

FOR THE RECORD

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Population Data on HLA-DQA1, LDLR, GYPA, HBGG, D7S8, and GC PCR-Based Loci in Serbia

POPULATION: Caucasians ($n = 131$).

KEYWORDS: forensic science, DNA typing, population genetics, polymerase chain reaction, Belgrade/Serbia, HLA-DQA1, LDLR, GYPA, HBGG, D7S8, GC

A series of 131 samples was collected from 131 unrelated individuals living in Serbia (100 whole-blood samples and 31 teeth extracted for therapeutic purposes). The DNA was isolated using proteinase K digestion, followed by phenol–chloroform–isoamyl extraction and ethanol precipitation. Purification of DNA was performed using centricon 100 (Millipore Corporation, Bedford, MA), DNA amplification was performed using AmpliType HLA-DQA1+PM, and typing of alleles was performed by reverse dot hybridization with the Typing Kit, all according to the manufacturer's protocol (Applied Biosystems, Foster City, CA).

Determination of statistical parameters of forensic interest as expected heterozygosity, power of discrimination, average probability of exclusion, polymorphism information content, and typical paternity index was performed using statistical software Cervus (1–3).

To determine the independence between all tested loci, an exact test based on 10,000 shuffling experiments ($p = 0.83395$) was applied (Table 1).

The complete data are available to any interested researcher upon request or at the following Web site URL: www.stomf.bg.ac.yu/srpski/nauka.html

References

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TABLE 1—HLA-DQA1 and PM frequency data for Serbian population ($n = 131$).

Allele	HLA-DQA1	LDLR	GYPA	HBGG	D7S8	GC
1.1	0.2176	—	—	—	—	—
1.2	0.3168	—	—	—	—	—
1.3	0.0305	—	—	—	—	—
2	0.0725	—	—	—	—	—
3	0.0496	—	—	—	—	—
4.1	0.2824	—	—	—	—	—
4.2	0.0305	—	—	—	—	—
A	—	0.385	0.5954	0.3969	0.5382	0.4008
B	—	0.6145	0.4046	0.5763	0.4618	0.1260
C	—	—	—	0.0267	—	0.4733
χ^2 value*	<0.001	0.53	0.00	0.20	0.08	0.71
Exact test*	0.0083	0.4104	0.9246	0.3350	0.2562	0.8253

*Statistical data.

and Gc (PM loci), and HLA-DQA^α using a multiplex amplification and typing procedure. *J Forensic Sci* 1995;40(1):45–54.

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