

Forensic Applications of Y-Short Tandem Repeats

REFERENCE: Lessig R: Forensic applications of Y-short tandem repeats; *Forensic Sci Rev* 15:183; 2003.

ABSTRACT: Y-short tandem repeats (STRs) are located in the nonrecombining part of the Y-chromosome. Its genetic characteristics are helpful to paternity testing. The male lineage can be pursued over several generations. Since an overwhelming majority of rape or sexual assault cases involve male suspects, these markers proved to be very useful with mixed stains. Routine casework performed in our laboratory has demonstrated that Y-STRs analysis can detect minimal amounts of male DNA in a stain. Analysis of Y-STRs should be conducted even when preliminary tests for the presence of sperms are negative or when the analysis of autosomal STRs shows no male component in the mixed stains.

KEY WORDS: Y-Haplotype, reference database, stain analysis, Y-STR.
