



A REVIEW :

Tools for simple sequence repeat (SSR) markers

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SUMMARY : SSRs or microsatellites are tandem repeats of 2-8nt units of DNA and are ubiquitous in all genomes studied so far. SSR markers have many advantages over the other marker systems. The first advantage is their high reproducibility, which would be the most important in genetic analysis. The second advantage of the SSR marker system is the polymorphic genetic information contents. The third advantage has to do with the co-dominant nature of SSR polymorphisms. The fourth advantage of the SSR marker system is their abundance and distribution in genomes. A fifth advantage of the SSR marker system is that SSRs are preferentially associated with non-repetitive DNA. This review focuses on some of the reasons for SSR mutations that occur due to replication or repair process which may depend on not only the motif size but also the nucleotide composition of each motif as well as orientation of repeats or position with reference to replication origin. In this review tools for SSRs available are given with their advantages and disadvantages.

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