

Supplementary Figure S1. Effects of nucleotide and dinucleotide composition on cyclizability. Mean predicted cyclizability around the TSS of all annotated genes containing a 5' UTR of compared to sampled sequences from the average base composition at each position and sampled sequences from the average dinucleotide composition at each position in (a) and (b) *Arabidopsis thaliana*, (c) and (d) *Saccharomyces cerevisiae*, (e) and (f) *Homo sapiens*, respectively.



Supplementary Figure S2. Relative dinucleotide composition around the TSS in *S. cerevesia*.

Natural logarithm of the ratio between the observed dinucleotide composition and the expected dinucleotide composition based on nucleotide frequency at each position in *Saccharomyces cerevisiae*.



Supplementary Figure S3. Relative dinucleotide composition around the TSS in Homo sapiens.

Natural logarithm of the ratio between the observed dinucleotide composition and the expected dinucleotide composition based on nucleotide frequency at each position in *Homo sapiens*.



Supplementary Figure S4. Distribution of predicted cyclizability among different species.