BRIEF REPORT

DNA isolation from urine samples for STR amplification with a rapid and safe new method

Aislamiento de ADN a partir de muestras de orina para la amplificación STR con un nuevo método rápido y seguro

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Urine can be very useful for isolating DNA because it is non-invasive, the sample volume is not restricted, and it is easily obtained.\textsuperscript{1} Forty-six urine samples from healthy volunteers (24 men and 22 women) were obtained. They were immediately centrifuged at 13,000 rpm for 20 minutes and maintained at a temperature of 4°C overnight. All the study participants provided their informed consent. DNA isolation was carried out with a modified salting out protocol.\textsuperscript{2} The median values were 29.25 ng for the men and 29.20 ng for the women. PCR with 5 STR markers was used to analyze DNA quality: D16S539, D7S820, D13S317, D5S818, and Penta D. The PCR products were separated by means of electrophoresis in silver-stained denaturing polyacrylamide gels. All the markers were successfully typed with an 85% yield and the rate was reduced in relation to the length of the amplicon. The amplification percentage showed a tendency to decrease with respect to the length of the amplicon, as occurred in other studies.\textsuperscript{3} These results indicate that urine is a suitable sample for DNA amplification and the modified procedure has a very low cost compared with the high cost of commercial kits.

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Conflict of interest

The authors declare that there is no conflict of interest.

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