**DNAlogo Manual**

**Introduction**

DNAlogo is an application written in vb.net for generating DNA sequence logos. It runs in Windows system, Win 7 or later versions. A .net frame work is needed if running in Win XP.

**Input**

The input sequence format can be either Fasta format or pure sequences (one sequence per line). Sequences can be pasted to the textbox or loaded by clicking ‘OpenFile’ button. Beside, DNAlogo can also generate logos based on a number matrix instead of sequences. In such matrix, each row is a position of the logo, and the four values in a row are the bit values for A, T, G and C. This function is designed for extremely large number of sequences. Because it can take pretty long time for DNAlogo to process too many sequences, in such case, one option is to process the sequences with a separate script and output the bit values, and then use DNAlogo to draw the logo. Note: matrix can only be input in textbox and can’t be load as file.

**Output**

The logo showed in the picture box can be saved as JPG file. However, it is a low resolution file only for quick views. Click ‘SAVE’ and choose ‘PostScript (.ps)’ to save a vector map, which can be opened by Adobe Illustrator.

**Frequency logo**

Check ‘Frequency’ to generate frequency logos, which content only the frequency of A, T, G and C at each position without information of conservation.

**GC content Compensated logo**

The GC content of a genome can be considered when generating logos. Check ‘Compensated logo’ and enter the GC content to create compensated logo. The default GC content is 50.