

DNA PROFILES OF THE SIXTEEN STR LOCI IN THE KOREAN POPULATION

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The sixteen STR loci, TH01, TPOX, CSF1PO, LPL, vWA, F13B, FESFPS, F13A01, D12S1090, D3S1744, D18S849, D3S1358, D7S820, FGA, D5S818, and D13S317 were investigated for allele frequency distribution in the Korean population. The loci TH01, TPOX, CSF1PO, LPL, vWA, F13B, FESFPS, F13A01, D12S1090, D3S1744, and D18S849 were typed using three multiplex-PCR (I: TH01, TPOX, and CSF1PO; II: LPL, vWA, F13B, FESFPS, and F13A01; III: D12S1090, D3S1744, and D18S849). Amplified DNA samples were subsequently analyzed by denaturing 5% polyacrylamide gel electrophoresis followed by silver staining. Another STR loci D3S1358, S7S820, FGA, D5S818, and D13S317 were analyzed by fluorescent multiplex PCR and automated detection using the ABI™ 377 Prism® DNA sequencer and GeneScan® 672 S/W. The polymorphisms of the sixteen loci have been analyzed in a Korean population sample of maximum 710 unrelated individuals. We found 7 different alleles of TH01 locus, 6 different alleles of TPOX locus, 9 different alleles of CSF1PO locus, 5 different alleles of LPL locus, 9 different alleles of vWA locus, 4 different alleles of F13B locus, 8 different alleles for FESFPS locus, 8 different alleles of F13A01 locus, 22 different alleles of D12S1090 locus, 9 different alleles of D3S1744 locus, 8 different alleles of D18S849 locus, 7 different alleles of D3S1358 locus, 8 different alleles of D7820 locus, 14 different alleles of FGA locus, 9 different alleles of D5S818 locus, and 9 different alleles of D13S317 locus. This data can be used in forensic analysis in Korean population.

