E-06	1	1.09E-05	1	6.3004E-05	1	4.8949E-05
EG12439	yjfF	1	6.23E-04	1	6.53E-04	1	1.2167E-05	1	6.5056E-06
EG12484	yjfI	1	9.66E-05	1	2.19E-04	1	7.8688E-05	1	0.00025527
EG12485	yjfJ	1	4.56E-05	1	6.22E-05	1	8.0466E-05	1	0.00013075
EG12486	yjfK	1	4.36E-04	1	4.42E-04	1	3.1263E-05	1	4.053E-05
EG12487	yjfL	1	8.57E-04	1	9.42E-04	1	0.00060261	1	0.00037492
EG12488	yjfM	1	1.09E-05	1	8.42E-06	1	0.00013328	1	9.0788E-05
EG12521	yjfN	1	2.71E-04	1	2.37E-04	1	0.00010943	1	5.9232E-05
EG12489	yjfO	1	4.37E-04	1	2.58E-04	1	0.00040597	1	0.00040583
EG12490	yjfP	1	2.34E-04	1	3.95E-04	1	0.00018638	1	5.0484E-05
EG12499	yjfY	1	3.66E-04	1	5.54E-04	1	2.597E-05	1	2.617E-05
EG12500	yjfZ	0	5.36E-07	0	5.01E-07	1	8.3054E-05	1	3.6665E-05
EG11410	yjgA	1	2.07E-04	1	1.96E-04	1	9.4963E-05	1	0.00014549
EG11436	yjgB	1	2.07E-04	1	1.92E-04	1	0.00012164	1	9.7909E-05
EG12524	yjgF	1	2.50E-04	1	2.20E-04	1	0.00029205	1	0.00029212
EG12527	yjgH	1	2.37E-05	1	2.14E-05	1	0.00024238	1	0.00075943
EG12528	yjgI	1	2.48E-04	1	2.16E-04	1	0.00028291	1	0.00043519
EG12529	yjgJ	1	5.93E-04	1	3.31E-04	1	0.00015337	1	0.00031066
EG12530	yjgK	1	7.01E-04	1	4.37E-04	1	0.00085846	1	0.0008036
EG12531	yjgL	1	2.48E-04	1	4.32E-04	1	0.00023207	1	0.00028723
EG12532	yjgM	1	7.86E-05	1	1.75E-04	1	0.00074138	1	0.00071203
EG12533	yjgN	1	8.65E-04	1	1.11E-03	1	0.00121299	1	0.0017846
EG12535	yjgP	1	4.17E-04	1	3.17E-04	1	0.00133713	1	0.00078093
EG12536	yjgQ	1	2.52E-04	1	2.22E-04	1	3.0408E-05	1	3.7295E-05
EG12537	yjgR	1	3.89E-04	1	5.17E-04	1	0.00022404	1	0.00017628
EG12603	yjgZ	1	7.73E-05	1	4.64E-05	1	0.00140987	1	0.00124881
EG12544	yjhB	1	3.83E-04	1	1.70E-04	1	0.00011679	1	0.00010138
EG12545	yjhC	1	4.21E-05	1	4.25E-05	1	0.00021705	1	0.00010951
EG12548	yjhF	1	2.52E-04	1	2.33E-04	1	0.00140222	1	0.00107884
EG12549	yjhG	1	7.05E-04	1	8.13E-04	1	0.00096198	1	0.0011898

EG12550	yjhH	1	2.44E-04	1	2.04E-04	1	0.00024436	1	0.00013722
EG12551	yjhI	1	5.50E-04	1	3.50E-04	1	1.1124E-05	1	5.6802E-06
EG12558	yjhP	1	4.98E-04	1	5.11E-04	1	9.8872E-05	1	9.0233E-05
EG12559	yjhQ	1	6.26E-05	1	1.59E-04	1	0.00039319	1	0.00040966
EG12561	yjhS	1	4.41E-04	1	4.57E-04	1	0.00060781	1	0.0007458
EG12604	yjhU	1	5.60E-04	1	6.30E-04	1	6.0246E-05	1	2.8508E-05
EG14430	yjhX	1	1.09E-04	1	3.00E-04	1	0.0003145	1	0.0002109
EG10021	yjiA	1	3.53E-05	1	3.67E-05	1	4.6439E-05	1	6.3491E-05
EG12564	yjiC	1	8.76E-04	1	6.01E-04	1	0.00017046	1	5.171E-05
EG12565	yjiD	1	1.22E-04	1	1.12E-04	1	7.7552E-05	1	9.4867E-05
EG12566	yjiE	1	2.54E-04	1	2.63E-04	1	0.00042135	1	0.00033293
EG12568	yjiG	1	1.45E-04	1	1.32E-04	1	0.00013214	1	0.00012516
EG12569	yjiH	0	3.83E-07	0	1.83E-07	1	6.2886E-05	1	2.914E-05
EG12571	yjiJ	1	8.68E-04	1	6.71E-04	1	0.0002398	1	0.00029193
EG12572	yjiK	1	3.32E-04	1	4.71E-04	1	0.00019839	1	0.00062724
EG12573	yjiL	1	1.82E-05	1	3.04E-05	1	3.9834E-05	1	2.8655E-05
EG12574	yjiM	1	5.13E-04	1	5.18E-04	1	6.4241E-05	1	3.9918E-05
EG12575	yjiN	1	4.93E-04	1	5.21E-04	1	7.1725E-05	1	0.00013343
EG12579	yjiR	1	5.05E-04	1	2.69E-04	1	0.00032749	1	0.00018167
EG12580	yjiS	1	6.88E-05	1	3.59E-05	1	2.7745E-05	1	2.8634E-05
EG12585	yjiX	1	2.34E-05	1	3.68E-05	1	0.00034326	1	0.00020147
EG12586	yjiY	1	8.25E-04	1	8.09E-04	1	8.6428E-06	0	6.1801E-07
EG11214	yjjA	1	1.01E-03	1	7.22E-04	1	0.00011802	1	0.00036319
EG11215	yjjB	1	7.38E-06	0	4.67E-06	1	5.3143E-05	1	5.9563E-05
EG12115	yjjG	1	3.42E-04	1	2.67E-04	1	0.00012852	1	0.00013215
EG12171	yjjI	1	2.16E-04	1	4.97E-04	1	0.00010071	1	0.00020206
EG12342	yjjJ	1	1.29E-04	1	7.65E-05	1	0.00074622	1	0.00105041
EG12343	yjjK	1	2.29E-04	1	2.98E-04	1	0.00027096	1	0.00012476
EG12588	yjjL	1	9.17E-04	1	5.65E-04	1	0.00023477	1	0.00021253
EG12589	yjjM	1	4.56E-05	1	6.38E-05	1	0.00033462	1	0.00022087
EG12590	yjjN	1	4.23E-05	1	1.01E-04	1	0.00065837	1	0.00062171
EG12592	yjjP	1	4.18E-04	1	2.52E-04	1	0.00063998	1	0.00044076
EG12593	yjjQ	1	9.40E-05	1	6.49E-05	1	0.00013448	1	0.00014239
EG12597	yjjU	1	1.27E-04	1	1.95E-04	1	2.6706E-05	1	1.3409E-05
EG12598	yjjV	1	1.56E-03	1	1.11E-03	1	0.00028153	1	0.00025832
EG12599	yjjW	1	7.00E-04	1	9.91E-04	1	0.00057553	1	0.00076324
EG12600	yjjX	1	9.67E-04	1	8.05E-04	1	0.00055563	1	0.00040174
EG12601	yjjY	1	2.16E-04	1	3.34E-04	1	0.00035907	1	0.00060071
EG13348	yjjZ	1	3.85E-05	1	5.38E-05	1	0.00023115	1	0.00042512
EG12309	yjtD	1	7.88E-05	1	9.40E-05	1	0.00025777	1	0.00024424
EG13339	ykfA	1	2.58E-04	1	3.88E-04	1	0.00032974	1	0.00036334
EG13548	ykfB	1	6.40E-05	1	1.41E-04	1	0.00023647	1	0.00011402
EG14283	ykfF	0	1.30E-06	0	3.00E-06	1	6.6599E-06	1	1.5938E-05
EG14331	ykfG	1	1.70E-04	1	1.52E-04	1	1.3494E-05	0	3.7239E-06
EG14332	ykfH	1	6.83E-05	1	3.94E-05	1	0.00038282	1	0.00059963
EG14333	ykfI	1	2.11E-04	1	2.27E-04	1	0.00016094	1	0.00010256
EG14451	ykfM	1	1.79E-03	1	1.66E-03	1	0.00046581	1	0.00044264
EG13579	ykgB	1	1.10E-04	1	1.21E-04	1	1.9882E-05	1	1.2946E-05
EG13580	ykgC	1	2.93E-04	1	2.03E-04	1	0.00054897	1	0.00050461
EG13581	ykgD	1	2.09E-04	1	3.04E-04	1	0.00018388	1	0.00027327
EG13582	ykgE	1	7.77E-05	1	8.30E-05	1	0.00018295	1	0.00016633
EG13583	ykgF	1	2.29E-04	1	1.79E-04	1	3.5096E-05	1	6.4717E-06
EG13584	ykgG	1	3.57E-05	1	2.51E-05	1	3.2327E-05	1	1.5462E-05
EG13585	ykgH	1	3.20E-04	1	3.79E-04	1	0.0014043	1	0.00111167
EG14278	ykgI	1	2.89E-04	1	2.51E-04	1	0.00079854	1	0.00024953
EG14323	ykgJ	1	1.48E-03	1	8.75E-04	1	0.00010071	1	0.00050532
EG14325	ykgL	1	1.41E-05	1	8.94E-06	1	2.9759E-05	1	2.4142E-05
EG14326	ykgM	1	4.25E-05	1	1.16E-04	1	0.00119054	1	0.00097566
EG14432	ykgO	1	5.33E-05	1	5.99E-05	1	9.2389E-05	1	0.000162
EG14237	ylaB	1	2.04E-04	1	1.80E-04	1	0.00012919	1	0.00012536
EG14238	ylaC	1	2.22E-04	1	3.60E-04	1	5.3893E-05	1	6.7952E-05
EG13622	ylbA	1	3.43E-05	1	2.51E-05	1	0.00034795	1	0.00046061
EG13626	ylbF	1	3.73E-05	1	2.45E-05	1	7.8612E-05	1	0.00014749
EG14354	ylcG	1	3.03E-05	1	2.36E-05	1	1.6235E-05	1	2.3688E-05
EG14355	ylcH	1	1.47E-04	1	1.52E-04	1	8.6529E-05	1	1.6341E-05
EG14444	ylcI	1	1.05E-04	1	1.79E-04	1	6.4312E-05	1	4.6701E-05
EG13476	yliE	1	2.60E-04	1	5.65E-04	1	0.00059238	1	0.00050974
EG13477	yliF	1	3.59E-04	1	1.63E-04	1	0.00018164	1	0.00046951
EG13478	yliG	1	1.05E-03	1	9.65E-04	1	0.00023594	1	0.00041842
EG13480	yliI	1	3.16E-03	1	2.19E-03	0	-1.016E-07	0	-6.204E-07
EG13481	yliJ	1	1.08E-05	1	1.43E-05	1	8.1258E-05	1	4.9343E-05

EG14410	yliL	1	2.29E-06	0	5.59E-07	1	0.00025806	1	0.00011999
EG13719	ymbA	1	2.58E-06	0	3.34E-06	1	0.00012852	1	4.27E-05
EG13232	ymcE	1	9.61E-04	1	8.92E-04	1	0.00049732	1	0.00063451
EG13873	ymdA	1	1.18E-04	1	9.46E-05	1	0.00019332	1	0.00023784
EG13874	ymdB	1	1.12E-04	1	2.03E-04	1	0.000309	1	0.00047445
EG13875	ymdC	1	2.54E-05	1	1.76E-05	1	2.8991E-05	1	5.8061E-05
EG14358	ymdF	1	1.33E-05	1	2.22E-05	1	0.00012404	1	8.6795E-05
EG13445	ymfA	1	1.77E-05	1	1.28E-05	1	0.00019854	1	0.00011082
EG13448	ymfD	1	9.04E-05	1	4.84E-05	1	0.00031264	1	0.00010297
EG13449	ymfE	1	1.97E-04	1	1.43E-04	1	1.3087E-05	1	7.2704E-06
EG14247	ymfI	1	9.49E-04	1	7.23E-04	1	0.00020106	1	0.00034185
EG14248	ymfJ	1	6.28E-05	1	3.83E-05	1	0.00014428	1	8.5509E-05
EG14249	ymfK	1	2.25E-04	1	1.60E-04	1	6.9569E-05	1	7.3558E-06
EG14250	ymfL	1	7.02E-05	1	9.26E-05	1	0.0001729	1	0.00018078
EG14251	ymfM	1	3.97E-04	1	3.39E-04	1	9.9201E-05	1	1.8397E-05
EG14252	ymfN	1	1.40E-04	1	8.78E-05	1	1.784E-05	0	4.2336E-06
EG14255	ymfQ	1	6.52E-05	1	5.61E-05	1	3.6139E-05	1	2.8676E-05
EG14336	ymfR	1	1.23E-04	1	1.84E-04	1	0.0003157	1	0.00017596
EG14337	ymfS	1	4.69E-04	1	3.02E-04	1	8.6242E-05	1	5.0996E-05
EG14414	ymfT	1	3.91E-04	1	2.83E-04	1	0.00040832	1	0.00054325
EG14289	ymgA	1	1.73E-04	1	1.82E-04	1	0.00029618	1	0.00057022
EG14291	ymgC	1	1.14E-04	1	2.54E-04	1	6.6421E-06	0	1.6992E-06
EG14292	ymgD	1	1.22E-05	1	1.30E-05	1	0.00018846	1	0.00035643
EG14338	ymgE	1	8.28E-05	1	7.66E-05	1	0.00050866	1	0.00051089
EG14341	ymgF	1	2.83E-04	1	6.73E-04	1	0.00087657	1	0.00029016
EG14415	ymgG	1	1.97E-04	1	2.25E-04	1	4.271E-05	1	5.5578E-05
EG14449	ymgI	1	5.39E-04	1	7.10E-04	1	4.7564E-05	1	1.4647E-05
EG14450	ymgJ	1	7.71E-04	1	5.38E-04	1	0.00017314	1	4.3503E-05
EG14463	ymiA	1	3.65E-04	1	2.19E-04	1	0.00033661	1	6.3586E-05
EG14295	ymjA	1	1.31E-03	1	9.41E-04	1	6.9496E-05	1	0.00018604
EG13373	ynaE	1	4.94E-04	1	2.95E-04	1	6.3289E-05	1	4.1052E-05
EG13924	ynaI	1	6.71E-04	1	8.47E-04	1	0.00013315	1	0.00016096
EG14294	ynaJ	1	5.49E-05	1	3.55E-05	1	0.00034821	1	9.0059E-05
EG14296	ynaK	1	4.57E-04	1	4.07E-04	1	0.00010353	1	4.6326E-05
EG13748	ynbA	1	7.46E-05	1	6.34E-05	1	0.00029073	1	0.00019599
EG13749	ynbB	1	7.55E-05	1	5.24E-05	1	0.00034821	1	0.00068417
EG13750	ynbC	1	4.47E-04	1	4.85E-04	1	0.00034185	1	0.00014718
EG13751	ynbD	1	1.08E-05	1	9.88E-06	1	5.017E-06	1	1.5119E-05
EG14298	ynbE	1	2.28E-05	1	1.83E-05	1	6.9545E-05	1	9.0186E-05
EG13770	yncA	1	4.02E-03	1	2.58E-03	1	0.00027087	1	0.00025027
EG13772	yncB	1	3.06E-05	1	2.55E-05	1	0.00019456	1	0.00023833
EG13774	yncD	1	2.68E-04	1	5.03E-04	1	0.00039797	1	0.0004211
EG13775	yncE	1	2.00E-04	1	2.04E-04	1	0.00044925	1	0.00079474
EG13777	yncG	1	1.34E-05	1	1.34E-05	1	8.3415E-05	1	1.2873E-05
EG13778	yncH	1	7.70E-04	1	7.81E-04	1	5.4075E-05	1	1.3245E-05
EG14300	yncJ	1	1.65E-04	1	1.25E-04	1	0.00011421	1	3.7002E-05
EG14394	yncL	1	3.82E-04	1	2.86E-04	1	0.00012196	1	0.00034705
EG14421	yncN	1	3.67E-05	1	2.05E-05	1	9.4156E-05	1	1.021E-05
EG13813	yneE	1	1.20E-03	1	1.51E-03	1	0.00031742	1	0.00077846
EG13814	yneF	1	1.08E-05	1	1.27E-05	1	0.00011482	1	9.2128E-05
EG13815	yneG	1	6.17E-04	1	3.06E-04	1	0.0002062	1	0.00010928
EG13816	yneH	1	1.95E-04	1	1.71E-04	1	4.914E-05	1	4.8298E-05
EG13818	yneJ	1	7.16E-05	1	6.13E-05	1	0.0001642	1	8.8279E-05
EG13819	yneK	1	2.92E-04	1	2.54E-04	1	0.00036385	1	0.00016183
EG14395	yneM	1	7.88E-05	1	1.13E-04	1	3.3087E-05	1	1.393E-05
EG14466	yneN	1	1.20E-03	1	6.47E-04	1	5.1921E-05	1	4.3882E-05
EG13839	ynfA	1	1.22E-04	1	8.63E-05	1	0.00015643	1	0.00051362
EG13840	ynfB	1	6.40E-04	1	4.92E-04	1	0.0006302	1	0.00102002
EG13841	ynfC	1	3.71E-04	1	2.41E-04	1	0.00021992	1	0.0004142
EG13842	ynfD	1	7.89E-04	1	8.71E-04	1	0.00022262	1	0.00056477
EG13843	ynfE	1	1.35E-04	1	8.83E-05	1	0.00038953	1	0.00103352
EG13844	ynfF	1	2.13E-05	1	1.31E-05	1	0.00014996	1	9.0201E-05
EG13845	ynfG	1	9.30E-05	1	1.32E-04	1	0.00027324	1	0.00013436
EG13846	ynfH	0	1.72E-07	0	8.04E-07	1	5.8275E-06	0	2.9569E-06
EG13849	ynfK	1	2.45E-04	1	1.35E-04	1	0.00017953	1	0.00028836
EG13850	ynfL	1	1.61E-04	1	3.62E-04	1	7.5194E-05	1	1.4656E-05
EG12951	ynfM	1	1.59E-04	1	2.60E-04	1	0.00047715	1	0.00035683
EG14388	ynfN	1	3.39E-04	1	3.33E-04	1	0.00019798	1	0.00026648
EG14422	ynfO	1	7.62E-04	1	8.54E-04	1	7.955E-05	1	7.4631E-05
EG14016	ynhF	1	6.61E-05	1	1.57E-04	1	0.00037479	1	0.00010351
EG14015	ynhG	1	9.60E-05	1	1.35E-04	1	0.00012087	1	7.2954E-05

EG13986	yniA	1	1.49E-05	1	9.44E-06	1	0.00060891	1	0.0005403
EG13987	yniB	1	9.39E-04	1	5.81E-04	1	0.00025531	1	0.00035972
EG13988	yniC	1	8.48E-04	1	5.67E-04	1	9.8872E-05	1	5.5398E-05
EG14423	yniD	1	3.13E-04	1	2.34E-04	1	0.00029941	1	0.00032261
EG14003	ynjA	1	5.19E-06	1	8.97E-06	1	9.1509E-05	1	0.0001571
EG14004	ynjB	1	1.85E-05	1	2.98E-05	1	0.000104	1	0.00017175
EG14005	ynjC	1	1.10E-05	1	6.99E-06	1	4.8695E-05	1	9.7795E-06
EG14006	ynjD	1	4.47E-04	1	3.58E-04	1	4.7719E-05	1	2.0252E-05
EG14007	ynjE	1	4.19E-05	1	5.53E-05	1	0.00045398	1	0.00040784
EG14008	ynjF	1	8.68E-04	1	7.75E-04	1	0.00085478	1	0.0003905
EG14010	ynjH	1	2.07E-04	1	3.23E-04	1	0.00058634	1	0.00027482
EG14011	ynjI	1	1.09E-04	1	9.36E-05	1	7.8739E-05	1	1.5807E-05
EG13513	yoaA	1	1.09E-05	1	8.22E-06	1	0.00011644	1	0.00019187
EG13514	yoaB	1	1.09E-04	1	1.35E-04	1	7.9255E-06	0	1.4116E-06
EG13515	yoaC	1	1.01E-04	1	1.25E-04	1	0.00039841	1	0.00027904
EG13516	yoaD	1	8.54E-04	1	6.07E-04	1	0.00037751	1	0.00079379
EG13517	yoaE	1	5.51E-05	1	4.10E-05	1	7.5944E-05	1	8.9001E-05
EG14304	yoaF	1	2.46E-04	1	1.35E-04	1	8.136E-05	1	0.00041937
EG14305	yoaG	1	2.75E-04	1	4.18E-04	1	0.00016636	1	8.8107E-05
EG14306	yoaH	1	4.41E-04	1	7.28E-04	1	0.000442	1	0.00074316
EG14417	yoaI	1	6.85E-04	1	1.11E-03	1	0.00047393	1	0.00047238
EG14029	yobA	1	1.49E-05	1	2.76E-05	1	0.00013995	1	2.6634E-05
EG14030	yobB	1	2.36E-03	1	1.54E-03	1	0.00102496	1	0.0009094
EG13948	yobD	1	4.02E-04	1	7.10E-04	1	5.4806E-05	1	4.5627E-05
EG14382	yobF	1	1.72E-04	1	1.94E-04	1	0.00030322	1	0.00029787
EG14424	yobH	1	3.99E-05	1	8.17E-05	1	0.0003321	1	0.00060654
EG14049	yodA	1	1.72E-04	1	1.25E-04	1	6.8693E-05	1	0.00012723
EG14050	yodB	1	6.84E-04	1	8.69E-04	1	4.116E-05	1	3.4693E-05
EG14307	yodC	1	2.08E-05	1	1.49E-05	1	1.9269E-05	1	1.5985E-05
EG14387	yodD	1	8.05E-05	1	5.45E-05	1	2.3565E-05	1	9.0282E-06
EG14356	yoeB	1	7.17E-06	1	1.63E-05	1	4.1267E-05	1	1.0087E-05
EG12016	yohC	1	1.02E-04	1	1.06E-04	1	7.0131E-05	1	5.9894E-05
EG12017	yohD	1	2.93E-04	1	3.97E-04	1	6.6252E-05	1	0.00027473
EG12019	yohF	1	7.14E-05	1	4.95E-05	1	0.00023846	1	5.8731E-05
EG12023	yohJ	1	2.02E-04	1	3.30E-04	1	0.00045152	1	0.00025222
EG12024	yohK	1	3.62E-05	1	2.14E-05	1	5.5815E-05	1	9.0455E-05
EG14072	yohN	1	5.85E-05	1	1.10E-04	1	0.00027566	1	0.00021194
EG14426	yohO	1	1.08E-04	1	1.07E-04	1	0.00030857	1	0.00029371
EG12070	yojI	1	3.38E-05	1	7.63E-05	1	0.00024181	1	0.00037518
EG14461	yojO	1	2.03E-05	1	1.98E-05	1	8.852E-05	1	5.1772E-05
EG14427	ypaA	1	1.03E-04	1	1.20E-04	1	8.1156E-05	1	3.8088E-05
EG14445	ypaB	1	3.78E-05	1	7.43E-05	1	1.9077E-05	1	2.396E-05
EG14148	ypdA	1	5.82E-04	1	9.55E-04	1	0.00021407	1	0.00044694
EG14149	ypdB	1	1.19E-04	1	1.19E-04	1	0.0003269	1	0.00023388
EG14150	ypdC	1	8.42E-06	0	4.87E-06	1	0.0001132	1	0.00015706
EG14152	ypdE	1	3.63E-05	1	3.66E-05	1	0.00038449	1	0.000273
EG14153	ypdF	1	9.68E-05	1	2.15E-04	1	0.00012647	1	6.0706E-05
EG14376	ypdI	1	7.97E-04	1	7.80E-04	1	0.00028224	1	0.00039395
EG14168	ypeA	1	2.00E-04	1	2.80E-04	1	7.6573E-06	1	8.6895E-06
EG14366	ypeB	1	5.39E-06	1	7.97E-06	1	0.00021535	1	0.00032898
EG14385	ypeC	1	1.99E-05	1	1.40E-05	1	0.00016595	1	6.6133E-05
EG14194	ypfG	1	3.17E-04	1	3.08E-04	1	0.00055632	1	0.00068724
EG14195	ypfH	1	3.72E-04	1	2.48E-04	1	2.9738E-05	1	2.0878E-05
EG14196	ypfI	1	2.72E-04	1	1.83E-04	1	0.00038136	1	0.00033377
EG14197	ypfJ	1	8.94E-05	1	4.50E-05	1	0.00020574	1	0.00011368
EG14396	ypfM	1	3.51E-04	1	2.15E-04	1	0.00018217	1	0.00011087
EG14399	ypfN	1	4.56E-06	0	4.54E-06	1	0.00010821	1	0.00023704
EG13462	yphA	1	1.47E-04	1	2.49E-04	1	4.7431E-05	1	0.0001229
EG13463	yphB	1	6.46E-05	1	4.66E-05	1	6.8693E-05	1	0.0003557
EG13464	yphC	1	4.65E-05	1	4.84E-05	1	0.0003374	1	0.00038676
EG13465	yphD	1	1.27E-04	1	6.13E-05	1	0.00065589	1	0.00067259
EG13466	yphE	1	3.22E-06	0	1.89E-06	1	0.00012464	1	0.00010727
EG13467	yphF	1	2.56E-04	1	1.41E-04	1	4.4906E-06	0	1.141E-07
EG13468	yphG	1	6.42E-05	1	9.01E-05	1	0.00063405	1	0.00032603
EG13469	yphH	1	3.73E-04	1	4.59E-04	1	0.00021597	1	0.00015125
EG13213	ypjA	1	1.01E-03	1	9.98E-04	1	0.00019935	1	3.0381E-05
EG14226	ypjD	1	5.79E-04	1	9.11E-04	1	0.0005402	1	0.00099632
EG14284	ypjF	1	1.42E-04	1	9.95E-05	1	0.00047263	1	0.00071976
EG14330	ypjJ	1	1.47E-05	1	1.75E-05	1	0.00041175	1	0.00040266
EG14379	ypjK	1	1.36E-05	1	2.79E-05	1	0.00121348	1	0.00095125
EG13529	yqaA	1	3.04E-04	1	1.95E-04	1	0.00082603	1	0.00106839

EG13530	yqaB	1	4.53E-04	1	4.72E-04	1	0.00093082	1	0.00065168
EG14313	yqaE	1	5.16E-05	1	2.44E-05	1	0.00035346	1	0.0002383
EG13170	yqcA	1	1.52E-05	1	8.98E-06	1	2.3331E-06	0	6.1801E-07
EG13172	yqcC	1	4.85E-04	1	9.45E-04	1	0.00015197	1	5.9483E-05
EG13174	yqcE	1	2.19E-04	1	5.23E-04	1	0.00209365	1	0.00210643
EG13057	yqeA	1	1.22E-04	1	1.28E-04	1	7.6596E-05	1	4.6024E-05
EG13058	yqeB	1	2.27E-04	1	2.18E-04	1	0.00013245	1	0.00012954
EG13059	yqeC	1	3.23E-04	1	1.79E-04	1	0.00014944	1	0.00012176
EG13097	yqeF	1	2.99E-05	1	3.30E-05	1	0.00011726	1	4.3078E-05
EG13098	yqeG	1	7.43E-04	1	8.15E-04	1	0.00013147	1	6.2274E-05
EG13099	yqeH	1	5.19E-05	1	6.78E-05	1	0.00010011	1	0.00019041
EG13100	yqeI	1	9.72E-04	1	1.02E-03	1	0.0002761	1	0.00019281
EG13101	yqeJ	1	5.76E-05	1	2.90E-05	1	1.1233E-05	1	6.8532E-06
EG13274	yqeK	1	2.94E-05	1	1.04E-05	1	0.00031407	1	0.00030625
EG13077	yqfA	1	2.15E-05	1	2.75E-05	1	8.831E-05	1	6.8133E-05
EG13078	yqfB	1	1.76E-05	1	4.72E-05	1	1.085E-05	1	1.1149E-05
EG12987	yqgA	1	6.02E-04	1	4.56E-04	1	1.3198E-05	1	5.1453E-06
EG13164	yqgB	1	2.76E-04	1	2.04E-04	1	0.00082695	1	0.00038359
EG13165	yqgC	1	2.58E-06	0	2.36E-06	1	0.00016656	1	0.0001206
EG13166	yqgD	1	8.47E-05	1	7.31E-05	1	9.0765E-05	1	2.615E-05
EG13289	yqgE	1	5.32E-04	1	3.26E-04	1	0.00032427	1	0.00025678
EG13290	yqgF	1	1.89E-04	1	1.94E-04	1	8.6659E-05	1	1.6962E-05
EG13011	yqhA	1	2.93E-04	1	2.63E-04	1	8.1002E-05	1	0.00010558
EG13013	yqhC	1	1.46E-03	1	1.39E-03	1	0.00031113	1	0.00067389
EG13014	yqhD	1	3.94E-04	1	4.24E-04	0	1.0081E-06	0	3.258E-06
EG13017	yqhG	1	1.70E-04	1	1.11E-04	1	0.00015961	1	0.00034302
EG13018	yqhH	1	1.71E-04	1	2.08E-04	1	6.9887E-05	1	0.00016418
EG12186	yqiA	1	3.79E-04	1	6.13E-04	1	0.00066087	1	0.00028355
EG12185	yqiB	1	5.60E-04	1	4.72E-04	1	0.00021029	1	8.9569E-05
EG13031	yqiC	1	2.02E-04	1	1.37E-04	1	0.00020888	1	0.00018637
EG14229	yqiH	1	2.31E-04	1	3.54E-04	1	0.00011326	1	6.1186E-05
EG14230	yqiI	1	3.35E-04	1	2.42E-04	1	0.00011346	1	0.00017191
EG14231	yqiJ	1	8.58E-05	1	1.82E-04	1	0.0001842	1	0.00014528
EG14232	yqiK	1	1.08E-04	1	2.30E-04	1	0.00015298	1	3.2014E-05
EG12740	yqjA	1	8.31E-05	1	6.31E-05	1	5.7082E-05	1	4.5111E-05
EG12741	yqjB	1	1.30E-04	1	1.19E-04	1	0.00010504	1	0.00018779
EG12742	yqjC	1	1.69E-04	1	5.09E-04	1	0.00041051	1	0.00097165
EG12743	yqjD	1	1.62E-04	1	1.80E-04	1	0.0002573	1	0.00034167
EG12744	yqjE	1	1.09E-05	1	8.31E-06	1	1.1855E-05	1	8.6116E-06
EG12745	yqjF	1	4.75E-05	1	2.74E-05	1	0.00023191	1	0.00010458
EG12746	yqjG	1	1.40E-05	1	1.30E-05	1	0.00024325	1	9.8702E-05
EG12953	yqjH	1	3.93E-04	1	7.25E-04	1	0.00042015	1	0.00043063
EG12954	yqjI	1	2.00E-04	1	1.28E-04	1	0.00011913	1	5.955E-05
EG14314	yqjK	1	1.64E-04	1	1.04E-04	1	4.0688E-05	1	1.3528E-05
EG12773	yraH	1	8.22E-04	1	8.45E-04	1	0.00034361	1	0.00057744
EG12774	yraI	1	8.32E-04	1	7.12E-04	1	0.00015367	1	0.00035621
EG12775	yraJ	1	5.69E-05	1	3.15E-05	1	0.0001186	1	0.00022401
EG12776	yraK	1	6.96E-04	1	5.68E-04	1	6.4479E-05	1	7.9598E-05
EG12777	yraL	1	1.66E-04	1	3.64E-04	1	0.00013068	1	3.8623E-05
EG12778	yraM	1	9.59E-04	1	6.15E-04	1	8.3544E-05	1	0.00010512
EG12779	yraN	1	2.81E-06	0	4.66E-06	1	4.7542E-05	1	6.2274E-05
EG12781	yraP	1	8.65E-05	1	1.41E-04	1	9.4291E-05	1	3.0638E-05
EG12782	yraQ	1	3.03E-04	1	2.77E-04	1	0.00089692	1	0.00096272
EG12783	yraR	0	9.60E-08	0	2.32E-07	1	6.1281E-06	1	5.588E-06
EG12796	yrbA	1	1.75E-04	1	2.01E-04	1	0.00089711	1	0.00045722
EG12797	yrbB	1	6.22E-05	1	7.75E-05	1	5.8263E-05	1	2.4861E-05
EG12798	yrbC	1	1.97E-04	1	3.02E-04	1	5.6643E-05	1	0.00019811
EG12799	yrbD	1	2.69E-05	1	2.27E-05	1	0.00013873	1	5.2288E-05
EG12800	yrbE	1	7.24E-05	1	1.00E-04	1	2.8769E-05	1	7.5696E-06
EG12801	yrbF	1	5.47E-05	1	1.14E-04	1	0.00019703	1	0.00034093
EG12802	yrbG	1	3.31E-04	1	2.97E-04	1	0.00024482	1	0.00041822
EG12806	yrbK	1	8.48E-06	1	1.22E-05	1	6.6059E-05	1	4.1985E-05
EG12807	yrbL	1	1.23E-04	1	8.58E-05	1	0.00013679	1	0.00037903
EG12838	yrdA	1	1.15E-03	1	1.29E-03	1	6.2105E-05	1	0.00013098
EG12839	yrdB	1	3.12E-05	1	1.59E-05	1	0.00039913	1	0.00037409
EG12841	yrdD	1	2.44E-04	1	2.45E-04	1	0.0005336	1	0.00030078
EG12927	yrfF	1	6.64E-05	1	5.23E-05	1	7.5369E-05	1	2.7713E-05
EG12928	yrfG	1	1.15E-04	1	1.34E-04	1	0.00018638	1	0.00049596
EG12948	yrhB	1	2.17E-03	1	9.91E-04	1	0.00022353	1	0.00012058
EG14370	yrhD	1	1.01E-04	1	6.32E-05	1	0.00010481	1	0.0002296
EG14319	ysaA	1	9.05E-05	1	4.85E-05	1	0.00025947	1	0.00019922

EG14400	ysaB	1	3.77E-05	1	5.09E-05	1	0.00029173	1	0.00014091
EG14321	ysgA	1	1.14E-03	1	9.03E-04	1	0.00026596	1	0.00039062
EG14401	ytcA	1	4.79E-04	1	3.49E-04	1	3.6034E-05	1	0.00012202
EG12502	ytfB	1	1.31E-05	1	1.08E-05	1	1.8106E-05	1	7.844E-06
EG12505	ytfE	1	2.55E-04	1	9.91E-05	1	0.00014809	1	2.8435E-05
EG12506	ytfF	1	7.23E-06	1	1.01E-05	1	0.00011266	1	0.00013198
EG12507	ytfG	1	2.86E-04	1	2.73E-04	1	7.0865E-05	1	2.3106E-05
EG12508	ytfH	1	1.09E-04	1	1.11E-04	1	0.00015871	1	6.2557E-05
EG12509	ytfI	1	5.19E-05	1	5.12E-05	1	3.0753E-05	1	2.4374E-05
EG12510	ytfJ	1	3.22E-04	1	3.38E-04	1	0.0009834	1	0.00081061
EG12511	ytfK	1	5.07E-05	1	3.67E-05	1	5.3007E-05	1	2.3839E-05
EG12512	ytfL	1	1.61E-04	1	2.30E-04	1	8.2334E-05	1	0.00018618
EG12513	ytfM	1	1.47E-04	1	1.88E-04	1	0.00021208	1	0.0003197
EG12514	ytfN	1	1.15E-04	1	1.30E-04	1	0.00017221	1	6.0293E-05
EG12516	ytfP	1	4.89E-04	1	4.08E-04	1	0.00048302	1	0.00019359
EG12517	ytfQ	1	5.95E-04	1	6.03E-04	1	0.00040641	1	0.00016222
EG12518	ytfR	1	1.94E-04	1	1.35E-04	0	1.0424E-06	0	6.5751E-07
EG12520	ytfT	1	1.56E-04	1	2.08E-04	1	0.00065403	1	0.00041871
EG14464	ythA	1	5.46E-04	1	4.14E-04	1	0.00096942	1	0.00100149
EG14398	ytjA	1	5.61E-05	1	3.24E-05	1	6.2791E-05	1	0.00018977
EG10951	ytjB	1	1.62E-05	1	7.67E-06	1	0.00043835	1	0.00021817
EG12164	ytjC	1	1.44E-04	1	2.61E-04	1	0.00030252	1	0.00044819
EG12878	zapA	1	1.01E-04	1	7.49E-05	1	3.5763E-05	1	0.00011649
EG14169	zipA	1	1.36E-04	1	7.55E-05	1	9.5503E-05	1	3.6116E-05
EG13662	zitB	1	2.63E-04	1	3.67E-04	1	0.00039297	1	0.00022042
EG12215	zntA	1	3.59E-04	1	4.37E-04	1	0.00026695	1	0.00037371
EG11969	zntR	1	9.90E-05	1	7.06E-05	1	0.00016555	1	0.00014316
EG12678	znuA	1	1.08E-04	1	2.38E-04	1	0.00025391	1	0.00020363
EG12368	znuB	1	1.27E-03	1	9.00E-04	1	0.00065225	1	0.00040836
EG13132	znuC	1	1.09E-04	1	1.64E-04	1	7.7652E-05	1	3.0317E-05
EG11918	zraP	1	4.70E-05	1	3.63E-05	1	0.00012521	1	0.00016174
EG10482	zraR	1	2.45E-05	1	2.29E-05	1	0.000146	1	0.00010535
EG10008	zraS	1	7.78E-05	1	9.64E-05	1	0.00044585	1	0.0003684
EG11167	zupT	1	1.37E-05	1	1.52E-05	1	6.8596E-05	1	3.6777E-05
EG11929	zur	1	1.00E-04	1	6.84E-05	1	3.2635E-05	1	1.0052E-05
EG11221	zwf	1	8.70E-06	1	8.16E-06	1	9.8197E-06	1	1.0989E-05

Supplementary Table 3. Information about selective conditions and frequency of resistant mutants.

Plate[i]	Selective pressure	Observed TReMR allele(s)	Frequency of spontaneous mutant(s)[ii]	Frequency of TReMR mutant(s)
Salicin	induction of bgl operon is required for cells to use Salicin as a sole carbon source, however, this operon is silent in wild-type cells	hns down	7.E-08	> 2. E-5
D-fucose and L-arabinose	D-fucose inhibits the metabolism of the sole carbon source, arabinose	xylA up	1.E-07	7.E-05
Valine	feedback inhibition by valine leads to isoleucine starvation	IlvN down leuL down	3.E-08	6.E-05
methylglyoxal	methylglyoxal is a metabolic intermediate that can accumulate to toxic levels during growth in a particular environment (example: glycerol as a carbon source)	sodC down	< 1.E-8	2.E-05

[i]Selections occurred on MA minimal plates with additives described in refernces.[ii] E. coli MG1655 ATCC 700926 was grown in 5 mL SOC medium at 37 C until OD 600 was 1.0. Cells were harvested, washed twice with MA salts and 50 uL plated (~ 3.E7 CFU +/- 50 %). Frequencies of spontaneous mutants were calculated from the number of colonies observed after 48 hrs growth at 37 C divided by the total number of viable cells plated. Total viable cells was determined by plating 50 uL of a 10,000 dilution and counting colonies after 24hrs growth at 37 C on MA agar.

Supplementary Table 4. Results from sequencing TReMR colonies isolated on selective plate conditions

Selection	Colonies	Allele	Barcode sequence notes
Methylglyoxal glucose minimal	12	sodC down	
Valine Glucose minimal	8	LeuL down	
	4	IlvN down	
	3	emrD down	G replaced with A 3 bases from 3' tag end
D-Fucose Arabinose minimal	1	yeeU down	
	1	ydcQ down	
	10	xylA up	
	1	fixB down	
	1	psiF down	
	1	recA down	
	1	ydgI down	
Salicin minimal	1	yjdP down	
	1	motA up	
	1	alsE down	missing T 3 bases from 3' tag end
	5	hns down	
	1	yjhHdown	
	1	ydiM up	
	1	gloA up	
	1	sodA up	
	2	ihfB down	
	1	ybjG down	
Plates containing tetracycline or phenylgalactoside	5	accA down	
	1	ygaZ down	
	1	fhlA down	
	1	yobD up	missing G 1 base in from 3' tag end
	4	yeiG down	
	1	tufB up	
	2	pbpG down	
	1	gloA up	
	1	ycjN down	
	1	yqeH down	
	1	yadE up	
	1	rplT down	
	3	ampH up	missing GT bases from 5' tag end
	1	ygfA up	
	1	ycjN down	
	1	rho up	

Supplementary Table 5. TReMR Allele fitness for growth in rich medium or minimal medium.

Symbol	Name	Up allele fitness rich	Down allele fitness rich	Up allele fitness minimal	Down allele fitness minimal
EG12823	aaeA	0.00	0.00	0.00	0.00
EG12822	aaeB	0.00	0.00	0.00	0.00
EG12825	aaeR	0.00	0.09	0.03	0.06
EG12824	aaeX	0.00	0.00	0.00	0.00
EG11679	aas	0.00	1.05	0.00	1.17
EG11112	aat	0.00	0.00	0.00	0.00
EG13352	abgA	0.41	1.11	0.27	1.65
EG13351	abgB	0.33	0.18	0.13	0.18
EG13353	abgR	0.00	1.10	0.00	1.59
EG12853	abgT	0.90	1.16	0.67	1.09
EG13310	abrB	0.00	0.00	0.00	0.00
EG11647	accA	0.00	0.59	0.00	0.21
EG10275	accB	0.00	0.00	0.00	0.00
EG10276	accC	0.00	0.00	0.00	0.00
EG10217	accD	0.00	1.06	0.00	1.06
EG10022	aceA	0.17	1.50	0.10	1.57
EG10023	aceB	0.00	0.00	0.00	0.00
EG10024	aceE	0.13	0.27	0.42	0.04
EG10025	aceF	0.43	0.21	0.98	0.03
EG10026	aceK	0.00	0.31	0.00	0.19
EG10027	ackA	0.04	0.00	0.03	0.00
EG11325	acnA	0.00	0.00	0.00	0.00
EG12316	acnB	0.00	0.00	0.00	0.00
EG11095	acpH	0.00	0.00	0.00	0.00
EG50003	acpP	0.00	0.00	0.00	0.03
EG10247	acpS	0.00	0.00	0.00	0.00
EG12221	acpT	0.98	1.62	0.87	1.72
EG11703	acrA	0.00	0.00	0.00	0.00
EG11704	acrB	0.00	0.57	0.00	1.63
EG10014	acrD	0.00	0.00	0.00	0.00
EG10266	acrE	0.00	1.35	0.00	1.35
EG10267	acrF	0.00	0.37	0.02	0.14
EG12116	acrR	0.00	0.21	0.00	0.20
EG11448	acs	1.23	0.22	1.02	0.20
EG11942	actP	0.00	1.22	0.08	0.95
EG10029	ada	0.00	0.00	0.00	0.00
EG10030	add	0.00	0.00	0.00	0.00
EG11692	ade	0.00	0.00	0.00	0.00
EG10031	adhE	0.00	0.00	0.00	0.01
EG12622	adhP	0.00	1.17	0.00	0.93
EG11501	adiA	1.16	1.09	1.61	1.43
EG12462	adiC	0.03	0.19	0.03	0.12
EG11966	adiY	1.38	0.00	1.09	0.00
EG10032	adk	0.00	0.00	0.00	0.00
EG11257	adrA	0.00	0.50	0.05	0.22
EG12409	aegA	0.00	0.00	0.00	0.00
EG12955	aer	0.00	1.24	0.00	1.43
EG11101	aes	1.25	0.00	1.12	0.00
EG12340	afuC	0.00	0.00	0.00	0.00
EG12769	agaB	0.00	0.00	0.00	0.00
EG12770	agaC	1.13	0.00	0.99	0.00
EG12771	agaD	0.00	0.00	0.00	0.00

EG12772	agaI	0.00	0.91	0.00	1.14
EG12762	agaR	0.00	0.00	0.00	0.00
EG12767	agaS	0.00	0.07	0.00	0.00
EG12764	agaV	0.00	0.00	0.00	0.00
EG10033	agp	0.00	0.09	0.00	0.00
EG11384	ahpC	0.99	0.67	1.08	0.56
EG11385	ahpF	0.00	0.00	0.00	0.00
EG11811	aidB	0.00	0.00	0.00	0.00
EG13155	ais	0.82	1.24	0.76	1.91
EG10034	alaS	0.12	0.00	0.18	0.00
EG10035	aldA	0.00	0.59	0.00	0.55
EG12292	aldB	0.12	1.22	0.10	1.06
EG11222	alkA	0.00	0.00	0.00	0.00
EG10037	alkB	0.00	0.00	0.00	0.00
EG13615	allA	0.00	0.00	0.00	0.00
EG13619	allB	0.00	0.00	0.00	0.00
EG13623	allC	0.00	0.00	0.00	0.00
EG13624	allD	0.00	0.00	0.00	0.00
EG13616	allR	0.00	0.00	0.00	0.00
EG13267	allS	0.00	0.00	0.42	0.00
EG12112	alpA	0.00	0.00	0.00	0.00
EG10001	alr	0.00	0.00	0.00	0.00
EG11959	alsA	0.00	0.00	0.00	0.00
EG12458	alsB	0.00	1.22	0.03	1.10
EG11958	alsC	0.00	0.00	0.00	0.00
EG11957	alsE	0.00	1.29	0.00	1.18
EG11956	alsK	0.00	0.00	0.00	0.00
EG12731	alx	0.00	1.35	0.00	1.36
EG11823	amiA	1.23	0.09	1.10	0.12
EG11363	amiB	0.00	0.00	0.00	0.00
EG13086	amiC	0.00	0.06	0.00	0.00
EG13687	amiD	0.00	0.00	0.00	0.00
EG10039	amn	0.00	1.30	0.00	1.59
EG10040	ampC	0.26	0.00	0.12	0.00
EG10041	ampD	0.00	0.00	0.00	0.00
EG10042	ampE	0.00	0.00	0.00	0.00
EG12183	ampG	0.00	0.00	0.07	0.00
EG12867	ampH	0.02	0.00	0.03	0.00
EG11821	amtB	0.00	0.00	0.00	0.00
EG11387	amyA	0.00	0.98	0.00	1.49
EG13942	anmK	0.00	0.00	0.00	0.00
EG10045	ansA	0.00	0.63	0.00	0.35
EG10046	ansB	0.00	0.00	0.00	0.00
EG13776	ansP	0.99	1.45	0.65	1.70
EG10047	apaG	0.00	0.00	0.00	0.00
EG10048	apaH	0.00	0.00	0.00	0.00
EG12073	apbE	0.00	1.21	0.00	1.81
EG11934	aphA	0.00	0.64	0.00	0.40
EG10049	appA	0.40	0.00	0.25	0.00
EG11379	appB	0.00	0.00	0.00	0.00
EG11380	appC	0.00	1.18	0.00	1.32
EG10050	appY	0.00	1.71	0.00	1.21
EG10051	apt	0.51	0.00	0.09	0.00
EG13270	aqpZ	0.00	0.00	0.00	0.00
EG10052	araA	0.00	0.00	0.00	0.00
EG10053	araB	0.00	0.11	0.00	0.12
EG10054	araC	0.00	0.00	0.00	0.00
EG10055	araD	0.00	0.24	0.00	0.20

EG10056	araE	0.00	0.24	0.00	0.16
EG10057	araF	0.00	0.40	0.00	0.26
EG10058	araG	0.00	1.35	0.00	1.59
EG10059	araH	0.00	0.38	0.00	0.39
EG10060	araJ	0.00	0.00	0.00	0.00
EG10061	arcA	0.00	0.15	0.00	1.57
EG10062	arcB	0.00	0.09	0.00	0.68
EG10063	argA	1.33	1.25	1.08	0.04
EG10064	argB	0.00	0.00	0.00	0.00
EG10065	argC	0.00	0.00	0.00	0.00
EG10066	argD	0.06	0.00	0.04	0.00
EG11286	argE	0.00	0.10	0.00	0.13
EG10067	argF	0.00	0.00	0.00	0.00
EG10068	argG	0.00	0.00	0.00	0.00
EG11223	argH	0.00	0.00	0.00	0.00
EG10069	argI	0.00	0.00	0.00	0.00
EG11445	argK	0.26	0.46	0.05	0.30
EG11159	argO	0.00	1.16	0.00	1.08
EG10490	argP	0.23	0.68	0.00	0.75
EG10070	argR	0.06	0.00	0.07	0.00
EG10071	argS	0.13	0.17	0.16	0.18
EG10072	argT	0.00	0.00	0.00	0.00
EG14290	ariR	0.00	0.00	0.00	0.00
EG14091	arnA	0.15	0.00	0.13	0.00
EG14089	arnB	0.00	0.00	0.00	0.03
EG14090	arnC	0.00	0.00	0.00	0.00
EG14092	arnD	0.00	1.48	0.04	1.73
EG14344	arnE	0.00	0.00	0.00	0.00
EG14094	arnF	0.00	0.00	0.00	0.00
EG14093	arnT	0.00	0.22	0.00	0.13
EG10073	aroA	0.00	0.60	0.00	0.01
EG10074	aroB	0.00	0.00	0.00	0.00
EG10075	aroC	0.00	1.01	0.00	0.01
EG10076	aroD	0.00	0.43	0.00	0.17
EG10077	aroE	0.00	0.09	0.00	0.11
EG10078	aroF	0.00	0.00	0.00	0.00
EG10079	aroG	0.00	0.00	0.00	0.00
EG10080	aroH	0.00	0.00	0.00	0.00
EG10081	aroK	0.00	0.00	0.00	0.00
EG10082	aroL	0.00	0.00	0.00	0.00
EG10083	aroM	0.00	0.00	0.00	0.00
EG10084	aroP	0.00	0.00	0.00	0.00
EG11208	arpA	0.00	1.16	0.06	1.03
EG13635	arrD	1.22	1.14	1.02	1.23
EG13829	arrQ	0.00	0.00	0.00	0.00
EG12236	arsB	0.24	0.03	0.04	0.04
EG12237	arsC	0.00	0.45	0.00	0.19
EG12235	arsR	0.94	0.36	0.67	0.25
EG11625	artI	0.00	0.00	0.00	0.00
EG11628	artJ	0.00	0.00	0.00	0.00
EG11627	artM	0.00	0.00	0.00	0.00
EG11624	artP	0.37	0.36	0.07	0.26
EG11626	artQ	0.76	0.08	0.58	0.03
EG10085	ascB	0.00	1.44	0.00	1.34
EG10086	ascF	0.00	1.22	0.00	1.10
EG10087	ascG	0.00	0.00	0.00	0.00
EG10088	asd	0.00	0.17	0.00	0.53
EG10089	aslA	0.00	0.02	0.00	0.03

EG10090	aslB	0.00	0.00	0.00	0.00
EG11361	asmA	0.00	0.00	0.00	0.00
EG10091	asnA	0.00	0.08	0.00	0.00
EG10092	asnB	0.00	0.00	0.00	0.00
EG10093	asnC	0.00	0.00	0.00	0.00
EG10094	asnS	0.00	0.00	0.00	0.00
EG10095	aspA	0.00	0.21	0.00	0.19
EG10096	aspC	1.27	1.16	0.84	0.23
EG10097	aspS	0.00	0.00	0.00	0.00
EG12149	asr	0.00	0.00	0.00	0.00
EG13998	astA	0.00	0.00	0.00	0.00
EG13996	astB	0.00	0.00	0.00	0.00
EG13999	astC	0.99	1.40	0.84	1.40
EG13997	astD	0.00	0.00	0.00	0.00
EG13995	astE	0.00	0.00	0.00	0.00
EG11670	atoA	0.00	0.00	0.00	0.00
EG11672	atoB	1.30	0.00	1.04	0.06
EG11668	atoC	0.00	0.00	0.20	0.00
EG11669	atoD	0.86	0.00	0.50	0.00
EG11671	atoE	0.00	0.52	0.00	0.44
EG11667	atoS	0.00	0.00	0.00	0.00
EG10098	atpA	0.27	0.27	0.18	0.14
EG10099	atpB	0.00	0.40	0.00	0.92
EG10100	atpC	0.41	0.00	0.25	0.00
EG10101	atpD	0.00	0.00	0.00	0.00
EG10102	atpE	0.00	0.00	0.00	0.02
EG10103	atpF	0.69	0.03	0.44	0.07
EG10104	atpG	0.00	0.00	0.00	0.00
EG10105	atpH	0.00	0.00	0.00	0.00
EG10106	atpI	0.00	0.13	0.00	0.10
EG10107	avtA	0.00	0.00	0.00	0.00
EG12695	azoR	0.18	0.59	0.08	0.26
EG11665	bacA	0.00	0.00	0.00	0.00
EG11618	baeR	0.00	0.00	0.00	0.00
EG11617	baeS	0.00	0.00	0.00	0.00
EG12676	bamA	0.00	0.00	0.00	0.00
EG14208	bamB	0.00	0.00	0.19	0.04
EG10658	bamC	0.00	0.20	0.00	0.18
EG14222	bamD	0.00	0.07	0.00	0.05
EG11367	barA	0.00	0.38	0.00	0.29
EG11615	basR	0.00	0.00	0.00	0.00
EG11614	basS	0.00	1.21	0.00	1.05
EG11360	bax	0.00	0.41	0.00	2.54
EG10108	bcp	0.05	0.51	0.04	0.29
EG11419	bcr	0.46	1.22	0.34	1.63
EG12260	bcsA	0.00	0.67	0.00	0.51
EG12259	bcsB	0.00	0.55	0.00	1.54
EG12257	bcsC	0.00	0.00	0.00	0.00
EG12263	bcsE	0.00	0.00	0.00	0.00
EG12264	bcsF	0.00	1.49	0.00	1.15
EG12265	bcsG	0.00	0.00	0.00	0.00
EG12258	bcsZ	0.00	0.05	0.00	0.12
EG14301	bdm	0.17	0.00	0.03	0.00
EG10109	betA	0.00	0.00	0.00	0.00
EG10110	betB	0.00	1.40	0.00	1.26
EG10111	betI	0.00	0.00	0.00	0.00
EG10112	betT	0.44	0.00	0.48	0.00
EG11181	bfd	0.00	0.27	0.00	0.72

EG10113	bfr	0.00	0.00	0.00	0.00
EG13079	bglA	0.00	0.00	0.00	0.00
EG10114	bglB	0.00	0.00	0.00	0.00
EG10115	bglF	0.00	0.00	0.00	0.00
EG10116	bglG	0.00	0.10	0.00	0.07
EG11364	bglH	0.00	1.30	0.04	1.24
EG12594	bglJ	0.21	0.00	0.13	0.00
EG12013	bglX	0.00	0.00	0.00	0.00
EG13436	bhsA	0.00	0.00	0.00	0.00
EG10117	bioA	0.00	0.00	0.00	0.00
EG10118	bioB	0.00	0.28	0.00	0.15
EG10119	bioC	0.00	0.00	0.00	0.00
EG10120	bioD	0.00	0.00	0.00	0.00
EG10121	bioF	1.11	0.00	0.00	0.00
EG10122	bioH	0.00	0.00	0.00	0.00
EG10123	birA	0.00	1.04	0.00	0.56
EG10124	bisC	0.00	0.40	0.00	0.50
EG12474	blc	0.00	0.65	0.00	0.47
EG14389	blr	0.20	0.80	0.07	0.72
EG10125	bolA	0.00	0.00	0.00	0.00
EG13637	borD	0.00	0.00	0.06	0.00
EG12168	brnQ	0.00	0.00	0.00	0.00
EG13479	bssR	0.00	0.00	0.00	0.00
EG14335	bssS	0.00	0.00	0.00	0.00
EG10126	btuB	0.00	1.15	0.26	0.93
EG10127	btuC	1.03	0.00	0.99	0.00
EG10128	btuD	0.14	0.00	0.03	0.00
EG10129	btuE	0.00	0.00	0.00	0.00
EG12334	btuF	0.00	0.00	0.00	0.00
EG10130	btuR	0.00	0.00	0.00	0.00
EG10131	cadA	0.00	0.00	0.00	0.00
EG10132	cadB	0.00	1.18	0.00	1.24
EG10133	cadC	0.00	1.26	0.00	1.16
EG11560	caiA	0.00	0.42	0.00	0.37
EG11559	caiB	0.00	0.00	0.00	0.00
EG11558	caiC	0.00	0.00	0.00	0.00
EG11557	caiD	0.91	0.00	0.75	0.00
EG12608	caiE	0.00	0.00	0.00	0.00
EG13451	caiF	0.00	0.92	0.00	0.12
EG11561	caiT	0.00	0.00	0.00	0.00
EG12319	can	0.00	0.00	0.00	0.00
EG10134	carA	0.00	0.29	0.00	0.49
EG10135	carB	1.15	1.38	0.99	0.01
EG14264	cbl	0.85	0.00	0.69	0.00
EG12193	cbpA	0.00	0.00	0.00	0.00
EG12194	cbpM	0.00	0.00	0.00	0.00
EG11714	cbrA	0.00	0.43	0.00	0.24
EG11726	cbrB	0.00	1.10	0.00	0.95
EG11727	cbrC	0.00	0.00	0.05	0.00
EG10136	cca	0.00	0.00	0.25	0.19
EG12059	ccmA	0.00	0.00	0.00	0.00
EG12058	ccmB	0.00	0.21	0.00	0.20
EG12057	ccmC	0.00	0.00	0.00	0.00
EG12169	ccmD	0.00	0.00	0.00	0.00
EG12055	ccmE	0.00	0.00	0.00	0.00
EG12054	ccmF	0.00	0.00	0.00	0.00
EG12053	ccmG	0.00	1.37	0.00	1.26
EG12052	ccmH	0.00	0.00	0.00	0.00

EG12335	cdaR	0.00	0.27	0.00	0.10
EG10137	cdd	0.00	0.00	0.00	0.02
EG10138	cdh	0.00	0.64	0.00	0.47
EG10139	cdsA	0.00	0.37	0.00	0.11
EG13992	cedA	0.00	1.19	0.00	0.88
EG11531	cfa	0.00	0.00	0.00	0.00
EG11753	chaA	0.00	0.00	0.00	0.00
EG12402	chaB	0.85	0.00	0.40	0.00
EG12403	chaC	0.00	0.00	0.00	0.00
EG10142	chbA	0.00	0.00	0.00	0.00
EG10140	chbB	0.00	0.26	0.00	0.25
EG10141	chbC	1.68	0.99	1.98	1.33
EG10144	chbF	0.00	0.00	0.00	0.00
EG12198	chbG	0.00	0.00	0.00	0.00
EG10143	chbR	0.00	0.44	0.00	0.20
EG10146	cheA	0.00	0.00	0.00	0.00
EG10147	cheB	0.00	0.00	0.00	0.00
EG10148	cheR	0.00	1.07	0.00	1.04
EG10149	cheW	0.00	0.00	0.00	0.00
EG10150	cheY	0.00	0.00	0.00	0.00
EG10151	cheZ	0.00	0.00	0.00	0.00
EG11237	chiA	0.00	0.64	0.00	0.36
EG13993	cho	0.00	0.25	0.00	0.13
EG11249	chpA	0.00	1.06	0.00	0.98
EG12096	chpB	0.00	0.00	0.00	0.00
EG10571	chpR	0.00	0.91	0.00	0.60
EG11250	chpS	0.00	0.96	0.00	0.95
EG10155	cirA	0.00	1.22	0.00	1.50
EG13645	citC	0.00	0.00	0.00	0.00
EG13543	citD	0.00	0.00	0.00	0.00
EG13542	citE	0.00	0.40	0.00	0.23
EG13541	citF	0.00	0.43	0.00	0.23
EG13539	citG	0.06	0.00	0.06	0.00
EG13538	citT	0.00	0.00	0.00	0.03
EG13540	citX	0.00	0.00	0.00	0.00
EG12331	clcA	0.00	0.19	0.00	0.22
EG13848	clcB	0.74	0.83	0.55	0.91
EG13406	cld	0.00	0.00	0.00	0.00
EG10156	clpA	0.00	0.69	0.00	0.38
EG10157	clpB	1.23	0.46	1.01	0.31
EG10158	clpP	0.00	0.23	0.00	0.00
EG14241	clpS	0.00	0.00	0.00	0.00
EG10159	clpX	0.00	0.00	0.00	0.00
EG11608	cls	0.00	0.00	0.00	0.00
EG11265	cmk	0.00	0.00	0.00	0.00
EG14033	cmoA	0.00	0.04	0.00	0.00
EG14034	cmoB	0.00	0.00	0.00	0.00
EG13696	cmr	0.00	0.00	0.00	0.00
EG11792	cmtA	0.00	0.14	0.00	0.09
EG11791	cmtB	0.03	0.13	0.00	0.13
EG14303	cnu	0.00	0.50	0.01	0.53
EG10922	coaA	0.45	0.32	0.27	0.28
EG11190	coaD	0.00	0.00	0.00	0.00
EG12312	coaE	0.00	0.00	0.00	0.00
EG13443	cobB	0.00	0.00	0.00	0.00
EG13240	cobC	0.00	0.00	0.00	0.00
EG12150	cobS	0.00	0.19	0.00	0.36
EG12151	cobT	0.00	0.00	0.00	0.00

EG13238	cobU	0.00	0.00	0.00	0.00
EG11326	codA	0.00	0.10	0.00	0.09
EG11327	codB	0.00	1.20	0.00	1.37
EG13216	cof	0.00	0.00	0.00	0.00
EG13246	copA	0.00	1.26	0.00	1.92
EG11463	corA	0.00	0.00	0.00	0.00
EG12187	cpdA	0.00	0.00	0.00	0.00
EG10160	cpdB	0.06	0.19	0.05	0.13
EG10161	cpsB	0.00	0.00	0.00	0.00
EG10162	cpsG	0.00	1.13	0.00	1.31
EG10163	cpxA	0.00	0.00	0.00	0.00
EG11872	cpxP	0.00	1.16	0.00	1.16
EG10020	cpxR	0.00	1.06	0.00	0.89
EG12209	crcB	0.00	1.25	0.00	1.21
EG11217	creA	0.00	0.00	0.00	0.00
EG11218	creB	0.00	0.00	0.00	0.00
EG10730	creC	0.22	0.00	0.14	0.00
EG10145	creD	0.00	0.00	0.00	0.00
EG11092	crl	0.00	0.47	0.00	0.29
EG10164	crp	0.00	0.00	0.00	0.00
EG10165	crr	0.00	0.41	0.32	0.28
EG13082	csdA	0.00	0.10	0.00	0.07
EG13083	csdE	0.00	0.00	0.00	0.00
EG11489	csgA	0.00	0.00	0.00	0.00
EG12621	csgB	0.00	1.28	0.00	1.27
EG13414	csgC	0.00	1.22	0.00	1.42
EG13410	csgD	0.00	1.20	0.00	1.24
EG13411	csgE	1.36	0.66	1.29	0.42
EG13412	csgF	0.00	0.35	0.00	0.12
EG13413	csgG	0.00	0.00	0.00	0.00
EG13523	csiD	0.00	0.00	0.00	0.00
EG13418	csiE	0.00	0.89	0.00	0.80
EG12386	csiR	0.00	1.23	0.00	1.33
EG10166	cspA	0.96	1.24	0.73	1.30
EG12203	cspB	0.00	0.00	0.00	0.00
EG12204	cspC	0.00	0.00	0.00	0.00
EG11111	cspD	0.00	0.12	0.00	0.09
EG12179	cspE	1.43	1.15	1.20	0.81
EG12205	cspF	0.00	0.14	0.07	0.07
EG14243	cspG	0.00	0.00	0.00	0.04
EG14281	cspH	0.00	0.00	0.00	0.05
EG13877	cspI	0.00	0.00	0.00	0.00
EG11447	csrA	0.00	0.00	0.00	0.00
EG10018	csrD	0.00	0.00	0.05	0.00
EG10167	cstA	0.00	0.74	0.00	0.64
EG12318	cueO	0.00	0.89	0.00	0.86
EG13256	cueR	0.11	0.00	0.00	0.00
EG12367	cusA	0.00	1.00	0.00	0.92
EG14235	cusB	0.00	0.00	0.00	0.00
EG14233	cusC	0.41	0.67	0.20	0.63
EG14234	cusF	0.00	0.00	0.00	0.00
EG13851	cusR	0.54	0.00	0.22	0.00
EG13642	cusS	0.00	0.00	0.00	0.00
EG12177	cutA	0.00	1.08	0.00	0.97
EG12956	cutC	0.00	0.00	0.00	0.00
EG10169	cvpA	0.56	0.00	0.34	0.00
EG13896	cvrA	0.00	0.00	0.00	0.00
EG10170	cyaA	0.31	1.30	0.10	1.45

EG11653	cyaY	0.00	0.00	0.00	0.05
EG10172	cybB	1.36	0.80	1.15	0.96
EG12504	cycA	0.00	0.00	0.00	0.00
EG10173	cydA	0.00	0.04	0.00	0.07
EG10174	cydB	0.00	0.00	0.00	0.00
EG10012	cydC	0.00	0.00	0.00	0.00
EG11405	cydD	0.38	0.00	0.32	0.00
EG11421	cynR	0.00	0.89	0.00	0.75
EG10175	cynS	0.00	0.00	0.00	0.00
EG10176	cynT	0.00	1.27	0.00	1.65
EG10177	cynX	0.70	0.00	0.53	0.00
EG10178	cyoA	0.15	0.00	0.18	0.00
EG10179	cyoB	0.00	0.20	0.00	0.13
EG10180	cyoC	0.66	0.93	0.70	0.99
EG10181	cyoD	0.00	0.00	0.00	0.00
EG10182	cyoE	0.15	0.00	0.12	0.00
EG10183	cysA	0.00	0.00	0.00	0.00
EG10184	cysB	0.00	0.00	0.00	0.00
EG10185	cysC	0.00	0.00	0.00	0.00
EG10186	cysD	0.00	0.00	0.00	0.00
EG10187	cysE	0.00	0.00	0.00	0.00
EG10188	cysG	0.00	0.23	0.06	0.00
EG10189	cysH	0.00	0.00	0.00	0.00
EG10190	cysI	0.00	1.32	0.00	0.05
EG10191	cysJ	0.27	0.00	0.00	0.00
EG10192	cysK	0.00	0.21	0.00	0.13
EG10193	cysM	0.00	0.45	0.00	0.67
EG10194	cysN	0.00	0.83	0.00	0.04
EG10195	cysP	0.00	0.48	0.00	0.19
EG10043	cysQ	0.00	0.00	0.00	0.00
EG10196	cysS	0.00	0.00	0.00	0.14
EG10197	cysU	0.00	0.30	0.00	0.14
EG10198	cysW	0.36	0.13	0.21	0.12
EG10003	cysZ	0.00	0.06	0.00	0.05
EG10200	cytR	0.00	0.00	0.00	0.00
EG10201	dacA	0.00	0.00	0.00	0.00
EG10202	dacB	0.00	0.21	0.04	0.16
EG10203	dacC	0.00	0.00	0.00	0.00
EG11893	dacD	0.04	0.00	0.26	0.00
EG11407	dadA	0.00	0.00	0.00	0.00
EG11408	dadX	0.00	0.28	0.00	0.11
EG10204	dam	0.00	0.00	0.00	0.00
EG11183	damX	0.00	0.00	0.00	0.00
EG10205	dapA	0.00	1.25	0.00	1.79
EG10206	dapB	0.00	0.32	0.00	0.25
EG10207	dapD	0.00	0.00	0.00	0.00
EG10208	dapE	0.00	0.00	0.00	0.00
EG10209	dapF	1.36	0.36	1.24	0.28
EG10210	dbpA	0.00	1.16	0.00	0.94
EG11418	dcd	0.00	0.00	0.00	0.00
EG10211	dcm	0.00	0.90	0.00	1.19
EG10212	dcp	0.00	0.00	0.00	0.00
EG12218	dcrB	0.00	0.00	0.00	0.00
EG20044	dctA	0.56	0.00	0.47	0.00
EG11889	dctR	0.00	0.09	0.00	0.05
EG11225	dcuA	0.00	0.00	0.00	0.00
EG10006	dcuB	0.00	1.18	0.00	0.87
EG13545	dcuC	0.00	0.56	0.00	0.63

EG12818	dcuD	0.00	1.19	0.00	0.56
EG12464	dcuR	0.00	0.00	0.00	0.00
EG12465	dcuS	0.50	0.00	0.31	0.00
EG14038	dcyD	0.00	0.86	0.00	0.62
EG10213	ddlA	0.00	0.34	0.00	0.27
EG10214	ddlB	0.00	0.00	0.00	0.00
EG13790	ddpA	0.86	0.21	0.72	0.12
EG13789	ddpB	0.00	0.00	0.00	0.00
EG13788	ddpC	0.00	1.13	0.00	1.08
EG13787	ddpD	0.23	0.00	0.11	0.00
EG13786	ddpF	0.00	0.00	0.00	0.00
EG13791	ddpX	0.13	0.00	0.06	0.00
EG10215	deaD	0.00	0.26	0.00	0.16
EG10216	dedA	0.00	0.78	0.00	0.42
EG10218	dedD	0.00	0.00	0.00	0.00
EG11440	def	0.19	0.09	0.13	0.03
EG10463	degP	0.00	0.00	0.00	0.00
EG12612	degQ	0.00	0.00	0.00	0.00
EG11652	degS	0.22	0.09	0.10	0.08
EG10219	deoA	0.00	0.00	0.00	0.00
EG10220	deoB	0.98	0.08	0.91	0.09
EG10221	deoC	0.00	1.18	0.00	1.29
EG10222	deoD	0.00	0.15	0.00	0.05
EG10223	deoR	0.00	0.78	0.00	1.17
EG14207	der	0.00	0.00	0.00	0.00
EG10004	dfp	0.00	0.00	0.00	0.00
EG10224	dgkA	0.00	1.25	0.00	1.18
EG11716	dgoA	0.00	0.94	0.00	0.75
EG20050	dgoD	0.00	1.19	0.00	0.68
EG11717	dgoK	0.00	0.71	0.00	0.64
EG11718	dgoR	0.00	0.09	0.00	0.03
EG11715	dgoT	0.00	0.00	0.00	0.00
EG13156	dgsA	0.00	0.00	0.00	0.00
EG10225	dgt	0.00	1.28	0.00	0.97
EG13901	dhaK	0.00	0.35	0.02	0.22
EG13900	dhaL	0.00	0.00	0.00	0.00
EG12399	dhaM	0.00	1.16	0.00	0.96
EG13902	dhaR	0.00	0.00	0.00	0.00
EG12780	diaA	0.33	1.01	0.64	1.19
EG10226	dicA	0.00	0.54	0.00	0.58
EG10227	dicB	0.27	0.97	0.42	0.78
EG10228	dicC	0.00	0.00	0.00	0.00
EG13141	dinB	0.00	0.22	0.00	0.17
EG11193	dinD	0.00	0.81	0.00	0.67
EG11491	dinF	0.00	0.84	0.00	0.76
EG11357	dinG	0.00	1.23	0.00	1.13
EG12670	dinI	0.00	0.79	0.00	0.94
EG13142	dinJ	0.00	0.85	0.00	0.85
EG14431	dinQ	0.00	0.00	0.00	0.00
EG12178	dipZ	0.03	0.00	0.00	0.00
EG11570	djlA	0.00	0.00	0.00	0.00
EG13649	djlB	0.00	0.00	0.00	0.00
EG13652	djlC	0.00	0.00	0.00	0.00
EG13015	dkgA	0.00	0.00	0.00	0.00
EG11648	dkgB	0.05	0.00	0.04	0.01
EG10230	dksA	0.00	0.11	0.00	0.05
EG10231	dld	0.00	0.00	0.00	0.00
EG10232	dmsA	0.00	0.00	0.00	0.00

EG10233	dmsB	0.00	0.00	0.00	0.00
EG10234	dmsC	0.00	0.00	0.00	0.00
EG13847	dmsD	0.00	0.16	0.00	0.17
EG10235	dnaA	0.07	0.00	0.04	0.00
EG10236	dnaB	0.00	0.00	0.00	0.00
EG10237	dnaC	0.00	0.00	0.00	0.00
EG10238	dnaE	0.00	0.00	0.00	0.00
EG10239	dnaG	0.00	0.66	0.00	0.43
EG10240	dnaJ	0.78	0.00	0.56	0.00
EG10241	dnaK	0.00	0.00	0.00	0.00
EG10242	dnaN	0.38	1.33	0.83	1.52
EG10243	dnaQ	0.30	0.00	0.21	0.00
EG10244	dnaT	0.00	0.00	0.00	0.00
EG10245	dnaX	0.00	1.06	0.00	1.02
EG13792	dos	0.00	1.18	0.00	1.46
EG13544	dpiA	0.00	0.00	0.00	0.00
EG13646	dpiB	0.14	0.00	0.11	0.00
EG10248	dppA	0.00	0.00	0.00	0.00
EG12625	dppB	0.00	0.00	0.00	0.00
EG12626	dppC	0.00	0.00	0.00	0.00
EG12627	dppD	0.00	0.00	0.00	0.00
EG12628	dppF	0.00	0.28	0.00	0.41
EG11415	dps	0.00	0.00	0.00	0.00
EG11297	dsbA	1.32	0.94	0.98	1.54
EG11393	dsbB	0.00	0.00	0.00	0.00
EG11070	dsbC	0.00	1.09	0.00	0.05
EG13535	dsbG	0.00	0.28	0.00	0.17
EG10249	dsdA	0.00	0.00	0.00	0.00
EG13161	dsdC	0.00	0.00	0.00	0.00
EG10250	dsdX	0.00	0.00	0.00	0.00
EG12636	dsrB	0.00	0.00	0.00	0.00
EG11852	dtd	0.00	0.83	0.00	1.97
EG12232	dtpB	0.00	1.05	0.00	1.12
EG11932	dusA	0.00	0.00	0.00	0.00
EG11311	dusB	0.00	1.09	0.00	0.99
EG12022	dusC	0.00	0.00	0.00	0.00
EG10251	dut	0.00	0.00	0.00	0.00
EG12715	dxr	0.00	0.00	0.00	0.00
EG13612	dxs	0.00	0.09	0.02	0.56
EG11639	eamA	0.00	0.00	0.00	0.00
EG12445	eamB	0.00	0.00	0.00	0.00
EG10252	ebgA	0.00	1.27	0.06	0.90
EG10253	ebgC	0.21	0.00	0.14	0.00
EG10254	ebgR	0.00	0.44	0.00	0.44
EG14372	ecnA	0.00	0.86	0.00	0.53
EG14345	ecnB	0.00	0.00	0.00	0.00
EG10255	eco	0.00	1.49	0.00	1.64
EG11973	ecpD	1.14	0.00	1.29	0.00
EG10256	eda	0.00	0.00	0.00	0.00
EG10257	edd	0.00	0.47	0.00	0.35
EG11735	efeB	0.00	0.96	0.00	0.99
EG13861	efeO	0.00	1.31	0.00	1.50
EG12099	efp	0.11	0.00	0.07	0.00
EG13184	elaA	0.00	0.00	0.00	0.00
EG13185	elaB	0.00	0.68	0.00	0.49
EG14261	elaD	0.00	0.00	0.00	0.05
EG13885	elbA	1.15	0.00	0.00	0.00
EG11383	elbB	0.00	0.00	0.00	0.00

EG11354	emrA	0.00	0.00	0.00	0.00
EG11439	emrB	0.00	0.04	0.00	0.04
EG11693	emrD	0.00	0.83	0.00	0.58
EG10629	emrE	0.00	0.00	0.00	0.00
EG13282	emrK	0.00	0.22	0.00	0.04
EG13283	emrY	0.03	0.26	0.02	0.02
EG13897	emtA	0.00	1.36	0.00	1.52
EG11336	endA	0.84	0.00	0.77	0.00
EG10258	eno	0.66	0.36	0.36	0.19
EG10259	entA	0.00	0.00	0.00	0.00
EG10260	entB	0.00	0.00	0.00	0.00
EG10261	entC	0.00	0.00	0.00	0.00
EG10262	entD	0.53	0.72	0.30	0.41
EG10263	entE	0.00	0.00	0.00	0.00
EG10264	entF	0.00	0.00	0.00	0.00
EG11104	entS	0.00	0.00	0.00	0.00
EG12297	envC	0.00	0.00	0.00	0.00
EG11741	envR	0.27	0.11	0.21	0.09
EG10268	envY	0.00	0.00	0.00	0.00
EG10269	envZ	0.00	0.00	0.00	0.00
EG10368	epd	0.00	0.00	0.00	0.00
EG11613	eptA	0.00	0.00	0.00	0.00
EG12267	eptB	0.00	0.00	0.00	0.00
EG10270	era	0.00	0.00	0.00	0.00
EG12682	erfK	0.38	1.10	0.27	1.60
EG12332	erpA	0.00	0.00	0.00	0.00
EG13634	essD	0.00	0.00	0.00	0.00
EG13831	essQ	0.00	0.05	0.00	0.05
EG11826	etk	0.00	0.00	0.00	0.00
EG13727	etp	0.00	0.00	0.00	0.00
EG14181	eutA	0.00	0.00	0.00	0.00
EG50006	eutB	0.00	0.00	0.00	0.00
EG50007	eutC	0.00	0.19	0.00	0.00
EG14188	eutD	0.00	0.00	0.00	0.00
EG14185	eutE	0.00	0.00	0.00	0.00
EG14183	eutG	0.00	0.00	0.00	0.00
EG14182	eutH	0.00	0.00	0.00	0.00
EG14184	eutJ	0.00	0.09	0.00	0.05
EG14170	eutK	0.00	0.00	0.00	0.00
EG14171	eutL	0.00	0.00	0.00	0.00
EG14187	eutM	0.00	0.00	0.00	0.00
EG14186	eutN	0.00	0.00	0.00	0.00
EG14191	eutP	0.00	0.00	0.00	0.00
EG14190	eutQ	0.00	0.00	0.00	0.00
EG12190	eutR	0.00	0.00	0.00	0.00
EG14192	eutS	0.00	0.00	0.00	0.00
EG14189	eutT	0.00	1.12	0.00	1.04
EG11609	evgA	0.00	0.00	0.00	0.00
EG11610	evgS	0.00	0.00	0.00	0.00
EG10271	exbB	0.55	1.15	0.32	1.16
EG10272	exbD	0.00	0.00	0.00	0.00
EG14031	exoX	0.00	1.25	0.00	1.31
EG12739	exuR	0.00	0.34	0.00	0.26
EG12738	exuT	0.00	0.00	0.00	0.00
EG10273	fabA	0.00	0.21	0.00	0.31
EG10274	fabB	0.00	0.00	0.00	0.00
EG11317	fabD	0.00	0.00	0.00	0.00
EG12606	fabF	0.00	0.00	0.00	0.00

EG11318	fabG	0.38	0.00	0.25	0.50
EG10277	fabH	0.00	0.00	0.00	0.00
EG11528	fabI	0.00	1.34	0.00	1.36
EG11394	fabR	0.00	0.00	0.00	0.00
EG11284	fabZ	0.00	0.15	0.00	0.00
EG10278	fadA	0.00	1.21	0.00	1.09
EG10279	fadB	0.00	0.14	0.00	0.00
EG11530	fadD	0.00	0.41	0.00	0.20
EG13145	fadE	0.66	0.61	0.49	0.69
EG12723	fadH	0.00	0.00	0.03	0.00
EG14128	fadI	0.00	0.00	0.00	0.00
EG14127	fadJ	0.00	0.00	0.00	0.00
EG12357	fadK	0.00	1.44	0.00	1.62
EG10280	fadL	0.00	0.00	0.00	0.00
EG10281	fadR	1.13	0.00	0.82	0.00
EG10282	fbaA	0.00	0.00	0.00	0.00
EG14062	fbaB	0.00	0.02	0.00	0.02
EG10283	fbp	0.00	1.29	0.03	1.17
EG11788	fcl	0.00	0.00	0.00	0.00
EG11859	fdhD	0.00	0.00	0.00	0.00
EG10284	fdhE	1.25	0.00	1.12	0.00
EG10285	fdhF	0.29	0.00	0.00	0.00
EG11227	fdnG	0.00	0.68	0.00	0.28
EG11228	fdnH	0.00	0.83	0.00	0.81
EG11229	fdnI	0.00	0.87	0.00	1.08
EG11858	fdoG	0.00	0.92	0.00	0.88
EG11857	fdoH	0.00	1.23	0.33	1.01
EG11856	fdoI	0.00	1.45	0.00	1.25
EG13399	fdrA	0.00	0.21	0.00	0.08
EG11328	fdx	0.00	0.00	0.00	0.00
EG13179	feaB	0.00	0.88	0.00	0.55
EG13422	feaR	1.03	0.70	0.65	0.72
EG10286	fecA	0.00	0.90	0.00	0.95
EG10287	fecB	0.36	0.00	0.16	0.04
EG10288	fecC	0.00	0.00	0.00	0.00
EG10289	fecD	0.00	0.00	0.00	0.00
EG10290	fecE	0.00	0.00	0.00	0.00
EG10291	fecI	0.08	0.00	0.03	0.00
EG10292	fecR	0.00	0.00	0.00	0.00
EG12101	feoA	0.00	0.00	0.00	0.00
EG12102	feoB	0.00	0.00	0.00	0.00
EG12933	feoC	0.00	0.00	0.00	0.00
EG10293	fepA	0.00	1.49	0.00	1.48
EG10294	fepB	1.24	0.00	1.22	0.00
EG10295	fepC	0.00	0.00	0.00	0.00
EG10296	fepD	0.00	0.53	0.00	0.34
EG10297	fepE	0.00	0.00	0.00	0.00
EG10298	fepG	0.00	0.00	0.00	0.00
EG10299	fes	0.00	0.00	0.00	0.00
EG10300	ffh	1.23	0.39	1.23	0.28
EG10301	fhlA	0.00	1.09	0.00	0.91
EG10302	fhuA	0.00	0.00	0.00	0.00
EG10303	fhuB	0.00	0.00	0.00	0.00
EG10304	fhuC	0.51	1.41	0.36	1.41
EG10305	fhuD	0.00	0.00	0.00	0.00
EG10306	fhuE	0.00	0.00	0.00	0.00
EG12595	fhuF	1.48	0.00	1.51	0.00
EG10307	fic	0.00	0.00	0.00	0.00

EG11873	fieF	0.00	0.00	0.00	0.00
EG10308	fimA	0.60	0.06	0.27	0.03
EG10309	fimB	0.00	0.31	0.00	0.26
EG10310	fimC	0.22	0.00	0.16	0.00
EG10311	fimD	0.00	0.00	0.00	0.00
EG10312	fimE	0.00	0.00	0.00	0.00
EG10313	fimF	0.00	0.00	0.08	0.00
EG10314	fimG	0.00	0.00	0.00	0.00
EG10315	fimH	0.00	1.36	0.00	1.34
EG11974	fimI	0.00	0.00	0.00	0.00
EG11103	fimZ	0.00	0.00	0.00	0.00
EG10317	fis	0.00	1.11	0.00	2.78
EG13317	fiu	0.59	0.00	0.45	0.00
EG11562	fixA	0.97	1.31	0.05	1.46
EG11563	fixB	1.32	1.31	1.08	1.17
EG11564	fixC	0.00	0.14	0.00	0.03
EG11565	fixX	0.00	0.00	0.00	0.00
EG12503	fklB	0.00	0.24	0.00	0.04
EG12900	fkpA	0.00	0.20	0.00	0.17
EG11080	fkpB	0.00	0.49	0.00	0.22
EG10318	fldA	0.00	0.60	0.00	0.74
EG12697	fldB	0.00	0.00	0.00	0.00
EG20263	flgA	0.00	0.46	0.00	0.26
EG14266	flgB	0.00	0.45	0.00	0.26
EG14267	flgC	0.50	0.09	0.43	0.08
EG14268	flgD	0.45	0.58	0.31	0.45
EG14269	flgE	0.00	1.24	0.00	1.80
EG14270	flgF	0.00	0.00	0.00	0.00
EG14271	flgG	0.00	1.37	0.00	1.27
EG20264	flgH	0.00	1.06	0.00	1.52
EG20265	flgI	0.00	0.00	0.00	0.00
EG14272	flgJ	0.00	0.00	0.00	0.00
EG11967	flgK	0.00	0.00	0.00	0.00
EG11545	flgL	0.00	0.13	0.00	0.06
EG12664	flgM	0.08	0.52	0.07	0.43
EG12665	flgN	0.35	0.51	0.22	0.36
EG14273	flhA	0.00	0.00	0.00	0.00
EG14035	flhB	0.00	0.00	0.00	0.00
EG10319	flhC	0.00	0.00	0.00	0.00
EG10320	flhD	0.00	0.00	0.00	0.00
EG14013	flhE	0.00	0.00	0.00	0.00
EG11355	fliA	0.26	0.33	0.13	0.17
EG10321	fliC	0.48	0.61	0.36	0.40
EG10841	fliD	0.00	0.96	0.00	1.20
EG11346	fliE	0.00	0.68	0.00	0.57
EG11347	fliF	0.00	0.61	0.00	0.46
EG11654	fliG	0.00	0.25	0.00	0.15
EG11656	fliH	0.00	0.00	0.00	0.00
EG20266	fliI	0.00	0.00	0.00	0.00
EG20267	fliJ	0.00	0.00	0.00	0.00
EG20268	fliK	0.00	0.00	0.00	0.00
EG10322	fliL	0.00	0.83	0.00	0.64
EG10323	fliM	0.65	0.26	0.59	0.25
EG10324	fliN	0.00	1.28	0.03	1.96
EG11224	fliO	0.00	0.38	0.00	0.33
EG11975	fliP	0.00	0.00	0.00	0.00
EG11976	fliQ	0.00	0.00	0.00	0.00
EG11977	fliR	0.00	0.00	0.00	0.00

EG11388	fliS	0.00	0.38	0.00	0.40
EG11389	fliT	0.00	0.76	0.03	0.49
EG12680	fliY	0.00	0.00	0.00	0.00
EG11356	fliZ	0.52	0.56	0.26	0.35
EG10229	flk	0.00	0.00	0.00	0.00
EG12686	flu	0.00	0.00	0.00	0.00
EG13429	flxA	1.31	0.14	1.21	0.15
EG11268	fmt	0.00	0.00	0.00	0.00
EG10325	fnr	0.73	0.00	0.49	0.00
EG11258	focA	0.00	0.00	0.00	0.00
EG14220	focB	0.00	0.00	0.00	0.00
EG10326	folA	0.00	0.27	0.00	0.03
EG11673	folB	0.00	0.00	0.00	0.00
EG10327	folC	0.00	0.00	0.00	0.00
EG10328	folD	0.00	0.00	0.00	0.00
EG11375	folE	0.00	0.00	0.00	0.00
EG11374	folK	0.00	0.38	0.00	0.03
EG13189	folM	0.00	0.44	0.00	0.45
EG50011	folP	0.00	0.00	0.00	0.00
EG14263	folX	0.00	0.00	0.00	0.00
EG11518	fpr	0.00	0.00	0.00	0.00
EG14145	frc	0.00	1.44	0.00	1.29
EG10330	frdA	0.00	0.00	0.00	0.00
EG10331	frdB	0.00	0.00	0.00	0.00
EG10332	frdC	0.00	1.16	0.00	1.08
EG10333	frdD	0.09	1.26	0.11	1.11
EG10334	fre	0.00	0.66	0.00	0.32
EG12908	frlA	0.00	0.60	0.00	0.24
EG12909	frlB	0.00	1.43	0.00	1.33
EG12910	frlC	0.00	0.00	0.00	0.00
EG12912	frlD	0.00	0.62	0.00	0.00
EG12913	frlR	0.00	1.32	0.00	1.40
EG50010	frmA	0.45	1.05	0.33	0.91
EG13295	frmB	0.70	0.36	0.04	0.26
EG13296	frmR	0.00	1.21	0.00	1.18
EG10335	frr	0.00	0.02	0.00	0.00
EG11091	frsA	0.11	1.10	0.08	1.15
EG10336	fruA	0.44	0.43	0.28	0.30
EG10005	fruB	0.00	0.00	0.00	0.00
EG10337	fruK	0.00	0.54	0.00	0.76
EG10338	fruR	0.00	0.00	0.00	0.00
EG11864	frvA	0.00	0.00	0.00	0.00
EG11863	frvB	0.00	0.00	0.00	0.00
EG11861	frvR	0.00	1.24	0.00	0.93
EG11862	frvX	0.00	0.00	0.00	0.00
EG11909	frwB	0.00	0.00	0.00	0.00
EG11908	frwC	0.00	0.52	0.00	0.34
EG11912	frwD	0.00	0.00	0.00	0.00
EG14151	fryA	0.00	0.00	0.00	0.00
EG14155	fryB	0.00	0.00	0.00	0.00
EG14154	fryC	0.00	0.12	0.00	0.00
EG13471	fsaA	0.00	0.00	0.00	0.00
EG11905	fsaB	0.00	1.27	0.00	1.24
EG13268	fsr	0.00	0.00	0.00	0.00
EG10921	ftnA	1.25	0.00	1.24	0.00
EG13175	ftnB	0.00	0.00	0.00	0.00
EG10339	ftsA	0.00	0.00	0.00	0.00
EG13111	ftsB	0.00	0.00	0.00	0.00

EG10340	ftsE	0.00	0.00	0.00	0.00
EG10341	ftsI	0.00	0.00	0.00	0.00
EG13226	ftsK	0.00	0.00	0.00	0.00
EG11086	ftsL	0.00	0.00	0.00	0.04
EG11529	ftsN	0.00	0.40	0.00	0.13
EG11376	ftsP	0.00	0.00	0.00	0.00
EG10342	ftsQ	0.00	0.66	0.00	0.37
EG10344	ftsW	0.00	0.53	0.00	1.17
EG10345	ftsX	0.00	0.00	0.00	0.00
EG10346	ftsY	0.00	0.00	0.00	0.00
EG10347	ftsZ	0.00	0.00	0.00	0.00
EG10348	fucA	0.00	0.91	0.00	0.77
EG10349	fucI	0.00	1.16	0.00	0.87
EG10350	fucK	0.54	1.20	0.23	1.12
EG10351	fucO	0.00	0.30	0.00	0.14
EG10352	fucP	0.00	0.00	0.00	0.00
EG10353	fucR	0.00	0.00	0.00	0.00
EG10355	fucU	0.00	0.00	0.00	0.00
EG10356	fumA	1.59	0.52	1.49	0.52
EG10357	fumB	0.00	0.83	0.00	0.88
EG10358	fumC	0.00	0.00	0.00	0.00
EG10359	fur	0.06	0.00	0.03	0.00
EG10360	fusA	0.00	0.00	0.00	0.00
EG12382	fxsA	0.00	0.46	0.00	0.42
EG11329	gabD	0.00	0.00	0.00	0.00
EG11330	gabP	0.00	0.00	0.00	0.00
EG10361	gabT	0.00	0.76	0.00	0.46
EG50009	gadA	0.89	0.88	1.05	0.80
EG11490	gadB	0.00	0.00	0.00	0.00
EG12456	gadC	0.00	0.42	0.00	0.32
EG11544	gadE	0.00	0.00	0.00	0.00
EG12242	gadW	0.00	1.08	0.00	0.98
EG12243	gadX	0.05	0.12	0.02	0.00
EG10362	galE	0.13	0.00	0.09	0.00
EG13578	galF	0.00	0.00	0.00	0.00
EG10363	galK	0.00	1.12	0.00	1.37
EG11698	galM	0.00	0.00	0.00	0.00
EG12148	galP	0.00	0.46	0.00	0.12
EG10364	galR	0.00	1.28	0.00	1.27
EG10365	galS	0.00	0.68	0.00	0.67
EG10366	galT	0.00	0.88	0.00	0.94
EG11319	galU	0.00	0.00	0.00	0.00
EG10367	gapA	0.00	0.24	0.00	0.20
EG12522	garD	0.00	0.85	0.00	0.93
EG11175	garK	0.00	1.25	0.00	0.94
EG10016	garL	0.00	0.00	0.00	0.00
EG12760	garP	0.00	0.00	0.00	0.00
EG11176	garR	0.00	0.00	0.00	0.00
EG12414	gatA	0.00	0.73	0.00	0.59
EG12415	gatB	0.00	0.57	0.00	0.35
EG12416	gatC	0.48	0.00	0.34	0.00
EG12417	gatD	0.00	0.00	0.00	0.00
EG12419	gatY	0.00	1.22	0.00	0.82
EG12418	gatZ	0.00	1.01	0.00	0.83
EG10369	gcd	1.32	0.00	1.22	0.04
EG11583	gcl	0.00	0.00	0.00	0.00
EG11795	gcvA	0.00	0.00	0.00	0.00
EG10371	gcvH	0.00	0.00	0.00	0.00

EG11810	gcvP	0.00	0.00	0.04	0.00
EG11149	gcvR	0.00	0.00	0.00	0.00
EG11442	gcvT	0.00	0.00	0.00	0.00
EG10372	gdhA	0.00	0.00	0.00	0.00
EG13732	gfcA	0.00	0.00	0.00	0.00
EG13731	gfcB	0.00	1.08	0.00	1.29
EG13730	gfcC	0.00	0.00	0.00	0.00
EG13729	gfcD	0.00	1.14	0.00	1.04
EG13728	gfcE	0.98	0.00	0.73	0.00
EG10374	ggt	0.00	1.48	0.00	1.78
EG13869	ghrA	0.00	0.00	0.00	0.03
EG12272	ghrB	0.00	0.45	0.00	0.00
EG10376	gidB	0.00	0.00	0.00	0.00
EG12995	glcA	0.00	0.77	0.00	0.41
EG20080	glcB	0.00	0.19	0.00	0.13
EG12998	glcC	0.00	0.00	0.00	0.00
EG12997	glcD	0.00	0.00	0.00	0.00
EG12996	glcE	0.00	0.00	0.00	0.00
EG13291	glcF	0.00	0.99	0.00	0.87
EG12952	glcG	0.00	0.94	0.00	0.81
EG11904	gldA	0.00	1.44	0.00	1.14
EG11981	glf	0.00	0.55	0.00	0.47
EG10377	glgA	0.00	0.00	0.00	0.00
EG10378	glgB	0.00	0.11	0.00	0.00
EG10379	glgC	0.00	0.38	0.00	0.10
EG10380	glgP	1.48	0.41	1.23	1.29
EG11381	glgS	0.00	0.35	0.00	0.27
EG10381	glgX	0.00	0.00	0.00	0.00
EG12957	glk	0.00	0.46	0.00	0.00
EG11553	glmM	0.00	0.00	0.00	0.00
EG10382	glmS	0.00	0.00	0.00	0.00
EG11198	glmU	0.00	0.00	0.00	0.07
EG10383	glnA	0.38	1.23	0.00	1.14
EG10384	glnB	0.00	0.00	0.00	0.00
EG11411	glnD	0.00	1.28	0.00	1.01
EG11602	glnE	0.00	0.27	0.00	0.00
EG10385	glnG	0.00	1.29	0.00	1.25
EG10386	glnH	0.00	0.54	0.00	0.30
EG12191	glnK	0.00	0.00	0.00	0.00
EG10387	glnL	0.00	0.00	0.00	0.00
EG10388	glnP	0.00	0.00	0.00	0.00
EG10389	glnQ	0.00	0.00	0.00	0.07
EG10390	glnS	0.00	0.00	0.00	0.06
EG13421	gloA	1.30	0.00	1.15	0.00
EG13330	gloB	0.58	0.75	0.60	0.90
EG10391	glpA	0.00	0.16	0.00	0.09
EG10392	glpB	0.00	0.00	0.00	0.00
EG10393	glpC	0.00	0.00	0.00	0.00
EG10394	glpD	0.39	1.34	0.00	1.18
EG10395	glpE	0.00	0.00	0.00	0.00
EG10396	glpF	1.34	1.02	1.33	0.67
EG10397	glpG	0.64	0.69	1.18	1.98
EG10398	glpK	0.00	0.62	0.00	0.11
EG10399	glpQ	0.09	0.22	0.05	0.13
EG10400	glpR	0.00	0.00	0.00	0.00
EG10401	glpT	1.53	0.00	1.21	0.15
EG11517	glpX	0.00	0.00	0.00	0.00
EG10402	gltA	0.11	0.00	0.15	0.00

EG10403	gltB	0.00	1.12	0.00	0.97
EG10404	gltD	0.00	0.00	0.00	0.00
EG11514	gltF	0.00	0.00	0.00	0.00
EG12700	gltI	0.00	0.00	0.00	0.00
EG12661	gltJ	0.00	0.04	0.00	0.04
EG12662	gltK	0.00	0.00	0.00	0.00
EG12663	gltL	0.00	0.00	0.00	0.07
EG10405	gltP	0.00	0.33	0.00	0.31
EG10406	gltS	0.00	0.00	0.00	0.00
EG10407	gltX	0.19	0.12	0.18	0.05
EG13621	glxK	0.00	0.00	0.00	0.00
EG13265	glxR	0.00	0.00	0.00	0.00
EG10408	glyA	0.00	0.04	0.00	0.00
EG10409	glyQ	0.00	0.06	0.00	0.21
EG10410	glyS	0.00	0.13	0.00	0.25
EG11787	gmd	0.17	1.03	0.07	0.59
EG11736	gmhB	1.06	0.34	1.03	0.15
EG10965	gmk	1.31	0.12	1.33	0.23
EG11789	gmm	0.00	0.00	0.00	0.00
EG13415	gmr	0.00	0.00	0.04	0.00
EG10411	gnd	0.00	0.00	0.00	0.00
EG13233	gnsA	0.00	0.00	0.00	0.00
EG13837	gnsB	0.22	0.00	0.06	0.00
EG12629	gntK	0.00	1.15	0.00	1.00
EG12563	gntP	0.00	0.00	0.00	0.00
EG12630	gntR	0.00	0.00	0.00	0.00
EG12380	gntT	0.00	0.00	0.03	0.00
EG12631	gntU	0.00	0.00	0.00	0.00
EG12934	gntX	0.00	1.06	0.00	0.74
EG10412	gor	0.00	0.38	0.00	0.33
EG11871	gph	0.00	0.00	0.17	0.00
EG11699	gpmA	0.00	0.95	0.11	0.63
EG12296	gpmM	0.00	0.00	0.00	0.00
EG10413	gpp	0.00	1.22	0.00	1.09
EG20091	gpsA	0.00	0.00	0.00	0.00
EG10414	gpt	0.31	1.05	0.30	0.97
EG10415	greA	0.00	0.00	0.00	0.25
EG11578	greB	0.00	0.00	0.00	0.00
EG10599	groL	0.00	0.00	0.00	0.00
EG10600	groS	0.95	0.27	0.64	0.19
EG10416	grpE	0.80	0.00	0.29	0.00
EG10417	grxA	0.00	1.26	0.00	1.25
EG12688	grxB	0.00	0.00	0.00	0.04
EG12294	grxC	0.73	0.00	0.39	0.00
EG12181	grxD	0.00	0.00	0.00	0.03
EG10418	gshA	0.00	0.00	0.00	0.00
EG10419	gshB	0.00	0.34	0.00	0.10
EG13472	gsiA	0.00	0.00	0.00	0.00
EG13473	gsiB	0.00	0.00	0.00	0.00
EG13474	gsiC	0.00	1.30	0.00	1.25
EG13475	gsiD	0.00	0.00	0.00	0.00
EG11102	gsk	0.00	0.16	0.00	0.20
EG12882	gsp	0.00	0.00	0.00	0.00
EG12888	gspA	0.00	0.00	0.00	0.00
EG11263	gspB	0.00	0.86	0.00	0.53
EG12889	gspC	0.34	0.66	0.27	1.14
EG12890	gspD	0.00	1.26	0.04	0.87
EG12891	gspE	1.34	0.00	1.13	0.00

EG12885	gspF	0.00	0.00	0.00	0.00
EG12886	gspG	1.33	0.00	1.38	0.00
EG12887	gspH	0.00	0.00	0.33	0.00
EG12892	gspI	0.00	1.29	0.00	1.15
EG12893	gspJ	0.00	0.00	0.00	0.00
EG12894	gspK	0.00	1.39	0.00	1.19
EG12895	gspL	0.97	0.00	0.61	0.00
EG12173	gspM	0.00	0.00	0.00	0.00
EG11359	gspO	0.00	0.62	0.00	0.56
EG12613	gst	0.00	0.00	0.00	0.00
EG10420	guaA	0.00	0.08	0.00	0.04
EG10421	guaB	0.10	0.24	0.04	0.04
EG10422	guaC	0.00	0.31	0.00	0.44
EG13066	guaD	0.00	0.00	0.00	0.00
EG13167	gudD	0.00	0.00	0.00	0.00
EG13169	gudP	0.00	1.08	0.00	1.07
EG13168	gudX	0.00	1.29	0.00	1.34
EG10972	gutM	0.00	0.00	0.00	0.00
EG10973	gutQ	0.00	0.72	0.00	0.45
EG10423	gyrA	0.00	0.00	0.00	0.00
EG10424	gyrB	0.87	0.00	2.19	0.00
EG13459	hcaB	0.00	0.00	0.00	0.00
EG13458	hcaC	0.00	0.00	0.00	0.00
EG13460	hcaD	0.00	0.00	0.00	0.00
EG13456	hcaE	0.00	0.00	0.00	0.00
EG13457	hcaF	0.00	0.85	0.00	0.86
EG13455	hcaR	0.00	0.00	0.00	0.00
EG13454	hcaT	0.00	0.53	0.00	0.36
EG11755	hchA	0.00	0.22	0.00	0.18
EG13692	hcp	0.00	1.55	0.00	1.73
EG13691	hcr	0.00	1.40	0.00	1.12
EG14201	hda	0.00	0.38	0.00	0.17
EG11398	hdeA	0.18	0.00	0.06	0.00
EG11399	hdeB	0.00	0.95	0.00	2.23
EG11495	hdeD	0.00	0.20	0.00	0.00
EG11449	hdfR	0.00	1.51	0.00	2.29
EG10425	hdhA	0.17	0.65	0.14	0.35
EG10426	helD	0.00	0.93	0.00	0.68
EG10427	hemA	0.82	0.47	0.68	0.37
EG10428	hemB	0.00	0.00	0.00	0.00
EG10429	hemC	0.09	0.00	0.05	0.00
EG10430	hemD	0.00	0.00	0.00	0.00
EG11543	hemE	0.00	0.52	0.00	0.86
EG12189	hemF	1.27	1.22	1.32	0.99
EG11485	hemG	0.00	0.68	0.00	0.35
EG10431	hemH	0.00	0.00	0.00	0.00
EG10432	hemL	0.00	0.04	0.03	0.03
EG11836	hemN	0.00	1.43	0.00	1.19
EG10433	hemX	0.00	0.73	0.00	0.34
EG10434	hemY	0.00	0.00	0.00	0.00
EG11083	hepA	1.32	1.16	1.22	1.07
EG11506	hflB	0.00	0.00	0.00	0.00
EG10435	hflC	0.08	1.56	0.08	1.09
EG11345	hflD	0.00	0.03	0.00	0.03
EG10436	hflK	0.00	0.00	0.00	0.00
EG10437	hflX	0.32	0.26	0.20	0.16
EG10438	hfq	0.00	0.00	0.00	0.00
EG10439	hha	0.00	0.00	0.00	0.00

EG12172	hinT	0.00	0.00	0.00	0.00
EG10443	hipA	0.00	1.11	0.00	1.09
EG10442	hipB	0.00	0.00	0.00	0.00
EG10444	hisA	0.00	0.00	0.00	0.00
EG10445	hisB	0.00	1.23	0.00	0.02
EG10446	hisC	0.00	0.39	0.00	0.26
EG10447	hisD	0.07	0.00	0.06	0.00
EG10448	hisF	0.00	0.00	0.00	0.00
EG10449	hisG	0.00	0.00	0.00	0.00
EG10450	hisH	0.00	0.00	0.00	0.00
EG10451	hisI	0.00	0.00	0.00	0.00
EG12124	hisJ	0.00	0.00	0.00	0.00
EG11269	hisL	0.17	0.66	0.10	0.05
EG10007	hisM	0.00	0.00	0.00	0.00
EG10452	hisP	0.08	0.71	0.03	0.76
EG12125	hisQ	0.00	0.00	0.00	0.00
EG10453	hisS	0.00	0.00	0.00	0.00
EG13243	hlyE	0.00	0.00	0.00	0.00
EG10456	hmp	0.00	0.82	0.00	0.71
EG10457	hns	0.43	0.41	0.07	0.01
EG12106	hofB	0.00	0.00	0.00	0.00
EG11798	hofC	0.00	0.00	0.00	0.00
EG12925	hofM	0.00	0.00	0.00	0.05
EG12924	hofN	0.00	0.00	0.00	0.00
EG12923	hofO	0.00	0.00	0.00	0.00
EG12922	hofP	0.00	0.00	0.00	0.00
EG12113	hofQ	0.00	0.00	0.00	0.00
EG12346	hokA	0.00	1.29	0.00	0.68
EG11240	hokB	0.00	0.00	0.00	0.00
EG10373	hokC	0.00	1.32	0.00	1.27
EG11130	hokD	0.00	0.00	0.00	0.00
EG14302	hokE	0.00	0.00	0.00	0.00
EG11412	holA	0.00	0.00	0.00	0.00
EG11500	holB	0.00	0.00	0.00	0.00
EG11413	holC	0.00	0.79	0.00	0.80
EG11414	holD	0.00	0.00	0.00	0.00
EG11505	holE	0.00	0.00	0.00	0.13
EG11681	hpf	0.00	0.00	0.00	0.00
EG20098	hpt	0.00	0.00	0.00	0.00
EG12936	hrpA	1.21	1.28	1.17	1.25
EG12329	hrpB	0.00	1.38	0.03	1.27
EG12130	hscA	0.57	0.29	0.44	0.12
EG12131	hscB	0.14	0.29	0.03	0.14
EG13653	hscC	0.26	0.00	0.74	0.00
EG10458	hsdM	0.00	0.00	0.00	0.00
EG10459	hsdR	0.00	0.00	0.00	0.16
EG10460	hsdS	0.00	0.00	0.00	0.00
EG13181	hslJ	0.81	0.53	0.79	0.31
EG12930	hslO	1.24	1.08	0.98	1.33
EG12929	hslR	0.00	0.00	0.00	0.00
EG11881	hslU	0.55	0.00	0.14	0.00
EG11676	hslV	0.00	1.42	0.00	1.23
EG13724	hspQ	0.00	0.51	0.00	0.38
EG11732	hsrA	0.00	0.00	0.00	0.00
EG10461	htpG	0.05	0.51	0.04	0.50
EG10462	htpX	0.00	0.85	0.06	0.87
EG11972	htrE	0.00	1.32	0.00	1.38
EG12434	htrG	0.99	0.10	0.73	0.05

EG11188	htrL	0.21	0.52	0.37	1.29
EG10466	hupA	0.13	1.30	0.15	1.55
EG10467	hupB	0.00	1.24	0.00	1.02
EG10468	hyaA	0.00	0.00	0.00	0.00
EG10469	hyaB	0.00	0.00	0.00	0.00
EG10470	hyaC	0.00	0.00	0.00	0.00
EG10471	hyaD	0.00	0.00	0.00	0.00
EG10472	hyaE	0.00	0.00	0.00	0.00
EG10473	hyaF	0.00	0.00	0.00	0.11
EG11799	hybA	0.00	0.00	0.00	0.00
EG11800	hybB	0.00	0.00	0.00	0.00
EG11801	hybC	0.00	0.41	0.00	0.29
EG11802	hybD	0.00	0.57	0.00	0.41
EG11803	hybE	0.00	0.00	0.00	0.00
EG11804	hybF	0.00	1.14	0.00	1.30
EG11805	hybG	0.00	0.00	0.00	0.00
EG13006	hybO	0.00	0.00	0.00	0.00
EG10474	hycA	0.00	0.00	0.00	0.00
EG10475	hycB	0.00	0.16	0.00	0.07
EG10476	hycC	0.00	0.67	0.00	0.57
EG10477	hycD	0.00	0.43	0.00	0.28
EG10478	hycE	0.10	0.28	0.05	0.17
EG10479	hycF	0.00	1.02	0.00	1.28
EG10480	hycG	0.00	0.00	0.00	0.00
EG10481	hycH	1.41	0.00	2.00	0.00
EG13396	hycI	0.00	0.00	0.00	0.00
EG11552	hydN	0.00	0.20	0.00	0.14
EG11150	hyfA	0.55	0.00	0.00	0.00
EG11282	hyfB	0.00	0.00	0.00	0.00
EG14211	hyfC	0.95	0.00	0.77	0.00
EG14212	hyfD	0.00	0.00	0.00	0.00
EG14213	hyfE	0.00	0.00	0.00	0.00
EG14214	hyfF	0.00	0.00	0.00	0.00
EG14215	hyfG	0.00	0.00	0.00	0.08
EG14216	hyfH	0.00	1.34	0.00	1.50
EG14217	hyfI	0.00	0.00	0.00	0.00
EG14218	hyfJ	0.00	1.19	0.00	0.90
EG14219	hyfR	0.41	0.00	0.46	0.00
EG11584	hyi	0.00	0.00	0.00	0.02
EG10483	hypA	0.00	0.88	0.00	0.88
EG10484	hypB	0.00	0.00	0.00	0.00
EG10485	hypC	0.00	0.00	0.00	0.00
EG10486	hypD	0.00	1.12	0.00	0.94
EG10487	hypE	0.00	0.54	0.00	0.40
EG11551	hypF	0.00	0.00	0.00	0.00
EG13056	hyuA	0.00	1.05	0.00	0.80
EG12407	iaaA	0.00	0.00	0.00	0.00
EG12567	iadA	0.00	0.00	0.00	0.00
EG10488	iap	0.00	0.00	0.00	0.15
EG11534	ibpA	0.00	1.46	0.03	1.10
EG11535	ibpB	0.00	0.00	0.00	0.00
EG10489	icd	0.00	0.00	0.00	0.00
EG10491	iclR	0.97	1.20	0.64	1.12
EG13072	idi	0.00	0.00	0.00	0.00
EG12541	idnD	0.00	1.25	0.00	1.12
EG12152	idnK	0.00	0.00	0.00	0.00
EG12540	idnO	0.67	0.00	0.51	0.00
EG12538	idnR	0.00	0.00	0.00	0.00

EG12539	idnT	0.00	0.00	0.00	0.05
EG10440	ihfA	0.00	0.21	0.00	0.14
EG10441	ihfB	0.83	1.77	0.64	1.41
EG10492	ileS	0.16	0.00	0.11	0.00
EG10493	ilvA	0.00	0.00	0.00	0.00
EG10494	ilvB	0.00	0.00	0.00	0.00
EG10495	ilvC	0.26	0.00	0.00	0.00
EG10496	ilvD	0.00	0.00	0.00	0.00
EG10497	ilvE	0.00	0.00	0.00	0.00
EG10499	ilvH	0.00	0.00	0.00	0.00
EG10500	ilvI	0.00	0.00	0.00	0.00
EG11270	ilvL	0.00	0.00	0.41	0.00
EG10501	ilvM	0.85	1.39	1.20	1.58
EG10502	ilvN	0.00	0.67	0.00	0.75
EG10503	ilvY	0.31	1.03	0.02	0.79
EG11569	imp	0.00	0.00	0.00	0.00
EG11422	inaA	0.00	0.00	0.00	0.00
EG10504	infA	0.00	0.00	0.00	0.00
EG10505	infB	0.00	0.19	0.00	0.11
EG10506	infC	0.00	0.00	0.00	0.00
EG11783	intA	0.00	0.00	0.00	0.00
EG10507	intD	0.00	0.09	0.00	0.07
EG12370	intE	0.00	0.00	0.00	0.00
EG13554	intF	0.00	0.00	0.00	0.00
EG13358	intR	0.00	0.00	0.00	0.00
EG12413	intS	0.00	0.44	0.00	0.19
EG14172	intZ	0.00	0.00	0.00	0.00
EG11256	iraP	0.00	0.00	0.00	0.00
EG12132	iscA	0.00	0.00	0.00	0.00
EG13397	iscR	0.00	0.33	0.00	0.00
EG12677	iscS	0.19	0.28	0.24	0.04
EG13395	iscU	0.00	1.00	0.24	1.16
EG12311	iscX	0.00	0.00	0.00	0.00
EG10508	ispA	0.00	0.00	0.00	0.00
EG10017	ispB	0.00	0.32	0.00	0.36
EG13110	ispD	0.00	0.00	0.00	0.00
EG11294	ispE	0.00	0.05	0.00	0.07
EG11816	ispF	0.00	0.00	0.00	0.00
EG10370	ispG	0.00	0.00	0.00	0.00
EG11081	ispH	0.00	0.00	0.00	0.00
EG13329	ispU	0.00	0.20	0.00	0.10
EG11275	ivbL	0.97	0.69	0.60	0.10
EG13547	ivy	0.00	0.00	0.00	0.00
EG10509	katE	0.00	1.16	0.00	1.17
EG10511	katG	0.00	0.00	0.00	0.00
EG12768	kbaY	0.00	0.00	0.00	0.00
EG12763	kbaZ	0.00	0.00	0.00	0.00
EG10512	kbl	0.00	0.00	0.00	0.00
EG11606	kch	0.00	0.00	0.00	0.00
EG12253	kdgK	0.00	0.00	0.00	0.00
EG14018	kdgR	0.00	0.00	0.00	0.00
EG11869	kdgT	0.00	0.00	0.00	0.00
EG10513	kdpA	0.00	1.56	0.00	1.23
EG10514	kdpB	0.00	0.00	0.00	0.00
EG10515	kdpC	0.00	0.00	0.00	0.00
EG10516	kdpD	0.00	0.00	0.00	0.00
EG10517	kdpE	0.00	0.00	0.00	0.00
EG12126	kdpF	0.00	0.00	0.00	0.00

EG10518	kdsA	0.00	0.00	0.00	0.00
EG10519	kdsB	0.00	0.90	0.00	0.82
EG12804	kdsC	0.00	0.00	0.00	0.00
EG12803	kdsD	0.00	0.00	0.00	0.00
EG12361	kduD	0.00	0.00	0.00	0.00
EG13096	kduI	0.00	0.00	0.00	0.00
EG14240	kefA	0.68	0.20	0.62	0.11
EG20110	kefB	0.00	0.80	0.00	0.72
EG10521	kefC	0.00	0.23	0.00	0.00
EG11568	kefF	0.00	1.51	0.00	0.91
EG12902	kefG	0.00	0.40	0.00	0.27
EG10522	kgtP	0.00	0.43	0.00	0.32
EG12155	kilR	0.83	0.10	0.38	0.07
EG12570	kptA	0.00	0.00	0.00	0.00
EG10523	ksgA	0.00	0.14	0.00	0.00
EG11541	kup	0.29	0.00	0.23	0.00
EG10524	lacA	0.00	1.05	0.00	1.24
EG10525	lacI	0.00	0.00	0.00	0.00
EG10526	lacY	0.07	1.30	0.04	1.33
EG10527	lacZ	0.00	1.32	0.00	1.31
EG10528	lamB	0.00	0.00	0.00	0.00
EG11900	lar	0.05	0.00	0.05	0.00
EG13898	ldcA	0.00	0.00	0.00	0.00
EG13219	ldcC	0.00	0.00	0.00	0.00
EG13186	ldhA	0.00	0.00	0.00	0.00
EG14403	ldrA	0.00	1.13	0.00	1.16
EG14404	ldrB	0.00	1.56	0.00	1.74
EG14405	ldrC	0.00	1.28	0.00	1.36
EG14406	ldrD	0.00	0.80	0.00	0.47
EG10529	lepA	0.00	0.00	0.00	0.00
EG10530	lepB	0.00	0.00	0.00	0.00
EG11226	leuA	0.00	0.86	0.00	0.00
EG11577	leuB	0.00	0.00	0.00	0.00
EG11576	leuC	0.00	0.00	0.00	0.00
EG11575	leuD	0.00	0.00	0.00	0.00
EG13505	leuE	0.00	0.43	0.00	0.19
EG11280	leuL	0.00	1.09	0.00	0.16
EG10531	leuO	0.00	0.00	0.00	0.09
EG10532	leuS	0.00	0.00	0.00	0.00
EG10533	lexA	0.00	0.94	0.00	0.72
EG12128	lgt	0.00	0.00	0.00	0.01
EG11548	lhr	0.00	0.00	0.00	0.00
EG10534	ligA	0.00	0.00	0.00	0.00
EG11334	ligB	0.00	1.19	0.00	0.90
EG12330	ligT	0.00	0.00	0.02	0.00
EG11306	lipA	0.08	0.24	0.05	0.06
EG11591	lipB	0.00	0.00	0.02	0.00
EG10535	lit	0.16	0.00	0.00	0.03
EG10536	livF	0.13	0.00	0.09	0.00
EG10537	livG	0.00	0.00	0.00	0.00
EG10538	livH	0.00	0.90	0.00	0.27
EG10539	livJ	0.00	0.00	0.00	0.00
EG10540	livK	0.00	0.00	0.00	0.00
EG10541	livM	0.00	0.24	0.00	0.25
EG11963	lldD	0.00	0.30	0.00	0.20
EG11961	lldP	0.00	1.08	0.00	0.44
EG11962	lldR	0.00	0.44	0.00	0.40
EG10168	lnt	0.00	0.00	0.00	0.00

EG12684	lolA	0.00	0.00	0.00	0.00
EG11293	lolB	0.06	0.00	0.00	0.00
EG13439	lolC	0.00	0.00	0.00	0.02
EG13440	lolD	0.00	0.00	0.00	0.00
EG13441	lolE	0.00	0.00	0.00	0.00
EG10542	lon	0.00	0.27	0.00	0.08
EG13146	lpcA	0.00	0.00	0.00	0.00
EG10543	lpd	0.00	0.00	0.00	0.00
EG11796	lplA	0.00	1.26	0.00	1.20
EG12455	lplT	0.00	0.13	0.00	0.07
EG10544	lpp	0.06	0.35	0.04	0.24
EG12618	lptA	0.00	0.00	0.00	0.00
EG11680	lptB	0.64	0.00	0.36	0.00
EG10545	lpxA	0.19	0.29	0.14	0.59
EG10546	lpxB	0.55	0.00	2.04	0.00
EG10265	lpxC	0.78	0.39	0.63	0.13
EG10316	lpxD	0.31	0.00	0.20	0.00
EG12666	lpxH	0.43	0.00	0.27	0.00
EG11409	lpxK	0.18	0.11	0.15	0.07
EG10464	lpxL	0.00	0.50	0.00	0.49
EG10614	lpxM	0.00	0.90	0.04	1.55
EG12901	lpxP	0.00	1.16	0.00	1.25
EG14075	lpxT	0.00	0.74	0.00	0.35
EG12123	lrhA	0.00	0.00	0.03	0.00
EG10547	lrp	0.00	0.00	0.00	0.00
EG10548	lspA	0.21	0.21	0.19	0.56
EG13806	lsrA	0.85	0.23	0.71	0.10
EG13809	lsrB	0.26	1.07	0.06	0.86
EG13807	lsrC	0.00	0.80	0.17	0.79
EG13808	lsrD	0.00	0.24	0.13	0.12
EG13810	lsrF	0.00	0.30	0.00	0.13
EG13811	lsrG	0.40	0.09	0.10	0.00
EG13804	lsrK	0.00	1.36	0.00	1.40
EG13805	lsrR	0.00	0.00	0.00	0.00
EG13690	ltaE	0.00	1.00	0.00	0.98
EG12712	luxS	0.00	1.24	0.00	1.18
EG10549	lysA	0.00	0.00	0.00	0.00
EG10550	lysC	0.00	0.00	0.00	0.00
EG11337	lysP	0.00	0.00	0.00	0.00
EG10551	lysR	0.00	0.00	0.00	0.00
EG10552	lysS	0.00	0.00	0.00	0.00
EG10553	lysU	0.00	0.70	0.00	0.00
EG12284	lyx	0.00	0.00	0.00	0.00
EG14239	maa	0.00	1.29	0.00	1.35
EG13694	macA	0.96	0.48	0.62	0.55
EG13695	macB	0.00	0.00	0.34	0.00
EG10948	maeA	0.00	0.15	0.00	0.08
EG14193	maeB	0.00	0.19	0.00	0.00
EG11288	mak	0.00	0.51	0.00	0.44
EG10554	malE	0.17	0.20	0.10	0.17
EG10555	malF	0.00	1.21	0.00	1.11
EG10556	malG	0.00	0.42	0.00	0.28
EG10557	malI	0.00	1.53	0.00	1.06
EG10558	malK	0.00	0.00	0.00	0.00
EG10559	malM	1.69	1.10	1.61	1.40
EG10560	malP	0.21	1.71	0.13	1.54
EG10561	malQ	0.00	0.00	0.00	0.00
EG11316	malS	0.00	0.64	0.00	0.32

EG10562	malT	1.49	0.00	1.46	0.00
EG10563	malX	0.00	0.00	0.00	0.00
EG10564	malY	0.26	0.00	0.15	0.00
EG10565	malZ	0.00	0.00	0.00	0.00
EG10566	manA	0.00	0.14	0.00	0.10
EG10567	manX	0.18	0.00	0.09	0.00
EG10568	manY	0.00	0.00	0.00	0.00
EG10569	manZ	0.00	0.00	0.00	0.00
EG13735	maoC	0.00	0.32	0.00	0.17
EG10570	map	0.00	0.06	0.00	0.05
EG11434	marA	0.00	0.00	0.00	0.00
EG11599	marB	0.00	0.00	0.00	0.00
EG11637	marC	0.18	0.29	0.09	0.21
EG11435	marR	0.41	0.17	0.35	0.15
EG14324	matA	0.00	1.39	0.00	1.08
EG13565	matB	0.00	0.00	0.00	0.00
EG13564	matC	0.00	1.05	0.00	1.15
EG10572	mazG	0.00	0.00	0.00	0.00
EG13318	mcbA	0.00	0.00	0.00	0.00
EG13773	mcbR	0.00	0.78	0.00	0.79
EG10573	mcrA	0.00	0.09	0.00	0.00
EG10574	mcrB	0.00	0.00	0.00	0.00
EG10575	mcrC	0.00	0.00	0.00	0.36
EG12656	mdaB	0.04	0.00	0.03	0.00
EG10576	mdh	0.00	0.00	0.00	0.00
EG11622	mdlA	0.00	1.24	0.00	1.17
EG14374	mdlB	0.00	0.00	0.00	0.00
EG12591	mdoB	0.00	1.19	0.00	1.32
EG13876	mdoC	0.00	0.00	0.00	0.02
EG12859	mdoD	0.00	0.42	0.00	0.13
EG11885	mdoG	0.00	0.00	0.00	0.00
EG11886	mdoH	0.00	0.00	0.00	0.00
EG14056	mdtA	0.00	0.00	0.00	0.00
EG14057	mdtB	0.00	0.00	0.00	0.00
EG14058	mdtC	0.00	0.00	0.00	0.00
EG12136	mdtD	0.00	0.00	0.05	0.00
EG12240	mdtE	0.13	1.23	0.11	0.93
EG12241	mdtF	0.00	0.14	0.00	0.11
EG11343	mdtG	0.00	0.00	0.00	0.00
EG13878	mdtH	0.00	0.74	0.00	0.65
EG13926	mdtI	0.00	1.49	0.00	1.47
EG13927	mdtJ	0.00	0.00	0.00	0.00
EG12400	mdtK	0.00	0.00	0.00	0.04
EG11720	mdtL	0.00	0.06	0.00	0.05
EG12576	mdtM	0.00	1.13	0.00	1.29
EG11954	mdtN	0.00	0.00	0.05	0.00
EG11953	mdtO	0.00	0.00	0.00	0.00
EG11952	mdtP	0.00	0.00	0.00	0.00
EG10577	melA	0.00	0.17	0.00	0.40
EG10578	melB	0.00	0.00	0.00	0.00
EG11230	melR	0.17	0.00	0.11	0.00
EG11880	menA	0.00	0.33	0.00	0.19
EG11368	menB	0.00	0.00	0.00	0.00
EG11532	menC	0.00	0.00	0.00	0.00
EG10579	menD	0.00	0.00	0.00	0.00
EG12437	menE	0.00	0.00	0.00	0.00
EG12362	menF	0.00	1.27	0.00	0.95
EG10580	mepA	0.00	1.28	0.00	1.32

EG10581	metA	0.58	0.00	0.42	0.00
EG10582	metB	0.00	0.00	0.00	0.00
EG10583	metC	0.00	1.26	0.00	0.07
EG10584	metE	0.03	0.77	0.02	0.02
EG10585	metF	0.00	0.00	0.00	0.00
EG10586	metG	0.00	1.17	0.00	0.90
EG10587	metH	0.00	0.00	0.00	0.00
EG11737	metI	0.00	0.00	0.00	0.00
EG10588	metJ	0.00	0.00	0.00	0.00
EG10589	metK	0.00	0.00	0.00	0.00
EG10590	metL	0.00	0.00	0.00	0.00
EG11621	metN	0.00	0.00	0.00	0.00
EG11504	metQ	0.00	0.00	0.00	0.00
EG10591	metR	0.00	0.00	0.18	0.00
EG11619	mfd	0.00	1.37	0.00	1.16
EG10592	mglA	0.68	0.00	0.52	0.00
EG10593	mglB	0.11	1.30	0.00	1.38
EG10594	mglC	0.00	1.11	0.00	1.04
EG14383	mgrB	0.00	1.13	0.00	1.14
EG12307	mgsA	0.65	0.63	0.49	0.59
EG12525	mgtA	0.24	1.15	0.19	1.08
EG20273	mhpA	0.00	0.00	0.00	0.00
EG20274	mhpB	0.75	0.81	0.64	0.90
EG20275	mhpC	0.39	0.00	0.35	0.00
EG14274	mhpD	0.00	0.00	0.00	0.00
EG13292	mhpE	0.00	0.00	0.00	0.00
EG13625	mhpF	0.26	0.26	0.16	0.93
EG20276	mhpR	0.00	0.00	0.00	0.00
EG13293	mhpT	0.02	1.34	0.06	1.19
EG10595	miaA	0.00	0.64	0.00	0.42
EG13657	miaB	0.22	0.00	0.22	0.00
EG10596	minC	0.00	0.00	0.00	0.00
EG10597	minD	0.00	0.45	0.00	0.30
EG10598	minE	0.00	0.00	0.00	0.00
EG11199	mioC	0.00	0.00	0.00	0.00
EG13492	mipA	0.62	0.00	0.50	0.00
EG12008	mlrA	0.00	0.00	0.00	0.00
EG13085	mltA	0.00	0.00	0.00	0.00
EG12699	mltB	0.82	0.11	0.95	0.19
EG12986	mltC	0.00	0.00	0.00	0.00
EG10246	mltD	0.93	1.57	0.94	1.21
EG11373	mltF	0.00	0.00	0.00	0.00
EG13343	mmuM	0.00	0.87	0.00	0.65
EG13342	mmuP	0.54	0.03	0.57	0.03
EG13235	mngA	0.00	0.00	0.00	0.00
EG13236	mngB	0.00	0.97	0.00	0.95
EG11109	mngR	0.00	0.00	0.00	0.00
EG11344	mnmA	0.35	0.00	0.28	0.00
EG14114	mnmC	0.00	0.00	0.00	0.00
EG10997	mnmE	0.00	0.00	0.00	0.00
EG10375	mnmG	0.00	0.73	0.00	0.75
EG14157	mntH	0.00	0.00	0.00	0.00
EG13322	mntR	0.00	0.00	0.00	0.00
EG11595	moaA	0.00	0.04	0.00	0.03
EG11596	moaB	0.00	0.00	0.00	0.00
EG11666	moaC	0.00	0.37	0.00	0.34
EG11597	moaD	0.00	0.00	0.00	0.00
EG11598	moaE	0.00	0.06	0.00	0.04

EG11829	mobA	0.00	0.00	0.00	0.00
EG11828	mobB	0.00	1.13	0.00	1.18
EG12427	modA	0.00	0.00	0.00	0.00
EG10002	modB	0.00	0.00	0.00	0.04
EG10152	modC	0.00	0.00	0.00	0.00
EG13227	modE	0.00	0.00	0.00	0.00
EG11677	modF	0.00	0.79	0.00	0.63
EG10153	moeA	0.00	0.90	0.00	0.98
EG10154	moeB	0.00	0.00	0.00	0.00
EG11511	mog	0.00	0.00	0.00	0.00
EG20260	mokB	0.57	0.28	0.18	0.12
EG12074	mokC	0.00	0.00	0.08	0.00
EG10601	motA	1.49	1.54	1.47	1.81
EG10602	motB	0.00	0.00	0.00	0.00
EG13906	mpaA	0.00	0.00	0.00	0.00
EG12440	mpl	0.00	0.00	0.00	0.00
EG13376	mppA	0.00	0.00	0.00	0.00
EG10603	mprA	0.55	0.85	0.37	1.02
EG12069	mqo	0.00	0.26	0.00	0.15
EG13023	mqsR	0.00	0.64	0.00	0.50
EG11085	mraW	0.00	0.04	0.00	0.03
EG10604	mraY	0.00	0.00	0.00	0.00
EG11084	mraZ	0.00	0.00	0.00	0.00
EG10748	mrcA	0.00	0.00	0.00	0.00
EG10605	mrcB	0.00	0.00	0.00	0.00
EG10606	mrdA	0.00	0.00	0.00	0.00
EG10607	mrdB	0.00	0.00	0.00	0.00
EG10608	mreB	0.15	0.00	0.99	0.00
EG10609	mreC	0.38	0.00	0.21	0.00
EG10610	mreD	0.00	0.00	0.00	0.00
EG10611	mrp	0.96	0.00	0.71	0.00
EG10612	mrr	0.00	0.70	0.00	0.58
EG10613	msbA	0.00	0.00	0.14	0.00
EG11180	mscL	0.00	0.00	0.00	0.00
EG11160	mscS	0.00	0.00	0.00	0.00
EG11433	msrA	0.00	1.11	0.00	0.84
EG12394	msrB	0.00	0.38	0.00	0.34
EG11338	msyB	0.15	0.00	0.13	0.00
EG13377	mtfA	0.00	0.00	0.00	0.00
EG12808	mtgA	0.29	0.00	0.06	0.00
EG10615	mtlA	0.00	1.20	0.00	1.05
EG10616	mtlD	0.33	0.00	0.23	0.23
EG11965	mtlR	0.00	0.00	0.00	0.00
EG11090	mtn	0.00	0.51	0.00	0.90
EG10617	mtr	0.00	1.12	0.00	1.00
EG12717	mug	0.00	0.00	0.00	0.00
EG10618	mukB	0.00	0.00	0.00	0.00
EG11252	mukE	0.00	0.00	0.00	0.00
EG12165	mukF	0.00	0.00	0.00	0.00
EG11358	murA	0.00	0.00	0.00	0.00
EG11205	murB	0.00	0.00	0.00	0.00
EG10619	murC	0.00	0.07	0.00	1.72
EG10620	murD	0.00	0.00	0.00	0.00
EG10621	murE	0.00	0.00	0.00	0.00
EG10622	murF	0.00	0.00	0.00	0.00
EG10623	murG	0.00	0.00	0.00	0.00
EG11204	murI	0.00	0.00	0.00	0.08
EG14163	murP	0.00	0.00	0.00	0.00

EG14162	murQ	0.00	0.00	0.00	0.00
EG10624	mutH	0.00	1.22	0.00	1.05
EG11281	mutL	0.15	0.61	0.08	0.44
EG10329	mutM	0.00	1.18	0.03	1.27
EG10625	mutS	0.00	0.16	0.00	0.00
EG10626	mutT	0.00	0.00	0.00	0.00
EG10627	mutY	0.00	0.09	0.00	0.04
EG14265	nac	0.00	0.92	0.00	0.93
EG10630	nadA	1.94	0.00	1.50	0.00
EG10631	nadB	0.00	0.36	0.00	0.37
EG11546	nadC	0.00	0.00	0.00	0.00
EG13241	nadD	0.00	0.75	0.00	0.83
EG10663	nadE	0.00	0.00	0.00	0.00
EG12192	nadK	0.00	0.00	0.00	0.00
EG11335	nadR	0.00	0.00	0.00	0.00
EG10632	nagA	0.51	1.03	0.40	1.21
EG10633	nagB	0.00	0.00	0.00	0.00
EG10636	nagC	0.00	1.36	0.00	1.27
EG10634	nagD	1.19	0.05	1.06	0.05
EG10635	nagE	0.00	0.00	0.00	0.00
EG13442	nagK	0.00	0.00	0.00	0.00
EG13433	nagZ	0.00	0.00	0.00	0.00
EG10637	nanA	0.00	0.00	0.12	0.00
EG12389	nanC	0.00	0.00	0.00	0.00
EG12816	nanE	0.00	0.00	0.00	0.00
EG12815	nanK	0.00	0.00	0.00	0.00
EG12562	nanM	0.00	0.98	0.10	0.43
EG12817	nanR	0.00	0.00	0.00	0.00
EG20145	nanT	0.77	0.00	0.21	0.00
EG12067	napA	0.00	0.31	0.00	0.27
EG12061	napB	0.00	0.00	0.00	0.00
EG12060	napC	0.00	0.00	0.00	0.00
EG12143	napD	0.00	0.00	0.00	0.00
EG12068	napF	0.00	0.09	0.00	0.08
EG12064	napG	0.38	0.00	0.33	0.00
EG12062	napH	0.00	0.00	0.00	0.00
EG10638	narG	0.00	1.09	0.00	0.57
EG10639	narH	0.00	0.00	0.00	0.00
EG10640	narI	0.00	0.00	0.00	0.00
EG10641	narJ	0.00	1.54	0.00	1.27
EG10642	narK	0.00	0.00	0.00	0.00
EG10643	narL	0.00	0.05	0.00	0.04
EG11527	narP	0.09	0.04	0.06	0.02
EG11460	narQ	1.26	1.43	1.30	1.36
EG12153	narU	0.63	1.03	0.23	0.64
EG10644	narV	0.00	0.00	0.00	0.00
EG10645	narW	0.00	0.00	0.00	0.00
EG10646	narX	0.00	0.00	0.00	0.00
EG10647	narY	0.00	0.00	0.00	0.00
EG10648	narZ	0.17	0.00	0.05	0.09
EG10649	ndh	0.00	0.00	0.00	0.00
EG10650	ndk	0.00	0.55	0.00	0.44
EG13237	nei	0.00	0.00	0.00	0.00
EG13546	nemA	0.00	0.00	0.00	0.00
EG13947	nemR	0.00	1.35	0.05	1.61
EG11689	nepI	0.00	0.36	0.00	0.07
EG11915	nfi	0.00	0.00	0.00	0.00
EG10651	nfo	0.00	0.00	0.00	0.00

EG11740	nfrA	0.00	0.00	0.00	0.00
EG11739	nfrB	0.07	0.00	0.04	0.00
EG11261	nfsA	0.00	0.27	0.00	0.12
EG20151	nfsB	0.00	0.00	0.00	0.00
EG12935	nfuA	0.00	0.96	0.00	1.46
EG10652	nhaA	0.00	0.76	0.00	0.95
EG11392	nhaB	0.00	0.00	0.00	0.00
EG11078	nhaR	0.00	0.00	0.00	0.00
EG13780	nhoA	0.00	0.44	0.00	0.29
EG12075	nikA	1.44	1.29	1.51	1.03
EG12076	nikB	1.42	1.20	1.34	1.06
EG12077	nikC	0.00	0.40	0.00	0.20
EG12078	nikD	0.00	0.00	0.00	0.00
EG12079	nikE	0.00	0.00	0.00	0.00
EG11519	nikR	0.00	0.00	0.00	0.00
EG14286	ninE	0.00	0.17	0.00	0.08
EG10653	nirB	0.00	1.03	0.00	1.13
EG10654	nirC	0.00	0.00	0.00	0.00
EG10655	nirD	0.00	0.13	0.00	0.08
EG10657	nlpA	0.00	0.00	0.00	0.00
EG11133	nlpC	0.00	0.00	0.00	0.00
EG12111	nlpD	0.00	0.59	0.00	0.57
EG12137	nlpE	0.00	0.00	0.00	0.00
EG12371	nlpI	0.00	0.00	0.00	0.00
EG11635	nohB	0.00	0.00	0.00	0.00
EG12108	norR	0.42	1.03	0.56	1.00
EG12963	norV	0.00	1.29	0.00	1.12
EG12450	norW	0.00	0.00	0.00	0.00
EG12147	npr	0.00	0.00	0.00	0.00
EG10660	nrdA	0.00	0.47	0.00	0.36
EG10661	nrdB	0.00	0.82	0.00	0.34
EG11417	nrdD	0.00	0.00	0.00	0.04
EG20257	nrdE	0.00	0.10	0.00	0.10
EG12381	nrdF	0.00	1.14	0.00	1.21
EG12523	nrdG	0.00	1.35	0.00	1.19
EG13286	nrdH	1.25	1.20	1.51	1.01
EG13287	nrdI	0.00	0.97	0.00	0.85
EG11320	nrdR	0.00	0.00	0.00	0.00
EG11781	nrfA	0.00	0.00	0.07	0.00
EG11945	nrfB	0.00	0.00	0.00	0.00
EG11946	nrfC	0.00	0.00	0.00	0.00
EG11947	nrfD	0.00	0.00	0.00	0.00
EG11948	nrfE	0.00	0.18	0.00	0.09
EG11949	nrfF	0.00	0.15	0.00	0.00
EG11950	nrfG	0.00	0.54	0.00	0.47
EG11212	nsrR	0.00	0.95	0.00	0.97
EG10662	nth	0.00	0.00	0.00	0.00
EG11138	nudB	0.00	0.00	0.00	0.00
EG11702	nudC	0.00	0.00	0.00	0.05
EG12926	nudE	0.00	1.10	0.00	0.90
EG12184	nudF	0.00	0.00	0.00	0.00
EG14009	nudG	0.70	0.04	0.00	0.04
EG13275	nudI	0.00	0.00	0.00	0.00
EG13446	nudJ	0.00	0.00	0.00	0.00
EG12410	nudK	0.00	0.92	0.00	0.91
EG12693	nudL	0.00	1.07	0.00	0.94
EG12082	nuoA	0.00	0.11	0.00	0.13
EG12083	nuoB	0.00	0.13	0.00	0.09

EG12084	nuoC	0.00	0.37	0.00	0.29
EG12086	nuoE	0.00	0.00	0.00	0.00
EG11774	nuoF	0.38	0.12	0.18	0.07
EG12087	nuoG	0.00	0.48	0.00	0.46
EG12088	nuoH	0.00	0.93	0.00	1.22
EG12089	nuoI	0.00	0.00	0.00	0.00
EG12090	nuoJ	0.00	0.00	0.00	0.00
EG12091	nuoK	0.00	0.16	0.00	0.16
EG12092	nuoL	0.92	0.00	1.09	0.00
EG11773	nuoM	0.00	0.54	0.00	0.65
EG12093	nuoN	0.00	0.00	0.00	0.00
EG11971	nupC	1.49	0.00	1.32	0.00
EG10664	nupG	0.03	1.03	0.02	0.67
EG12029	nupX	0.00	0.00	0.00	0.00
EG10665	nusA	0.00	0.18	0.00	0.03
EG10666	nusB	0.10	0.24	0.25	0.14
EG10667	nusG	0.00	0.06	0.00	0.06
EG12795	obgE	0.00	0.00	0.00	0.00
EG12425	ogrK	0.00	0.67	0.00	0.72
EG10668	ogt	0.00	0.00	0.00	0.00
EG10669	ompA	0.00	0.11	0.00	0.07
EG10670	ompC	0.00	0.55	0.00	0.17
EG10671	ompF	0.00	1.16	0.00	0.86
EG13428	ompG	0.00	0.90	0.00	1.00
EG13374	ompL	0.00	0.00	0.00	0.00
EG13375	ompN	0.00	1.01	0.00	0.84
EG10672	ompR	0.57	0.54	1.47	0.50
EG10673	ompT	0.00	0.00	0.00	0.00
EG11124	ompW	0.00	0.00	0.00	0.00
EG12135	ompX	0.00	1.36	0.00	1.46
EG10674	oppA	0.00	0.00	0.00	0.00
EG10675	oppB	0.00	0.35	0.00	0.28
EG10676	oppC	0.00	0.00	0.00	0.00
EG10677	oppD	0.00	1.05	0.00	1.17
EG10678	oppF	0.76	1.32	0.43	1.56
EG20005	oriC	0.00	0.00	0.00	0.04
EG12480	orn	0.00	0.19	0.00	0.40
EG10679	osmB	0.00	0.00	0.00	0.00
EG10680	osmC	0.00	0.71	0.00	0.53
EG10044	osmE	0.36	0.20	0.11	0.00
EG12012	osmF	0.00	0.00	0.00	0.00
EG11391	osmY	0.12	0.00	0.12	0.00
EG11751	otsA	0.00	0.00	0.00	0.00
EG11752	otsB	0.00	0.00	0.00	0.00
EG14143	oxc	0.00	0.00	0.00	0.00
EG10681	oxyR	0.00	0.22	0.00	0.07
EG13736	paaA	0.00	0.35	0.00	0.17
EG14299	paaB	0.00	0.00	0.00	0.00
EG13737	paaC	0.09	0.00	0.07	0.00
EG13738	paaD	0.00	0.61	0.00	0.56
EG13739	paaE	0.00	0.80	0.00	0.54
EG13740	paaF	0.00	0.00	0.00	0.00
EG13741	paaG	0.00	1.16	0.00	1.38
EG13742	paaH	0.00	0.00	0.00	0.00
EG13743	paaI	0.00	0.48	0.00	0.41
EG13744	paaJ	0.00	0.00	0.00	0.00
EG13745	paaK	0.00	0.25	0.00	0.17
EG13746	paaX	0.00	0.00	0.00	0.00

EG13747	paaY	0.40	0.98	0.24	0.80
EG10682	pabA	1.15	0.00	0.68	0.00
EG10683	pabB	0.00	0.00	0.00	0.02
EG11493	pabC	0.00	0.00	0.00	0.00
EG11922	pagB	0.12	0.00	0.06	0.00
EG12180	pagP	1.28	0.62	1.17	0.50
EG10684	pal	0.00	0.00	0.00	0.00
EG11675	panB	0.00	0.00	0.00	0.00
EG11746	panC	1.40	1.35	1.46	0.25
EG11747	panD	0.00	0.00	0.00	0.00
EG13271	panE	0.00	0.00	0.00	0.00
EG10685	panF	0.00	0.00	0.00	0.03
EG10686	parC	0.37	0.00	0.23	0.00
EG10687	parE	0.00	0.08	0.00	0.05
EG14210	pbpC	0.00	0.00	0.00	0.00
EG12015	pbpG	0.00	1.12	0.00	1.20
EG10688	pck	0.00	0.00	0.00	0.00
EG10689	pcm	0.00	0.31	0.00	0.29
EG10690	pcnB	1.31	1.26	1.09	1.33
EG11088	pdhR	0.65	0.69	0.90	1.01
EG10691	pdxA	0.00	0.00	0.00	0.00
EG10692	pdxB	0.00	0.00	0.00	0.00
EG11487	pdxH	0.39	0.00	0.20	0.00
EG10693	pdxJ	0.00	0.00	0.00	0.00
EG12642	pdxK	0.00	0.00	0.00	0.00
EG13940	pdxY	0.00	0.76	0.00	1.01
EG10694	pepA	0.00	0.00	0.00	0.00
EG12310	pepB	0.24	0.00	0.14	0.00
EG10695	pepD	1.14	0.49	1.24	0.57
EG11920	pepE	0.00	0.00	0.00	0.00
EG10696	pepN	0.00	0.00	0.02	0.00
EG10697	pepP	0.00	0.00	0.00	0.00
EG10698	pepQ	0.00	0.42	0.00	0.29
EG11549	pepT	0.00	0.00	0.00	0.00
EG13340	perR	0.00	0.00	0.00	0.00
EG10699	pfkA	0.00	0.13	0.00	0.10
EG10700	pfkB	0.00	0.97	0.00	1.30
EG10028	pflA	0.00	0.00	0.00	0.00
EG10701	pflB	0.00	0.88	0.00	1.02
EG11911	pflC	0.00	0.00	0.00	0.00
EG11910	pflD	0.00	1.17	0.00	1.07
EG13865	pgaA	0.00	0.17	0.00	0.10
EG13864	pgaB	0.00	0.00	0.00	0.00
EG13863	pgaC	0.00	0.09	0.04	0.08
EG13862	pgaD	0.00	0.00	0.00	0.00
EG10702	pgi	0.00	0.00	0.00	0.00
EG10703	pgk	0.00	0.21	0.00	0.11
EG13231	pgl	0.00	0.00	0.00	0.00
EG12144	pgm	0.00	0.00	0.00	0.00
EG10704	pgpA	0.00	0.30	0.00	0.07
EG10705	pgpB	0.00	0.00	0.00	0.00
EG10706	pgsA	0.00	0.00	0.00	0.00
EG10707	pheA	0.00	0.00	0.00	0.00
EG11271	pheL	0.81	0.66	0.61	0.36
EG11272	pheM	0.26	0.29	0.48	0.39
EG10708	pheP	0.00	0.00	0.00	0.00
EG10709	pheS	0.00	0.00	0.00	0.00
EG10710	pheT	0.00	0.00	0.00	0.00

EG10713	phnC	0.46	1.24	0.57	1.22
EG10714	phnD	0.31	0.17	0.18	0.06
EG10715	phnF	0.00	0.90	0.00	0.64
EG10716	phnG	0.00	0.00	0.00	0.00
EG10717	phnH	1.48	1.31	1.06	1.28
EG10718	phnI	0.00	0.00	0.00	0.00
EG10719	phnJ	0.00	1.18	0.00	1.41
EG10720	phnK	1.19	0.00	0.83	0.00
EG10721	phnL	0.00	1.11	0.00	1.02
EG10722	phnM	0.00	0.00	0.00	0.00
EG10723	phnN	0.00	0.00	0.00	0.00
EG10724	phnO	0.38	0.00	0.27	0.00
EG10725	phnP	0.00	0.00	0.00	0.00
EG10727	phoA	0.00	0.39	0.04	0.28
EG10728	phoB	0.00	0.28	0.00	0.21
EG10729	phoE	0.00	0.39	0.00	0.27
EG11734	phoH	0.00	1.25	0.00	0.94
EG10731	phoP	0.00	0.00	0.00	0.00
EG10732	phoQ	0.00	0.00	0.00	0.00
EG10733	phoR	0.00	0.00	0.00	0.00
EG10735	phoU	0.08	0.79	0.04	0.34
EG12917	php	1.15	1.26	1.37	1.06
EG10736	phr	0.00	0.00	0.00	0.00
EG10737	pinE	0.00	1.51	0.00	2.14
EG13824	pinQ	0.00	0.36	0.00	0.32
EG13372	pinR	0.63	0.47	0.35	0.42
EG12230	pitA	1.35	0.19	1.15	0.11
EG12883	pitB	0.00	0.00	0.00	0.00
EG10738	pldA	0.00	0.00	0.00	0.00
EG10739	pldB	0.00	0.00	0.00	0.00
EG10740	plsB	1.57	0.11	1.62	0.07
EG11377	plsC	0.00	0.24	0.00	0.35
EG11437	plsX	0.00	0.00	0.00	0.00
EG10741	pmbA	0.06	1.26	0.02	1.33
EG12671	pmrD	0.00	0.00	0.00	0.00
EG11135	pncA	0.00	0.00	0.00	0.00
EG10742	pncB	0.00	0.00	0.00	0.00
EG10743	pnp	0.12	1.08	0.18	1.32
EG10744	pntA	0.28	0.63	0.22	0.32
EG10745	pntB	0.00	0.00	0.00	0.00
EG11700	pnuC	0.00	0.15	0.00	0.00
EG10746	polA	0.00	0.95	0.00	0.78
EG10747	polB	0.00	1.11	0.00	1.02
EG10749	potA	0.00	0.00	0.00	0.00
EG10750	potB	0.28	0.15	0.15	0.10
EG10751	potC	0.00	0.09	0.00	0.03
EG10752	potD	0.00	1.14	0.00	1.24
EG10753	potE	0.00	0.00	0.00	0.00
EG11629	potF	0.00	0.00	0.00	0.00
EG11630	potG	0.00	0.00	0.00	0.00
EG11631	potH	0.00	0.00	0.00	0.00
EG11632	potI	0.00	1.18	0.00	1.63
EG11211	poxA	0.37	0.17	0.21	0.14
EG10754	poxB	0.00	0.41	0.13	0.28
EG10755	ppa	0.00	0.00	0.00	0.00
EG10756	ppc	0.00	0.37	0.00	0.00
EG12081	ppdA	0.00	1.39	0.00	1.32
EG11156	ppdB	0.00	0.00	0.00	0.00

EG11154	ppdC	0.00	0.00	0.00	0.00
EG12107	ppdD	0.00	1.37	0.00	1.13
EG14026	pphA	0.00	0.00	0.00	0.00
EG13102	pphB	0.00	0.00	0.00	0.00
EG10757	ppiA	0.15	0.00	0.15	0.00
EG10758	ppiB	0.00	0.73	0.00	2.15
EG12352	ppiC	1.20	0.04	1.06	0.03
EG13249	ppiD	0.00	0.00	0.00	0.00
EG11510	ppk	0.00	0.00	0.00	0.00
EG12992	pppA	0.00	0.74	0.00	0.61
EG10759	pps	0.28	0.00	0.13	0.00
EG11761	pptA	0.82	1.33	0.39	1.36
EG11403	ppx	1.26	1.20	1.03	1.11
EG12965	pqiA	1.14	0.00	1.08	0.00
EG12966	pqiB	0.00	0.36	0.00	0.11
EG11744	pqqL	0.00	0.00	0.00	0.00
EG10760	prc	0.00	1.18	0.00	0.70
EG10761	prfA	0.20	0.39	0.29	0.25
EG10762	prfB	0.96	0.00	0.38	0.00
EG12114	prfC	0.05	0.00	0.00	0.00
EG10763	priA	0.00	0.06	0.00	0.04
EG10764	priB	1.00	0.00	1.14	0.00
EG10765	priC	0.00	0.87	0.00	0.92
EG12365	prkB	0.00	0.00	0.00	0.00
EG11441	prlC	0.99	0.70	2.07	0.16
EG11497	prmA	0.13	0.98	0.08	1.00
EG12449	prmB	0.00	0.00	0.00	0.00
EG12424	prmC	0.00	0.00	0.00	0.00
EG10767	proA	0.00	0.67	0.00	0.02
EG10768	proB	0.48	0.00	0.41	0.00
EG10769	proC	0.00	0.00	0.00	0.00
EG11612	proP	0.00	0.00	0.00	0.00
EG12866	proQ	1.42	1.04	1.70	0.88
EG10770	proS	0.00	0.00	0.00	0.00
EG10771	proV	1.01	0.27	0.61	0.21
EG10772	proW	0.00	0.00	0.00	0.00
EG10773	proX	0.04	0.00	0.00	0.00
EG13609	proY	0.00	0.00	0.00	0.00
EG13601	prpB	0.00	0.13	0.00	0.11
EG11756	prpC	0.00	0.00	0.00	0.00
EG13603	prpD	0.00	0.00	0.00	0.00
EG13604	prpE	0.64	0.07	0.87	0.04
EG13600	prpR	0.00	0.00	0.00	0.00
EG10774	prs	0.00	0.00	0.00	0.00
EG10775	psd	0.00	0.00	0.00	0.00
EG11209	psiE	0.00	1.28	0.00	1.09
EG11401	psiF	0.00	1.24	0.00	1.32
EG10776	pspA	0.00	0.30	0.00	0.17
EG10777	pspB	0.00	0.26	0.03	0.57
EG10778	pspC	0.00	0.00	0.00	0.00
EG10779	pspD	0.51	0.00	0.55	0.00
EG10780	pspE	0.00	0.97	0.00	0.72
EG12344	pspF	0.00	1.21	0.00	0.92
EG11933	pspG	1.06	0.99	0.89	1.02
EG10781	pssA	0.14	0.31	0.12	0.22
EG10782	pstA	0.00	0.23	0.00	0.11
EG10783	pstB	0.22	0.00	0.20	0.00
EG10784	pstC	0.00	0.08	0.00	0.05

EG10734	pstS	0.04	0.00	0.04	0.00
EG12033	psuG	0.00	0.71	0.00	0.70
EG11646	psuK	0.00	0.04	0.00	0.03
EG12032	psuT	0.00	0.22	0.00	0.00
EG20173	pta	0.00	0.00	0.00	0.00
EG10785	pth	0.00	0.00	0.00	0.00
EG10786	ptrA	0.00	0.42	0.00	0.34
EG11004	ptrB	0.00	1.00	0.00	0.78
EG11906	ptsA	0.00	0.00	0.00	0.00
EG10787	ptsG	0.00	0.11	0.00	0.00
EG10788	ptsH	0.00	0.00	0.00	0.00
EG10789	ptsI	0.00	0.41	0.00	0.35
EG11682	ptsN	0.52	0.00	0.23	0.00
EG12188	ptsP	0.00	0.00	0.00	0.00
EG10790	purA	0.00	0.98	0.00	0.37
EG11314	purB	0.00	0.00	0.00	0.00
EG10791	purC	0.00	0.00	0.00	0.00
EG10792	purD	0.00	0.00	0.00	0.00
EG10793	purE	0.00	0.00	0.00	0.00
EG10794	purF	0.00	0.73	0.00	0.19
EG10795	purH	0.07	0.00	0.05	0.00
EG10796	purK	0.00	0.00	0.00	0.00
EG10797	purL	0.00	1.29	0.00	0.03
EG10798	purM	0.00	0.00	0.00	0.00
EG10799	purN	0.00	0.00	0.00	0.00
EG10800	purR	0.00	0.00	0.00	0.00
EG11809	purT	0.00	1.00	0.00	1.63
EG11819	purU	0.00	1.10	0.00	1.14
EG10801	putA	0.00	0.00	0.69	0.00
EG10802	putP	0.00	0.03	0.00	0.03
EG13908	puuA	1.45	1.01	2.24	0.72
EG11822	puuB	0.00	0.78	0.00	0.58
EG10036	puuC	0.00	0.00	0.12	0.00
EG13909	puuD	0.00	0.05	0.00	0.00
EG13187	puuE	0.00	0.00	0.00	0.00
EG13907	puuP	0.00	0.51	0.00	0.17
EG12431	puuR	0.00	0.00	0.00	0.00
EG10803	pykA	0.00	0.00	0.00	0.00
EG10804	pykF	0.81	0.00	1.08	0.00
EG10805	pyrB	0.00	0.00	0.00	0.00
EG10806	pyrC	0.00	0.00	0.00	0.00
EG10807	pyrD	0.00	0.00	0.00	0.00
EG10808	pyrE	0.00	0.11	0.08	0.10
EG10809	pyrF	0.00	0.00	0.00	0.00
EG10810	pyrG	0.12	0.00	0.13	0.00
EG11539	pyrH	0.52	0.00	0.39	0.00
EG10811	pyrI	0.00	0.77	0.00	0.63
EG11279	pyrL	0.42	0.74	0.40	0.89
EG13258	qmcA	0.00	0.00	0.00	0.00
EG11492	qor	0.00	1.33	0.00	1.07
EG13026	qseB	0.00	0.00	0.00	0.00
EG13027	qseC	0.00	1.35	0.02	1.07
EG10812	queA	0.00	0.76	0.00	0.80
EG13252	queC	1.06	0.31	1.00	0.22
EG13173	queF	0.03	0.11	0.04	0.04
EG13633	quuD	0.00	0.00	0.00	0.00
EG13832	quuQ	0.00	0.72	0.00	0.70
EG10813	racC	0.00	0.00	0.00	0.00

EG13360	racR	0.00	0.77	0.00	0.54
EG11296	radA	0.32	0.00	0.04	0.00
EG11151	raiA	0.14	0.00	0.00	0.00
EG12690	rarA	1.17	1.42	1.24	1.17
EG11466	rarD	1.39	1.11	1.24	0.95
EG11731	ravA	0.00	0.00	0.00	0.00
EG12223	rbbA	0.00	0.38	0.00	0.26
EG11178	rbfA	0.00	0.00	0.00	0.00
EG14260	rbn	0.00	1.09	0.00	1.34
EG10814	rbsA	0.00	0.45	0.00	0.21
EG10815	rbsB	0.00	0.33	0.00	0.36
EG10816	rbsC	0.00	0.13	0.00	0.07
EG10817	rbsD	0.40	1.13	0.25	0.97
EG10818	rbsK	0.00	0.00	0.00	0.00
EG10819	rbsR	0.00	0.00	0.00	0.00
EG14071	rcnA	0.00	0.00	0.00	0.00
EG14070	rcnR	0.00	0.42	0.00	0.24
EG10820	rcsA	0.00	1.45	0.00	1.78
EG10821	rcsB	0.00	0.00	0.00	0.05
EG10822	rcsC	0.00	0.77	0.00	0.70
EG12385	rcsD	0.00	0.00	0.00	0.00
EG11502	rcsF	0.00	0.00	0.00	0.00
EG12982	rdgB	0.00	0.67	0.00	0.78
EG12158	rdgC	0.00	0.16	0.00	0.15
EG11831	rdoA	0.00	0.07	0.00	0.15
EG10823	recA	0.00	1.18	0.00	1.12
EG10824	recB	0.37	0.00	0.28	0.00
EG10825	recC	0.00	0.38	0.00	0.34
EG10826	recD	0.00	0.00	0.00	0.00
EG10827	recE	0.00	1.48	0.00	1.43
EG10828	recF	0.00	1.22	0.00	0.85
EG10829	recG	0.00	0.00	0.00	0.00
EG10830	recJ	0.44	0.00	0.45	0.00
EG10831	recN	0.16	0.00	0.19	0.00
EG10832	recO	0.00	0.00	0.00	0.00
EG10833	recQ	0.00	0.00	0.00	0.00
EG10834	recR	0.00	0.00	0.00	0.00
EG11899	recT	0.69	0.00	0.59	0.00
EG12080	recX	0.14	0.00	0.11	0.00
EG10835	relA	0.00	1.37	0.00	1.14
EG10836	relB	0.00	0.00	0.00	0.00
EG11131	relE	0.00	0.00	0.00	0.00
EG11129	rem	0.00	1.43	0.00	1.30
EG10837	rep	1.37	0.00	1.52	0.00
EG11351	rfaB	0.00	0.00	0.00	0.00
EG11189	rfaC	0.00	0.80	0.00	0.98
EG10838	rfaD	0.00	0.47	0.00	0.32
EG13416	rfaE	0.00	0.61	0.00	0.44
EG12210	rfaF	0.00	0.00	0.00	0.00
EG11339	rfaG	0.21	0.00	0.19	0.00
EG10839	rfaH	0.00	0.00	0.00	0.00
EG11352	rfaI	0.00	0.00	0.00	0.00
EG11353	rfaJ	0.00	0.00	0.00	0.00
EG11424	rfaL	0.00	0.00	0.00	0.00
EG11340	rfaP	0.00	0.86	0.00	1.07
EG11341	rfaQ	0.00	1.38	0.00	1.28
EG11350	rfaS	0.00	0.00	0.00	0.00
EG11425	rfaY	0.00	0.00	0.00	0.06

EG11426	rfaZ	0.00	0.00	0.00	0.00
EG11978	rfbA	0.00	1.02	0.00	0.88
EG12412	rfbB	0.62	0.11	0.45	0.06
EG11979	rfbC	0.00	0.00	0.00	0.00
EG12411	rfbD	0.00	0.00	0.00	0.00
EG11980	rfbX	0.00	0.00	0.00	0.00
EG11982	rfc	0.00	1.06	0.00	0.92
EG10840	rfe	0.00	0.00	0.00	0.00
EG11456	rffA	0.00	0.00	0.66	0.00
EG11455	rffC	0.06	0.00	0.09	0.00
EG11452	rffD	0.00	0.00	0.00	0.00
EG11451	rffE	0.00	0.16	0.00	0.51
EG11453	rffG	0.00	0.00	0.00	0.00
EG11454	rffH	0.00	0.00	0.00	0.00
EG11458	rffM	0.00	0.00	0.00	0.00
EG14320	rffT	0.04	0.00	0.03	0.00
EG11867	rhaA	0.00	0.22	0.00	0.14
EG11868	rhaB	0.00	1.00	0.00	0.89
EG11866	rhaD	0.00	0.00	0.00	0.00
EG11865	rhaM	0.00	0.00	0.00	0.00
EG10842	rhaR	0.00	1.28	0.00	1.02
EG10843	rhaS	0.15	0.00	0.13	0.00
EG11313	rhaT	0.00	0.00	0.00	0.00
EG10844	rhlB	0.00	0.66	0.05	0.51
EG11235	rhlE	0.00	0.00	0.00	0.00
EG10845	rho	1.10	0.00	0.60	0.00
EG10846	rhsA	0.00	0.00	0.00	0.00
EG10847	rhsB	0.00	0.00	0.00	0.64
EG10848	rhsC	0.00	0.00	0.00	0.00
EG10849	rhsD	0.00	0.00	0.00	0.00
EG12134	rhtA	0.00	0.00	0.00	0.00
EG11469	rhtB	0.13	0.89	0.13	0.59
EG11468	rhtC	0.00	0.00	0.00	0.00
EG11331	ribA	0.00	0.00	0.00	0.00
EG10465	ribB	1.18	0.11	1.51	0.17
EG11406	ribC	0.00	0.00	0.00	0.00
EG11321	ribD	0.00	0.00	0.00	0.00
EG11322	ribE	0.50	0.00	0.05	0.00
EG11079	ribF	0.00	0.49	0.00	0.51
EG12701	rihA	0.00	1.02	0.00	1.13
EG12030	rihB	0.74	0.00	0.48	0.00
EG11082	rihC	0.00	1.07	0.02	1.01
EG10850	rimI	0.00	0.00	0.00	0.00
EG10851	rimJ	0.00	0.00	0.00	0.00
EG10852	rimK	0.00	0.00	0.00	0.00
EG10853	rimL	0.46	0.00	0.26	0.00
EG11153	rimM	0.96	0.06	0.72	0.04
EG12840	rimN	0.00	0.00	0.04	0.00
EG12483	rlmB	0.00	0.00	0.00	0.00
EG13319	rlmF	0.00	1.09	0.00	1.23
EG12726	rlmG	0.00	0.00	0.00	0.00
EG13717	rlmL	0.00	0.10	0.00	0.07
EG12401	rlmN	0.00	0.00	0.00	0.00
EG10854	rlpA	0.00	0.00	0.00	0.00
EG10855	rlpB	0.00	0.00	0.00	0.00
EG12609	rluA	0.00	0.00	0.00	0.00
EG12433	rluB	0.00	0.00	0.00	0.00
EG11118	rluC	0.00	0.00	0.00	0.00

EG12098	rluD	0.00	0.21	0.00	0.03
EG13447	rluE	0.00	0.69	0.00	0.24
EG11921	rluF	0.18	1.11	0.27	0.92
EG50004	rmf	0.00	0.00	0.00	0.00
EG11472	rmuC	0.00	0.20	0.00	0.13
EG10856	rna	0.91	0.99	1.02	1.20
EG11620	rnb	0.43	1.00	0.22	0.98
EG10857	rnc	0.02	0.00	0.01	0.00
EG10858	rnd	0.00	0.00	0.00	0.00
EG10859	rne	0.00	0.50	0.00	0.01
EG11299	rng	0.00	0.00	0.00	0.00
EG10860	rnhA	0.00	0.90	0.00	1.12
EG10861	rnhB	0.00	0.00	0.00	0.00
EG12637	rnk	1.36	1.36	1.16	1.26
EG13200	rnlA	0.00	0.00	0.00	0.00
EG10862	rnpA	1.18	0.95	1.03	1.12
EG11259	rnr	0.00	0.00	0.00	0.08
EG11547	rnt	0.00	0.00	0.00	0.00
EG11366	rob	0.00	0.00	0.00	0.00
EG13221	rof	0.05	0.00	0.06	0.00
EG11960	rpe	0.00	1.06	0.00	1.01
EG11443	rpiA	0.00	0.00	0.05	0.00
EG11827	rpiB	0.00	0.25	0.00	0.24
EG12459	rpiR	0.00	1.24	0.00	1.44
EG10864	rplA	0.00	0.08	0.00	0.17
EG10865	rplB	0.00	0.42	0.00	0.25
EG10866	rplC	0.00	0.09	0.00	0.15
EG10867	rplD	0.00	0.00	0.00	0.04
EG10868	rplE	0.22	0.19	0.30	0.16
EG10869	rplF	0.26	0.00	0.22	0.00
EG10870	rplI	1.11	0.69	1.60	1.14
EG10871	rplJ	0.66	0.00	0.70	0.08
EG10872	rplK	0.00	0.16	0.00	0.13
EG10873	rplL	0.29	0.21	0.46	0.51
EG10874	rplM	0.13	0.78	0.05	0.64
EG10875	rplN	0.00	0.15	0.00	0.10
EG10876	rplO	0.00	0.23	0.00	0.17
EG10877	rplP	0.00	0.00	0.00	0.00
EG10878	rplQ	0.00	0.18	0.00	0.17
EG10879	rplR	0.00	0.00	0.00	0.00
EG10880	rplS	0.00	0.00	0.00	0.00
EG10881	rplT	0.00	1.32	0.00	1.11
EG50001	rplU	0.00	0.49	0.00	0.18
EG10882	rplV	0.00	0.00	0.00	0.20
EG10883	rplW	0.00	0.13	0.00	0.09
EG10884	rplX	0.20	0.51	0.16	0.59
EG10885	rplY	0.00	0.00	0.00	0.00
EG50002	rpmA	0.00	0.87	0.12	1.13
EG10886	rpmB	0.00	1.57	0.00	1.48
EG10887	rpmC	0.00	0.00	0.00	0.00
EG10888	rpmD	0.00	0.00	0.00	0.00
EG10889	rpmE	0.61	0.13	0.60	0.15
EG10890	rpmF	0.00	0.20	0.00	0.13
EG10891	rpmG	1.23	0.84	0.87	0.59
EG10892	rpmH	1.17	0.70	1.58	1.08
EG11231	rpmI	0.09	0.32	0.08	0.12
EG11232	rpmJ	0.32	0.33	0.66	0.52
EG10893	rpoA	0.00	0.02	0.00	0.02

EG10894	rpoB	0.31	0.00	0.45	0.00
EG10895	rpoC	0.89	0.37	0.78	0.26
EG10896	rpoD	0.00	0.00	0.00	0.00
EG11897	rpoE	0.00	0.00	0.00	0.00
EG10897	rpoH	0.64	0.04	0.42	0.03
EG10898	rpoN	0.00	0.24	0.00	0.38
EG10510	rpoS	0.00	0.27	0.00	0.17
EG10899	rpoZ	0.17	0.00	0.15	0.00
EG13091	rppH	0.00	0.14	0.00	0.06
EG10900	rpsA	0.00	0.00	0.00	0.00
EG10901	rpsB	0.00	0.06	0.00	0.00
EG10902	rpsC	0.00	0.00	0.00	0.00
EG10903	rpsD	0.00	0.37	0.00	0.73
EG10904	rpsE	0.00	0.00	0.00	0.00
EG10905	rpsF	0.44	0.00	0.23	0.00
EG10906	rpsG	1.57	0.96	1.37	1.11
EG10907	rpsH	0.00	0.95	0.00	0.16
EG10908	rpsI	0.08	0.19	0.06	0.11
EG10909	rpsJ	0.71	1.11	0.62	0.37
EG10910	rpsK	0.00	0.99	0.00	0.44
EG10911	rpsL	0.00	0.43	0.00	0.26
EG10912	rpsM	0.00	0.40	0.00	0.19
EG10913	rpsN	0.32	0.97	0.28	0.87
EG10914	rpsO	0.00	0.10	0.00	0.07
EG10915	rpsP	0.00	0.48	0.00	0.22
EG10916	rpsQ	0.00	0.10	0.00	0.06
EG10917	rpsR	0.83	0.51	0.33	0.22
EG10918	rpsS	0.00	0.41	0.00	0.30
EG10919	rpsT	0.00	0.48	0.00	0.14
EG10920	rpsU	0.75	0.00	0.64	0.00
EG11879	rraA	0.00	0.00	0.04	0.00
EG12453	rraB	0.00	0.81	0.00	0.65
EG12207	rrmA	0.64	0.64	0.44	0.19
EG11507	rrmJ	0.00	0.00	0.00	0.00
EG11738	rsd	0.13	0.00	0.11	0.00
EG12341	rseA	0.00	0.00	0.00	0.00
EG13177	rseB	0.08	1.13	0.05	1.19
EG13178	rseC	0.00	0.00	0.00	0.00
EG12436	rseP	0.00	1.13	0.00	1.36
EG12479	rsgA	0.00	1.03	0.00	0.63
EG12163	rsmB	0.18	1.05	0.00	1.09
EG12596	rsmC	0.08	0.77	0.06	0.65
EG10343	rsmD	0.00	0.00	0.00	0.00
EG12366	rsmE	0.00	0.00	0.00	0.00
EG14023	rsmF	0.00	0.21	0.00	0.07
EG12451	rspA	0.00	1.23	0.00	1.48
EG12452	rspB	0.00	0.00	0.00	0.00
EG12120	rssA	0.00	0.70	0.00	1.74
EG12121	rssB	0.00	0.00	0.00	0.00
EG13190	rstA	0.81	0.00	0.54	0.00
EG11233	rstB	1.17	1.25	0.79	1.36
EG12044	rsuA	0.00	0.00	0.00	0.00
EG13933	rsxA	0.00	1.15	0.00	1.50
EG13934	rsxB	0.00	0.00	0.00	0.00
EG13935	rsxC	0.89	1.34	0.74	1.17
EG13936	rsxD	0.00	0.30	0.00	0.25
EG13938	rsxE	0.00	0.00	0.00	0.00
EG13937	rsxG	0.00	0.00	0.00	0.00

EG12938	rtcA	0.00	0.56	0.00	0.52
EG12939	rtcB	0.00	0.00	0.00	0.00
EG12356	rtcR	0.00	1.22	0.06	1.11
EG14077	rtn	1.23	0.00	1.21	0.00
EG11247	rumA	0.00	0.91	0.00	0.83
EG13427	rumB	0.00	0.15	0.00	0.09
EG20283	rusA	0.00	1.39	0.00	1.43
EG13859	rutA	0.00	0.00	0.00	0.00
EG13858	rutB	0.00	0.00	0.00	0.00
EG13857	rutC	0.00	0.00	0.00	0.00
EG13856	rutD	0.00	0.10	0.00	0.06
EG13855	rutE	0.00	0.00	0.00	0.00
EG13854	rutF	0.60	0.00	0.42	0.00
EG13853	rutG	0.00	0.10	0.00	0.00
EG12301	rutR	0.00	0.00	0.00	0.00
EG10923	ruvA	0.00	0.05	0.00	0.00
EG10924	ruvB	0.00	1.04	0.00	1.09
EG10925	ruvC	0.00	0.00	0.00	0.00
EG14380	rzoD	0.00	0.17	0.00	0.00
EG14381	rzoR	0.00	0.32	0.00	0.11
EG13636	rzpD	0.00	0.00	0.00	0.00
EG13817	sad	0.00	0.54	0.00	0.61
EG12025	sanA	0.00	0.00	0.00	0.00
EG20254	sapA	0.36	0.15	0.16	0.10
EG20255	sapB	0.00	0.36	0.00	0.18
EG20256	sapC	0.00	0.07	0.00	0.05
EG12304	sapD	0.30	0.00	0.13	0.00
EG12305	sapF	0.34	0.43	0.19	0.23
EG10926	sbcB	0.00	0.00	0.00	0.00
EG10927	sbcC	0.00	0.00	0.00	0.00
EG11094	sbcD	0.00	0.00	0.00	0.00
EG10928	sbmA	0.00	0.00	0.00	0.00
EG11892	sbmC	0.00	0.00	0.00	0.00
EG10929	sbp	0.00	0.00	0.00	0.00
EG11444	scpA	0.00	0.00	0.00	0.00
EG12972	scpB	0.78	1.27	0.70	1.25
EG12973	scpC	0.00	1.31	0.00	1.08
EG10930	sdaA	0.00	0.81	0.00	0.92
EG11623	sdaB	0.26	0.23	0.17	0.13
EG12142	sdaC	0.41	0.43	0.19	0.13
EG10931	sdhA	0.00	0.15	0.00	0.10
EG10932	sdhB	0.00	0.00	0.00	0.00
EG10933	sdhC	0.00	0.32	0.00	0.17
EG10934	sdhD	0.66	1.18	0.44	1.08
EG10935	sdiA	0.00	0.00	0.00	0.00
EG10936	secA	1.32	0.00	1.11	0.00
EG10937	secB	0.24	0.45	0.23	0.84
EG10938	secD	0.98	0.70	1.00	0.46
EG10939	secE	0.00	0.00	0.00	0.00
EG10940	secF	0.00	0.43	0.00	0.57
EG12095	secG	1.14	0.41	1.00	0.47
EG11087	secM	0.00	0.91	0.00	1.09
EG10766	secY	0.00	0.00	0.00	0.00
EG10941	selA	0.81	0.00	0.54	0.00
EG10942	selB	0.00	0.00	0.00	0.00
EG10943	selD	0.00	0.00	0.00	0.00
EG12197	seqA	0.00	0.00	0.00	0.00
EG10944	serA	0.00	0.00	0.00	0.13

EG10945	serB	0.00	0.99	0.00	0.02
EG10946	serC	0.00	0.00	0.00	0.00
EG10947	serS	0.00	0.00	0.00	0.00
EG11754	setA	0.00	0.00	0.00	0.09
EG12034	setB	0.00	0.00	0.00	0.00
EG11687	setC	0.00	0.00	0.00	0.00
EG13881	sfmA	0.00	0.00	0.00	0.00
EG13882	sfmC	0.00	0.00	0.00	0.00
EG13883	sfmD	0.00	0.00	0.00	0.00
EG12388	sfmF	0.00	0.00	0.00	0.00
EG13884	sfmH	0.00	0.00	0.00	0.00
EG10949	sfsA	0.00	0.00	0.00	0.00
EG10656	sfsB	0.00	1.43	0.00	1.22
EG12287	sgbE	0.00	0.00	0.00	0.00
EG12285	sgbH	1.12	0.00	1.26	0.08
EG12286	sgbU	0.77	0.00	0.56	0.00
EG12554	sgcA	0.00	0.00	0.00	0.00
EG14343	sgcB	0.00	0.00	0.00	0.00
EG12556	sgcC	0.08	1.24	0.07	1.27
EG12553	sgcE	0.00	1.00	0.00	0.98
EG12555	sgcQ	0.00	1.01	0.00	0.89
EG12552	sgcR	0.00	0.00	0.00	0.00
EG12557	sgcX	0.00	1.31	0.00	1.12
EG12094	sgrR	0.04	1.35	0.04	0.96
EG14467	sgrT	0.03	1.15	0.04	0.84
EG20205	shiA	0.00	1.38	0.03	1.39
EG12154	sieB	0.00	0.03	0.00	0.00
EG12216	sirA	0.00	0.53	0.00	0.94
EG14126	sixA	0.00	0.77	0.00	0.50
EG10455	skp	0.00	0.00	0.00	0.00
EG11191	slmA	0.00	0.20	0.00	0.15
EG11890	slp	0.00	0.00	0.00	0.00
EG10950	slt	0.00	0.00	0.00	0.00
EG13408	slyA	0.00	0.00	0.00	0.00
EG13409	slyB	0.00	0.00	0.00	0.00
EG11663	slyD	0.00	0.00	0.00	0.04
EG11664	slyX	0.00	0.00	0.00	0.00
EG11604	smf	0.00	0.00	0.00	0.00
EG11605	smg	0.58	1.32	0.26	1.64
EG10952	smpA	0.00	0.62	0.00	0.56
EG11782	smpB	0.00	0.00	0.00	0.00
EG12167	smtA	0.00	0.00	0.00	0.00
EG10953	sodA	1.43	0.00	1.15	0.00
EG10954	sodB	0.17	0.00	0.08	0.05
EG13419	sodC	0.00	0.95	0.00	0.22
EG10955	sohA	1.22	0.00	1.35	0.00
EG10956	sohB	0.69	1.04	0.47	1.22
EG12669	solA	0.00	0.37	0.00	0.25
EG10957	soxR	0.48	1.18	0.00	1.30
EG10958	soxS	0.00	0.11	0.00	0.25
EG10959	speA	0.02	0.00	0.03	0.00
EG10960	speB	0.51	0.00	0.36	0.00
EG10961	speC	1.36	1.31	1.13	0.98
EG10962	speD	0.38	1.41	0.19	0.86
EG10963	speE	0.00	0.00	0.00	0.00
EG10964	speF	0.04	0.00	0.02	0.00
EG12447	speG	0.52	1.21	0.76	1.30
EG10966	spoT	0.00	0.22	0.00	0.06

EG10968	sppA	0.00	1.13	0.00	0.99
EG14076	spr	0.24	0.27	0.17	0.16
EG13490	spy	0.00	0.04	0.00	0.04
EG11508	sra	0.07	1.18	0.00	1.08
EG10969	srlA	0.00	0.00	0.00	0.00
EG10970	srlB	0.37	0.00	0.31	0.00
EG10971	srlD	0.00	0.00	0.00	0.00
EG14373	srlE	0.00	0.00	0.00	0.00
EG10974	srlR	0.00	0.41	0.00	0.30
EG10975	srmB	0.00	0.00	0.00	0.00
EG10976	ssb	0.00	0.00	0.00	0.00
EG13120	sscR	0.00	1.22	0.00	0.83
EG11600	sseA	0.00	0.00	0.00	0.00
EG11601	sseB	0.00	0.00	0.00	0.00
EG13062	ssnA	0.21	0.97	0.00	0.95
EG10977	sspA	0.00	0.20	0.00	0.81
EG10978	sspB	0.07	0.00	0.05	0.00
EG12732	sstT	0.00	1.24	0.00	1.00
EG13707	ssuA	0.00	0.00	0.00	0.00
EG12358	ssuB	0.00	0.00	0.00	0.00
EG13705	ssuC	0.75	1.19	0.00	1.28
EG13706	ssuD	0.00	0.00	0.00	0.00
EG13708	ssuE	0.00	0.00	0.00	0.00
EG13370	stfR	0.00	0.33	0.00	0.13
EG11428	sthA	0.00	0.63	0.00	0.66
EG11554	stpA	0.52	0.00	0.54	0.15
EG10979	sucA	0.00	0.00	0.00	0.00
EG10980	sucB	0.00	0.00	0.00	0.00
EG10981	sucC	0.00	0.00	0.00	0.00
EG10982	sucD	0.00	0.17	0.00	0.10
EG11378	sufA	0.00	0.61	0.00	0.47
EG13965	sufB	0.00	0.74	0.00	0.66
EG13964	sufC	0.00	0.80	0.00	0.87
EG13963	sufD	0.00	0.00	0.00	0.00
EG13961	sufE	0.00	0.00	0.00	0.00
EG13962	sufS	0.00	0.00	0.00	0.00
EG11616	sugE	0.00	0.23	0.00	0.28
EG10983	suhB	0.06	0.06	0.55	0.11
EG10984	sulA	0.00	0.16	0.00	0.11
EG10985	surA	0.00	0.42	0.00	0.32
EG11817	surE	0.11	0.00	0.00	0.00
EG13720	sxy	0.00	0.00	0.00	0.00
EG12959	syd	0.00	0.58	0.00	0.35
EG12584	symE	0.00	0.46	0.00	0.28
EG11372	tadA	0.00	0.00	0.00	0.00
EG10986	tag	0.00	0.00	0.00	0.00
EG11797	talA	1.31	0.00	1.29	0.00
EG11556	talB	0.00	0.17	0.00	0.28
EG13812	tam	0.25	0.33	0.05	0.11
EG10987	tap	0.72	0.80	0.69	0.85
EG10988	tar	0.00	0.00	0.00	0.00
EG13093	tas	0.00	0.00	0.00	0.00
EG11478	tatA	0.00	0.00	0.00	0.00
EG14322	tatB	0.00	0.00	0.00	0.33
EG11479	tatC	0.00	0.40	0.00	0.33
EG11481	tatD	0.00	0.00	0.00	0.00
EG11305	tatE	0.00	0.00	0.00	0.00
EG13300	tauA	0.00	0.00	0.00	0.00

EG13299	tauB	0.15	0.00	0.04	0.00
EG13301	tauC	0.00	0.00	0.00	0.00
EG12423	tauD	0.00	0.31	0.00	0.00
EG11574	tbpA	0.00	0.00	0.00	0.00
EG10989	tdcA	0.00	0.00	0.00	0.00
EG10990	tdcB	0.00	0.21	0.00	0.09
EG10991	tdcC	0.00	1.03	0.00	0.93
EG11172	tdcD	0.00	0.00	0.00	0.00
EG12758	tdcE	0.00	0.00	0.00	0.00
EG12757	tdcF	0.00	0.00	0.00	0.00
EG12756	tdcG	0.00	0.61	0.00	0.63
EG10992	tdcR	0.00	0.00	0.00	0.00
EG10993	tdh	0.00	0.59	0.00	0.42
EG10994	tdk	0.00	0.00	0.00	0.00
EG11883	tehA	0.00	0.80	0.20	0.36
EG11884	tehB	0.14	0.86	0.09	0.99
EG11542	tesA	0.09	0.00	0.11	0.00
EG10995	tesB	0.00	1.25	0.00	1.13
EG11120	tfaE	0.00	0.00	0.00	0.00
EG13825	tfaQ	1.32	1.45	1.19	1.19
EG13371	tfaR	0.00	1.19	0.15	1.76
EG10996	tgt	0.00	0.00	0.00	0.00
EG11585	thiC	0.00	1.22	0.00	0.09
EG14068	thiD	0.00	0.00	0.00	0.00
EG11586	thiE	0.44	1.07	0.31	0.04
EG11587	thiF	1.04	0.00	0.74	0.00
EG11589	thiG	0.00	0.39	0.00	0.31
EG11590	thiH	0.00	0.31	0.00	0.19
EG13273	thiI	0.00	0.00	0.00	0.00
EG13432	thiK	0.00	1.32	0.18	1.55
EG20227	thiL	0.00	0.34	0.00	0.20
EG14069	thiM	0.00	0.00	0.00	0.00
EG11573	thiP	0.00	0.00	0.00	0.00
EG11572	thiQ	0.00	0.06	0.00	0.00
EG14363	thiS	0.00	0.00	0.00	0.00
EG10998	thrA	0.00	0.00	0.00	0.00
EG10999	thrB	0.00	0.49	0.28	0.44
EG11000	thrC	0.00	0.00	0.00	0.00
EG11277	thrL	0.00	0.19	0.00	0.00
EG11001	thrS	0.00	0.28	0.00	0.13
EG11002	thyA	0.00	0.00	0.03	0.00
EG11003	tig	0.00	0.00	0.00	0.00
EG13220	tilS	0.00	0.40	0.00	0.16
EG14402	tisB	0.00	0.00	0.00	0.00
EG11427	tktA	0.00	0.24	0.00	0.19
EG12100	tktB	0.75	0.00	0.49	0.00
EG12826	tldD	0.00	0.27	0.00	0.31
EG12302	tmk	0.00	0.00	0.00	0.00
EG11005	tnaA	0.41	0.04	0.20	0.04
EG11006	tnaB	0.00	0.00	0.00	0.00
EG11276	tnaC	1.05	1.00	0.88	1.18
EG11007	tolA	0.00	0.00	0.00	0.00
EG11008	tolB	0.00	0.00	0.00	0.00
EG11009	tolC	0.04	1.25	0.05	1.24
EG11010	tolQ	0.00	0.70	0.00	0.46
EG11011	tolR	0.00	0.00	0.00	0.00
EG12429	tomB	0.00	0.00	0.00	0.00
EG11012	tonB	1.13	1.26	0.95	1.46

EG11013	topA	0.00	0.30	0.00	0.15
EG11014	topB	0.00	0.00	0.00	0.00
EG11814	torA	0.00	0.00	0.00	0.00
EG11815	torC	0.00	0.00	0.00	0.00
EG12195	torD	0.00	0.00	0.00	0.00
EG14411	torI	0.00	0.09	0.03	0.12
EG12615	torR	0.00	0.29	0.00	0.13
EG12617	torS	0.00	0.00	0.00	0.00
EG12616	torT	0.97	1.66	0.64	1.29
EG13277	torY	0.00	0.00	0.00	0.04
EG13276	torZ	0.00	0.85	0.00	0.61
EG11015	tpiA	0.00	0.00	0.00	0.00
EG13939	tppB	0.00	0.72	0.00	1.13
EG11016	tpr	0.00	0.00	0.00	0.00
EG12672	tpx	0.20	0.39	0.08	0.20
EG13928	tqsA	0.00	0.58	0.00	0.68
EG11017	treA	1.14	1.18	1.29	1.06
EG12127	treB	1.33	0.13	1.54	0.13
EG11402	treC	0.00	0.89	0.00	1.01
EG12245	treF	0.38	0.00	0.10	0.00
EG12202	treR	0.00	1.29	0.00	1.16
EG11018	trg	0.00	0.67	0.00	0.48
EG11019	trkA	0.00	0.00	0.00	0.00
EG11020	trkG	0.00	0.00	0.00	0.00
EG11021	trkH	0.00	0.58	0.00	0.32
EG11022	trmA	0.00	0.00	0.00	0.00
EG11023	trmD	0.44	0.71	0.52	0.57
EG10967	trmH	0.00	1.14	0.03	0.81
EG11779	trmI	0.11	0.61	0.06	0.53
EG13452	trmJ	0.00	0.00	0.00	0.00
EG11024	trpA	0.00	0.00	0.00	0.00
EG11025	trpB	0.00	0.00	0.00	0.00
EG11026	trpC	0.00	0.00	0.00	0.00
EG11027	trpD	0.00	1.39	0.00	0.06
EG11028	trpE	0.00	0.00	0.00	0.00
EG11274	trpL	0.00	1.15	0.00	0.85
EG11029	trpR	0.00	0.37	0.00	0.29
EG11030	trpS	0.63	0.00	0.49	0.02
EG10454	truA	0.00	0.00	0.00	0.00
EG11177	truB	0.00	0.00	0.00	0.00
EG13171	truC	0.00	0.92	0.00	0.80
EG13109	truD	0.00	0.00	0.00	0.00
EG11031	trxA	0.20	1.21	0.11	0.25
EG11032	trxB	0.00	0.00	0.00	0.00
EG11887	trxC	0.00	0.24	0.00	0.14
EG11033	tsf	0.00	0.00	0.00	0.00
EG11262	tsgA	0.02	1.06	0.01	1.13
EG11034	tsr	0.00	0.31	0.00	0.25
EG11035	tsx	0.00	0.00	0.00	0.00
EG13357	ttcA	0.84	1.26	0.61	1.23
EG11168	ttdA	0.00	0.00	0.00	0.00
EG11169	ttdB	0.00	0.00	0.00	0.00
EG12694	ttdR	0.00	0.00	0.00	0.00
EG12393	ttdT	0.00	0.00	0.00	0.00
EG11036	tufA	0.90	0.30	1.69	1.49
EG11037	tufB	0.75	0.68	0.81	1.21
EG11038	tus	0.00	0.00	0.03	0.00
EG13140	tynA	0.45	0.00	0.28	0.00

EG11837	typA	0.56	1.30	0.44	1.12
EG11039	tyrA	0.00	0.00	0.00	0.00
EG11040	tyrB	0.00	1.28	0.00	1.10
EG11041	tyrP	0.00	1.38	0.00	1.40
EG11042	tyrR	0.10	1.09	0.21	0.95
EG11043	tyrS	0.00	0.00	0.00	0.00
EG11370	ubiA	0.30	0.00	0.18	0.00
EG11476	ubiB	0.00	0.00	0.00	0.00
EG11369	ubiC	1.44	1.23	1.54	1.29
EG11396	ubiD	0.00	0.00	0.00	0.03
EG11473	ubiE	0.00	0.00	0.00	0.00
EG13658	ubiF	0.00	0.00	0.00	0.00
EG11143	ubiG	0.00	0.31	0.00	0.09
EG11324	ubiH	0.00	0.00	0.00	0.00
EG11044	ubiX	0.00	0.93	0.25	0.59
EG12133	ucpA	0.00	0.00	0.00	0.00
EG11701	udk	0.00	0.00	0.00	0.00
EG11045	udp	0.05	1.23	0.05	0.73
EG13407	ugd	0.00	0.00	0.00	0.00
EG11046	ugpA	1.14	0.00	0.73	0.00
EG11047	ugpB	0.00	0.00	0.00	0.00
EG11048	ugpC	0.00	0.00	0.00	0.00
EG11049	ugpE	0.00	1.26	0.00	1.09
EG11050	ugpQ	0.00	0.00	0.00	0.00
EG11051	uhpA	0.00	0.43	0.05	0.33
EG11052	uhpB	0.00	1.26	0.00	1.22
EG11053	uhpC	0.00	0.00	0.00	0.00
EG11054	uhpT	0.75	1.73	0.47	1.26
EG11055	uidA	0.00	0.56	0.00	0.46
EG12668	uidC	0.00	0.00	0.00	0.00
EG12667	uidR	0.00	0.00	0.00	0.00
EG12493	ulaA	0.27	0.00	0.15	0.00
EG12494	ulaB	0.00	0.00	0.00	0.00
EG12495	ulaC	0.00	0.00	0.00	0.00
EG12496	ulaD	0.00	0.55	0.00	1.01
EG12497	ulaE	0.12	1.04	0.09	0.99
EG12498	ulaF	1.01	0.00	1.35	0.00
EG12492	ulaG	0.00	1.28	0.00	1.11
EG12491	ulaR	0.00	0.00	0.00	0.00
EG11056	umuC	0.00	0.00	0.00	0.00
EG11057	umuD	0.00	0.00	0.00	0.00
EG11058	ung	0.00	0.00	0.00	0.00
EG14465	uof	0.12	0.00	0.10	0.00
EG11332	upp	0.00	0.00	0.00	0.00
EG12129	uraA	0.00	0.00	0.00	0.00
EG11059	usg	0.00	0.00	0.00	0.00
EG11060	ushA	0.00	0.37	0.00	0.26
EG11390	uspA	0.12	0.00	0.07	0.00
EG12231	uspB	0.00	0.00	0.00	0.00
EG12862	uspC	0.00	0.00	0.00	0.00
EG11877	uspD	0.00	0.00	0.00	0.00
EG11246	uspE	0.64	0.43	0.39	0.19
EG12674	uspF	0.91	0.00	0.88	0.00
EG12683	uspG	0.20	0.31	0.20	0.09
EG13134	uup	0.00	1.13	0.00	1.10
EG11061	uvrA	0.00	0.00	0.00	0.00
EG11062	uvrB	0.00	0.36	0.00	0.22
EG11063	uvrC	0.00	0.26	0.00	0.21

EG11064	uvrD	0.00	0.00	0.00	0.00
EG11140	uvrY	0.00	0.04	0.00	0.07
EG12734	uxaA	0.00	0.00	0.00	0.00
EG11065	uxaB	0.00	0.00	0.00	0.00
EG12737	uxaC	0.43	0.76	0.24	0.65
EG11066	uxuA	0.00	0.10	0.00	0.00
EG20248	uxuB	0.00	0.80	0.00	0.84
EG20249	uxuR	0.00	0.19	0.00	0.11
EG14276	vacJ	0.00	0.00	0.00	0.00
EG11067	valS	0.00	0.09	0.00	0.09
EG13994	ves	0.00	1.28	0.00	0.85
EG11730	viaA	0.00	0.00	0.00	0.00
EG11333	visC	0.00	0.00	0.00	0.00
EG11068	vsr	0.00	0.10	0.00	0.09
EG10520	waaA	0.83	0.72	0.71	0.80
EG11423	waaU	0.07	0.00	0.10	0.00
EG11983	wbbI	0.00	0.00	0.00	0.11
EG11984	wbbJ	0.00	0.00	0.00	0.00
EG11985	wbbK	0.00	0.00	0.00	0.00
EG13569	wcaA	0.00	0.00	0.00	0.00
EG13570	wcaB	0.00	0.00	0.00	0.00
EG13571	wcaC	0.00	0.00	0.00	0.00
EG13572	wcaD	0.00	0.14	0.00	0.13
EG13573	wcaE	0.00	0.00	0.00	0.00
EG13574	wcaF	0.00	0.00	0.00	0.00
EG11790	wcaI	0.00	0.17	0.00	0.10
EG13575	wcaJ	0.00	0.00	0.00	0.00
EG13577	wcaK	0.00	0.00	0.00	0.00
EG12652	wcaL	0.00	0.00	0.00	0.00
EG12651	wcaM	0.00	0.00	0.00	0.00
EG12274	wecH	0.63	1.36	0.22	1.08
EG11540	wrbA	0.00	0.00	0.00	0.00
EG13566	wza	0.38	0.00	0.40	0.00
EG13567	wzb	0.00	1.46	0.00	1.42
EG13568	wzc	0.00	0.00	0.00	0.00
EG13576	wzxC	0.00	0.00	0.00	0.00
EG11486	wzxE	0.00	1.34	0.00	1.15
EG11457	wzyE	0.00	0.00	0.00	0.00
EG11295	wzzE	0.00	0.00	0.00	0.00
EG20250	xapA	0.00	0.00	0.00	0.00
EG13159	xapB	0.00	1.56	0.00	1.44
EG11146	xapR	0.00	0.00	0.00	0.00
EG13049	xdhA	0.00	0.00	0.00	0.00
EG13050	xdhB	0.00	0.40	0.00	0.20
EG13051	xdhC	0.00	1.13	0.00	1.08
EG13064	xdhD	0.00	0.00	0.00	0.00
EG11069	xerC	0.00	0.00	0.00	0.00
EG11071	xerD	0.00	0.00	0.00	0.00
EG14245	xisE	0.00	1.03	0.00	1.54
EG11072	xseA	0.09	0.00	0.06	0.00
EG11098	xseB	0.00	0.00	0.00	0.00
EG11073	xthA	0.44	0.00	0.31	0.00
EG11074	xylA	1.23	0.09	1.01	0.12
EG11075	xylB	0.00	0.00	0.00	0.00
EG11076	xylE	0.00	0.47	0.00	0.00
EG20252	xylF	0.00	0.00	0.00	0.00
EG12275	xylG	0.00	0.00	0.00	0.00
EG12276	xylH	0.00	1.72	0.00	1.91

EG20253	xylR	0.10	0.00	0.06	0.00
EG10011	yaaA	0.24	0.00	0.25	0.00
EG11512	yaaH	0.00	0.00	0.00	0.00
EG11513	yaaI	0.08	0.14	0.05	0.12
EG11555	yaaJ	0.11	0.00	0.10	0.00
EG11566	yaaU	0.00	0.72	0.00	0.68
EG14340	yaaW	0.00	1.43	0.00	1.20
EG14384	yaaX	0.00	1.33	0.00	1.04
EG14386	yaaY	0.00	1.68	0.00	1.31
EG11571	yabI	1.14	0.00	1.01	0.00
EG11089	yacC	0.00	0.50	0.00	0.38
EG12313	yacF	0.00	1.23	0.00	0.81
EG12314	yacG	0.00	0.92	0.00	0.79
EG12315	yacH	0.00	0.00	0.00	0.00
EG12605	yacL	0.00	0.00	0.00	0.00
EG11362	yadB	0.00	0.34	0.00	0.28
EG11678	yadC	0.00	0.00	0.00	0.00
EG11748	yadD	0.00	0.00	0.00	0.00
EG11749	yadE	1.60	1.10	1.30	1.11
EG12320	yadG	0.00	1.31	0.00	1.19
EG12321	yadH	0.00	0.00	0.00	0.00
EG12322	yadI	0.00	0.00	0.00	0.00
EG12325	yadK	1.18	0.00	1.04	0.00
EG12326	yadL	1.27	0.00	1.33	0.00
EG12327	yadM	0.00	0.00	0.00	0.00
EG12328	yadN	0.00	0.00	0.00	0.00
EG12333	yadS	0.00	0.00	0.00	0.00
EG11503	yaeB	0.00	1.19	0.00	1.23
EG12138	yaeF	0.00	0.00	0.00	0.00
EG12336	yaeH	1.45	0.00	1.32	0.00
EG12337	yaeI	0.00	0.00	0.00	0.00
EG12354	yaeJ	0.00	0.00	0.00	0.00
EG13222	yaeP	0.00	0.33	0.00	0.00
EG13223	yaeQ	0.00	0.00	0.00	0.00
EG13224	yaeR	0.00	0.00	0.00	0.00
EG11649	yafC	0.30	0.95	0.19	0.71
EG11650	yafD	0.00	0.00	0.24	0.00
EG11651	yafE	0.00	0.10	0.00	0.20
EG13147	yafJ	0.00	1.14	0.00	0.91
EG13148	yafK	0.80	0.68	0.74	0.62
EG13149	yafL	0.00	0.35	0.00	0.12
EG13150	yafM	0.36	0.00	0.25	0.00
EG13151	yafN	0.00	0.00	0.00	0.00
EG13152	yafO	0.00	0.15	0.00	0.12
EG13153	yafP	0.00	1.45	0.00	1.19
EG13154	yafQ	0.00	0.24	0.00	0.14
EG13331	yafS	1.35	0.80	1.21	0.64
EG13332	yafT	0.00	0.00	0.00	0.00
EG13334	yafV	0.00	0.56	0.00	0.63
EG13335	yafW	0.00	0.64	0.00	0.48
EG13336	yafX	0.00	0.69	0.00	0.50
EG13337	yafY	1.25	1.42	1.45	1.44
EG13338	yafZ	0.00	0.96	0.00	1.25
EG12338	yagA	0.00	0.00	0.00	0.00
EG13344	yagE	0.00	0.00	0.00	0.00
EG13345	yagF	0.00	0.00	0.00	0.00
EG13346	yagG	0.00	0.00	0.00	0.00
EG13347	yagH	0.00	0.98	0.00	0.69

EG13349	yagI	0.00	1.13	0.04	0.93
EG13549	yagJ	0.00	0.00	0.00	0.00
EG13550	yagK	0.00	0.00	0.00	0.00
EG13551	yagL	0.00	0.00	0.00	0.00
EG13552	yagM	1.19	0.00	1.20	0.00
EG13553	yagN	0.00	0.00	0.00	0.00
EG13555	yagP	0.00	0.00	0.00	0.00
EG13556	yagQ	0.00	0.00	0.00	0.00
EG13557	yagR	0.00	0.00	0.00	0.00
EG13558	yagS	0.86	0.00	0.38	0.00
EG13559	yagT	0.00	0.42	0.00	0.27
EG13560	yagU	0.00	0.00	0.00	0.00
EG13561	yagV	0.00	0.00	0.00	0.00
EG13562	yagW	1.36	0.00	1.32	0.00
EG13563	yagX	0.00	0.09	0.00	0.19
EG11236	yahA	0.00	1.69	0.00	1.57
EG13586	yahB	0.00	0.00	0.00	0.00
EG13587	yahC	0.00	0.00	0.00	0.00
EG13588	yahD	0.00	1.14	0.00	1.07
EG13589	yahE	0.00	0.00	0.00	0.00
EG13590	yahF	0.00	0.31	0.00	0.23
EG13591	yahG	0.00	1.20	0.00	1.56
EG13593	yahI	0.00	0.14	0.00	0.08
EG13594	yahJ	0.00	1.37	0.00	1.54
EG13595	yahK	0.00	0.00	0.00	0.00
EG13596	yahL	0.00	1.02	0.00	1.30
EG13597	yahM	0.00	0.00	0.00	0.00
EG13598	yahN	0.00	0.00	0.00	0.00
EG13599	yahO	0.00	1.30	0.00	1.06
EG11093	yaiA	0.00	0.04	0.00	0.02
EG12159	yaiE	0.00	1.07	0.00	0.93
EG13176	yaiI	0.00	0.18	0.00	0.19
EG13294	yaiL	0.00	0.00	0.33	0.00
EG13297	yaiO	0.00	0.00	0.00	0.00
EG13298	yaiP	0.00	0.02	0.04	0.03
EG13302	yaiS	0.00	0.00	0.00	0.00
EG13607	yaiV	0.00	0.00	0.00	0.00
EG13608	yaiW	0.00	0.20	0.00	0.15
EG14279	yaiY	0.00	0.49	0.00	0.34
EG14280	yaiZ	0.00	0.00	0.00	0.00
EG11096	yajC	0.36	0.00	0.30	0.00
EG11097	yajD	0.00	0.30	0.00	0.19
EG12182	yajG	0.00	1.16	0.00	1.01
EG12874	yajI	0.00	0.00	0.00	0.00
EG13272	yajL	0.00	1.21	0.00	1.13
EG13611	yajO	0.00	1.22	0.00	1.26
EG13613	yajQ	0.94	0.03	0.90	0.02
EG13614	yajR	0.00	0.00	0.00	0.00
EG11099	ybaA	0.00	0.00	0.00	0.00
EG11100	ybaB	0.00	0.00	0.00	0.00
EG13217	ybaE	0.00	0.00	0.00	0.00
EG12454	ybaK	0.00	0.00	0.03	0.00
EG12623	ybaL	0.00	1.24	0.00	1.43
EG12830	ybaM	0.17	0.00	0.11	0.00
EG12843	ybaN	0.08	0.00	0.06	0.00
EG13218	ybaO	0.00	0.00	0.00	0.00
EG13244	ybaP	0.00	0.00	0.00	0.00
EG13245	ybaQ	0.00	0.00	0.00	0.00

EG13247	ybaS	0.00	0.00	0.00	0.00
EG13248	ybaT	0.00	0.00	0.00	0.00
EG13250	ybaV	0.00	0.00	0.00	0.00
EG13251	ybaW	0.00	0.00	0.00	0.00
EG13253	ybaY	0.00	0.00	0.00	0.00
EG13254	ybaZ	0.00	0.00	0.00	0.00
EG11657	ybbA	0.00	0.23	0.00	0.09
EG11768	ybbB	0.00	0.40	0.00	0.16
EG11769	ybbC	0.00	0.00	0.00	0.00
EG13257	ybbJ	0.00	0.00	0.00	0.00
EG13259	ybbL	0.00	0.00	0.00	0.00
EG13260	ybbM	0.22	0.11	0.14	0.00
EG13261	ybbN	0.39	0.00	0.32	0.00
EG13262	ybbO	0.00	0.00	0.00	0.00
EG13263	ybbP	0.00	0.00	0.00	0.00
EG13618	ybbW	0.00	0.00	0.00	0.00
EG13620	ybbY	0.00	1.09	0.00	1.22
EG12384	ybcF	0.00	0.00	0.00	0.00
EG12448	ybcH	0.57	0.00	0.55	0.00
EG12708	ybcI	0.00	1.34	0.02	1.33
EG12879	ybcJ	0.00	1.09	0.00	0.79
EG13627	ybcK	0.00	0.00	0.00	0.00
EG13628	ybcL	0.00	0.00	0.00	0.00
EG13629	ybcM	0.00	0.14	0.00	0.08
EG13630	ybcN	0.00	1.14	0.00	1.15
EG13631	ybcO	0.00	0.00	0.00	0.00
EG13638	ybcV	0.87	0.12	0.73	0.05
EG13639	ybcW	0.00	0.00	0.00	0.00
EG11105	ybdB	0.00	0.00	0.00	0.00
EG11107	ybdD	0.00	0.00	0.00	0.10
EG12619	ybdF	0.00	0.40	0.00	0.00
EG12620	ybdG	0.00	0.00	0.00	0.00
EG12692	ybdH	0.06	0.00	0.04	0.00
EG13643	ybdJ	0.00	0.00	0.00	0.00
EG13644	ybdK	0.00	0.00	0.00	0.00
EG13531	ybdL	0.00	0.00	0.00	0.00
EG13532	ybdM	0.00	0.00	0.00	0.00
EG13533	ybdN	0.00	0.00	0.00	0.00
EG13534	ybdO	0.78	0.00	0.65	0.00
EG13537	ybdR	0.00	1.36	0.00	1.32
EG14353	ybdZ	0.00	0.07	0.00	0.04
EG11254	ybeA	0.00	0.07	0.00	0.13
EG11255	ybeB	0.00	0.00	0.16	0.00
EG11592	ybeD	0.00	0.00	0.00	0.00
EG11594	ybeF	0.00	0.00	0.09	0.00
EG12851	ybeL	0.00	0.00	0.00	0.00
EG13647	ybeQ	0.00	0.00	0.00	0.00
EG13648	ybeR	0.00	0.00	0.00	0.00
EG13650	ybeT	0.00	0.00	0.00	0.00
EG13651	ybeU	0.25	0.00	0.00	0.00
EG13654	ybeX	0.00	0.00	0.00	0.00
EG13655	ybeY	0.00	0.29	0.00	0.61
EG13656	ybeZ	0.00	0.00	0.00	0.00
EG11521	ybfA	1.01	1.22	1.08	1.07
EG11522	ybfB	0.00	0.00	0.00	0.00
EG11523	ybfC	0.00	0.00	0.00	0.00
EG11524	ybfD	1.52	0.57	1.38	0.45
EG11775	ybfE	0.00	0.00	0.00	0.00

EG11776	ybfF	0.00	0.00	0.00	0.00
EG12869	ybfK	0.62	0.00	0.48	0.00
EG13659	ybfM	0.00	0.00	0.00	0.00
EG13660	ybfN	0.00	0.00	0.00	0.00
EG14158	ybfP	0.00	1.36	0.00	1.40
EG14419	ybfQ	1.25	0.14	0.97	0.08
EG11108	ybgA	1.43	0.09	1.93	0.08
EG11110	ybgC	0.00	1.02	0.00	1.07
EG12359	ybgD	0.00	0.23	0.00	0.18
EG12395	ybgE	0.00	0.00	0.07	0.00
EG12854	ybgF	0.24	0.97	0.22	0.88
EG13304	ybgH	0.44	0.00	0.11	0.00
EG13305	ybgI	0.00	0.00	0.00	0.00
EG13306	ybgJ	0.00	1.20	0.00	1.13
EG13307	ybgK	0.00	0.00	0.00	0.00
EG13308	ybgL	0.00	0.00	0.00	0.00
EG13311	ybgO	0.00	1.00	0.00	0.71
EG13312	ybgP	0.00	0.00	0.00	0.00
EG13313	ybgQ	0.00	0.00	0.00	0.00
EG13663	ybgS	0.00	0.00	0.00	0.00
EG14329	ybgT	0.40	0.09	0.00	0.05
EG11239	ybhA	1.71	0.00	1.16	0.00
EG11238	ybhB	0.00	0.00	0.00	0.00
EG12875	ybhC	0.00	0.00	0.00	0.00
EG13230	ybhD	1.74	0.00	1.48	0.00
EG13314	ybhF	0.00	0.00	0.00	0.00
EG13315	ybhG	0.00	0.00	0.00	0.00
EG13664	ybhH	0.00	0.00	0.00	0.00
EG13665	ybhI	0.00	0.00	0.00	0.00
EG13666	ybhJ	0.00	0.37	0.00	0.24
EG13667	ybhK	0.00	0.53	0.00	0.38
EG13668	ybhL	0.00	0.60	0.00	0.37
EG13669	ybhM	0.23	0.00	0.14	0.00
EG13670	ybhN	0.00	0.00	0.00	0.00
EG13671	ybhO	0.00	0.00	0.00	0.00
EG13672	ybhP	0.00	0.00	0.00	0.00
EG13673	ybhQ	0.00	0.00	0.00	0.00
EG13674	ybhR	0.00	0.00	0.00	0.00
EG13675	ybhS	0.00	0.00	0.00	0.00
EG14328	ybhT	0.00	0.91	0.00	1.07
EG14453	ybhU	0.19	0.00	0.14	0.00
EG11579	ybiA	0.07	0.00	0.03	0.00
EG11580	ybiB	0.00	0.00	0.00	0.15
EG11581	ybiC	0.00	0.46	0.00	0.32
EG12406	ybiH	0.00	0.00	0.00	0.00
EG12421	ybiI	0.00	0.06	0.00	0.07
EG12422	ybiJ	0.07	1.04	0.04	1.28
EG13320	ybiO	0.00	0.00	0.00	0.00
EG13321	ybiP	0.46	0.00	0.15	0.00
EG13323	ybiR	0.00	1.33	0.00	0.97
EG13324	ybiS	0.00	1.36	0.00	1.34
EG13325	ybiT	0.00	1.28	0.00	1.34
EG13326	ybiU	0.00	0.00	0.00	0.00
EG13327	ybiV	0.99	0.09	0.82	0.06
EG13328	ybiW	0.00	0.00	0.00	0.00
EG13316	ybiX	0.00	1.23	0.24	1.62
EG13470	ybiY	0.00	0.19	0.00	0.06
EG12842	ybjC	0.00	0.97	0.00	1.04

EG13425	ybjD	0.00	0.50	0.00	0.36
EG13426	ybjE	0.89	0.00	0.66	0.00
EG13676	ybjG	0.88	1.53	0.83	1.39
EG13677	ybjH	1.42	1.29	1.08	1.00
EG13678	ybjI	0.00	0.37	0.00	0.00
EG13679	ybjJ	0.74	0.65	0.45	0.66
EG13680	ybjK	0.00	0.00	0.00	0.00
EG13681	ybjL	0.00	0.00	0.00	0.00
EG13682	ybjM	0.00	0.00	0.09	0.00
EG13683	ybjN	0.36	0.00	0.18	0.03
EG13684	ybjO	0.00	1.21	0.00	1.30
EG13685	ybjP	0.00	0.11	0.04	0.14
EG13686	ybjQ	0.00	0.00	0.00	0.00
EG13688	ybjS	0.00	0.00	0.00	0.00
EG13689	ybjT	0.00	0.50	0.00	0.37
EG13693	ybjX	0.30	0.00	0.03	0.00
EG11241	ycaC	0.53	0.00	0.23	0.00
EG11242	ycaD	0.52	1.00	0.54	1.23
EG12375	ycaI	0.00	0.00	0.00	0.00
EG12702	ycaK	0.00	0.00	0.00	0.00
EG13133	ycaL	0.00	0.14	0.07	0.05
EG13697	ycaM	0.00	0.00	0.00	0.00
EG13698	ycaN	0.03	0.00	0.04	0.04
EG13699	ycaO	0.00	0.00	0.00	0.03
EG13700	ycaP	0.24	0.00	0.13	0.00
EG13701	ycaQ	0.00	0.00	0.00	0.04
EG14287	ycaR	0.00	0.13	0.00	1.35
EG11253	ycbB	0.00	0.12	0.06	0.00
EG12166	ycbC	0.00	0.68	0.00	0.49
EG12397	ycbF	0.00	1.48	0.00	1.12
EG12855	ycbG	0.00	0.00	0.00	0.05
EG13702	ycbJ	0.00	0.00	0.00	0.00
EG13703	ycbK	0.00	0.62	0.00	0.61
EG13704	ycbL	0.00	0.00	0.00	0.00
EG13709	ycbQ	0.00	0.00	0.00	0.00
EG13710	ycbR	0.00	0.00	0.00	0.00
EG13711	ycbS	0.00	0.00	0.03	0.00
EG13712	ycbT	0.00	0.00	0.00	0.00
EG13713	ycbU	0.00	0.00	0.00	0.00
EG13714	ycbV	0.00	0.00	0.37	0.00
EG13715	ycbW	0.00	0.24	0.00	0.23
EG13716	ycbX	0.00	0.88	0.00	0.67
EG13718	ycbZ	0.00	0.00	0.00	0.04
EG11113	yccA	0.18	0.00	0.00	0.00
EG11114	yccB	0.00	0.34	0.00	0.25
EG12196	yccE	0.00	0.26	0.00	0.06
EG12306	yccF	0.84	1.12	0.88	1.28
EG12703	yccJ	0.00	0.63	0.00	0.63
EG12876	yccK	0.00	0.00	0.00	0.06
EG13234	yccM	0.30	0.00	0.12	0.00
EG13721	yccS	0.17	0.97	0.11	0.89
EG13722	yccT	0.00	0.14	0.34	0.24
EG13723	yccU	0.00	0.00	0.00	0.00
EG13725	yccW	0.00	0.00	0.00	0.00
EG13726	yccX	0.00	1.16	0.00	1.61
EG13866	ycdT	0.00	0.00	0.00	0.00
EG13867	ycdU	0.00	0.00	0.00	0.00
EG13870	ycdX	1.13	0.90	1.07	0.91

EG13871	ycdY	0.00	0.52	0.00	0.37
EG13872	ycdZ	0.00	0.00	0.00	0.00
EG11116	yceA	0.00	0.75	0.00	0.57
EG11117	yceB	0.00	1.03	0.00	1.18
EG11119	yceD	1.06	0.24	0.73	0.29
EG11438	yceF	0.00	1.22	0.00	1.26
EG11494	yceG	0.06	1.05	0.05	1.07
EG11537	yceH	0.00	0.00	0.03	0.00
EG11820	yceI	0.00	0.00	0.00	0.00
EG12659	yceJ	1.50	0.92	1.48	1.27
EG12689	yceK	0.00	0.00	0.00	0.00
EG13879	yceM	0.00	0.00	0.00	0.00
EG13880	yceN	0.00	0.00	0.00	0.00
EG14334	yceO	0.18	0.00	0.13	0.00
EG14413	yceQ	0.00	0.59	0.00	0.45
EG11430	ycfD	0.00	0.00	0.00	0.00
EG12303	ycfH	1.51	1.41	1.22	1.24
EG12444	ycfJ	0.00	0.00	0.00	0.00
EG12877	ycfK	0.11	1.24	0.09	1.16
EG13430	ycfL	0.00	0.00	0.00	0.00
EG13431	ycfM	0.82	0.68	0.60	0.65
EG13434	ycfP	0.00	0.00	0.00	0.00
EG13435	ycfQ	1.23	0.00	1.22	0.00
EG13437	ycfS	0.85	1.42	0.99	1.96
EG13438	ycfT	0.00	0.00	0.00	0.00
EG13444	ycfZ	0.00	0.00	0.00	0.00
EG11516	ycgB	0.00	0.00	0.00	0.00
EG13886	ycgE	0.00	0.00	0.00	0.00
EG13887	ycgF	0.00	0.00	0.00	0.00
EG13888	ycgG	0.00	0.00	0.00	0.00
EG13891	ycgJ	0.00	1.42	0.00	1.33
EG13892	ycgK	0.00	1.29	0.09	1.16
EG13893	ycgL	0.00	0.35	0.00	0.28
EG13894	ycgM	0.00	0.00	0.00	0.00
EG13895	ycgN	0.00	0.22	0.00	0.18
EG13899	ycgR	0.00	0.00	0.00	0.00
EG13903	ycgV	0.00	0.00	0.00	0.00
EG14244	ycgX	0.00	0.00	0.00	0.00
EG14275	ycgY	0.00	1.06	0.00	1.69
EG14288	ycgZ	0.00	0.00	0.00	0.02
EG11251	ychA	0.00	0.00	0.00	0.00
EG11342	ychE	0.00	1.18	0.00	1.35
EG11404	ychF	0.00	0.59	0.00	0.61
EG11533	ychH	0.00	1.57	0.00	1.76
EG12119	ychJ	0.02	1.68	0.03	1.50
EG12392	ychM	0.02	0.00	0.03	0.00
EG12404	ychN	0.00	1.35	0.00	1.77
EG12405	ychO	0.06	1.55	0.02	1.41
EG14293	ychQ	0.00	0.00	0.00	0.00
EG14416	ychS	0.00	0.00	0.00	0.00
EG11121	yciA	0.00	0.04	0.00	0.03
EG11122	yciB	0.00	0.00	0.00	0.00
EG11123	yciC	0.00	0.00	0.00	0.00
EG11125	yciE	0.00	1.19	0.00	1.22
EG11126	yciF	0.00	0.00	0.00	0.00
EG11127	yciG	0.00	0.00	0.00	0.00
EG11128	yciH	0.00	0.00	0.00	0.00
EG11607	yciI	0.00	0.10	0.00	0.02

EG11759	yciK	0.00	0.00	0.00	0.00
EG12691	yciM	0.00	0.00	0.00	0.00
EG12868	yciN	0.00	0.00	0.00	0.00
EG12967	yciO	0.00	1.26	0.00	1.23
EG12969	yciQ	0.00	0.00	0.00	0.00
EG13904	yciS	0.20	0.35	0.17	0.02
EG13905	yciT	0.12	0.00	0.09	0.00
EG14256	yciU	0.00	0.29	0.00	0.22
EG14257	yciV	0.00	1.20	0.00	1.06
EG14262	yciW	0.00	0.27	0.00	0.13
EG14351	yciX	0.00	0.00	0.00	0.00
EG14393	yciY	0.00	0.00	0.00	0.00
EG14460	yciZ	0.80	0.83	0.27	0.46
EG12653	ycjD	1.53	0.00	1.32	0.00
EG12870	ycjF	0.25	0.29	0.43	0.19
EG13228	ycjG	0.00	0.30	0.00	0.25
EG13910	ycjM	0.00	0.00	0.00	0.00
EG13911	ycjN	0.00	1.03	0.00	1.36
EG13912	ycjO	0.00	0.00	0.00	0.00
EG13913	ycjP	0.00	1.11	0.00	0.79
EG13914	ycjQ	0.00	0.00	0.00	0.00
EG13915	ycjR	0.00	0.95	0.00	0.98
EG13916	ycjS	0.00	0.00	0.00	0.00
EG13917	ycjT	0.00	1.05	0.00	1.17
EG13918	ycjU	0.00	0.00	0.00	0.00
EG13920	ycjW	0.00	0.86	0.00	0.69
EG13921	ycjX	0.00	0.34	0.00	0.29
EG13922	ycjY	0.13	0.16	0.10	0.17
EG13923	ycjZ	0.00	0.95	0.00	0.45
EG11901	ydaC	0.53	0.00	0.25	0.00
EG12156	ydaE	0.05	1.23	0.00	1.35
EG12157	ydaF	1.41	0.00	1.33	0.00
EG12174	ydaG	0.21	1.10	0.00	1.02
EG13354	ydaL	0.00	0.00	0.00	0.00
EG13355	ydaM	1.57	1.32	1.51	1.22
EG13356	ydaN	0.00	0.00	0.00	0.00
EG13359	ydaQ	0.00	0.00	0.00	0.00
EG13361	ydaS	0.00	0.00	0.00	0.00
EG13362	ydaT	0.00	0.98	0.00	0.93
EG13363	ydaU	0.43	0.52	0.16	0.21
EG13364	ydaV	0.00	0.00	0.00	0.00
EG11309	ydbC	0.90	1.21	0.72	1.10
EG11310	ydbD	0.11	1.18	0.35	1.76
EG13180	ydbH	0.31	0.29	0.21	0.38
EG13182	ydbJ	0.00	0.00	0.00	0.00
EG13183	ydbK	0.00	0.60	0.00	0.44
EG13733	ydbL	0.00	0.75	0.00	0.72
EG11219	ydcA	1.31	0.21	1.42	0.16
EG11526	ydcC	0.00	0.61	0.00	0.65
EG11760	ydcD	1.05	0.61	1.06	0.44
EG12110	ydcF	0.21	1.55	0.23	1.96
EG12865	ydcH	0.00	0.44	0.00	0.15
EG13752	ydcI	0.36	1.24	0.09	1.34
EG13753	ydcJ	0.00	0.00	0.00	0.00
EG13754	ydcK	0.00	1.05	0.00	1.22
EG13755	ydcL	1.34	0.43	1.25	0.26
EG13756	ydcM	0.65	0.54	0.38	0.24
EG13757	ydcN	0.00	0.73	0.00	0.47

EG13758	ydcO	0.00	0.93	0.00	0.85
EG13759	ydcP	0.00	1.21	0.00	0.90
EG13760	ydcQ	0.00	1.34	0.00	1.77
EG13761	ydcR	0.55	0.00	0.34	0.00
EG13762	ydcS	0.00	0.00	0.00	0.00
EG13763	ydcT	0.00	1.30	0.00	1.09
EG13764	ydcU	0.00	0.00	0.00	0.00
EG13765	ydcV	0.00	0.54	0.00	0.22
EG13766	ydcW	0.00	0.00	0.00	0.00
EG13767	ydcX	0.87	1.18	0.54	1.01
EG13768	ydcY	0.00	1.04	0.00	0.75
EG13769	ydcZ	0.00	0.70	0.00	0.69
EG11742	yddA	0.63	1.04	0.60	1.10
EG11743	yddB	0.00	0.00	0.00	0.00
EG11825	yddE	0.15	1.24	0.09	1.15
EG12713	yddG	0.00	1.06	0.00	1.41
EG13779	yddH	0.32	0.28	0.12	0.16
EG13781	yddJ	0.00	1.18	0.00	1.08
EG13784	yddM	0.43	0.00	0.10	0.00
EG13793	yddV	0.00	0.00	0.00	0.00
EG13794	yddW	0.00	0.00	0.00	0.00
EG11636	ydeA	0.25	1.17	0.00	1.29
EG11640	ydeE	1.06	1.00	0.89	0.81
EG11643	ydeH	0.00	0.00	0.00	0.00
EG11644	ydeI	0.00	0.59	0.07	0.40
EG11645	ydeJ	0.00	0.00	0.00	0.00
EG11780	ydeK	0.36	0.00	0.30	0.00
EG13795	ydeM	0.00	0.96	0.00	0.77
EG13796	ydeN	0.00	0.00	0.00	0.00
EG13797	ydeO	0.00	0.00	0.00	0.00
EG13798	ydeP	0.00	1.05	0.00	0.89
EG13799	ydeQ	0.24	0.81	0.18	0.95
EG13800	ydeR	0.00	0.59	0.00	0.29
EG13801	ydeS	0.00	0.50	0.00	0.25
EG13803	ydeU	0.00	0.00	0.00	0.00
EG11300	ydfA	0.98	0.17	1.37	0.48
EG11301	ydfB	0.00	0.42	0.00	0.40
EG11303	ydfD	0.00	1.18	0.00	1.79
EG12345	ydfG	0.00	0.30	0.00	0.23
EG13820	ydfH	1.44	0.44	1.33	0.27
EG13821	ydfI	0.51	0.71	0.39	0.49
EG13823	ydfK	1.16	0.85	1.16	1.04
EG13826	ydfN	0.00	0.00	0.00	0.00
EG13827	ydfO	0.00	0.00	0.00	0.00
EG13828	ydfP	0.26	0.00	0.16	0.00
EG13830	ydfR	0.00	0.00	0.00	0.00
EG13833	ydfU	0.00	1.14	0.00	0.96
EG13834	ydfV	1.14	0.43	1.27	0.36
EG13835	ydfW	0.00	1.07	0.00	0.90
EG13836	ydfX	0.00	0.00	0.00	0.00
EG13838	ydfZ	0.00	0.00	0.00	0.00
EG12457	ydgA	0.00	0.61	0.00	0.80
EG13191	ydgC	0.00	0.00	0.00	0.00
EG13925	ydgD	1.31	0.66	1.61	0.54
EG13929	ydgH	0.00	0.81	0.00	0.68
EG13930	ydgI	0.00	0.87	0.00	0.90
EG13931	ydgJ	0.00	0.00	0.00	0.00
EG13932	ydgK	0.00	0.00	0.00	0.00

EG14462	ydgU	0.00	0.85	0.00	0.92
EG11488	ydhA	0.00	0.00	0.07	0.00
EG12140	ydhB	0.00	0.60	0.00	0.41
EG12141	ydhC	0.00	0.00	0.00	0.00
EG13420	ydhF	0.14	0.31	0.19	0.20
EG13943	ydhI	0.00	0.00	0.00	0.00
EG13944	ydhJ	0.00	0.81	0.00	0.25
EG13945	ydhK	0.00	0.00	0.00	0.00
EG13946	ydhL	0.00	0.00	0.00	0.00
EG13949	ydhO	0.00	0.22	0.00	0.08
EG13950	ydhP	0.41	0.00	0.29	0.00
EG13951	ydhQ	0.00	0.00	0.00	0.00
EG13952	ydhR	0.00	1.32	0.00	1.27
EG13953	ydhS	0.00	1.11	0.00	1.37
EG13954	ydhT	0.00	0.00	0.00	0.00
EG13955	ydhU	0.00	0.00	0.00	0.00
EG13956	ydhV	0.00	0.00	0.00	0.00
EG13957	ydhW	0.00	0.00	0.00	0.00
EG13958	ydhX	0.00	0.00	0.00	0.00
EG13959	ydhY	0.67	0.63	0.48	0.48
EG13960	ydhZ	0.00	0.00	0.00	0.00
EG11132	ydiA	0.00	0.00	0.00	0.00
EG11234	ydiB	0.00	0.92	0.00	1.12
EG12391	ydiE	1.15	1.39	0.90	1.65
EG12432	ydiF	0.00	0.00	0.00	0.00
EG13967	ydiH	0.00	1.07	0.00	1.09
EG13968	ydiI	0.00	0.24	0.00	0.17
EG13969	ydiJ	0.00	0.00	0.00	0.00
EG13970	ydiK	0.30	0.00	0.18	0.00
EG13971	ydiL	0.00	1.37	0.00	1.33
EG13972	ydiM	1.14	0.00	0.99	0.00
EG13973	ydiN	0.00	0.00	0.00	0.00
EG13974	ydiO	0.00	0.00	0.00	0.00
EG13975	ydiP	0.46	0.00	0.00	0.48
EG13976	ydiQ	0.00	0.00	0.00	0.00
EG13977	ydiR	0.00	1.26	0.00	1.01
EG13978	ydiS	0.00	0.00	0.00	0.00
EG13979	ydiT	0.00	1.49	0.00	1.55
EG13980	ydiU	0.00	0.60	0.00	0.54
EG13981	ydiV	0.00	0.00	0.00	0.00
EG13984	ydiY	0.00	0.00	0.00	0.00
EG13985	ydiZ	0.00	0.00	0.00	0.00
EG11134	ydjA	0.00	0.88	0.00	0.96
EG12369	ydjE	0.00	1.45	0.00	1.38
EG13482	ydjF	0.00	0.00	0.00	0.00
EG13483	ydjG	0.00	1.39	0.00	1.65
EG13484	ydjH	0.00	0.74	0.00	0.66
EG13485	ydjI	0.00	0.00	0.00	0.00
EG13486	ydjJ	0.00	0.00	0.00	0.00
EG13487	ydjK	0.42	0.00	0.25	0.00
EG13488	ydjL	0.00	0.00	0.00	0.00
EG13989	ydjM	0.09	0.03	0.00	0.03
EG13990	ydjN	1.02	0.62	0.76	0.68
EG13991	ydjO	0.00	0.00	0.00	0.00
EG14000	ydjX	0.00	0.00	0.00	0.00
EG14001	ydjY	0.00	1.05	0.00	1.02
EG14002	ydjZ	0.00	0.00	0.00	0.00
EG13489	yeaC	0.00	0.00	0.00	0.00

EG12679	yeaD	0.00	0.92	0.00	0.89
EG13491	yeaE	0.33	1.27	0.26	1.40
EG13493	yeaG	0.00	0.26	0.00	0.00
EG13494	yeaH	0.00	0.00	0.00	0.00
EG13495	yeaI	0.14	0.00	0.10	0.00
EG13496	yeaJ	0.00	0.21	0.00	0.19
EG13497	yeaK	0.00	0.00	0.00	0.00
EG13498	yeaL	1.07	0.44	1.07	0.33
EG13499	yeaM	0.00	1.40	0.00	1.50
EG13500	yeaN	0.22	0.00	0.15	0.00
EG13501	yeaO	0.00	0.00	0.00	0.00
EG13502	yeaP	0.31	0.00	0.83	0.00
EG13503	yeaQ	0.00	0.00	0.00	0.00
EG13504	yeaR	0.00	0.00	0.00	0.00
EG13506	yeaT	0.03	0.00	0.03	0.00
EG13507	yeaU	0.00	0.00	0.00	0.00
EG13508	yeaV	0.00	0.69	0.00	0.62
EG13509	yeaW	0.47	0.00	0.41	0.00
EG13510	yeaX	0.00	0.00	0.00	0.00
EG13511	yeaY	0.00	0.00	0.00	0.00
EG13512	yeaZ	0.18	0.27	0.55	1.06
EG10013	yebA	0.00	0.36	0.00	0.23
EG11136	yebB	0.00	0.00	0.00	0.00
EG11137	yebC	0.00	1.01	0.00	1.07
EG11806	yebE	0.00	1.28	0.00	1.53
EG11807	yebF	0.00	0.15	0.00	0.09
EG11808	yebG	0.00	0.62	0.00	0.52
EG12860	yebK	0.15	1.02	0.10	1.35
EG14012	yebN	1.13	0.00	1.11	0.00
EG14014	yebO	0.00	0.26	0.00	0.21
EG14019	yebQ	0.00	0.00	0.00	0.00
EG14020	yebR	0.00	1.03	0.00	1.10
EG14021	yebS	0.42	0.12	0.05	0.09
EG14022	yebT	0.00	1.20	0.00	1.32
EG14024	yebV	0.00	0.00	0.00	0.00
EG14025	yebW	0.00	0.00	0.00	0.00
EG14027	yebY	0.37	0.31	0.29	0.12
EG14028	yebZ	0.00	0.54	0.00	0.33
EG11139	yecA	0.00	0.00	0.00	0.00
EG12347	yecC	0.00	0.00	0.00	0.00
EG12378	yecD	0.00	0.57	0.00	0.59
EG12379	yecE	0.00	1.10	0.00	0.89
EG12861	yecF	0.00	0.42	0.01	0.13
EG12863	yecH	0.00	0.00	0.00	0.00
EG13242	yecJ	0.00	0.00	0.00	0.00
EG13405	yecM	0.00	0.00	0.00	0.00
EG14032	yecN	0.00	0.69	0.00	0.33
EG14036	yecR	0.00	0.15	0.00	0.09
EG14037	yecS	0.00	0.00	0.00	0.00
EG14316	yecT	0.00	0.96	0.00	1.30
EG11141	yedA	0.00	1.25	0.00	1.36
EG11659	yedD	0.00	0.00	0.00	0.00
EG11660	yedE	0.70	0.00	0.69	0.00
EG11661	yedF	0.00	0.11	0.00	0.09
EG12709	yedI	0.00	0.00	0.00	0.00
EG12710	yedJ	0.00	0.00	0.00	0.00
EG13278	yedK	0.00	0.10	0.00	0.05
EG13279	yedL	0.00	0.00	0.00	0.00

EG14039	yedP	0.00	0.07	0.00	0.06
EG14040	yedQ	0.00	0.00	0.00	0.00
EG14041	yedR	0.00	0.10	0.00	0.08
EG14044	yedV	0.00	0.13	0.00	0.46
EG14045	yedW	0.00	1.38	0.00	1.28
EG14046	yedX	0.00	0.00	0.00	0.00
EG14047	yedY	0.40	0.59	0.25	0.48
EG14048	yedZ	0.00	1.10	0.00	1.53
EG11891	yeeA	0.00	0.08	0.00	0.11
EG11894	yeeD	0.00	0.77	0.00	0.85
EG11895	yeeE	0.00	0.00	0.02	0.00
EG11896	yeeF	0.00	0.00	0.20	0.00
EG13378	yeeJ	0.00	0.00	0.00	0.00
EG13382	yeeN	0.00	0.00	0.00	0.00
EG13383	yeeO	0.00	0.00	0.00	0.00
EG13385	yeeR	0.00	0.00	0.00	0.00
EG13386	yeeS	0.00	1.06	0.00	1.24
EG13387	yeeT	0.00	0.08	0.02	0.45
EG13388	yeeU	0.60	1.30	0.62	1.30
EG13389	yeeV	0.00	1.24	0.00	1.27
EG13391	yeeX	0.00	0.00	0.00	0.00
EG13392	yeeY	0.00	0.95	0.00	0.63
EG13393	yeeZ	0.00	0.00	0.00	0.00
EG12844	yefM	0.00	0.57	0.00	0.34
EG12200	yegD	0.00	0.26	0.00	0.19
EG12396	yegE	0.00	0.20	0.08	0.24
EG14051	yegH	0.10	0.13	0.05	0.13
EG14052	yegI	0.00	0.45	0.00	0.33
EG14053	yegJ	0.00	0.00	0.00	0.00
EG14054	yegK	0.00	0.00	0.00	0.00
EG14055	yegL	0.00	0.00	0.00	0.00
EG14059	yegP	0.12	0.28	0.08	0.20
EG14060	yegQ	0.00	0.27	0.00	0.16
EG14061	yegR	1.39	0.04	1.63	0.00
EG14367	yegS	0.00	0.00	0.00	0.00
EG14063	yegT	0.00	0.02	0.00	0.01
EG14064	yegU	0.00	0.00	0.00	0.00
EG14065	yegV	0.00	0.00	0.00	0.00
EG14066	yegW	0.00	0.00	0.00	0.00
EG14067	yegX	0.00	0.66	0.00	0.48
EG11987	yehA	0.00	0.00	0.00	0.00
EG11988	yehB	0.00	0.45	0.00	0.22
EG11989	yehC	0.00	0.00	0.00	0.00
EG11990	yehD	0.00	1.09	0.00	1.44
EG11991	yehE	0.36	0.06	0.00	0.13
EG11995	yehI	0.00	0.00	0.00	0.00
EG11997	yehK	0.00	0.00	0.00	0.00
EG11998	yehL	1.00	0.47	0.68	0.39
EG11999	yehM	0.00	0.00	0.00	0.00
EG12002	yehP	0.00	0.00	0.00	0.00
EG12004	yehR	0.84	0.00	0.90	0.00
EG12005	yehS	0.00	0.00	0.00	0.00
EG12006	yehT	0.00	0.54	0.00	0.43
EG12007	yehU	0.18	0.62	0.12	0.67
EG12009	yehW	0.00	0.38	0.00	0.22
EG12010	yehX	0.00	0.00	0.00	0.00
EG12011	yehY	0.00	0.05	0.00	0.08
EG11289	yeiA	0.00	0.00	0.00	0.02

EG11290	yeiB	0.00	0.00	0.00	0.00
EG12105	yeiE	0.00	1.06	0.00	0.70
EG12026	yeiG	0.00	1.35	0.00	1.50
EG12027	yeiH	0.00	1.15	0.00	1.43
EG12028	yeiI	0.00	0.00	0.00	0.00
EG12031	yeiL	0.28	0.00	0.19	0.00
EG12035	yeiP	0.00	0.50	0.00	0.59
EG12036	yeiQ	0.02	0.21	0.02	0.08
EG12104	yeiR	0.00	0.19	0.00	0.16
EG14073	yeiS	0.00	0.00	0.00	0.00
EG14074	yeiT	0.00	0.00	0.00	0.00
EG14375	yeiW	0.00	0.00	0.00	0.00
EG12037	yejA	0.00	1.25	0.03	1.30
EG12038	yejB	0.00	0.00	0.00	0.00
EG12040	yejE	0.00	0.00	0.00	0.00
EG12041	yejF	0.00	0.92	0.00	0.68
EG12042	yejG	0.00	0.00	0.00	0.00
EG12045	yejH	0.00	0.00	0.00	0.00
EG12048	yejK	0.00	0.00	0.00	0.00
EG12043	yejL	0.17	0.38	0.11	0.25
EG12049	yejM	0.00	0.00	0.00	0.00
EG11142	yfaA	0.00	0.00	0.00	0.00
EG12323	yfaD	0.12	0.00	0.09	0.00
EG12360	yfaE	0.00	0.00	0.00	0.00
EG12850	yfaL	0.00	0.00	0.05	0.00
EG14078	yfaP	0.00	0.08	0.01	0.07
EG14079	yfaQ	0.00	0.00	0.00	0.00
EG14082	yfaT	0.00	0.00	0.00	0.00
EG14083	yfaU	0.00	0.65	0.00	0.48
EG14084	yfaV	0.00	1.29	0.00	1.50
EG14085	yfaW	0.00	0.00	0.00	0.00
EG14086	yfaX	1.65	0.00	1.36	0.00
EG14087	yfaY	0.00	0.04	0.00	0.03
EG14088	yfaZ	0.43	0.52	0.24	0.46
EG12438	yfbB	0.00	0.00	0.00	0.00
EG14095	yfbK	0.00	0.33	0.00	0.14
EG14096	yfbL	0.00	0.00	0.00	0.00
EG14097	yfbM	0.00	0.00	0.00	0.00
EG14098	yfbN	0.00	0.00	0.00	0.00
EG14099	yfbO	1.44	0.00	1.35	0.00
EG14100	yfbP	0.00	0.00	0.00	0.00
EG14101	yfbQ	0.00	0.00	0.00	0.00
EG14102	yfbR	0.00	0.70	0.00	0.70
EG14103	yfbS	0.00	0.00	0.00	0.00
EG14104	yfbT	0.00	0.00	0.00	0.00
EG14105	yfbU	0.07	0.00	0.06	0.00
EG14106	yfbV	0.12	0.73	0.08	0.53
EG11144	yfcA	0.00	0.00	0.00	0.00
EG12607	yfcC	0.00	0.00	0.02	0.00
EG14107	yfcD	0.00	0.72	0.30	0.75
EG14108	yfcE	0.00	0.00	0.00	0.00
EG14109	yfcF	0.00	0.00	0.00	0.00
EG14110	yfcG	0.00	0.00	0.00	0.00
EG14111	yfcH	0.00	0.00	0.00	0.00
EG14112	yfcI	0.00	0.00	0.00	0.00
EG14113	yfcJ	0.00	1.36	0.00	0.93
EG14115	yfcL	0.00	0.00	0.00	0.11
EG14116	yfcM	0.00	1.37	0.00	1.54

EG14117	yfcN	0.00	0.00	0.00	0.00
EG14118	yfcO	0.00	0.05	0.00	0.04
EG14119	yfcP	0.00	0.96	0.00	1.07
EG14120	yfcQ	0.00	1.41	0.00	1.35
EG14121	yfcR	0.00	0.00	0.00	0.00
EG14122	yfcS	0.16	0.00	0.00	0.00
EG14125	yfcV	0.00	0.00	0.00	0.00
EG14129	yfcZ	0.00	1.36	0.00	1.00
EG12420	yfdC	0.00	1.56	0.00	1.30
EG13284	yfdE	1.24	0.00	1.16	0.00
EG14130	yfdF	0.00	0.00	0.00	0.00
EG14131	yfdG	0.00	0.00	0.00	0.00
EG14132	yfdH	0.48	0.00	0.58	0.00
EG14133	yfdI	0.00	0.00	0.00	0.00
EG14135	yfdK	0.00	0.00	0.00	0.00
EG12949	yfdN	0.00	0.12	0.00	0.00
EG14138	yfdP	0.00	1.00	0.00	0.96
EG14139	yfdQ	0.00	0.00	0.00	0.00
EG14140	yfdR	0.00	0.00	0.00	0.00
EG14141	yfdS	0.00	0.00	0.00	0.01
EG14142	yfdT	0.00	0.00	0.02	0.00
EG14144	yfdV	0.00	0.48	0.00	0.32
EG14146	yfdX	0.00	1.15	0.00	1.16
EG14147	yfdY	0.00	1.28	0.00	1.17
EG14198	yfdZ	0.00	0.00	0.00	0.00
EG11145	yfeA	0.00	1.05	0.00	0.96
EG11431	yfeC	0.00	0.00	0.00	0.00
EG11432	yfeD	0.00	0.07	0.00	0.04
EG12376	yfeH	1.17	0.00	0.99	0.00
EG12644	yfeK	0.00	1.80	0.00	1.57
EG13160	yfeN	0.00	0.00	0.00	0.00
EG14156	yfeO	0.00	1.27	0.00	1.43
EG14159	yfeR	0.00	0.00	0.00	0.00
EG14160	yfeS	0.00	0.00	0.00	0.00
EG14161	yfeT	0.00	0.16	0.00	0.14
EG14164	yfeW	0.00	0.00	0.00	0.00
EG14165	yfeX	0.08	0.16	0.00	0.09
EG14166	yfeY	1.28	0.00	0.92	0.00
EG14167	yfeZ	0.00	0.13	0.00	0.11
EG11147	yffB	0.00	0.18	0.12	0.31
EG14173	yffL	0.00	0.00	0.00	0.00
EG14174	yffM	0.00	0.92	0.00	0.90
EG14175	yffN	0.08	1.30	0.00	1.28
EG14176	yffO	0.00	1.41	0.00	1.55
EG14177	yffP	0.00	0.00	0.00	0.00
EG14178	yffQ	0.00	0.00	0.00	0.00
EG14179	yffR	0.00	0.00	0.00	0.00
EG14180	yffS	1.09	1.54	0.00	1.46
EG10015	yfgA	0.00	0.00	0.00	0.00
EG14199	yfgC	0.00	0.00	0.00	0.00
EG14200	yfgD	0.00	1.00	0.00	1.03
EG14202	yfgF	0.00	0.00	0.00	0.00
EG14203	yfgG	0.00	0.00	0.00	0.00
EG14204	yfgH	0.25	0.00	0.09	0.00
EG14205	yfgI	0.00	0.35	0.00	0.31
EG14206	yfgJ	0.00	0.00	0.00	0.00
EG14209	yfgM	0.00	0.00	0.00	0.00
EG14221	yfgO	0.00	0.00	0.00	0.00

EG11285	yfhA	0.00	0.00	0.00	0.00
EG11371	yfhB	0.00	0.36	0.00	0.21
EG12139	yfhG	0.00	0.00	0.00	0.00
EG12308	yfhH	0.00	1.16	0.00	1.18
EG13461	yfhK	0.00	0.09	0.03	0.06
EG13215	yfhL	0.00	0.00	0.00	0.00
EG13394	yfhM	0.00	0.00	0.00	0.00
EG13453	yfhR	0.00	0.00	0.00	0.00
EG11152	yfiB	0.00	0.00	0.00	0.00
EG11538	yfiC	0.85	0.00	0.62	0.00
EG11784	yfiD	0.00	0.58	0.00	0.25
EG11785	yfiE	0.00	0.00	0.00	0.00
EG11786	yfiF	0.00	0.00	0.00	0.00
EG12097	yfiH	0.00	0.00	0.00	0.00
EG12446	yfiL	0.27	0.10	0.13	0.07
EG12857	yfiM	0.11	0.53	0.07	0.93
EG12880	yfiN	0.00	0.00	0.00	0.00
EG14223	yfiP	0.00	0.88	0.00	1.31
EG14224	yfiQ	0.00	0.00	0.00	0.00
EG14225	yfiR	0.00	1.06	0.11	1.10
EG12442	yfjD	0.27	0.00	0.23	0.00
EG13192	yfjF	0.00	0.50	0.00	0.29
EG13193	yfjG	0.00	1.29	0.00	1.27
EG13194	yfjH	0.00	0.00	0.00	0.00
EG13195	yfjI	0.00	0.00	0.00	0.00
EG13196	yfjJ	0.00	0.05	0.00	0.04
EG13197	yfjK	0.00	0.00	0.00	0.00
EG13198	yfjL	0.00	0.00	0.00	0.00
EG13199	yfjM	0.00	0.00	0.00	0.00
EG13201	yfjO	0.00	0.00	0.33	0.00
EG13202	yfjP	0.00	0.00	0.00	0.00
EG13203	yfjQ	0.00	1.36	0.00	1.52
EG13204	yfjR	0.00	0.32	0.00	0.24
EG13205	yfjS	0.00	0.00	0.00	0.00
EG13206	yfjT	0.00	0.00	0.00	0.00
EG13209	yfjW	0.06	1.01	0.05	0.93
EG13210	yfjX	0.00	0.00	0.00	0.00
EG13211	yfjY	0.00	0.08	0.00	0.00
EG13212	yfjZ	0.00	0.00	0.00	0.00
EG12201	ygaC	0.00	0.00	0.00	0.00
EG12698	ygaD	0.00	0.00	0.00	0.00
EG12387	ygaF	0.00	0.00	0.00	0.00
EG12940	ygaH	0.00	0.00	0.00	0.00
EG13285	ygaM	0.00	0.00	0.00	0.00
EG13288	ygaP	0.76	0.00	0.69	0.00
EG12675	ygaU	0.00	0.00	0.00	0.00
EG13524	ygaV	0.00	0.54	0.00	0.43
EG13525	ygaW	0.00	1.20	0.04	1.18
EG13528	ygaZ	0.85	1.52	1.12	1.39
EG11287	ygbA	0.05	0.00	0.07	0.00
EG12707	ygbE	0.20	0.52	0.16	0.25
EG12845	ygbF	0.00	0.00	0.00	0.00
EG13103	ygbI	0.00	0.00	0.00	0.00
EG13104	ygbJ	0.00	1.19	0.00	1.17
EG13105	ygbK	0.24	0.00	0.06	0.00
EG13106	ygbL	0.00	0.00	0.00	0.00
EG13107	ygbM	0.00	0.29	0.00	0.18
EG13108	ygbN	0.00	0.85	0.00	0.71

EG13114	ygbT	0.00	0.08	0.00	0.12
EG12634	ygcB	0.00	0.00	0.00	0.00
EG13033	ygcE	0.00	0.00	0.00	0.00
EG13034	ygcF	0.00	0.00	0.00	0.00
EG13035	ygcG	0.00	0.97	0.00	0.95
EG13115	ygcH	0.00	0.12	0.00	0.05
EG13116	ygcI	0.00	0.69	0.00	0.48
EG13117	ygcJ	0.00	0.00	0.00	0.03
EG13118	ygcK	0.00	0.00	0.00	0.08
EG13119	ygcL	0.00	0.00	0.00	0.00
EG13121	ygcN	0.00	0.00	0.00	0.00
EG13122	ygcO	0.00	0.00	0.00	0.00
EG13123	ygcP	0.00	0.00	0.00	0.00
EG13124	ygcQ	0.00	0.00	0.00	0.00
EG13125	ygcR	0.00	0.00	0.00	0.00
EG13126	ygcS	0.18	0.00	0.13	0.00
EG13128	ygcU	0.00	0.16	0.00	0.07
EG13130	ygcW	0.00	0.40	0.00	2.05
EG11155	ygdB	0.00	0.00	0.00	0.00
EG11793	ygdD	1.27	1.59	1.21	1.74
EG11794	ygdE	0.00	1.35	0.00	0.99
EG12372	ygdG	0.00	0.19	0.00	0.12
EG12373	ygdH	0.00	0.00	0.00	0.00
EG13081	ygdI	0.22	0.00	0.84	0.00
EG13084	ygdL	0.00	0.91	0.00	0.88
EG13092	ygdQ	0.00	0.00	0.00	0.00
EG13076	ygdR	0.00	0.00	0.00	0.00
EG14446	ygdT	0.00	0.00	0.00	0.00
EG11157	ygeA	0.00	0.00	0.00	0.00
EG13037	ygeG	0.66	0.00	0.32	0.00
EG13038	ygeH	0.00	0.00	0.00	0.00
EG13039	ygeI	1.10	0.98	1.12	0.84
EG13048	ygeR	0.00	0.00	0.00	0.00
EG13052	ygeV	0.00	0.00	0.00	0.00
EG13053	ygeW	0.00	1.20	0.00	1.02
EG13054	ygeX	0.00	0.00	0.00	0.00
EG13055	ygeY	0.29	0.00	0.18	0.00
EG11158	ygfA	1.23	0.00	1.56	0.00
EG11323	ygfB	1.11	0.00	0.70	0.00
EG12971	ygfF	0.00	0.00	0.00	0.00
EG12974	ygfI	0.00	1.23	0.00	1.15
EG13060	ygfJ	0.00	1.07	0.00	1.76
EG13061	ygfK	0.00	0.00	0.00	0.00
EG13063	ygfM	0.00	0.78	0.00	0.93
EG13065	ygfO	0.11	1.47	0.03	1.35
EG13067	ygfQ	1.61	0.00	1.57	0.00
EG13069	ygfS	0.00	0.00	0.00	0.00
EG13070	ygfT	0.00	0.02	0.00	0.00
EG13071	ygfU	0.00	0.89	0.00	1.21
EG13074	ygfX	0.00	0.00	0.00	0.00
EG13075	ygfY	0.00	0.00	0.00	0.00
EG12685	ygfZ	1.19	0.45	1.12	0.36
EG11161	yggC	0.00	0.00	0.00	0.00
EG11162	yggD	0.00	0.10	0.00	0.04
EG11244	yggE	0.00	0.00	0.00	0.00
EG11245	yggF	0.00	0.00	0.00	0.00
EG11291	yggG	1.28	0.00	1.26	0.00
EG12122	yggI	0.00	1.45	0.00	0.90

EG12443	yggL	0.00	0.44	0.00	0.40
EG12704	yggM	0.00	1.14	0.00	1.05
EG12705	yggN	0.00	0.24	0.00	0.39
EG12976	yggP	0.00	0.00	0.00	0.00
EG12978	yggR	0.00	0.00	0.00	0.00
EG12979	yggS	0.00	0.00	0.00	0.00
EG12980	yggT	0.00	1.40	0.00	1.37
EG12981	yggU	0.00	0.00	0.00	0.00
EG12983	yggW	0.00	0.00	0.00	0.00
EG12984	yggX	0.00	0.39	0.00	0.30
EG11292	yghA	0.00	0.00	0.00	0.00
EG11824	yghB	0.00	0.00	0.00	0.00
EG12988	yghD	0.00	0.00	0.00	0.00
EG12991	yghG	0.00	0.00	0.00	0.00
EG12994	yghJ	0.00	0.29	0.00	0.32
EG13001	yghQ	0.00	0.00	0.00	0.00
EG13002	yghR	0.00	0.95	0.00	0.87
EG13003	yghS	0.00	0.00	0.00	0.13
EG13004	yghT	0.00	0.00	0.00	0.00
EG13005	yghU	0.00	0.35	0.00	0.46
EG13007	yghW	0.00	0.00	0.00	0.00
EG13010	yghZ	0.00	0.00	0.00	0.00
EG11164	ygiB	0.00	0.62	0.00	0.55
EG11165	ygiC	0.00	0.00	0.00	0.00
EG11166	ygiD	0.00	0.00	0.00	0.00
EG11603	ygiF	0.72	0.00	0.66	0.00
EG11674	ygiH	0.00	0.51	0.00	0.23
EG12363	ygiL	0.00	1.26	0.00	1.01
EG12657	ygiN	0.00	0.00	0.00	0.00
EG13019	ygiQ	0.00	0.46	0.00	0.37
EG13021	ygiS	0.00	1.45	0.00	1.23
EG13022	ygiT	0.00	0.00	0.00	0.00
EG13024	ygiV	0.00	0.22	0.00	0.12
EG13025	ygiW	0.00	1.28	0.13	1.02
EG13028	ygiZ	0.00	0.00	0.00	0.00
EG11171	ygjD	0.00	0.00	0.00	0.00
EG12718	ygjG	0.00	1.40	0.00	1.33
EG12719	ygjH	0.00	0.25	0.00	0.15
EG12720	ygjI	1.23	0.00	1.02	0.00
EG12721	ygjJ	0.00	0.00	0.00	0.00
EG12722	ygjK	0.00	0.00	0.00	0.00
EG12724	ygjM	0.00	0.89	0.00	0.54
EG12725	ygjN	1.24	0.05	0.87	0.07
EG12727	ygjP	0.00	1.39	0.00	1.24
EG12728	ygjQ	0.57	0.00	0.44	0.00
EG12729	ygjR	0.00	0.00	0.00	0.00
EG12733	ygjV	0.00	1.25	0.00	1.15
EG11173	yhaB	0.00	0.21	0.00	0.13
EG11174	yhaC	0.28	0.00	0.36	0.00
EG12747	yhaH	0.00	1.22	0.00	1.01
EG12748	yhaI	0.00	0.00	0.00	0.00
EG12749	yhaJ	0.00	0.45	0.00	0.21
EG12750	yhaK	1.02	0.00	1.15	0.00
EG12751	yhaL	0.00	1.15	0.00	1.10
EG12752	yhaM	0.51	1.26	0.23	1.01
EG12754	yhaO	0.00	0.20	0.00	0.23
EG12761	yhaV	0.00	0.00	0.00	0.00
EG11179	yhbC	0.00	0.14	0.00	0.44

EG11499	yhbE	0.00	0.00	0.00	0.00
EG12146	yhbJ	0.00	0.00	0.00	0.00
EG12784	yhbO	0.10	1.44	0.04	0.98
EG12785	yhbP	0.00	0.00	0.00	0.00
EG12786	yhbQ	0.28	1.40	0.17	1.23
EG12788	yhbS	0.00	0.00	0.00	0.00
EG12789	yhbT	0.00	0.00	0.00	0.00
EG12790	yhbU	0.00	0.00	0.00	0.00
EG12791	yhbV	0.00	0.00	0.00	0.00
EG12792	yhbW	0.23	0.94	0.15	1.09
EG12793	yhbX	0.00	0.00	0.03	0.00
EG12794	yhbY	0.33	0.69	0.25	0.42
EG11515	yhcA	0.03	0.00	0.00	0.00
EG12614	yhcB	0.00	0.81	0.00	1.18
EG12809	yhcC	0.00	1.23	0.00	0.84
EG12810	yhcD	1.25	0.00	1.12	0.00
EG12812	yhcF	0.00	1.10	0.00	1.08
EG12813	yhcG	0.00	1.23	0.00	1.24
EG12814	yhcH	0.00	0.00	0.00	0.00
EG12819	yhcM	0.00	0.00	0.00	0.00
EG12820	yhcN	0.00	0.00	0.00	0.00
EG12821	yhcO	0.00	0.00	0.00	0.00
EG11298	yhdE	0.00	0.00	0.00	0.00
EG11315	yhdH	0.04	0.00	0.03	0.00
EG11498	yhdJ	0.00	0.25	0.00	0.38
EG11968	yhdL	0.00	0.00	0.00	0.00
EG11970	yhdN	0.00	1.08	0.00	1.04
EG12827	yhdP	0.00	0.00	0.00	0.00
EG12831	yhdT	0.00	0.00	0.00	0.00
EG12832	yhdU	0.00	0.29	0.00	0.16
EG12833	yhdV	0.11	1.56	0.09	1.04
EG12835	yhdX	0.13	0.27	0.22	0.12
EG12836	yhdY	0.00	0.91	0.00	0.55
EG12837	yhdZ	0.00	0.33	0.00	0.25
EG12896	yheL	0.23	0.57	0.20	0.89
EG12897	yheM	0.00	0.00	0.00	0.00
EG12898	yheN	0.00	0.64	0.00	0.94
EG12899	yheO	0.88	0.00	0.68	0.00
EG12903	yheS	0.27	1.15	0.18	1.18
EG12904	yheT	0.00	0.00	0.00	0.00
EG12905	yheU	0.29	0.00	0.00	0.00
EG14364	yheV	0.00	0.00	0.00	0.00
EG11182	yhfA	0.00	0.00	0.00	0.00
EG12374	yhfG	0.00	0.00	0.00	0.00
EG12906	yhfK	0.00	0.06	0.00	0.05
EG12907	yhfL	0.00	0.00	0.00	0.00
EG12914	yhfS	0.00	0.00	0.00	0.00
EG12915	yhfT	0.30	0.28	0.05	0.39
EG12916	yhfU	0.00	0.79	0.00	0.49
EG12918	yhfW	0.00	0.00	0.00	0.00
EG12919	yhfX	0.00	0.00	0.00	0.00
EG12920	yhfY	0.00	0.00	0.00	0.00
EG12921	yhfZ	0.00	0.26	0.00	0.16
EG11750	yhgA	0.00	0.00	0.00	0.00
EG12931	yhgE	0.00	0.00	0.00	0.00
EG12932	yhgF	0.00	0.00	0.00	0.00
EG12941	yhgN	0.00	0.00	0.00	0.00
EG11184	yhhA	0.00	1.44	0.00	1.91

EG11520	yhhH	0.00	1.13	0.10	0.98
EG11525	yhhI	0.85	0.00	0.56	0.00
EG11767	yhhJ	0.00	0.00	0.00	0.00
EG12211	yhhK	1.27	0.00	0.71	0.10
EG12212	yhhL	0.00	0.15	0.00	0.08
EG12213	yhhM	0.37	0.09	0.29	0.07
EG12214	yhhN	0.00	0.00	0.00	0.06
EG12217	yhhQ	0.00	0.62	0.00	0.36
EG12219	yhhS	0.00	0.00	0.00	0.00
EG12220	yhhT	0.00	1.17	0.00	1.01
EG12943	yhhW	0.00	0.00	0.00	0.00
EG12944	yhhX	0.00	0.00	0.00	0.00
EG12945	yhhY	0.00	0.00	0.00	0.00
EG12946	yhhZ	0.00	0.00	0.00	0.00
EG11400	yhiD	1.23	1.36	0.89	0.22
EG12224	yhiI	0.00	0.00	0.00	0.00
EG12225	yhiJ	0.00	0.09	0.00	0.02
EG12228	yhiM	1.06	0.00	0.07	0.00
EG12229	yhiN	0.00	0.12	0.00	0.12
EG12233	yhiQ	0.00	0.00	0.00	0.00
EG12234	yhiR	1.21	1.31	1.16	0.81
EG12244	yhjA	0.00	0.00	0.00	0.00
EG12246	yhjB	0.00	0.00	0.00	0.00
EG12247	yhjC	0.00	0.00	0.00	0.00
EG12248	yhjD	0.00	0.00	0.41	0.00
EG12249	yhjE	0.00	0.86	0.00	0.04
EG12251	yhjG	0.00	0.00	0.00	0.00
EG12252	yhjH	0.00	0.28	0.00	0.20
EG12254	yhjJ	0.00	0.00	0.00	0.00
EG12256	yhjK	0.00	0.00	0.00	0.00
EG12262	yhjR	0.00	0.00	0.00	0.00
EG12266	yhjV	0.03	0.28	0.03	0.18
EG12268	yhjX	0.00	0.90	0.00	1.50
EG12269	yhjY	0.00	0.13	0.00	0.05
EG11186	yiaA	0.00	0.00	0.00	0.00
EG11267	yiaB	0.00	0.00	0.00	0.00
EG12270	yiaC	0.00	0.18	0.00	0.12
EG12271	yiaD	0.69	0.00	0.54	0.00
EG12273	yiaF	0.00	0.00	0.00	0.00
EG12624	yiaG	0.00	0.24	0.00	0.15
EG12278	yiaJ	0.00	0.00	0.00	0.00
EG12279	yiaK	0.00	0.00	0.00	0.00
EG12280	yiaL	0.00	0.00	0.00	0.00
EG12281	yiaM	0.00	0.00	0.00	0.17
EG12282	yiaN	0.00	1.01	0.00	0.66
EG12283	yiaO	0.00	0.00	0.00	0.03
EG12288	yiaT	0.00	0.13	0.00	0.08
EG12289	yiaU	0.48	0.00	0.25	0.00
EG12290	yiaV	0.00	0.94	0.00	0.71
EG12291	yiaW	0.00	0.09	0.00	0.12
EG12293	yiaY	0.00	1.18	0.00	0.99
EG11187	yibA	0.00	0.00	0.00	0.00
EG11266	yibD	0.00	1.03	0.00	0.74
EG11762	yibF	0.00	0.44	0.02	0.30
EG11763	yibG	0.00	1.20	0.00	0.97
EG11764	yibH	1.13	0.00	0.83	0.04
EG11765	yibI	0.00	0.33	0.00	0.15
EG11888	yibK	0.00	0.00	0.00	0.00

EG11964	yibL	0.00	0.00	0.00	0.00
EG12295	yibN	0.96	0.17	1.09	0.15
EG12298	yibQ	0.00	0.00	0.00	0.00
EG14397	yibT	0.00	1.50	0.00	1.05
EG14438	yibV	0.00	0.00	0.00	0.00
EG11192	yicC	0.00	0.26	0.00	0.32
EG11194	yicE	0.00	0.33	0.00	0.14
EG11683	yicG	0.00	1.09	0.00	0.86
EG11684	yicH	0.00	0.00	0.00	0.00
EG11685	yicI	0.66	0.00	1.03	0.00
EG11686	yicJ	0.00	0.74	0.00	0.66
EG11688	yicL	0.00	0.00	0.00	0.00
EG11690	yicN	0.00	0.00	0.00	0.00
EG11691	yicO	0.00	0.00	0.00	0.00
EG11312	yicR	0.00	0.23	0.00	0.79
EG14429	yicS	1.09	1.22	0.86	1.14
EG11195	yidA	0.00	0.00	0.00	0.00
EG11196	yidB	0.00	0.00	0.00	0.00
EG11197	yidC	0.00	0.07	0.00	0.10
EG11348	yidD	0.00	0.00	0.00	0.00
EG11536	yidE	0.00	1.07	0.00	0.70
EG11694	yidF	0.00	0.50	0.00	0.32
EG11695	yidG	0.00	1.07	0.00	1.04
EG11696	yidH	0.00	0.00	0.00	0.00
EG11697	yidI	0.28	1.01	0.21	0.91
EG11705	yidJ	0.00	1.29	0.00	1.13
EG11706	yidK	0.00	0.00	0.00	0.00
EG11707	yidL	0.00	0.48	0.00	0.38
EG11711	yidP	0.00	0.00	0.00	0.00
EG11712	yidQ	0.00	0.00	0.02	0.00
EG11713	yidR	0.00	0.00	0.16	0.00
EG11719	yidX	1.34	0.92	1.67	0.81
EG11721	yidZ	0.00	0.29	0.00	0.41
EG11722	yieE	0.00	0.00	0.00	0.00
EG11723	yieF	0.00	0.00	0.00	0.00
EG11724	yieG	0.00	0.00	0.00	0.00
EG11725	yieH	0.00	0.00	0.00	0.08
EG11728	yieK	0.00	0.54	0.00	0.33
EG11729	yieL	0.00	0.00	0.00	0.00
EG11733	yieP	0.00	0.00	0.00	0.00
EG11260	yifB	0.00	1.21	0.00	1.18
EG11450	yifE	0.00	1.15	0.29	0.21
EG11459	yifK	0.00	0.00	0.00	0.00
EG12353	yifL	0.00	0.00	0.00	0.00
EG11201	yigA	0.00	0.00	0.00	0.00
EG11202	yigB	0.00	0.00	0.00	0.00
EG11462	yigE	0.00	0.00	0.00	0.00
EG11464	yigF	0.00	0.70	0.00	0.00
EG11465	yigG	0.00	1.14	0.00	0.91
EG11467	yigI	0.00	1.00	0.00	0.89
EG11470	yigL	0.00	0.00	0.00	0.00
EG11471	yigM	0.03	0.32	0.03	0.15
EG11474	yigP	0.00	0.00	0.00	0.00
EG11484	yigZ	0.00	0.00	0.00	0.00
EG11203	yihA	0.20	1.45	0.46	1.32
EG11830	yihD	0.00	1.53	0.00	1.03
EG11832	yihF	0.00	0.00	0.00	0.00
EG11833	yihG	0.76	0.06	0.51	0.03

EG11835	yihI	0.00	1.15	0.00	1.06
EG11838	yihL	0.00	0.00	0.00	0.00
EG11839	yihM	0.00	0.00	0.00	0.00
EG11840	yihN	0.00	0.00	0.00	0.00
EG11841	yihO	0.00	1.29	0.00	1.14
EG11842	yihP	0.00	0.00	0.00	0.00
EG11843	yihQ	0.00	0.11	0.00	0.10
EG11844	yihR	0.00	0.00	0.00	0.00
EG11845	yihS	0.36	0.00	0.40	0.00
EG11846	yihT	0.00	0.00	0.00	0.00
EG11847	yihU	0.00	1.42	0.00	1.04
EG11848	yihV	0.00	0.03	0.00	0.04
EG11849	yihW	0.04	0.05	0.04	0.00
EG11850	yihX	1.29	0.09	0.95	0.03
EG11851	yihY	0.00	0.00	0.00	0.00
EG11853	yiiD	0.00	0.53	0.00	0.32
EG11854	yiiE	0.00	1.50	0.00	1.48
EG11855	yiiF	0.00	0.00	0.00	0.00
EG11860	yiiG	0.00	0.44	0.00	2.12
EG11870	yiiM	0.00	0.00	0.00	0.00
EG11874	yiiQ	0.00	0.62	0.00	0.54
EG11875	yiiR	0.33	0.13	0.22	0.07
EG11876	yiiS	0.00	0.00	0.00	0.00
EG11878	yiiU	0.00	0.59	0.00	0.38
EG11882	yiiX	0.02	1.43	0.02	0.53
EG11395	yijD	0.00	0.00	0.00	0.00
EG11902	yijE	0.00	0.00	0.00	0.00
EG11903	yijF	0.00	1.07	0.00	1.14
EG11913	yijO	0.00	0.14	0.00	0.09
EG11914	yijP	0.12	0.00	0.20	0.00
EG11206	yjaA	0.00	0.00	0.00	0.00
EG11207	yjaB	0.00	0.00	0.00	0.00
EG11916	yjaG	0.00	0.00	0.00	0.00
EG11917	yjaH	1.14	0.95	0.83	0.87
EG11429	yjaZ	0.00	0.00	0.00	0.00
EG11919	yjbB	0.00	1.00	0.00	1.09
EG11923	yjbE	0.03	1.39	0.04	1.43
EG11924	yjbF	0.00	0.00	0.00	0.00
EG11925	yjbG	1.21	0.00	1.27	0.00
EG11926	yjbH	0.94	1.26	0.64	0.97
EG11928	yjbJ	0.00	1.14	0.00	1.37
EG11930	yjbL	0.00	0.00	0.00	0.00
EG11931	yjbM	0.00	0.00	0.00	0.00
EG11935	yjbQ	0.00	1.33	0.00	1.33
EG11936	yjbR	0.00	0.00	0.00	0.00
EG14350	yjbS	0.00	0.00	0.00	0.00
EG14459	yjbT	0.00	1.18	0.00	1.24
EG11937	yjcB	0.00	0.00	0.00	0.00
EG11938	yjcC	0.00	0.00	0.09	0.00
EG11939	yjcD	0.00	1.17	0.00	1.29
EG11940	yjcE	0.00	0.00	0.00	0.00
EG11941	yjcF	0.62	0.00	0.77	0.00
EG11943	yjcH	0.00	1.36	0.00	1.24
EG11951	yjcO	0.42	0.99	0.18	0.58
EG11955	yjcS	0.00	0.00	0.03	0.00
EG12460	yjcZ	0.12	0.00	0.09	0.00
EG11210	yjdA	0.00	0.00	0.00	0.00
EG12176	yjdC	0.00	1.41	0.00	1.10

EG12463	yjdF	1.30	0.00	1.42	0.00
EG12466	yjdI	0.00	0.00	0.00	0.22
EG12467	yjdJ	1.13	0.00	0.65	0.00
EG12468	yjdK	0.00	0.00	0.00	0.00
EG12469	yjdL	0.00	0.80	0.00	0.73
EG10711	yjdM	0.18	0.41	0.07	0.26
EG10712	yjdN	0.00	1.36	0.00	1.24
EG14342	yjdO	0.00	0.00	0.00	0.00
EG14407	yjdP	0.05	1.21	0.06	1.21
EG11757	yjeE	0.57	0.31	0.33	0.13
EG11758	yjeF	0.49	0.00	0.22	0.00
EG12470	yjeH	0.00	0.00	0.00	0.00
EG12471	yjeI	0.00	0.00	0.00	0.00
EG12472	yjeJ	0.00	0.00	0.00	0.00
EG12473	yjeK	0.00	0.00	0.00	0.00
EG12475	yjeM	0.00	0.00	0.00	0.00
EG12476	yjeN	0.00	0.00	0.00	0.00
EG12477	yjeO	0.00	1.14	0.00	1.05
EG12478	yjeP	0.00	1.16	0.00	0.98
EG12481	yjeS	0.00	0.00	0.00	0.00
EG12482	yjeT	0.00	0.17	0.00	0.16
EG11812	yjfC	0.00	0.00	0.00	0.00
EG12439	yjfF	0.00	0.00	0.00	0.00
EG12484	yjfI	0.00	0.00	0.00	0.13
EG12485	yjfJ	0.00	0.00	0.00	0.00
EG12486	yjfK	0.00	1.13	0.00	0.74
EG12487	yjfL	0.07	0.00	0.03	0.00
EG12488	yjfM	0.00	0.00	0.00	0.00
EG12521	yjfN	0.23	1.16	0.27	1.00
EG12489	yjfO	0.00	1.09	0.00	0.98
EG12490	yjfP	0.00	0.00	0.00	0.00
EG12499	yjfY	0.05	0.85	0.05	0.51
EG12500	yjfZ	0.00	0.00	0.00	0.00
EG11410	yjgA	0.00	0.00	0.00	0.00
EG11436	yjgB	0.00	0.00	0.00	0.00
EG12524	yjgF	0.00	0.79	0.00	0.55
EG12527	yjgH	0.00	0.00	0.00	0.00
EG12528	yjgI	0.00	0.00	0.00	0.00
EG12529	yjgJ	0.00	1.17	0.06	0.61
EG12530	yjgK	0.04	0.02	0.00	0.02
EG12531	yjgL	0.00	0.07	0.00	0.00
EG12532	yjgM	0.00	1.03	0.00	0.97
EG12533	yjgN	0.03	1.48	0.03	1.45
EG12535	yjgP	0.00	0.66	0.00	0.41
EG12536	yjgQ	0.00	0.00	0.00	0.00
EG12537	yjgR	0.10	1.23	0.08	1.27
EG12603	yjgZ	0.00	0.53	0.00	0.46
EG12544	yjhB	0.00	0.00	0.00	0.00
EG12545	yjhC	0.00	0.00	0.00	0.00
EG12548	yjhF	0.00	0.00	0.00	0.00
EG12549	yjhG	0.00	1.15	0.00	1.15
EG12550	yjhH	0.00	1.30	0.00	1.34
EG12551	yjhI	0.00	0.00	0.00	0.00
EG12558	yjhP	0.11	1.35	0.00	1.27
EG12559	yjhQ	0.00	0.12	0.00	0.06
EG12561	yjhS	0.62	0.06	0.58	0.00
EG12604	yjhU	0.00	0.00	0.00	0.00
EG14430	yjhX	0.00	1.26	0.00	1.32

EG10021	yjiA	0.00	0.00	0.00	0.00
EG12564	yjiC	0.00	0.00	0.00	0.00
EG12565	yjiD	0.00	0.00	0.00	0.00
EG12566	yjiE	0.00	0.00	0.00	0.00
EG12568	yjiG	0.36	0.00	0.00	0.00
EG12569	yjiH	0.00	0.00	0.00	0.00
EG12571	yjiJ	0.00	1.15	0.00	0.85
EG12572	yjiK	0.00	1.09	0.00	0.68
EG12573	yjiL	0.00	0.44	0.00	0.26
EG12574	yjiM	0.00	0.66	0.00	0.54
EG12575	yjiN	0.00	1.29	0.00	1.35
EG12579	yjiR	0.00	0.20	0.00	0.14
EG12580	yjiS	0.00	0.38	0.00	0.00
EG12585	yjiX	0.00	0.00	0.00	0.00
EG12586	yjiY	0.08	0.00	0.00	0.00
EG11214	yjjA	0.08	0.00	0.06	0.00
EG11215	yjjB	0.00	0.00	0.00	0.00
EG12115	yjjG	0.00	0.00	0.00	0.00
EG12171	yjjI	1.44	0.00	1.38	0.00
EG12342	yjjJ	0.00	0.63	0.00	0.51
EG12343	yjjK	0.00	0.00	0.00	0.00
EG12588	yjjL	0.00	0.00	0.00	0.00
EG12589	yjjM	0.00	0.00	0.00	0.00
EG12590	yjjN	0.00	0.14	0.00	0.13
EG12592	yjjP	0.00	0.34	0.00	0.28
EG12593	yjjQ	0.00	0.00	0.00	0.00
EG12597	yjjU	0.00	0.00	0.00	0.00
EG12598	yjjV	1.07	1.41	0.96	1.33
EG12599	yjjW	0.00	0.68	0.00	0.49
EG12600	yjjX	0.00	1.31	0.03	1.09
EG12601	yjjY	0.00	0.52	0.00	1.31
EG13348	yjjZ	0.00	0.00	0.00	0.00
EG12309	yjtD	0.00	0.92	0.00	0.87
EG13339	ykfA	0.00	0.88	0.00	0.66
EG13548	ykfB	0.00	0.00	0.00	0.00
EG14283	ykfF	0.00	0.00	0.00	0.00
EG14331	ykfG	0.00	0.00	0.00	0.00
EG14332	ykfH	0.00	0.18	0.00	0.19
EG14333	ykfI	0.00	0.00	0.06	0.18
EG14451	ykfM	0.30	1.52	0.23	1.45
EG13579	ykgB	0.00	0.00	0.00	0.00
EG13580	ykgC	0.00	0.98	0.00	0.98
EG13581	ykgD	0.00	0.37	0.00	0.57
EG13582	ykgE	0.00	1.15	0.00	1.28
EG13583	ykgF	0.00	0.00	0.00	0.00
EG13584	ykgG	0.00	0.00	0.00	0.00
EG13585	ykgH	0.00	0.00	0.00	0.01
EG14278	ykgI	0.00	0.38	0.10	0.22
EG14323	ykgJ	0.09	0.58	0.06	0.43
EG14325	ykgL	0.00	0.45	0.00	0.41
EG14326	ykgM	0.00	1.24	0.00	1.23
EG14432	ykgO	0.00	0.00	0.00	0.67
EG14237	ylaB	0.00	0.00	0.00	0.00
EG14238	ylaC	1.09	0.44	0.00	0.32
EG13622	ylbA	0.00	0.00	0.00	0.00
EG13626	ylbF	0.00	0.00	0.00	0.00
EG14354	ylcG	0.00	0.00	0.00	0.00
EG14355	ylcH	0.00	0.00	0.00	0.00

EG14444	ylcI	1.56	1.18	1.64	0.88
EG13476	yliE	0.06	0.00	0.03	0.00
EG13477	yliF	0.00	1.43	0.00	1.26
EG13478	yliG	0.39	0.00	0.09	0.00
EG13480	yliI	1.24	0.00	1.59	0.00
EG13481	yliJ	0.00	0.00	0.00	0.00
EG14410	yliL	0.79	0.28	0.00	0.20
EG13719	ymbA	0.00	0.00	0.00	0.00
EG13232	ymcE	0.00	0.08	0.00	0.06
EG13873	ymdA	0.00	1.21	0.00	1.29
EG13874	ymdB	0.00	0.00	0.00	0.00
EG13875	ymdC	0.00	0.00	0.00	0.00
EG14358	ymdF	0.00	0.00	0.00	0.00
EG13445	ymfA	0.00	1.14	0.00	1.09
EG13448	ymfD	0.00	0.00	0.00	0.00
EG13449	ymfE	0.44	0.00	1.40	0.00
EG14247	ymfI	0.00	0.00	0.00	0.04
EG14248	ymfJ	0.00	0.00	0.00	0.14
EG14249	ymfK	0.00	0.00	0.00	0.00
EG14250	ymfL	0.00	0.22	0.00	0.00
EG14251	ymfM	0.00	0.00	0.00	0.00
EG14252	ymfN	0.15	0.00	0.16	0.00
EG14255	ymfQ	0.00	0.00	0.00	0.00
EG14336	ymfR	0.00	0.00	0.00	0.00
EG14337	ymfS	0.00	0.00	0.00	0.00
EG14414	ymfT	0.00	0.53	0.00	0.43
EG14289	ymgA	0.00	0.00	0.00	0.00
EG14291	ymgC	0.00	0.00	0.00	0.00
EG14292	ymgD	0.00	1.33	0.00	1.66
EG14338	ymgE	0.00	0.62	0.00	0.57
EG14341	ymgF	0.95	0.85	0.80	1.15
EG14415	ymgG	0.00	0.26	0.00	0.13
EG14449	ymgI	0.00	1.20	0.02	1.25
EG14450	ymgJ	0.00	0.53	0.00	0.31
EG14463	ymiA	0.00	0.00	0.00	0.00
EG14295	ymjA	0.54	1.15	0.36	1.13
EG13373	ynaE	0.74	1.71	0.75	1.69
EG13924	ynaI	0.77	1.25	0.46	1.28
EG14294	ynaJ	0.00	0.00	0.00	0.00
EG14296	ynaK	0.11	0.00	0.06	0.00
EG13748	ynbA	0.00	0.10	0.00	0.05
EG13749	ynbB	0.00	1.28	0.00	1.34
EG13750	ynbC	0.44	0.87	0.25	1.06
EG13751	ynbD	0.00	0.00	0.00	0.00
EG14298	ynbE	0.00	0.00	0.00	0.00
EG13770	yncA	1.33	0.96	1.62	0.78
EG13772	yncB	0.00	0.23	0.00	0.18
EG13774	yncD	0.81	0.72	0.53	0.60
EG13775	yncE	0.93	1.35	0.38	1.55
EG13777	yncG	0.00	0.25	0.00	0.19
EG13778	yncH	0.00	0.00	0.00	0.00
EG14300	yncJ	0.00	0.00	0.00	0.00
EG14394	yncL	0.00	0.00	0.00	0.00
EG14421	yncN	0.00	0.00	0.00	0.00
EG13813	yneE	0.20	1.03	0.08	1.01
EG13814	yneF	0.00	0.00	0.00	0.00
EG13815	yneG	0.70	1.06	0.86	1.22
EG13816	yneH	0.00	0.00	0.00	0.00

EG13818	yneJ	0.00	0.00	0.00	0.00
EG13819	yneK	0.00	0.00	0.00	0.00
EG14395	yneM	0.00	0.00	0.00	0.00
EG14466	yneN	0.00	0.00	0.03	0.00
EG13839	ynfA	0.00	1.42	0.00	1.17
EG13840	ynfB	0.00	0.78	0.00	1.33
EG13841	ynfC	0.18	0.08	1.49	0.00
EG13842	ynfD	1.15	0.56	1.16	0.52
EG13843	ynfE	0.00	1.55	0.00	1.33
EG13844	ynfF	0.00	1.15	0.00	1.12
EG13845	ynfG	0.00	0.44	0.00	0.50
EG13846	ynfH	0.00	0.00	0.00	0.00
EG13849	ynfK	0.00	0.00	0.00	0.00
EG13850	ynfL	0.00	0.00	0.00	0.00
EG12951	ynfM	0.00	0.76	0.00	0.48
EG14388	ynfN	0.36	0.00	0.26	0.00
EG14422	ynfO	0.44	0.00	0.26	0.00
EG14016	ynhF	0.52	0.12	0.17	0.12
EG14015	ynhG	0.00	0.00	0.00	0.00
EG13986	yniA	0.00	0.00	0.00	0.00
EG13987	yniB	0.28	0.47	0.12	0.47
EG13988	yniC	0.00	0.00	0.00	0.00
EG14423	yniD	0.00	0.00	0.00	0.00
EG14003	ynjA	0.00	0.00	0.00	0.00
EG14004	ynjB	0.00	0.00	0.00	0.00
EG14005	ynjC	0.00	0.00	0.00	0.00
EG14006	ynjD	0.00	0.00	0.00	0.00
EG14007	ynjE	0.00	1.22	0.00	1.00
EG14008	ynjF	0.06	0.76	0.04	0.81
EG14010	ynjH	0.00	0.17	0.00	0.02
EG14011	ynjI	0.00	0.00	0.00	0.00
EG13513	yoaA	0.00	0.17	0.00	0.18
EG13514	yoaB	0.00	1.28	0.00	1.16
EG13515	yoaC	0.00	0.28	0.00	0.16
EG13516	yoaD	0.07	0.00	0.00	0.00
EG13517	yoaE	1.06	0.00	0.64	0.00
EG14304	yoaF	0.00	1.21	0.00	1.06
EG14305	yoaG	0.00	0.70	0.00	0.54
EG14306	yoaH	0.00	0.00	0.00	0.00
EG14417	yoaI	0.02	1.12	0.01	1.22
EG14029	yobA	0.00	0.25	0.00	0.22
EG14030	yobB	1.04	1.44	1.10	2.11
EG13948	yobD	1.07	0.00	0.78	0.00
EG14382	yobF	0.00	0.00	0.00	0.00
EG14424	yobH	0.00	0.72	0.00	0.63
EG14049	yodA	0.00	1.29	0.00	0.88
EG14050	yodB	0.00	0.00	0.00	0.00
EG14307	yodC	0.00	0.00	0.00	0.00
EG14387	yodD	0.00	0.00	0.00	0.00
EG14356	yoeB	0.00	0.00	0.00	0.00
EG12016	yohC	0.00	0.00	0.00	0.00
EG12017	yohD	0.00	0.00	0.00	0.00
EG12019	yohF	0.00	0.00	0.00	0.00
EG12023	yohJ	0.30	1.31	0.26	1.36
EG12024	yohK	0.00	0.00	0.00	0.00
EG14072	yohN	0.00	0.00	0.00	0.00
EG14426	yohO	0.00	0.00	0.00	0.00
EG12070	yojI	0.00	0.00	0.00	0.00

EG14461	yojO	0.00	0.00	0.00	0.00
EG14427	ypaA	0.00	0.00	0.00	0.00
EG14445	ypaB	0.00	0.00	0.00	0.00
EG14148	ypdA	0.07	0.99	0.03	0.86
EG14149	ypdB	0.00	0.00	0.00	0.00
EG14150	ypdC	0.00	1.35	0.00	1.32
EG14152	ypdE	0.00	0.00	0.00	0.04
EG14153	ypdF	0.22	0.00	0.15	0.00
EG14376	ypdI	1.08	0.00	1.09	0.00
EG14168	ypeA	0.21	0.00	0.13	0.00
EG14366	ypeB	0.00	0.00	0.00	0.00
EG14385	ypeC	0.00	0.00	0.00	0.00
EG14194	ypfG	0.23	1.29	0.00	1.33
EG14195	ypfH	1.04	1.55	1.05	1.54
EG14196	ypfI	0.00	0.00	0.00	0.00
EG14197	ypfJ	0.00	1.29	0.00	1.22
EG14396	ypfM	0.00	0.00	0.00	0.00
EG14399	ypfN	0.00	0.00	0.00	0.00
EG13462	yphA	0.00	1.20	0.00	0.81
EG13463	yphB	0.00	1.28	0.00	0.93
EG13464	yphC	0.00	0.07	0.00	0.07
EG13465	yphD	0.00	0.00	0.00	0.00
EG13466	yphE	0.00	0.28	0.00	0.18
EG13467	yphF	0.00	0.00	0.00	0.00
EG13468	yphG	0.00	1.06	0.00	0.89
EG13469	yphH	0.00	0.00	0.00	0.00
EG13213	ypjA	1.23	0.00	1.26	0.00
EG14226	ypjD	0.34	0.72	0.06	0.64
EG14284	ypjF	0.00	0.00	0.00	0.00
EG14330	ypjJ	0.00	0.00	0.00	0.00
EG14379	ypjK	0.00	0.84	0.00	0.77
EG13529	yqaA	0.76	0.87	0.25	0.87
EG13530	yqaB	0.00	0.00	0.05	0.02
EG14313	yqaE	0.00	0.12	0.00	0.09
EG13170	yqcA	0.00	0.00	0.00	0.00
EG13172	yqcC	0.16	0.29	0.12	0.16
EG13174	yqcE	0.00	0.00	0.00	0.00
EG13057	yqeA	0.00	0.00	0.00	0.00
EG13058	yqeB	0.00	1.08	0.00	0.64
EG13059	yqeC	0.00	0.00	0.00	0.06
EG13097	yqeF	0.00	0.00	0.00	0.00
EG13098	yqeG	0.64	1.58	0.38	1.97
EG13099	yqeH	0.00	1.84	0.00	1.70
EG13100	yqeI	0.54	0.00	0.41	0.00
EG13101	yqeJ	0.00	0.00	0.00	0.00
EG13274	yqeK	0.00	0.00	0.00	0.00
EG13077	yqfA	0.00	0.00	0.00	0.00
EG13078	yqfB	0.00	0.00	0.00	0.00
EG12987	yqgA	0.96	0.00	0.70	0.00
EG13164	yqgB	0.00	1.14	0.00	1.19
EG13165	yqgC	0.00	0.00	0.00	0.00
EG13166	yqgD	0.00	0.00	0.00	0.00
EG13289	yqgE	0.00	0.00	0.00	0.00
EG13290	yqgF	0.00	0.00	0.00	0.00
EG13011	yqhA	0.00	0.60	0.00	0.66
EG13013	yqhC	0.95	1.06	0.77	1.01
EG13014	yqhD	0.40	0.00	0.28	0.00
EG13017	yqhG	0.00	1.35	0.00	1.23

EG13018	yqhH	0.00	0.00	0.00	0.00
EG12186	yqiA	0.31	1.36	0.19	1.21
EG12185	yqiB	0.00	0.00	0.00	0.00
EG13031	yqiC	0.00	1.20	0.00	1.35
EG14229	yqiH	0.00	0.00	0.00	0.00
EG14230	yqiI	0.00	0.00	0.00	0.00
EG14231	yqiJ	0.00	0.49	0.00	0.16
EG14232	yqiK	0.00	0.00	0.00	0.00
EG12740	yqjA	0.00	0.00	0.00	0.00
EG12741	yqjB	0.00	1.28	0.00	1.13
EG12742	yqjC	0.00	0.00	0.00	0.00
EG12743	yqjD	0.00	0.00	0.00	0.07
EG12744	yqjE	0.00	0.00	0.00	0.00
EG12745	yqjF	0.00	0.00	0.00	0.00
EG12746	yqjG	0.00	0.00	0.00	0.00
EG12953	yqjH	0.19	0.00	0.26	0.00
EG12954	yqjI	0.47	0.62	0.31	0.60
EG14314	yqjK	0.00	0.00	0.00	0.00
EG12773	yraH	0.13	0.00	0.03	0.00
EG12774	yraI	0.03	0.56	0.04	0.51
EG12775	yraJ	0.00	0.87	0.00	0.55
EG12776	yraK	0.00	0.00	0.00	0.00
EG12777	yraL	0.00	0.56	0.00	0.50
EG12778	yraM	0.81	1.34	0.73	1.35
EG12779	yraN	0.00	0.41	0.00	0.29
EG12781	yraP	0.42	0.00	0.35	0.00
EG12782	yraQ	0.00	1.02	0.00	1.07
EG12783	yraR	0.00	0.00	0.00	0.00
EG12796	yrbA	0.00	1.32	0.16	1.31
EG12797	yrbB	0.00	0.00	0.00	0.00
EG12798	yrbC	0.50	0.42	0.19	0.17
EG12799	yrbD	0.00	0.28	0.00	0.21
EG12800	yrbE	0.00	0.30	0.00	0.40
EG12801	yrbF	0.30	0.09	0.00	0.16
EG12802	yrbG	0.00	1.09	0.00	1.13
EG12806	yrbK	0.00	0.00	0.00	0.00
EG12807	yrbL	0.40	0.11	0.29	0.07
EG12838	yrdA	1.11	0.33	0.90	0.18
EG12839	yrdB	0.00	0.18	0.00	0.24
EG12841	yrdD	0.87	0.37	0.57	0.20
EG12927	yrfF	0.00	0.99	0.00	0.51
EG12928	yrfG	0.00	1.12	0.00	0.85
EG12948	yrhB	0.00	0.26	0.05	0.53
EG14370	yrhD	0.00	1.30	0.00	1.03
EG14319	ysaA	0.00	0.70	0.00	0.64
EG14400	ysaB	0.00	0.00	0.00	0.00
EG14321	ysgA	0.00	0.31	0.03	0.19
EG14401	ytcA	0.00	1.14	0.00	0.77
EG12502	ytfB	0.00	0.00	0.00	0.00
EG12505	ytfE	0.00	0.85	0.00	0.69
EG12506	ytfF	0.00	0.00	0.00	0.00
EG12507	ytfG	0.00	0.00	0.00	0.00
EG12508	ytfH	0.00	0.00	0.00	0.00
EG12509	ytfI	0.00	0.00	0.00	0.00
EG12510	ytfJ	0.00	1.06	0.00	0.96
EG12511	ytfK	0.00	0.70	0.00	0.52
EG12512	ytfL	0.17	0.23	0.00	0.14
EG12513	ytfM	0.00	0.00	0.00	0.00

EG12514	ytfN	0.00	0.00	0.00	0.00
EG12516	ytfP	0.00	0.17	0.00	0.10
EG12517	ytfQ	0.00	0.56	0.00	0.33
EG12518	ytfR	0.00	0.00	0.00	0.00
EG12520	ytfT	0.00	1.32	0.00	1.36
EG14464	ythA	1.36	0.58	1.34	0.52
EG14398	ytjA	0.00	1.30	0.00	1.05
EG10951	ytjB	0.00	0.00	0.00	0.00
EG12164	ytjC	0.00	0.30	0.00	0.22
EG12878	zapA	0.00	0.00	0.00	0.00
EG14169	zipA	0.00	0.00	0.00	0.00
EG13662	zitB	0.00	1.11	0.00	1.26
EG12215	zntA	0.00	0.24	0.00	0.18
EG11969	zntR	0.00	0.00	0.00	0.00
EG12678	znuA	0.00	1.21	0.00	1.21
EG12368	znuB	0.00	0.16	0.00	0.02
EG13132	znuC	0.00	1.37	0.00	1.26
EG11918	zraP	0.00	0.00	0.00	0.00
EG10482	zraR	0.00	0.00	0.00	0.00
EG10008	zraS	0.00	0.16	0.18	0.04
EG11167	zupT	0.00	0.99	0.00	0.66
EG11929	zur	0.00	0.58	0.00	0.36
EG11221	zwf	0.00	0.00	0.00	0.00
control	JWKAN	1.11		1.09	

Supplementary Table 6a. Average Fitness after selection in cellulosic hydrolysate.

Avg Fitness after selection in high hydrolysate concentrations (18%, 19%, 20%)

gene:mutation	AVG fitness (lnW')	STDEV of sample
cyaA:downtag	5.65	1.58
yciV:downtag	5.17	3.29
ahpC:uptag	4.61	2.36
eutL:uptag	3.77	4.76
ygjQ:uptag	3.48	1.53
ydjG:downtag	3.14	1.44
lsrA:uptag	3.08	4.44
rseP:downtag	2.85	1.06
lpp:downtag	2.45	2.83
talA:uptag	2.26	1.32
motA:uptag	2.02	0.46
lacZ:downtag	1.89	0.78
nhoA:downtag	1.77	0.47
ydaF:uptag	1.70	0.47
kilR:uptag	1.69	0.49
tonB:downtag	1.66	0.45
eamA:downtag	1.60	0.68
yihL:downtag	1.58	0.67
glnQ:uptag	1.56	0.47
mdtB:uptag	1.55	0.70
chbC:uptag	1.53	0.42
nanC:uptag	1.52	0.48
ygaZ:uptag	1.51	2.16
yobF:uptag	1.51	0.69
yedQ:downtag	1.50	0.45
bcsA:uptag	1.50	0.46
fklB:uptag	1.47	0.43
menD:uptag	1.47	0.44
cysJ:uptag	1.47	0.41
bioB:downtag	1.47	0.40
glcF:uptag	1.46	0.45
nadD:uptag	1.46	0.45
yafV:uptag	1.46	0.51
ycaP:uptag	1.46	0.42
ispF:uptag	1.45	0.45
yaeP:uptag	1.45	0.41
yebS:downtag	1.45	0.42
pabC:uptag	1.45	0.44
frwC:downtag	1.44	0.41
yceO:uptag	1.44	0.40
clpA:downtag	1.44	0.43
yfaA:downtag	1.43	0.46
yjbJ:downtag	1.43	0.44
ybdR:downtag	1.42	0.22
alsA:downtag	1.42	0.46
uhpA:downtag	1.39	0.46
ybaB:downtag	1.37	1.07
yjhF:downtag	1.37	0.43
yccA:uptag	1.36	0.44
ybhD:uptag	1.35	0.45
yggI:downtag	1.32	0.24
ugpE:downtag	1.29	1.69
macA:uptag	1.26	0.32
yafX:downtag	1.24	0.26
gltJ:downtag	1.20	0.45
yjhS:downtag	1.19	0.25
yjgN:downtag	1.05	0.14
mdtM:downtag	0.96	0.02
yfaP:uptag	0.82	0.08
garP:downtag	0.77	2.08
rpoH:downtag	0.30	0.45
pgl:uptag	0.21	1.41
rnk:uptag	0.12	0.35
proQ:uptag	0.08	0.02

Avg Fitness after selection in low hydrolysate concentrations (14%, 15%, 16%, 17%)

gene:mutation	AVG fitness (lnW')	STDEV of sample
moeA:uptag	6.94	4.31
ptsI:uptag	6.45	1.04
cyaA:downtag	6.27	0.78
ilvM:uptag	5.08	3.88
ybjN:downtag	4.52	0.26
eutL:uptag	4.23	0.23
lolC:uptag	4.16	4.48
ybaB:downtag	4.16	0.26
agaS:uptag	4.12	1.51
ybiV:uptag	3.46	2.46
ftsP:uptag	3.44	2.58
purA:downtag	3.35	0.69
ygiF:uptag	3.27	4.97
ptsI:downtag	3.24	1.03
tdcG:uptag	3.12	0.50
glpD:downtag	2.99	0.60
puuE:downtag	2.91	0.57
yjhH:uptag	2.86	4.51
ilvL:uptag	2.73	2.59
rpmI:uptag	2.66	0.84
rumB:uptag	2.65	2.08
lldR:downtag	2.46	0.29
yfaU:downtag	2.45	0.63
rlmG:downtag	2.43	0.42
mioC:uptag	2.42	0.75
eno:uptag	2.37	0.20
lipA:downtag	2.27	3.04
gabT:downtag	2.19	1.59
tus:downtag	2.18	1.84
narU:downtag	2.13	0.23
yafE:downtag	2.02	1.11
yeeN:uptag	1.95	3.31
spy:uptag	1.95	1.24
ydaU:downtag	1.80	0.22
nuoF:downtag	1.73	0.51
ydeK:uptag	1.70	0.36
yadL:uptag	1.48	1.34
nagC:downtag	1.47	0.29
yeeE:uptag	1.44	0.13
acrF:downtag	1.44	2.59
uvrC:downtag	1.38	0.78
ynfC:downtag	1.36	1.06
lplA:downtag	1.36	0.53
ydjG:downtag	1.34	0.33
yihG:uptag	1.34	1.27
umuC:uptag	1.29	1.29
yhaC:downtag	1.18	0.68
yfbO:downtag	1.16	0.18
ydeM:uptag	1.16	1.83
rsmE:downtag	1.09	0.43
yhaM:uptag	1.07	0.98
nanC:uptag	0.98	0.29
sfmA:downtag	0.97	0.92
mreB:uptag	0.97	0.42
hokA:uptag	0.94	0.60
ylcH:uptag	0.94	0.14
ydiH:uptag	0.92	1.94
ygbN:downtag	0.91	0.16
dtd:downtag	0.88	0.54
yhaC:uptag	0.88	0.60
yedQ:downtag	0.84	0.42
talA:uptag	0.84	0.59
ygiQ:uptag	0.83	1.20
ydaF:uptag	0.83	0.22
glcF:uptag	0.83	0.45
yfaA:downtag	0.82	0.30

ispF:uptag	0.82	0.44
rimM:uptag	0.82	1.78
yjhF:downtag	0.80	0.44
fklB:uptag	0.79	0.28
yafV:uptag	0.79	0.32
ybgQ:uptag	0.79	0.27
ygiD:uptag	0.78	1.32
bcsA:uptag	0.78	0.30
menD:uptag	0.78	0.34
pabC:uptag	0.78	0.33
ygiV:uptag	0.77	1.40
ybhD:uptag	0.76	0.34
yebS:downtag	0.76	0.31
yaeP:uptag	0.75	0.42
nadD:uptag	0.75	0.32
yjbJ:downtag	0.75	0.32
cysJ:uptag	0.75	0.29
glnQ:uptag	0.74	0.30
ycaP:uptag	0.73	0.31
bioB:downtag	0.71	0.30
yceO:uptag	0.69	0.31
tonB:downtag	0.67	0.05
rfaS:downtag	0.67	0.98
ygbL:downtag	0.63	0.22
lacZ:downtag	0.62	0.32
gltJ:downtag	0.60	0.33
ygaV:downtag	0.56	0.25
bcsA:downtag	0.56	1.00
ccmD:downtag	0.55	0.13
parE:downtag	0.54	2.63
tnaC:uptag	0.53	0.72
fdhD:uptag	0.53	0.24
yciH:downtag	0.53	0.91
nhoA:downtag	0.52	0.65
uidR:uptag	0.52	0.75
ugpE:downtag	0.46	1.22
rimL:uptag	0.43	0.81
yqiJ:downtag	0.42	0.65
rrmA:downtag	0.37	1.12
znuC:uptag	0.37	3.23
ydcL:downtag	0.35	0.03
ycbS:downtag	0.33	1.75
glpC:uptag	0.32	0.23
yadB:downtag	0.32	0.22
accB:uptag	0.31	0.49
thiL:uptag	0.31	0.92
adiC:uptag	0.29	0.65
rstB:uptag	0.27	3.48
ynfG:uptag	0.21	0.27
tdcG:downtag	0.19	1.25
lldP:downtag	0.18	0.19
hcaT:downtag	0.11	0.52
ybgF:uptag	0.11	2.47
yohK:uptag	0.10	0.01
queA:uptag	0.07	1.57
yodA:downtag	0.06	0.51
motA:uptag	0.05	0.22
lsrA:uptag	0.02	2.76

GOEAST Analysis of Low and High Microarray Data

Bioinformatic analysis of Gene Ontology (GO) Groups from Microarray Data. Using the top 73 alleles above the background threshold from the low and high micoarray groups, utilized the GOEAST web server (Batch-Genes Analysis) to determine statistically relevant enriched GO groups within the data. In order to inform this analysis, each selection within a group was analyzed for the top 73 alleles and added to the list of 73 alleles from each of the other two selections in that group (totaling to 219 genes per analysis, including redundancies). This results in multiple copies of more relevant genes in each dataset, which biases the associated GO group in the GOEAST analysis. P-values below 0.01 were considered relevant and are summarized below for each group. Zheng, Q. & Wang, X.J. GOEAST: a web-based software toolkit for Gene Ontology enrichment analysis. Nucleic Acids Res 36, W358-363 (2008)

Table 6b. Low Hydrolysate Group GOEAST Analysis.

GOID	Ontology	Term	p-value
GO:0008965	molecular_function	phosphoenolpyruvate-protein phosphotransferase activity	0
GO:0003941	molecular_function	L-serine ammonia-lyase activity	0
GO:0006094	biological_process	gluconeogenesis	1.17E-07
GO:0019319	biological_process	hexose biosynthetic process	4.05E-07
GO:0006090	biological_process	pyruvate metabolic process	6.38E-06
GO:0016841	molecular_function	ammonia-lyase activity	1.57E-05
GO:0006006	biological_process	glucose metabolic process	3.85E-05
GO:0046364	biological_process	monosaccharide biosynthetic process	0.00012411
GO:0008170	molecular_function	N-methyltransferase activity	0.000138127
GO:0016840	molecular_function	carbon-nitrogen lyase activity	0.000244917
GO:0042219	biological_process	cellular amino acid derivative catabolic process	0.000411831
GO:0016435	molecular_function	rRNA (guanine) methyltransferase activity	0.000431284
GO:0000287	molecular_function	magnesium ion binding	0.000559743
GO:0046165	biological_process	alcohol biosynthetic process	0.000604756
GO:0070475	biological_process	rRNA base methylation	0.000615573
GO:0016849	molecular_function	phosphorus-oxygen lyase activity	0.001013833
GO:0019318	biological_process	hexose metabolic process	0.001033139
GO:0044445	cellular_component	cytosolic part	0.001154953
GO:0010181	molecular_function	FMN binding	0.001154953
GO:0050308	molecular_function	sugar-phosphatase activity	0.001907
GO:0022625	cellular_component	cytosolic large ribosomal subunit	0.001907
GO:0008649	molecular_function	rRNA methyltransferase activity	0.002835885
GO:0031167	biological_process	rRNA methylation	0.002835885
GO:0009310	biological_process	amine catabolic process	0.003299924
GO:0015562	molecular_function	efflux transmembrane transporter activity	0.005266544
GO:0016879	molecular_function	ligase activity, forming carbon-nitrogen bonds	0.00566321
GO:0051539	molecular_function	4 iron, 4 sulfur cluster binding	0.008439361
GO:0006364	biological_process	rRNA processing	0.009165961
GO:0016072	biological_process	rRNA metabolic process	0.009165961

Table 6c. High Hydrolysate Group GOEAST Analysis.

GOID	Ontology	Term	p-value
GO:0030243	biological_process	cellulose metabolic process	0
GO:0030244	biological_process	cellulose biosynthetic process	0
GO:0016849	molecular_function	phosphorus-oxygen lyase activity	4.27E-07
GO:0016744	molecular_function	transferase activity, transferring aldehyde or ketonic groups	2.78E-06
GO:0019748	biological_process	secondary metabolic process	7.00E-06
GO:0004601	molecular_function	peroxidase activity	7.90E-05
GO:0016684	molecular_function	oxidoreductase activity, acting on peroxide as acceptor	7.90E-05
GO:0051180	biological_process	vitamin transport	7.9046E-05
GO:0009250	biological_process	glucan biosynthetic process	0.000131346
GO:0006733	biological_process	oxidoreduction coenzyme metabolic process	0.000178543
GO:0009108	biological_process	coenzyme biosynthetic process	0.000199734
GO:0009110	biological_process	vitamin biosynthetic process	0.000304645
GO:0006073	biological_process	cellular glucan metabolic process	0.000383702
GO:0044042	biological_process	glucan metabolic process	0.000598254
GO:0051119	molecular_function	sugar transmembrane transporter activity	0.000727773
GO:0006721	biological_process	terpenoid metabolic process	0.00094036
GO:0016114	biological_process	terpenoid biosynthetic process	0.00094036
GO:0045426	biological_process	quinone cofactor biosynthetic process	0.001140427
GO:0006732	biological_process	coenzyme metabolic process	0.001226868
GO:0006769	biological_process	nicotinamide metabolic process	0.001310708
GO:0009820	biological_process	alkaloid metabolic process	0.001310708
GO:0046496	biological_process	nicotinamide nucleotide metabolic process	0.001310708
GO:0043603	biological_process	cellular amide metabolic process	0.001371054
GO:0042375	biological_process	quinone cofactor metabolic process	0.00148651
GO:0009441	biological_process	glycolate metabolic process	0.001613805
GO:0046296	biological_process	glycolate catabolic process	0.001613805
GO:0019355	biological_process	nicotinamide nucleotide biosynthetic process from aspartate	0.001613805
GO:0034627	biological_process	de novo NAD biosynthetic process	0.001613805
GO:0034628	biological_process	de novo NAD biosynthetic process from aspartate	0.001613805
GO:0015175	molecular_function	neutral amino acid transmembrane transporter activity	0.001613805
GO:0008965	molecular_function	phosphoenolpyruvate-protein phosphotransferase activity	1.61E-03
GO:0016209	molecular_function	antioxidant activity	1.74E-03
GO:0006766	biological_process	vitamin metabolic process	1.99E-03
GO:0019362	biological_process	pyridine nucleotide metabolic process	2.46E-03
GO:0015145	molecular_function	monosaccharide transmembrane transporter activity	2.46E-03
GO:0031402	molecular_function	sodium ion binding	0.003260022
GO:0015144	molecular_function	carbohydrate transmembrane transporter activity	0.004053636
GO:0008234	molecular_function	cysteine-type peptidase activity	0.004303837
GO:0015889	biological_process	cobalamin transport	0.004303837
GO:0015562	molecular_function	efflux transmembrane transporter activity	0.004303837
GO:0008643	biological_process	carbohydrate transport	0.004759862
GO:0016705	molecular_function	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	0.005783186
GO:0042364	biological_process	water-soluble vitamin biosynthetic process	0.006272792
GO:0006720	biological_process	isoprenoid metabolic process	0.008354271
GO:0008299	biological_process	isoprenoid biosynthetic process	0.008354271
GO:0070283	molecular_function	radical SAM enzyme activity	0.008518743
GO:0000103	biological_process	sulfate assimilation	0.008518743
GO:0046912	molecular_function	transferase activity, transferring acyl groups, acyl groups converted into alkyl on transfer	0.008518743
GO:0043213	biological_process	bacteriocin transport	0.008518743
GO:0015804	biological_process	neutral amino acid transport	0.008518743
GO:0044272	biological_process	sulfur compound biosynthetic process	0.009151092