



DNATagger, colors for codons

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ABSTRACT. DNATagger is a web-based tool for coloring and editing DNA, RNA and protein sequences and alignments. It is dedicated to the visualization of protein coding sequences and also protein sequence alignments to facilitate the comprehension of evolutionary processes in sequence analysis. The distinctive feature of DNATagger is the use of codons as informative units for coloring DNA and RNA sequences. The codons are colored according to their corresponding amino acids. It is the first program that colors codons in DNA sequences without being affected by “out-of-frame” gaps of alignments. It can handle single gaps and gaps inside the triplets. The program also provides the possibility to edit the alignments and change color patterns and translation tables. DNATagger is a JavaScript application, following the W3C guidelines, designed to work on standards-compliant web browsers. It therefore requires no installation and is platform independent. The web-based DNATagger is available as free and open source software at <http://www.inf.ufrgs.br/~dmbasso/dnatagger/>.

Key words: Protein-coding DNA; Codon alignment; Bioinformatics tool; Alignment colorization; Visualization and editing