

## FOR THE RECORD

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# Allele Frequencies and Statistical Parameters for Penta E and Penta D STR Loci in Córdoba (Argentina) Population

**POPULATION:** Urban and countryside population of Córdoba (Argentina)

**KEYWORDS:** forensic science, polymerase chain reaction, short tandem repeat, Penta E, Penta D, population genetics, Córdoba (Argentina)

EDTA whole blood samples were collected from 250 unrelated individuals of urban and countryside population of Córdoba

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TABLE 1—STR allele frequencies data and statistical parameters for Córdoba (Argentina) population.

| Allele | Penta E | Penta D |
|--------|---------|---------|
| 2,2    |         | 0.0080  |
| 5      | 0.0400  | 0.0020  |
| 7      | 0.1120  | 0.0060  |
| 8      | 0.0120  | 0.0140  |
| 9      | 0.0040  | 0.2240  |
| 10     | 0.0840  | 0.2000  |
| 11     | 0.0840  | 0.1680  |
| 12     | 0.2140  | 0.1500  |
| 13     | 0.1040  | 0.1480  |
| 14     | 0.0480  | 0.0600  |
| 15     | 0.0780  | 0.0160  |
| 16     | 0.0660  | 0.0040  |
| 17     | 0.0400  |         |
| 18     | 0.0400  |         |
| 19     | 0.0220  |         |
| 20     | 0.0220  |         |
| 21     | 0.0180  |         |
| 22     | 0.0100  |         |
| 23     | 0.0020  |         |
| Hob    | 88.00   | 80.80   |
| Hex    | 89.94   | 83.47   |
| PD     | 0.9784  | 0.9489  |
| PE     | 0.7970  | 0.6649  |
| PIC    | 0.890   | 0.811   |
| P*     | 0.2770  | 0.9574  |
| P**    | 0.2863  | 0.5138  |

Hob: observed heterozygosity, Hex: expected heterozygosity, PD: power of discrimination, PE: probability of exclusion, PIC: polymorphic information content, P\*: Hardy-Weinberg equilibrium, Chi square test, P\*\*: Hardy-Weinberg equilibrium, exact test based on 10.000 permutations.

(Argentina). DNA was obtained by CTAB treatment, chloroform extraction, and ethanol precipitation (1). The loci were amplified using the commercial kit PowerPlex® 16 System (Promega, Madison, WI) according to the manufacturer's instructions (2). The amplified products were analyzed with an ABI Prism 310 Genetic Analyzer using reference sequenced ladders (PE Applied Biosystems).

The data were analyzed using Cervus 2.0 (3) and TFPGA (4) programs. No significant deviation from the Hardy-Weinberg expectation was founded in the population of Córdoba (Argentina). Considering the results obtained with the previously reported seventeen STRs loci (D16S539, TH01, TPOX, CSF1PO, FBP, D6S366, FESFPS, F13A01, D3S1385, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317 and D7S820) (5,6), the combined Power of Discrimination (PD) and Probability of Exclusion (PE) for all nineteen loci are 0.99999999999999999999774948 and 0.999999981, respectively.

The complete dataset are available by accessing at [http://www.agenciacordobaciencia.cba.gov.ar/ceprocor/strs\\_data.htm](http://www.agenciacordobaciencia.cba.gov.ar/ceprocor/strs_data.htm).

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