

Table S 1. Significance (P-values) of difference between tCAI or position preference values of genes with either 10% highest or 10% lowest expression values.

| | tCAI | position preference |
|--------------------------|---------|---------------------|
| <i>E. coli</i> | ~0 | 1.5e-34 |
| <i>P. aeruginosa</i> | ~0 | 8.4e-15 |
| <i>G. sulfurreducens</i> | 1.5e-14 | 3.2e-3 |
| <i>C. jejuni</i> | ~0 | 3.1e-28 |
| <i>B. subtilis</i> | ~0 | 2.5e-12 |
| <i>S. cerevisiae</i> | ~0 | 5.8e-97 |

Table S 2. Comparison of position preference values and microarray gene expression values.

| | Spearman's correlation (rho) | overlap between 10% lowest PP and 10% most highly expressed, Fisher's exact test |
|--------------------------|------------------------------|--|
| <i>S. cerevisiae</i> | -0.36 (P-value = 2.7e-168) | 5.9e-117 |
| <i>E. coli</i> | -0.20 (P-value = 1.7e-39) | 1.3e-37 |
| <i>P. aeruginosa</i> | -0.20 (P-value = 9.2e-51) | 3.3e-25 |
| <i>G. sulfurreducens</i> | -0.11 (P-value = 5.7e-11) | 0.0083 |
| <i>C. jejuni</i> | -0.44 (P-value = 6.2e-77) | 5.1e-27 |
| <i>B. subtilis</i> | -0.11 (P-value = 7.3e-11) | 7.2e-05 |

