GENETIC DATA OF 17 Y-STRs IN A POPULATION FROM SOUTH OF ITALY (CALABRIA)

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Y-STRs are very useful for forensic laboratories to identify, segregate, and analyze male DNA from evidence-containing mixtures of male and female DNA (for example in case of sexual assault), in difficult paternity analysis or for reconstruction of male linage or application in kinship analysis.

In the present study we analysed the distribution of the following 17 Y-STRs loci using the AmpFLSTR® Yfiler™ PCR Amplification kit: DYS456, DYS389I, DYS389I, DYS389I, DYS458, DYS19, DYS385a/b, DYS393, DYS391, DYS439, DYS635, DYS392, YGATAH4, DYS437, DYS438, DYS448.

DNA was extracted, by Instant Gene Matrix (Biorad) treatment, from blood/saliva samples of 300 male unrelated healthy donors, since 3 generations at least, belonging to the examined populations.

All samples were quantified by the Quantifiler™ Human DNA Quantification Kit using a 7300 Real Time System and then amplified according to the Yfiler™ kit protocol using GeneAmp PCR Systems 9600,9700,2400,2720 thermal cyclers (Applied Biosystems). Female and Male Positive controls and negative controls were used during all amplification steps.

Amplified products were analyzed by capillary electrophoresis on an ABI PRISM 310 and an ABI PRISM 3130 Genetic Analyzers (Applied Biosystems) employing Genotyper and GeneMapper 3.2 software.

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