

2 Abstract

MicroRNAs (miRNAs) are small noncoding RNAs that are involved in the regulation of protein expression in plants and animals. They are about 22 nucleotides long and they predominantly bind to the 3' untranslated region of messenger RNAs to inhibit translation or to induce cleavage. Since the specific function of most miRNAs is unknown, it is necessary to find their target mRNAs. Because experimental identification of miRNA targets is difficult, several computational tools have been developed for predicting miRNA targets. Here the principles of target prediction and some prediction programs are presented.