

1 **Table S3. Growth phase dependent transcriptional regulation in *Hb.***
 2 ***salinarum**¹**

| ORF | gene product | transcript level | | | translational repression factor | | | | | |
|--|---|------------------|-----|---|---------------------------------|-----|---|------------|-----|---|
| | | stat/exp | | | exp | | | stat | | |
| | | ∅ | SD | n | ∅ | SD | n | ∅ | SD | n |
| Better transcription in stationary growth phase | | | | | | | | | | |
| <u>AA - amino acid metabolism</u> | | | | | | | | | | |
| OE1665R | dihydrodipicolinate synthase | 2.2 | 0.4 | 3 | 1.1 | 0.3 | 4 | 1.0 | 0.1 | 2 |
| OE2736F | formiminoglutamase | 2.8 | 0.4 | 3 | 1.4 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE3913F | imidazoleglycerol-phosphate synthase (glutamine amidotransferase) | 2.3 | 0.9 | 3 | 0.8 | 0.1 | 3 | 1.1 | 0.1 | 2 |
| OE4206F | methylaspartate mutase large chain | 2.4 | 0.5 | 2 | 1.7 | 0.6 | 3 | 0.9 | | 1 |
| <u>CIM - central intermediary metabolism</u> | | | | | | | | | | |
| OE3765F | glycerol-3-phosphate dehydrogenase chain C | 3 | 1.2 | 3 | 1.2 | 0.2 | 4 | 1.1 | | 1 |
| <u>COM - coenzyme metabolism</u> | | | | | | | | | | |
| OE1143R | probable molybdenum cofactor biosynthesis protein MoeA2 | 2.4 | 0.5 | 2 | 1.7 | 0.2 | 3 | 1.1 | 0.1 | 2 |
| OE1615R | folylpolyglutamate synthase / dihydropteroate synthase | 2.1 | 0.4 | 3 | 1.3 | 0.4 | 4 | 1.0 | 0.1 | 3 |
| <u>CP - cellular processes</u> | | | | | | | | | | |
| OE1482R | probable dolichyl-phosphate beta-glucosyltransferase (only N-terminal homology) | 2.1 | 0.4 | 2 | 2.0 | 1.1 | 2 | 2.1 | | 1 |
| OE1515R_a | structural-maintenance-of-chromosomes protein | 3.7 | 1.9 | 3 | 0.4 | 0.2 | 4 | 1.0 | 0.1 | 2 |
| OE1515R_b | structural-maintenance-of-chromosomes protein | 3.4 | 1.1 | 3 | 1.5 | 0.4 | 3 | 0.9 | 0.1 | 3 |
| OE1515R_c | structural-maintenance-of-chromosomes protein | 2.9 | 1.0 | 3 | 0.4 | 0.2 | 4 | 1.2 | 0.3 | 2 |
| OE3541R | probable heat shock protein | 4.7 | 1.4 | 3 | 0.4 | 0.1 | 4 | 0.5 | 0.1 | 3 |
| OE5037R | cell division control protein Cdc6 homolog | 2.1 | 0.6 | 3 | 0.4 | 0.1 | 4 | 1.2 | | 1 |
| OE5212F_a | SMC-like protein Sph1 | 4.5 | 1.9 | 3 | 0.4 | 0.2 | 3 | 0.3 | 0.1 | 3 |
| OE5212F_b | SMC-like protein Sph1 | 2.9 | 1.5 | 3 | 0.4 | 0.2 | 4 | 0.4 | 0.0 | 3 |
| OE6037R | cell division control protein Cdc6 homolog | 3.0 | 0.2 | 3 | 0.6 | 0.3 | 4 | 1.0 | 0.1 | 2 |
| <u>EM - energy metabolism</u> | | | | | | | | | | |
| OE2223F | probable dimethylsulfoxide reductase chain A (reductase subunit) | 4.5 | 1.8 | 3 | 1.4 | | 1 | 0.8 | 0.3 | 2 |
| OE2225F | dimethylsulfoxide reductase chain B (electron transfer protein) | 5.0 | 1.7 | 3 | 1.4 | 0.2 | 3 | 1.1 | | 1 |
| <u>ISH - transposases and ISH-encoded proteins</u> | | | | | | | | | | |
| OE1031F | probable transposase (ISH10) | 2.4 | 0.1 | 2 | 1.5 | 0.2 | 3 | 1.1 | 0.1 | 2 |
| OE1045F | transposase homolog (TCE39) | 2.7 | 0.6 | 3 | 1.2 | 0.2 | 3 | 1.3 | | 1 |
| <u>LIP - lipid metabolism</u> | | | | | | | | | | |
| OE3093R | geranylgeranyl-diphosphate geranylgeranyltransferase (phytoene synthase) | 2.4 | 0.5 | 3 | 1.3 | 0.3 | 4 | 1.1 | 0.3 | 3 |
| <u>MIS - miscellaneous</u> | | | | | | | | | | |
| OE1462R | nicotinamide-nucleotide adenylyltransferase | 2.3 | 0.7 | 2 | 1.7 | 0.6 | 4 | 0.9 | 0.3 | 2 |
| OE1656F | indole-3-acetyl-L-aspartic acid hydrolase | 2.2 | 0.4 | 3 | 1.0 | 0.3 | 4 | 1.0 | 0.1 | 2 |
| OE1698R | probable oxidoreductase Oxr4 | 5.5 | 0.8 | 3 | 0.4 | 0.2 | 4 | 0.5 | 0.2 | 3 |
| OE1808F | probable phytoene dehydrogenase 3 | 3.3 | 0.7 | 3 | 1.3 | 0.4 | 4 | 1.0 | | 1 |
| OE2546F | probable glycosyltransferase | 2.2 | 0.1 | 2 | 1.4 | 0.1 | 4 | 0.8 | 0.2 | 3 |
| OE3100F | bacterioopsin-linked protein Blp | 3.2 | 0.6 | 3 | 0.6 | 0.1 | 3 | 2.5 | 0.3 | 3 |
| OE3261F | conserved cobalamin operon protein | 2.3 | 0.2 | 3 | 1.2 | 0.4 | 4 | 1.0 | 0.1 | 3 |
| OE4021F | probable oxidoreductase | 2.1 | 0.2 | 2 | 1.6 | 0.0 | 2 | 1.0 | | 1 |
| OE4272F | conserved hem operon protein | 2.0 | 0.6 | 3 | 0.6 | 0.3 | 4 | 0.9 | 0.1 | 2 |

| | | | | | | | | | | |
|---|---|-------------|-----|---|------------|-----|---|------------|-----|---|
| OE4615F | protein N-acetyltransferase | 2.4 | 0.7 | 3 | 1.2 | 0.3 | 4 | 1.3 | 0.1 | 2 |
| OE4630R | probable GTP-binding protein | 2.2 | 0.4 | 3 | 1.8 | 0.6 | 3 | 1.2 | 0.3 | 3 |
| OE5192R | alkaline phosphatase | 2.5 | 0.4 | 3 | 0.3 | 0.1 | 4 | 1.0 | 0.0 | 3 |
| <u>NUM - nucleotide metabolism</u> | | | | | | | | | | |
| OE3363F | probable orotidine-5'-phosphate decarboxylase | 2.1 | 0.1 | 3 | 1.1 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| <u>RMT - RNA maturation</u> | | | | | | | | | | |
| OE1222R | tRNA adenylyltransferase, CCA-adding | 2.3 | 0.7 | 2 | 2.2 | 0.2 | 2 | 1.1 | 0.1 | 3 |
| OE3749R | queuine tRNA-ribosyltransferase | 2.3 | 0.3 | 3 | 1.4 | 0.2 | 3 | 1.0 | | 1 |
| <u>RRR - replication, repair, recombination</u> | | | | | | | | | | |
| OE1286R | DNA mismatch repair protein | 3.4 | 0.2 | 3 | 1.4 | 0.1 | 3 | 1.1 | 0.0 | 2 |
| OE3108F | probable DNA primase | 2.5 | 0.6 | 3 | 1.0 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE3467R | deoxyribodipyrimidine photo-lyase | 2.0 | 0.1 | 3 | 1.7 | 0.6 | 3 | 0.8 | 0.1 | 3 |
| OE4344F | excinuclease ABC chain C | 2.8 | 0.6 | 3 | 1.2 | 0.2 | 4 | 1.1 | 0.2 | 3 |
| <u>TC - transcription</u> | | | | | | | | | | |
| OE1557R | transcription antitermination protein homolog | 2.2 | 0.2 | 3 | 1.1 | 0.2 | 3 | 1.0 | 0.0 | 2 |
| <u>TL - translation</u> | | | | | | | | | | |
| OE4132R | tryptophan-tRNA ligase | 2.2 | 0.2 | 3 | 2.1 | 0.7 | 3 | 1.2 | 0.3 | 3 |
| OE4139R | tyrosine-tRNA ligase | 2.4 | 0.8 | 3 | 0.9 | 0.4 | 4 | 0.9 | 0.2 | 2 |
| <u>TP - small molecule transport</u> | | | | | | | | | | |
| OE1288F | probable cationic amino acid transport protein | 2.1 | 0.3 | 3 | 1.1 | 0.2 | 4 | 1.1 | 0.1 | 3 |
| OE3961R | probable Na ⁺ /H ⁺ -exchanging protein | 2.2 | 0.5 | 3 | 1.2 | 0.2 | 3 | 1.0 | 0.1 | 2 |
| OE4082F | probable cation-transporting ATPase | 2.5 | 0.3 | 3 | 1.3 | 0.1 | 4 | 1.1 | 0.2 | 3 |
| OE4316F | ABC-type transport system permease protein | 2.1 | 0.1 | 3 | 0.6 | 0.1 | 4 | 1.1 | 0.3 | 3 |
| OE4318F | ABC-type transport system ATP-binding protein | 2.8 | 0.9 | 3 | 1.0 | 0.1 | 4 | | | 0 |
| OE4358F | ABC-type transport system permease protein | 2.2 | 0.3 | 2 | 1.3 | 0.1 | 4 | 0.8 | 0.2 | 3 |
| OE4479R | probable ABC-type phosphate transport system ATP-binding protein | 3.5 | 0.9 | 3 | 1.1 | 0.1 | 2 | 1.1 | 0.3 | 3 |
| OE4485R | probable ABC-type phosphate transport system periplasmic substrate-binding protein | 3.1 | 1.0 | 3 | 0.9 | 0.2 | 4 | 1.2 | 0.1 | 2 |
| OE5166F | probable ABC-type transport system periplasmic substrate-binding protein (sugar / sn-glycerol-3-phosphate-binding protein) | 10.4 | 3.2 | 3 | 0.5 | 0.2 | 4 | 1.0 | 0.0 | 2 |
| OE5168F | probable ABC-type transport system permease protein (sugar / sn-glycerol-3-phosphate transport protein) | 4.6 | 1.9 | 3 | 0.5 | 0.2 | 4 | 0.9 | 0.2 | 2 |
| OE5169F | probable ABC-type transport system permease protein (sugar / sn-glycerol-3-phosphate transport protein) | 4.1 | 2.4 | 3 | 0.7 | 0.2 | 3 | 0.8 | 0.0 | 2 |
| <u>CHY - conserved hypothetical protein, HY - hypothetical protein, NOF - no function assigned to experimentally identified protein</u> | | | | | | | | | | |
| OE1008F | hypothetical protein | 2.6 | 0.9 | 3 | 0.9 | 0.1 | 4 | 1.0 | 0.1 | 3 |
| OE1025F | conserved hypothetical protein | 3.2 | 0.7 | 3 | 1.3 | 0.2 | 3 | 1.0 | 0.2 | 3 |
| OE1036F | hypothetical protein | 2.9 | 0.4 | 3 | 1.6 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE1037F | hypothetical protein | 3.3 | 0.2 | 3 | 2.1 | 0.9 | 3 | 0.9 | | 1 |
| OE1055R | hypothetical protein | 3.0 | 0.0 | 2 | 1.7 | 0.3 | 3 | 0.9 | 0.2 | 3 |
| OE1192R | hypothetical protein | 5.5 | 0.1 | 2 | 1.4 | 0.2 | 4 | 1.1 | 0.1 | 2 |
| OE1194R | hypothetical protein | 2.4 | 0.2 | 2 | 1.2 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE1196R | hypothetical protein | 3.5 | 2.4 | 2 | 2.7 | 2.0 | 2 | 0.9 | | 1 |
| OE1285F | conserved hypothetical protein | 2.3 | 0.3 | 3 | 1.4 | 0.3 | 4 | 1.1 | 0.1 | 3 |
| OE1314F | transport protein homolog | 4.3 | 1.1 | 2 | 1.6 | 0.5 | 2 | | | 0 |
| OE1342R | hypothetical protein | 2.3 | 0.2 | 2 | 1.6 | 0.4 | 4 | 1.3 | | 1 |
| OE1417F | conserved hypothetical protein | 2.2 | 0.0 | 2 | 1.4 | 0.0 | 3 | 1.1 | | 1 |
| OE1640F | transport protein homolog | 4.0 | 1.5 | 2 | 1.3 | 0.3 | 4 | 1.0 | 0.0 | 3 |
| OE1738R | hypothetical protein | 2.2 | 0.3 | 3 | 1.1 | 0.1 | 3 | 1.1 | | 1 |
| OE1794R | conserved hypothetical protein | 2.7 | 0.6 | 3 | 1.3 | 0.4 | 4 | 0.6 | 0.0 | 3 |

| | | | | | | | | | | |
|---------|--|------------|-----|---|------------|-----|---|------------|-----|---|
| OE1841R | HyfD / HycC / NADH dehydrogenase (ubiquinone) chain L homolog | 3.0 | 0.4 | 3 | 1.2 | 0.2 | 4 | 1.1 | 0.1 | 3 |
| OE1882R | hypothetical protein | 2.9 | 0.3 | 3 | 1.0 | 0.2 | 4 | 1.3 | 0.2 | 3 |
| OE1899R | conserved hypothetical protein | 3.0 | 0.2 | 3 | 1.3 | 0.2 | 3 | 1.3 | 0.2 | 2 |
| OE1947F | conserved hypothetical protein | 3.7 | 0.9 | 2 | 1.2 | 0.1 | 4 | 1.2 | 0.1 | 2 |
| OE1974R | conserved hypothetical protein | 3.0 | 0.3 | 3 | 1.1 | 0.2 | 3 | 0.8 | 0.3 | 3 |
| OE2052F | conserved hypothetical protein | 2.3 | 0.3 | 3 | 1.2 | 0.4 | 4 | 1.1 | 0.2 | 3 |
| OE2102R | conserved hypothetical protein | 3.7 | 0.9 | 3 | 1.2 | 0.1 | 4 | 0.5 | 0.1 | 3 |
| OE2108F | conserved hypothetical protein | 2.0 | 0.4 | 3 | 1.3 | 0.1 | 2 | 1.1 | 0.1 | 2 |
| OE2232F | conserved hypothetical protein | 2.1 | 0.2 | 2 | 2.1 | 0.4 | 2 | 0.8 | | 1 |
| OE2280R | hypothetical protein | 3.1 | 0.4 | 3 | 1.5 | 0.3 | 3 | 1.2 | 0.1 | 3 |
| OE2288F | pheromone shutdown protein homolog | 2.1 | 0.5 | 3 | 1.4 | 0.3 | 3 | 1.0 | 0.0 | 3 |
| OE2357F | conserved hypothetical protein | 2.5 | 0.4 | 2 | 1.4 | 0.2 | 3 | 1.2 | | 1 |
| OE2365R | hydrolase homolog | 2.2 | 0.2 | 2 | 1.4 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE2430F | hypothetical protein | 2.1 | 0.2 | 2 | 1.9 | 0.4 | 3 | 1.0 | 0.3 | 3 |
| OE2506R | conserved hypothetical protein | 2.4 | 0.7 | 3 | 1.3 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE2536F | hypothetical protein | 2.5 | 0.8 | 2 | 1.5 | 0.3 | 3 | 0.8 | 0.1 | 3 |
| OE2537F | sugar transferase homolog | 3.3 | 0.6 | 3 | 1.4 | 0.1 | 4 | 1.0 | 0.1 | 3 |
| OE2545F | conserved hypothetical protein | 2.1 | 0.1 | 2 | 2.1 | 0.5 | 3 | 1.1 | 0.0 | 2 |
| OE2741F | hypothetical protein | 2.0 | 0.5 | 2 | 1.8 | 0.1 | 3 | 1.0 | 0.2 | 3 |
| OE2844R | transcription regulator homolog / TrkA C-terminal domain protein | 2.1 | 0.4 | 3 | 1.1 | 0.2 | 4 | 1.0 | 0.2 | 3 |
| OE2988R | conserved hypothetical protein | 2.7 | 1.1 | 3 | 1.1 | 0.1 | 4 | 1.0 | 0.3 | 3 |
| OE3432R | conserved hypothetical protein | 3.1 | 0.8 | 3 | 1.3 | 0.0 | 2 | 1.0 | 0.0 | 2 |
| OE3445F | conserved hypothetical protein | 2.1 | 0.2 | 3 | 1.3 | 0.2 | 3 | 1.2 | 0.1 | 3 |
| OE3542R | hypothetical protein | 2.6 | 0.3 | 3 | 0.5 | 0.1 | 4 | 0.2 | 0.0 | 3 |
| OE3549F | hypothetical protein | 3.0 | 1.2 | 3 | 5.5 | 2.2 | 2 | 1.2 | | 1 |
| OE3551R | erythromycin esterase homolog | 3.6 | 0.5 | 3 | 1.6 | 0.4 | 4 | 1.2 | 0.3 | 2 |
| OE3766R | hypothetical protein | 2.7 | 0.6 | 3 | 1.2 | 0.1 | 3 | 1.2 | 0.1 | 2 |
| OE3822R | conserved hypothetical protein | 6.0 | 2.0 | 3 | 1.0 | 0.1 | 4 | 1.1 | 0.1 | 3 |
| OE3949R | glutaredoxin homolog | 2.6 | 0.8 | 3 | 1.0 | 0.2 | 4 | 1.0 | 0.1 | 2 |
| OE4028R | conserved hypothetical protein | 2.1 | 0.4 | 2 | 1.1 | 0.1 | 4 | 0.8 | 0.0 | 3 |
| OE4244F | conserved hypothetical protein | 2.1 | 0.3 | 3 | 1.3 | 0.3 | 4 | 1.1 | 0.2 | 3 |
| OE4349F | hypothetical protein | 2.3 | 0.3 | 2 | 1.6 | 0.4 | 4 | 0.9 | 0.2 | 3 |
| OE4363F | hypothetical protein | 4.3 | 0.8 | 3 | 1.4 | 0.1 | 2 | 1.1 | 0.1 | 3 |
| OE4432R | conserved hypothetical protein | 2.4 | 0.7 | 3 | 1.2 | 0.6 | 4 | 0.9 | | 1 |
| OE4444F | conserved hypothetical protein | 2.1 | 0.5 | 3 | 1.1 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE5033R | hypothetical protein | 2.2 | 0.2 | 3 | 0.5 | 0.1 | 4 | 1.1 | 0.5 | 2 |
| OE5174R | hypothetical protein | 2.0 | 0.2 | 3 | 0.5 | 0.3 | 4 | 0.9 | 0.0 | 2 |
| OE7008F | hypothetical protein (encoded by ISH7/ISH24 subtype 1) | 3.2 | 0.5 | 3 | 0.8 | 0.2 | 3 | 1.3 | 0.5 | 2 |
| OE7012R | hypothetical protein | 3.6 | 0.2 | 3 | 0.6 | 0.3 | 4 | 1.3 | 0.2 | 2 |
| OE7079F | tetracyclin resistance protein homolog | 2.5 | 1.0 | 2 | 0.6 | 0.2 | 4 | 0.9 | 0.3 | 2 |
| OE8009R | conserved hypothetical protein | 2.6 | 0.7 | 3 | 0.7 | 0.2 | 3 | 1.3 | 0.5 | 2 |

Better transcription in exponential growth phase

AA - amino acid metabolism

| | | | | | | | | | | |
|---------|-----------------------------------|------------|-----|---|------------|-----|---|------------|-----|---|
| OE1270F | glutamate dehydrogenase | 0.4 | 0.1 | 3 | 0.3 | 0.2 | 4 | 0.6 | 0.2 | 3 |
| OE1432F | sarcosine oxidase beta chain | 0.4 | 0.1 | 3 | 1.1 | 0.4 | 3 | 0.9 | 0.0 | 2 |
| OE2173F | cystathionine gamma-lyase | 0.4 | 0.1 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.2 | 3 |
| OE3036F | glycine hydroxymethyltransferase | 0.4 | 0.1 | 3 | 0.9 | 0.3 | 4 | 0.9 | 0.1 | 3 |
| OE3277R | glycine cleavage system protein H | 0.5 | 0.0 | 3 | 0.7 | 0.1 | 4 | 0.9 | 0.1 | 3 |
| OE3278R | glycine cleavage system protein T | 0.4 | 0.1 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.3 | 3 |

| | | | | | | | | | | |
|--|--|------------|-----|---|------------|-----|---|------------|-----|---|
| | (aminomethyltransferase) | | | | | | | | | |
| OE3584R | probable muconate cycloisomerase | 0.4 | 0.1 | 3 | 0.8 | 0.3 | 4 | 1.0 | 0.2 | 3 |
| OE3922R | glutamate-ammonia ligase | 0.3 | 0.0 | 3 | 1.5 | 0.6 | 4 | 1.1 | 0.1 | 3 |
| OE3931R | threonine dehydratase | 0.4 | 0.1 | 3 | 1.2 | 0.7 | 4 | 1.4 | 0.2 | 3 |
| OE3959R | branched-chain-amino-acid transaminase | 0.2 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.6 | 0.2 | 3 |
| OE4121R | probable ornithine cyclodeaminase | 0.4 | 0.1 | 3 | 1.1 | 0.5 | 4 | 1.2 | | 1 |
| OE4159F | adenosylhomocysteinase | 0.5 | 0.1 | 3 | 0.4 | 0.1 | 4 | 0.5 | 0.2 | 3 |
| <u>CE - cell envelope</u> | | | | | | | | | | |
| OE1806R | probable periplasmic protein | 0.4 | 0.0 | 3 | 0.8 | 0.3 | 4 | | | 0 |
| <u>CIM - central intermediary metabolism</u> | | | | | | | | | | |
| OE1495R | pyruvate kinase | 0.5 | 0.2 | 2 | 1.2 | 0.3 | 3 | 0.7 | 0.0 | 3 |
| OE1500R | pyruvate, water dikinase (PEP synthase) | 0.2 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.9 | 0.0 | 3 |
| OE2019F | fructose-bisphosphate aldolase 1 | 0.3 | 0.1 | 3 | 0.6 | 0.2 | 4 | 1.0 | 0.2 | 3 |
| OE2020F | fructose-bisphosphatase | 0.3 | 0.1 | 3 | 1.0 | 0.5 | 4 | 1.0 | 0.2 | 3 |
| OE2622R | pyruvate-ferredoxin oxidoreductase beta chain | 0.4 | 0.1 | 3 | 0.5 | 0.1 | 4 | 0.6 | 0.0 | 3 |
| OE2640F | phosphopyruvate hydratase (enolase) | 0.3 | 0.1 | 3 | 0.7 | 0.3 | 4 | 1.0 | 0.2 | 3 |
| OE2865R | succinate dehydrogenase chain A (flavoprotein) | 0.4 | 0.1 | 3 | 1.1 | 0.1 | 2 | 0.7 | 0.1 | 3 |
| OE2866R | succinate dehydrogenase chain B (iron-sulfur protein) | 0.4 | 0.0 | 3 | 0.7 | 0.2 | 4 | 1.0 | 0.2 | 3 |
| OE2868R | succinate dehydrogenase chain C (cytochrome b-556) | 0.3 | 0.0 | 3 | 0.8 | 0.3 | 3 | 0.8 | 0.0 | 3 |
| OE3195F | succinate-CoA ligase (ADP-forming) beta chain | 0.3 | 0.0 | 3 | 0.3 | 0.2 | 4 | 1.0 | 0.2 | 3 |
| OE3634F | isocitrate dehydrogenase (NADP+) | 0.4 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.9 | 0.2 | 2 |
| <u>COM - coenzyme metabolism</u> | | | | | | | | | | |
| OE1146R | probable molybdenum cofactor biosynthesis protein MoeA 1 | 0.4 | 0.1 | 3 | 1.3 | 0.2 | 2 | 0.8 | 0.2 | 3 |
| OE2057F | thiamin biosynthesis protein ThiC | 0.3 | 0.0 | 3 | 0.4 | 0.1 | 4 | 1.1 | 0.1 | 3 |
| OE3207F | probable precorrin-8W decarboxylase | 0.1 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE3209F | probable precorrin-2 C20-methyltransferase | 0.2 | 0.1 | 3 | 0.4 | 0.2 | 4 | 0.8 | 0.1 | 3 |
| OE3212F | precorrin-4 C11-methyltransferase | 0.3 | 0.1 | 3 | 0.7 | 0.3 | 4 | 0.9 | 0.1 | 3 |
| OE3214F | precorrin-3B C17-methyltransferase 1 | 0.4 | 0.1 | 3 | 0.8 | 0.4 | 4 | 1.1 | 0.0 | 3 |
| OE3216F | precorrin-3B C17-methyltransferase 2 | 0.1 | 0.0 | 3 | 0.3 | 0 | 4 | 1.1 | | 1 |
| OE3230F | CobN protein (probable cobalt chelatase) | 0.3 | 0.0 | 3 | 0.8 | 0.4 | 4 | 1.0 | 0.2 | 3 |
| OE3648F | nicotinate-nucleotide pyrophosphorylase (carboxylating) | 0.5 | 0.1 | 3 | 1.6 | 0.3 | 4 | 1.2 | 0.2 | 3 |
| OE4651F | thiamine biosynthesis protein (thiazole biosynthetic enzyme) | 0.1 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.6 | 0.1 | 3 |
| OE4654F | phosphomethylpyrimidine kinase | 0.2 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| <u>CP - cellular processes</u> | | | | | | | | | | |
| OE1559R | cell division protein FtsZ1 | 0.5 | 0.0 | 3 | 1.1 | 0.2 | 4 | 1.0 | | 1 |
| OE3693F | peptidylprolyl isomerase | 0.5 | 0.2 | 3 | 0.4 | 0.1 | 4 | 1.0 | 0.1 | 3 |
| OE3925R | thermosome beta chain | 0.2 | 0.0 | 3 | 0.2 | 0.1 | 4 | 0.3 | 0.0 | 3 |
| OE4122R | thermosome alpha chain | 0.2 | 0.0 | 3 | 0.2 | 0.1 | 4 | 0.4 | 0.2 | 3 |
| <u>EM - energy metabolism</u> | | | | | | | | | | |
| OE1953F | NADH dehydrogenase (ubiquinone) chain A | 0.2 | 0.1 | 3 | 0.5 | 0.1 | 4 | 0.8 | 0.2 | 3 |
| OE1954F_a | NADH dehydrogenase (ubiquinone) chain B | 0.4 | 0.1 | 3 | 1.5 | 0.3 | 4 | 1.0 | 0.3 | 3 |
| OE1954F_b | NADH dehydrogenase (ubiquinone) chain B | 0.4 | 0.1 | 3 | 0.4 | 0.2 | 4 | 0.8 | 0.3 | 2 |
| OE1956F | NADH dehydrogenase (ubiquinone) chain CD | 0.4 | 0.1 | 3 | 0.7 | 0.3 | 4 | 0.8 | 0.1 | 3 |
| OE1957F | NADH dehydrogenase (ubiquinone) chain H | 0.4 | 0.0 | 3 | 0.8 | 0.2 | 4 | 1.0 | 0.4 | 3 |
| OE1958F | NADH dehydrogenase (ubiquinone) chain I | 0.3 | 0.1 | 3 | 0.6 | 0.1 | 4 | 1.0 | 0.3 | 3 |
| OE1960F | NADH dehydrogenase (ubiquinone) chain J2 (C-terminal homology) | 0.3 | 0.1 | 3 | 0.7 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE3985R | H+-transporting two-sector ATPase chain A.a | 0.2 | 0.0 | 3 | 0.5 | 0.1 | 4 | 1.1 | 0.3 | 3 |
| OE3986R | H+-transporting two-sector ATPase chain F.a | 0.2 | 0.0 | 3 | 0.5 | 0.1 | 4 | 2.0 | | 1 |
| OE3987R | H+-transporting two-sector ATPase chain C.a | 0.2 | 0.1 | 3 | 0.5 | 0.2 | 4 | 0.9 | 0.1 | 3 |

| | | | | | | | | | | |
|--|--|------------|-----|---|------------|-----|---|------------|-----|---|
| OE3988R | H ⁺ -transporting two-sector ATPase chain E.a | 0.2 | 0.0 | 3 | 0.5 | 0.2 | 4 | 1.1 | | 1 |
| OE3989R | H ⁺ -transporting two-sector ATPase chain K.a | 0.1 | 0.0 | 3 | 0.5 | 0.1 | 4 | 1.1 | 0.1 | 3 |
| OE3991R | H ⁺ -transporting two-sector ATPase chain I.a | 0.2 | 0.0 | 3 | 0.8 | 0.2 | 4 | 0.9 | 0.2 | 3 |
| OE3992R | H ⁺ -transporting two-sector ATPase chain H.a | 0.1 | 0.1 | 3 | 0.6 | 0.1 | 4 | 1.2 | 0.3 | 3 |
| OE4005F | electron transfer flavoprotein beta chain | 0.4 | 0.0 | 3 | 0.6 | 0.3 | 4 | 1.0 | 0.3 | 2 |
| OE4007F | electron transfer flavoprotein alpha chain | 0.4 | 0.1 | 3 | 0.9 | 0.4 | 4 | 1.0 | | 1 |
| OE4073R | halocyanin HcpB | 0.4 | 0.1 | 3 | 1.2 | 0.1 | 2 | 0.8 | 0.1 | 3 |
| OE4075R | halocyanin HcpB | 0.4 | 0.1 | 3 | 1.4 | 0.5 | 4 | 0.9 | 0.0 | 2 |
| OE4217R | ferredoxin (2Fe-2S) | 0.2 | 0.0 | 3 | 0.6 | 0.1 | 4 | 1.0 | 0.2 | 3 |
| <u>ISH - transposases and ISH-encoded proteins</u> | | | | | | | | | | |
| OE1073F | probable IS200-type transposase (ISH12) | 0.3 | 0.1 | 3 | 1.3 | 0.7 | 4 | 1.7 | 0.6 | 3 |
| <u>LIP - lipid metabolism</u> | | | | | | | | | | |
| OE1271F | probable fatty-acid-CoA ligase | 0.4 | 0.0 | 3 | 1.9 | 0.6 | 3 | 1.2 | 0.1 | 3 |
| OE2912F | probable fatty-acid-CoA ligase | 0.4 | 0.1 | 3 | 0.8 | 0.1 | 4 | 0.9 | 0.2 | 3 |
| OE3637R | hydroxymethylglutaryl-CoA reductase (NADPH) | 0.5 | 0.1 | 3 | 1.0 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE4500R | probable acyl/butyryl-CoA dehydrogenase | 0.5 | 0.1 | 3 | 0.4 | 0.2 | 4 | 0.9 | 0.0 | 2 |
| <u>MIS - miscellaneous</u> | | | | | | | | | | |
| OE1081R | probable glycosyltransferase | 0.4 | 0.1 | 3 | 1.3 | 0.3 | 3 | 0.7 | 0.1 | 2 |
| OE1171F | type I restriction-modification system DNA-methyltransferase RmeM (nonfunctional, N-terminal part, interrupted by ISH8) | 0.5 | 0.1 | 2 | 2.2 | 1.5 | 2 | 0.7 | | 1 |
| OE1371R | prefoldin beta chain | 0.4 | 0.0 | 3 | 0.5 | 0.1 | 4 | 0.9 | 0.1 | 3 |
| OE1407F | inorganic pyrophosphatase | 0.3 | 0.0 | 3 | 0.5 | 0.2 | 4 | 1.2 | 0.2 | 3 |
| OE1465F | endopeptidase La | 0.2 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE1613R | probable acylaminoacyl-peptidase | 0.4 | 0.2 | 2 | 0.9 | 0.4 | 4 | | | 0 |
| OE1684F | probable sulfate adenylyltransferase small chain | 0.3 | 0.1 | 3 | 0.8 | 0.2 | 4 | 0.9 | 0.3 | 3 |
| OE1934R | proteinase IV | 0.3 | 0.1 | 3 | 1.2 | 0.2 | 4 | | | 0 |
| OE2015R | 3-hydroxybutyryl-CoA dehydrogenase | 0.4 | 0.1 | 3 | 0.7 | 0.1 | 4 | 1.1 | 0.2 | 3 |
| OE2373F | probable phosphate acetyltransferase | 0.4 | 0.0 | 3 | 0.7 | 0.1 | 4 | 1.0 | 0.0 | 2 |
| OE2390R | flagella accessory protein | 0.5 | 0.1 | 3 | 1.2 | 0.2 | 3 | 1.1 | 0.5 | 2 |
| OE2451R | probable oxidoreductase | 0.4 | 0.1 | 3 | 0.7 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE2708R | superoxide dismutase 1 (Mn containing) | 0.2 | 0.1 | 3 | 0.4 | 0.1 | 4 | 0.5 | 0.2 | 3 |
| OE2853R | probable peptidylprolyl isomerase | 0.3 | 0.0 | 3 | 0.4 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE2906R | superoxide dismutase 2 | 0.3 | 0.1 | 3 | 0.8 | 0.1 | 4 | 0.7 | 0.1 | 3 |
| OE3168R | pyridoxal phosphate-dependent aminotransferase (acetylornithine transaminase homolog) | 0.3 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.8 | 0.2 | 3 |
| OE3213F | CbiG protein | 0.1 | 0.1 | 3 | 0.5 | 0.2 | 4 | 1.4 | 0.1 | 2 |
| OE3218F | cobalamin operon protein | 0.2 | 0.1 | 3 | 0.3 | 0.1 | 4 | 0.9 | 0.2 | 3 |
| OE3221F | conserved cobalamin operon protein | 0.1 | 0.0 | 3 | 0.7 | 0.3 | 4 | 1.1 | 0.2 | 3 |
| OE3224F | conserved cobalamin operon protein | 0.2 | 0.0 | 3 | 0.5 | 0.4 | 4 | 0.8 | 0.1 | 3 |
| OE3807R | oligoendopeptidase | 0.3 | 0.0 | 3 | 0.6 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE4113F | 2-oxoacid dehydrogenase E1 component alpha-1 chain (the substrate is NOT pyruvate or 2-oxoglutarate) | 0.3 | 0.0 | 3 | 1.1 | 0.1 | 2 | 0.7 | 0.1 | 3 |
| OE4114F | 2-oxoacid dehydrogenase E1 component beta chain (the substrate is NOT pyruvate or 2-oxoglutarate) | 0.3 | 0.1 | 3 | 2.0 | 0.3 | 3 | 1.3 | | 1 |
| OE4116F | dihydrolipoamide dehydrogenase (probable glycine cleavage system protein L and probable E3 component of the 2-oxoacid dehydrogenase complex) (substrate of 2-oxoacid dehydrogenase complex is NOT pyruvate or 2-oxoglutarate) | 0.4 | 0.1 | 3 | 1.0 | 0.2 | 4 | 0.8 | | 1 |
| OE4187R | probable DNA-binding protein | 0.2 | 0.1 | 3 | 2.6 | 1.1 | 4 | 1.4 | 0.2 | 2 |
| OE4230F | probable acylaminoacyl-peptidase | 0.5 | 0.1 | 3 | 1.3 | 0.5 | 4 | 1.1 | 0.2 | 3 |
| OE4438F | leucyl aminopeptidase | 0.3 | 0.1 | 3 | 0.4 | 0.2 | 4 | 1.2 | 0.2 | 3 |
| OE4456R | prefoldin alpha chain | 0.4 | 0.0 | 3 | 0.6 | 0.1 | 3 | 0.9 | 0.1 | 2 |

MOT - motility

| | | | | | | | | | | |
|---------|------------------------|------------|-----|---|------------|-----|---|------------|-----|---|
| OE2469F | flagellin A1 precursor | 0.5 | 0.2 | 3 | 1.0 | 0.1 | 4 | 0.9 | 0.2 | 3 |
|---------|------------------------|------------|-----|---|------------|-----|---|------------|-----|---|

NUM - nucleotide metabolism

| | | | | | | | | | | |
|---------|---|------------|-----|---|------------|-----|---|------------|-----|---|
| OE2579F | adenylosuccinate synthase | 0.5 | 0.2 | 3 | 0.9 | 0.3 | 3 | 0.9 | 0.1 | 3 |
| OE3017R | UDP-sugar hydrolase / 5'-nucleotidase | 0.2 | 0.0 | 3 | 0.9 | 0.1 | 4 | 1.2 | 0.1 | 3 |
| OE3328R | ribonucleotide reductase, B12-dependent | 0.4 | 0.0 | 3 | 1.0 | 0.3 | 4 | 0.9 | 0.2 | 3 |
| OE3731R | phosphoribosylformylglycinamide synthase component I | 0.4 | 0.0 | 2 | 2.0 | 0.2 | 2 | 0.9 | 0.2 | 2 |
| OE4345R | probable ribonucleoside-diphosphate reductase small chain | 0.3 | 0.0 | 3 | 1.2 | 0.1 | 4 | 0.9 | 0.1 | 3 |
| OE4346R | ribonucleoside-diphosphate reductase large chain | 0.4 | 0.1 | 3 | 1.2 | 0.2 | 4 | 0.8 | 0.1 | 3 |
| OE5201F | aspartate carbamoyltransferase catalytic chain | 0.2 | 0.1 | 2 | 0.3 | 0.1 | 4 | 1.1 | 0.4 | 2 |
| OE5202F | aspartate carbamoyltransferase regulatory chain | 0.2 | 0.0 | 3 | 0.2 | 0.1 | 4 | 1.0 | 0.3 | 2 |

RRR - replication, repair, recombination

| | | | | | | | | | | |
|---------|----------------------------------|------------|-----|---|------------|-----|---|------------|-----|---|
| OE4195F | replication factor C small chain | 0.5 | 0.1 | 3 | 0.9 | 0.2 | 4 | 0.7 | 0.1 | 3 |
| OE4466R | DNA repair protein | 0.4 | 0.1 | 3 | 0.3 | 0.1 | 4 | 0.6 | 0.2 | 3 |

SEC - protein secretion

| | | | | | | | | | | |
|---------|---|------------|-----|---|------------|-----|---|------------|-----|---|
| OE3787R | preprotein-export translocase chain SecF | 0.5 | 0.1 | 2 | 1.5 | 0.4 | 4 | 0.8 | | 1 |
| OE4181R | Sec-independent protein translocase component TatC2 | 0.5 | 0.2 | 2 | 1.5 | 0.3 | 3 | 0.8 | 0.1 | 3 |

SIG - signal transduction

| | | | | | | | | | | |
|---------|---|------------|-----|---|------------|-----|---|------------|-----|---|
| OE3436R | transducer protein Htr17 | 0.5 | 0.1 | 3 | 1.3 | 0.2 | 2 | 0.8 | 0.1 | 3 |
| OE3481R | transducer protein HtrII | 0.5 | 0.1 | 3 | 0.9 | 0.2 | 4 | 0.9 | 0.3 | 3 |
| OE3612R | chemotactic signal transduction system periplasmic substrate-binding protein BasB | 0.4 | 0.1 | 3 | 1.0 | 0.3 | 4 | 1.1 | 0.1 | 2 |
| OE3854R | probable response regulator | 0.4 | 0.1 | 2 | 1.4 | 0.2 | 4 | 0.9 | 0.2 | 3 |
| OE5243F | transducer protein Car | 0.4 | 0.1 | 3 | 0.3 | 0.2 | 4 | 0.7 | 0.1 | 2 |

TC - transcription

| | | | | | | | | | | |
|---------|--|------------|-----|---|------------|-----|---|------------|-----|---|
| OE1637R | probable DNA-directed RNA polymerase chain M | 0.5 | 0.0 | 3 | 1.0 | 0.2 | 4 | 1 | 0.3 | 3 |
| OE2631F | DNA-directed RNA polymerase chain D | 0.3 | 0.1 | 3 | 0.4 | 0.2 | 4 | 0.9 | 0.0 | 3 |
| OE2638F | DNA-directed RNA polymerase chain K | 0.3 | 0.1 | 3 | 0.4 | 0.0 | 4 | 1.1 | | 1 |
| OE3452F | probable DNA-directed RNA polymerase chain M | 0.4 | 0.0 | 3 | 1.4 | 0.2 | 2 | 0.8 | 0.2 | 3 |
| OE4740R | DNA-directed RNA polymerase chain A' | 0.4 | 0.1 | 3 | 0.2 | 0.0 | 3 | 0.7 | 0.1 | 3 |
| OE4741R | DNA-directed RNA polymerase chain B' | 0.4 | 0.1 | 3 | 0.5 | 0.1 | 4 | 0.8 | | 1 |
| OE4742R | DNA-directed RNA polymerase chain B'' | 0.5 | 0.0 | 3 | 0.3 | 0.1 | 4 | 1.1 | | 1 |
| OE4743R | DNA-directed RNA polymerase chain H | 0.3 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.7 | 0.2 | 3 |

TL - translation

| | | | | | | | | | | |
|---------|--|------------|-----|---|------------|-----|---|------------|-----|---|
| OE1160R | ribosomal protein L10.eR | 0.3 | 0.0 | 3 | 0.5 | 0.1 | 4 | 1.0 | 0.5 | 2 |
| OE1373R | ribosomal protein L37a.eR | 0.5 | 0.1 | 3 | 0.8 | 0.1 | 4 | 1.7 | | 1 |
| OE2165R | ribosomal protein S15 | 0.2 | 0.1 | 3 | 0.4 | 0.1 | 4 | 1.2 | 0.1 | 2 |
| OE2601R | ribosomal protein L10 | 0.2 | 0.0 | 3 | 0.4 | 0.2 | 4 | 1.0 | 0.2 | 3 |
| OE2602R | ribosomal protein L1 | 0.2 | 0.1 | 3 | 0.4 | 0.2 | 4 | 1.0 | 0.0 | 3 |
| OE2603R | ribosomal protein L11 | 0.4 | 0.1 | 3 | 0.8 | 0.2 | 4 | 1.1 | 0.1 | 3 |
| OE2627F | ribosomal protein S13 | 0.3 | 0.1 | 3 | 0.2 | 0.1 | 4 | 1.2 | | 1 |
| OE2628F | ribosomal protein S4 | 0.2 | 0.0 | 3 | 0.7 | 0.2 | 4 | 1.1 | | 1 |
| OE2629F | ribosomal protein S11 | 0.2 | 0.0 | 3 | 0.2 | 0.1 | 4 | 1.0 | 0.7 | 2 |
| OE2632F | ribosomal protein L18.eR | 0.2 | 0.0 | 3 | 0.5 | 0.2 | 4 | 0.9 | 0.2 | 3 |
| OE2633F | ribosomal protein L13 | 0.2 | 0.1 | 3 | 0.5 | 0.1 | 4 | 1.3 | 0.3 | 3 |
| OE2641F | ribosomal protein S2 | 0.2 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.9 | 0.1 | 3 |
| OE2664F | ribosomal protein S28.eR | 0.5 | 0.1 | 3 | 0.4 | 0.1 | 4 | 1.1 | 0.2 | 3 |
| OE2665F | ribosomal protein L24.eR | 0.4 | 0.0 | 3 | 0.7 | 0.1 | 4 | 1.1 | 0.1 | 3 |
| OE2679R | ribosomal protein L21.eR | 0.4 | 0.1 | 3 | 0.8 | 0.2 | 4 | 1.1 | 0.2 | 3 |
| OE2683R | translation elongation factor aEF-1 beta chain | 0.5 | 0.0 | 3 | 1.1 | 0.2 | 4 | 1.0 | 0.3 | 3 |

| | | | | | | | | | | |
|---|---|------------|-----|---|------------|-----|---|------------|-----|---|
| OE3062F | ribosomal protein S17.eR | 0.5 | 0.1 | 2 | 1.7 | 0.4 | 3 | 0.9 | 0.1 | 2 |
| OE3141R | ribosomal protein L37.eR | 0.5 | 0.0 | 2 | 2.3 | 1.4 | 2 | | | 0 |
| OE3357R | ribosomal protein S8.eR | 0.2 | 0.0 | 3 | 0.7 | 0.1 | 3 | 1.0 | 0.2 | 2 |
| OE3390F | ribosomal protein L23 | 0.2 | 0.0 | 3 | 0.4 | 0.0 | 4 | 1.5 | | 1 |
| OE3392F | ribosomal protein L2 | 0.2 | 0.1 | 3 | 0.3 | 0.0 | 4 | 0.9 | 0.2 | 3 |
| OE3393F | ribosomal protein S19 | 0.2 | 0.1 | 3 | 0.2 | 0.0 | 4 | 1.0 | 0.1 | 3 |
| OE3394F | ribosomal protein L22 | 0.2 | 0.0 | 3 | 0.2 | 0.0 | 4 | 1.2 | 0.2 | 2 |
| OE3395F | ribosomal protein S3 | 0.1 | 0.0 | 3 | 0.4 | 0.2 | 4 | 0.8 | 0.1 | 3 |
| OE3396F | ribosomal protein L29 | 0.3 | 0.0 | 3 | 0.3 | 0.1 | 4 | 1.1 | 0.1 | 3 |
| OE3400F | ribosomal protein S17 | 0.1 | 0.0 | 3 | | | 0 | 1.0 | | 1 |
| OE3402F | ribosomal protein L14 | 0.2 | 0.1 | 3 | 0.3 | 0.1 | 4 | 0.9 | 0.2 | 3 |
| OE3405F | ribosomal protein S4.eR | 0.1 | 0.0 | 2 | 0.4 | 0.1 | 4 | 1.0 | 0.4 | 2 |
| OE3408F | ribosomal protein S14 | 0.3 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.2 | 3 |
| OE3411F | ribosomal protein L6 | 0.1 | 0.0 | 3 | 0.2 | 0.0 | 4 | 0.9 | 0.2 | 2 |
| OE3412F | ribosomal protein L32.eR | 0.2 | 0.1 | 3 | 0.2 | 0.0 | 4 | 1.0 | 0.2 | 2 |
| OE3413F | ribosomal protein L19.eR | 0.2 | 0.1 | 3 | 0.3 | 0.1 | 4 | 1.0 | 0.0 | 2 |
| OE3414F | ribosomal protein L18 | 0.2 | 0.0 | 3 | 0.4 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE3415F | ribosomal protein S5 | 0.4 | 0.1 | 2 | 1.0 | 0.4 | 4 | 1.0 | 0.0 | 2 |
| OE3416F | ribosomal protein L30 | 0.3 | 0.0 | 3 | 0.2 | 0.1 | 4 | 1.1 | 0.1 | 2 |
| OE3417F | ribosomal protein L15 | 0.4 | 0.1 | 3 | 0.4 | 0.1 | 4 | 1.4 | | 1 |
| OE3487R | translation initiation factor aIF-5A | 0.4 | 0.0 | 3 | 0.4 | 0.1 | 4 | 1.0 | 0.2 | 3 |
| OE3817R | ribosomal protein S19.eR | 0.4 | 0.0 | 3 | 0.8 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE3898F | ribosomal protein L40.eR | 0.4 | 0.1 | 2 | 1.3 | 0.2 | 3 | 1.2 | 0.0 | 2 |
| OE4460R | ribosomal protein L39.eR | 0.3 | 0.1 | 3 | 0.3 | 0.1 | 3 | 0.9 | 0.2 | 3 |
| OE4507F | phenylalanine-tRNA ligase beta chain | 0.5 | 0.1 | 3 | 1.1 | 0.2 | 4 | 1.7 | 0.0 | 2 |
| OE4720R | ribosomal protein S10 | 0.2 | 0.0 | 3 | 0.7 | 0.2 | 4 | 1.0 | 0.1 | 3 |
| OE4721R | translation elongation factor aEF-1 alpha chain | 0.2 | 0.0 | 3 | 0.3 | 0.1 | 4 | 0.5 | 0.1 | 3 |
| OE4729R | translation elongation factor aEF-2 | 0.4 | 0.1 | 3 | 0.6 | 0.2 | 4 | 0.9 | 0.0 | 3 |
| OE4736R | ribosomal protein S12 | 0.3 | 0.0 | 3 | 0.4 | 0.1 | 4 | 0.9 | 0.3 | 2 |
| <u>TP - small molecule transport</u> | | | | | | | | | | |
| OE1080F | probable polysaccharide export protein | 0.4 | 0.1 | 2 | 1.4 | 0.3 | 2 | 1.0 | 0.1 | 2 |
| OE2779F | amino acid transport protein (probable phenylalanine transport protein) | 0.3 | 0.0 | 3 | 1.2 | | 1 | 1.5 | | 1 |
| OE3318R | cobalt transport protein CbiN | 0.3 | 0.1 | 3 | 0.9 | 0.1 | 4 | 0.9 | 0.1 | 3 |
| OE3319R | CbiM protein (probable ABC-type cobalt transport system permease protein 2) | 0.1 | 0.0 | 3 | 0.9 | 0.1 | 4 | 1.1 | 0.3 | 2 |
| OE3907R | ABC-type transport system permease protein | 0.4 | 0.1 | 2 | 1.2 | 0.3 | 4 | 1.4 | | 1 |
| OE3908R | ABC-type transport system ATP-binding protein | 0.4 | 0.0 | 3 | 0.7 | 0.3 | 4 | 0.8 | 0.1 | 3 |
| OE3910R | probable ABC-type transport system periplasmic substrate-binding protein | 0.4 | 0.2 | 3 | 0.3 | 0.1 | 4 | 1.0 | 0.0 | 2 |
| OE4301R | ABC-type transport system ATP-binding protein | 0.2 | 0.0 | 3 | 0.4 | 0.2 | 4 | 0.9 | 0.1 | 3 |
| OE4302R | ABC-type oligopeptide transport system ATP-binding protein | 0.1 | 0.0 | 3 | 0.4 | 0.2 | 4 | 1.1 | 0.2 | 2 |
| OE4303R | ABC-type transport system permease protein | 0.2 | 0.1 | 3 | 0.6 | 0.1 | 4 | 1.0 | 0.2 | 3 |
| OE4304R | ABC-type transport system permease protein | 0.1 | 0.0 | 3 | 0.9 | 0.2 | 4 | 0.8 | | 1 |
| OE4336R | probable ABC-type transport system permease protein | 0.3 | 0.2 | 3 | 0.7 | 0.3 | 4 | 0.6 | 0.2 | 2 |
| OE4339R | ABC-type transport system ATP-binding protein | 0.3 | 0.0 | 3 | 0.9 | 0.3 | 4 | 0.8 | 0.1 | 3 |
| OE4480R | probable ABC-type phosphate transport system permease protein | 0.5 | 0.0 | 3 | 1.6 | 0.3 | 4 | 1.7 | 0.2 | 3 |
| <u>CHY - conserved hypothetical protein, HY - hypothetical protein, NOF - no function assigned to experimentally identified protein</u> | | | | | | | | | | |
| OE1001F | conserved hypothetical protein | 0.4 | 0.0 | 3 | 0.8 | 0.3 | 3 | 0.9 | 0.0 | 3 |
| OE1321R | conserved hypothetical protein | 0.4 | 0.2 | 2 | 1.3 | 0.0 | 4 | 1.0 | 0.2 | 3 |

| | | | | | | | | | | |
|---------|---|------------|-----|---|------------|-----|---|------------|-----|---|
| OE1323R | conserved hypothetical protein | 0.4 | 0.1 | 3 | 1.8 | 0.5 | 4 | 1.1 | 0.3 | 3 |
| OE1352F | hypothetical protein | 0.4 | 0.2 | 3 | 0.7 | 0.2 | 4 | | | 0 |
| OE1353F | hypothetical protein | 0.4 | 0.1 | 3 | 0.8 | 0.4 | 4 | 1.1 | 0.1 | 3 |
| OE1356F | conserved hypothetical protein | 0.4 | 0.1 | 3 | 0.9 | 0.3 | 4 | 1.0 | 0.2 | 3 |
| OE1405R | conserved hypothetical protein | 0.3 | 0.0 | 3 | 2.4 | 0.9 | 4 | 5.1 | 0.2 | 3 |
| OE1412F | conserved hypothetical protein | 0.4 | 0.1 | 3 | 1.1 | 0.3 | 4 | 1.2 | 0.4 | 3 |
| OE1475F | conserved hypothetical protein | 0.5 | 0.0 | 3 | 0.9 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE1636F | protein-L-isoaspartate O-methyltransferase homolog | 0.4 | 0.1 | 3 | 1.7 | 0.3 | 3 | 0.9 | | 1 |
| OE1718R | conserved hypothetical protein | 0.5 | 0.1 | 3 | 1.2 | 0.2 | 4 | 0.9 | 0.3 | 3 |
| OE1804R | conserved hypothetical protein | 0.4 | 0.0 | 3 | 1.5 | 0.2 | 3 | 1.1 | 0.1 | 2 |
| OE1826R | predicted orf | 0.5 | 0.1 | 3 | 1.1 | 0.2 | 2 | 1.2 | 0.1 | 2 |
| OE1842R | NADH dehydrogenase (ubiquinone) chain L homolog | 0.4 | 0.1 | 2 | 1.6 | 0.2 | 3 | 1.0 | 0.0 | 2 |
| OE1860F | conserved hypothetical protein | 0.5 | 0.1 | 3 | 1.4 | | 1 | 0.8 | | 1 |
| OE1866F | hypothetical protein | 0.3 | 0.0 | 3 | 1.4 | 0.2 | 3 | 1.4 | | 1 |
| OE1878R | hypothetical protein | 0.5 | 0.0 | 3 | 0.9 | 0.2 | 4 | 0.5 | 0.1 | 3 |
| OE1932R | conserved hypothetical protein | 0.5 | 0.1 | 2 | 1.5 | 0.3 | 4 | 0.7 | | 1 |
| OE2131F | conserved hypothetical protein | 0.5 | 0.0 | 3 | 1.7 | 0.4 | 4 | 1.5 | 0.1 | 3 |
| OE2141F | conserved hypothetical protein | 0.5 | 0.0 | 3 | 0.8 | 0.3 | 3 | 1.0 | | 1 |
| OE2160R | hypothetical protein | 0.3 | 0.1 | 3 | 0.3 | 0.1 | 4 | 0.8 | 0.2 | 3 |
| OE2161R | conserved hypothetical protein | 0.3 | 0.1 | 3 | 0.9 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE2247R | conserved hypothetical protein | 0.5 | 0.1 | 3 | 1.1 | 0.3 | 4 | 1.1 | 0.2 | 3 |
| OE2249R | transducer protein weak homolog lacking transduction domain | 0.5 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.7 | 0.0 | 3 |
| OE2448F | transcription regulator Bat homolog | 0.4 | 0.0 | 3 | 0.8 | 0.2 | 4 | 1.0 | | 1 |
| OE2466F | hypothetical protein | 0.4 | 0.1 | 3 | 1.5 | 0.3 | 3 | 0.7 | 0.0 | 2 |
| OE2525R | conserved hypothetical protein | 0.5 | 0.1 | 2 | 1.8 | 0.4 | 4 | 1.2 | | 1 |
| OE2532R | conserved hypothetical protein | 0.4 | 0.1 | 3 | 1.2 | 0.6 | 2 | 0.9 | 0.2 | 2 |
| OE2573F | hypothetical protein | 0.4 | 0.1 | 3 | 0.7 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE2706R | hypothetical protein | 0.3 | 0.1 | 3 | 1.2 | 0.2 | 3 | 1.1 | | 1 |
| OE2716R | hypothetical protein | 0.5 | 0.1 | 3 | 1.3 | 0.7 | 3 | 1.1 | 0.2 | 2 |
| OE2747R | conserved hypothetical protein | 0.4 | 0.1 | 3 | 2.0 | 0.9 | 3 | 1.0 | | 1 |
| OE2778R | hypothetical protein | 0.5 | 0.2 | 3 | 1.9 | 0.5 | 3 | 0.9 | 0.1 | 3 |
| OE2816F | conserved hypothetical protein | 0.4 | 0.0 | 3 | 0.8 | 0.3 | 3 | 0.9 | 0.1 | 3 |
| OE2838R | TrkA domain protein | 0.5 | 0.1 | 3 | 1.3 | 0.2 | 2 | 0.8 | 0.1 | 3 |
| OE2851R | hypothetical protein | 0.3 | 0.0 | 3 | 0.8 | 0.1 | 4 | 1.4 | 0.2 | 2 |
| OE3028R | conserved hypothetical protein | 0.3 | 0.0 | 3 | 0.6 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE3047F | hypothetical protein | 0.5 | 0.1 | 3 | 1.4 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE3155R | conserved hypothetical protein | 0.4 | 0.0 | 2 | 0.8 | 0.1 | 4 | 0.8 | 0.0 | 3 |
| OE3227F | nicotinate-nucleotide-dimethylbenzimidazole phosphoribosyltransferase homolog | 0.4 | 0.1 | 3 | 0.9 | 0.3 | 4 | 1.0 | 0.3 | 2 |
| OE3322F | conserved hypothetical protein | 0.4 | 0.0 | 3 | 0.6 | 0.2 | 4 | 0.9 | | 1 |
| OE3361F | conserved hypothetical protein | 0.5 | 0.0 | 2 | 1.6 | 0.5 | 2 | 1.4 | 0.4 | 3 |
| OE3398F | conserved hypothetical protein | 0.1 | 0.0 | 3 | 0.2 | 0.0 | 4 | 1.0 | 0.2 | 2 |
| OE3538R | hypothetical protein | 0.5 | 0.1 | 2 | 3.5 | 2.0 | 4 | 0.9 | 0.1 | 2 |
| OE3569R | hypothetical protein | 0.4 | 0.1 | 2 | 1.1 | 0.4 | 3 | 1.3 | | 1 |
| OE3636F | plasmid replication protein RepJ homolog | 0.5 | 0.1 | 3 | 1.4 | 0.3 | 4 | 1.1 | | 1 |
| OE3719F | conserved hypothetical protein | 0.4 | 0.1 | 3 | 0.7 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE3796R | conserved hypothetical protein | 0.4 | 0.1 | 3 | 0.9 | 0.1 | 3 | 1.2 | | 1 |
| OE3798R | conserved hypothetical protein | 0.4 | 0.0 | 2 | 1.0 | 0.0 | 3 | 1.8 | | 1 |
| OE3832F | conserved hypothetical protein | 0.4 | 0.0 | 3 | 0.7 | 0.2 | 4 | 0.7 | 0.1 | 3 |
| OE3921F | conserved hypothetical protein | 0.4 | 0.0 | 3 | 1.5 | 0.3 | 3 | 0.8 | 0.0 | 3 |
| OE3942R | hypothetical protein | 0.5 | 0.1 | 3 | 1.3 | 0.2 | 3 | 1.2 | | 1 |

| | | | | | | | | | | |
|---------|--------------------------------|------------|-----|---|------------|-----|---|------------|-----|---|
| OE4089R | conserved hypothetical protein | 0.5 | 0.1 | 2 | 1.9 | 0.7 | 2 | 0.9 | 0.1 | 3 |
| OE4201R | preflagellin peptidase homolog | 0.4 | 0.0 | 2 | 1.3 | 0.2 | 3 | 1.1 | 0.3 | 3 |
| OE4223R | conserved hypothetical protein | 0.3 | 0.1 | 3 | 1.3 | 0.0 | 3 | 1.3 | 0.1 | 2 |
| OE4300R | hypothetical protein | 0.3 | 0.1 | 3 | 0.7 | 0.1 | 4 | 0.8 | 0.1 | 3 |
| OE4354R | conserved hypothetical protein | 0.4 | 0.0 | 3 | 0.5 | 0.2 | 4 | 0.6 | 0.0 | 3 |
| OE4511R | hypothetical protein | 0.1 | 0.0 | 3 | 9.0 | 3.8 | 4 | 1.2 | 0.2 | 3 |
| OE4563F | hypothetical protein | 0.2 | 0.0 | 3 | 0.9 | 0.3 | 4 | 1.0 | 0.1 | 3 |
| OE4655R | conserved hypothetical protein | 0.5 | 0.1 | 3 | 1.0 | 0.4 | 3 | | | 0 |
| OE4670F | conserved hypothetical protein | 0.4 | 0.1 | 3 | 1.5 | 0.2 | 4 | 0.8 | | 1 |
| OE4712F | conserved hypothetical protein | 0.5 | 0.2 | 3 | 0.7 | 0.0 | 4 | 0.9 | 0.2 | 2 |
| OE4716R | conserved hypothetical protein | 0.5 | 0.0 | 3 | 0.7 | 0.1 | 4 | 0.9 | 0.2 | 3 |
| OE5051R | TrkA domain protein | 0.4 | 0.2 | 3 | 1.4 | 0.3 | 4 | 0.9 | | 1 |
| OE5100R | TrkA domain protein | 0.4 | 0.0 | 3 | 0.9 | 0.2 | 3 | 0.9 | 0.2 | 3 |
| OE5130F | TrkA domain protein | 0.5 | 0.0 | 3 | 0.9 | 0.1 | 4 | 0.7 | 0.1 | 3 |
| OE5298F | TrkA domain protein | 0.5 | 0.1 | 3 | 0.8 | 0.1 | 4 | 0.7 | 0.1 | 3 |

1

- 2 ¹Relative mRNA levels stationary/exponential growth phase are listed for genes reaching values ≥ 2 or
- 3 ≤ 0.5 ("transcript level"). If available, also the translational repression factors for these genes are listed.
- 4 ORF numbers and gene products correspond to <http://www.halolex.mpg.de>. The columns \emptyset , SD and n
- 5 list average value, standard deviation and number of repetitions.