

## A STUDY OF FOUR STR LOCI (D16S539, D7S820, D13S317, D5S818) IN SOUTHEAST POLAND

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Population studies of four STR loci (D16S539, D7S820, D13S317, and D5S818) were performed in unrelated individuals (n=302) who lived in southeast Poland. DNA was extracted from blood samples by the standard phenol/chloroform method. Amplification of three loci was done simultaneously according to the manufacturer's recommendations using *GenePrint*® Fluorescent STR System (Promega Corporation) in a T3 Thermocycler (Biometra). PCR products were typed by denaturing polyacrylamide gel electrophoresis and the results have been generated using Hitachi FMBIO® II to detect fluorescently labeled bands.

For D16S532, alleles were observed 7 with frequencies from 0.004 to 0.337, for D7S820, eight alleles with frequencies from 0.003 to 0.321, for D13S317, nine alleles with frequencies from 0.002 to 0.365 and for D5S818, nine alleles with frequencies from 0.002 to 0.354.

The heterozygosities were 0.764, 0.758, 0.758 and 0.712, respectively. Genotype distributions for all systems are in accordance with H-W expectations. Mother/child segregation analysis has not revealed any disturbances, demonstrating regular mendelian inheritance patterns. The combined power of discrimination for these four loci was 0.99991 and mean exclusion chance was 0.961.

