

## FOR THE RECORD

Alice-Corina Ceacareanu,<sup>1</sup> Ph.D., Bogdan Ceacareanu,<sup>1</sup> M.Sc.; Augustin Ofiteru,<sup>2</sup> M.Sc.;  
Alexander Rodewald,<sup>3</sup> Ph.D.; and Geza Szegli,<sup>2</sup> Ph.D.

# Distribution of D1S80 Alleles and Their Tsp509I Subtypes in Romanian Population\*

**POPULATION:** Caucasians ( $n = 193$ )

**KEYWORDS:** forensic science, DNA typing, PCR, polymorphism, RFLP, population genetics, Romania, allele frequencies, D1S80, Tsp509I

D1S80 locus polymorphism was investigated in a total of 193 samples from Romanian unrelated individuals. DNA extraction was performed by isolation of nuclei only then PCR amplification was achieved by using locus specific primers using a standardized PCR kit (Gibco BRL). Allele nomenclature was verified against a commercial standard (AmpliFLP D1S80, Perkin Elmer). Presence of Tsp509I restriction site was analyzed using a previous reported protocol (1). Amplified and digested products were separated by electrophoresis (Pharmacia unit Biotech AB, San Francisco, CA) then silver stained as earlier described (2). Nomenclature of D1S80 subtypes was done according to both number of repeats and presence of Tsp509I restriction site. Example: subtype 24(+) represents all alleles having 24 repeats that were digested by the above-mentioned restriction enzyme, whereas subtype 24(-) represents all alleles having 24 repeats that could not be digested by Tsp509I.

Allele and subtypes frequencies were calculated using standard counting procedures (Table 1). The expected heterozygosity was calculated as by Nei (3). Data were analyzed using a program provided by M. P. Miller (4).

A complete data set is available to any interested researcher upon request.

## References

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<sup>1</sup> Present address: University of Tennessee, Health Science Center, College of Medicine, Physiology Department, 894 Union Avenue, Memphis, TN 38163.

<sup>2</sup> Cantacuzino Institute, Ministry of Health, Spl. Independentei 103, 70100, Bucharest-5, Romania.

<sup>3</sup> Institute for Human Biology, Allende Platz 2, 20146 Hamburg, Germany.

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TABLE 1—Distribution of D1S80 alleles and their Tsp509I<sup>†</sup> subtypes in Romanian population.

D1S80 Alleles*		D1S80/Tsp509I Subtypes**			
Allele	Frequency	Allele subtype	Frequency	Allele subtype	Frequency
15	0.0025	37(-)	0.0051	21(+)	0.0233
17	0.0077	36(-)	0.0051	22(+)	0.0310
18	0.1917	35(-)	0.0077	23(+)	0.0181
19	0.0362	34(-)	0.0103	24(+)	0.2823
20	0.0181	33(-)	0.0025	25(+)	0.0518
21	0.0362	32(-)	0.0077	26(+)	0.0129
22	0.0388	31(-)	0.0544	27(+)	0.0077
23	0.0362	30(-)	0.0181	29(+)	0.0259
24	0.3108	29(-)	0.0285	30(+)	0.0103
25	0.0725	28(-)	0.0285	40(+)	0.0025
26	0.0207	27(-)	0.0077	41(+)	0.0051
27	0.0155	26(-)	0.0077		
28	0.0285	25(-)	0.0207		
29	0.0544	24(-)	0.0285		
30	0.0285	23(-)	0.0181		
31	0.0544	22(-)	0.0077		
32	0.0077	21(-)	0.0129		
33	0.0025	20(-)	0.0077		
34	0.0103	19(-)	0.0362		
35	0.0077	18(-)	0.1735		
36	0.0051	17(-)	0.0077		
37	0.0051	15(-)	0.0025		
40	0.0025	18(+)	0.0181		
41	0.0051	20(+)	0.0103		

<sup>†</sup> Tsp509I site is generated by the transversion G → T at the 58th nucleotide from 5' flank of a D1S80 allele (1).

\*  $h_{obs/exp} = 0.84/0.86$ ;

\*\*  $h_{obs/exp} = 0.87/0.89$ ;

h = heterozygosity.

Additional information and reprint requests:  
Alice-Corina Ceacareanu, Ph.D.  
University of Tennessee, Health Science Center  
College of Medicine, Physiology Department  
894 Union Avenue, Memphis, TN 38163  
E-mail: aceacareanu@physio1.utmem.edu  
Tel: (901) 448 7329  
Fax: (901) 448 7126