

FOR THE RECORD

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Distribution of Amplified Fragment Length Polymorphism D1S80 Alleles in Turkish Population

POPULATION: Turkish

KEYWORDS: forensic science, DNA typing, population genetics, polymerase chain reaction, D1S80, Turkey

Blood samples from 112 unrelated healthy volunteer and criminal donors in Turkey were collected in EDTA tubes. Liquid blood was deposited onto cotton swatches and dried at room temperature. The stains were stored at -20°C until analyzed. DNA was extracted by Chelex 100 method (1).

DNA typing by PCR, using 2 ng target DNA, followed manufacturer's instructions (2). Electrophoresis was performed on a GenePhor electrophoresis unit using Gene Gel Excel 12.5/24 (Pharmacia Biotech) and reference sequenced ladders (Perkin-Elmer Corporation, Foster City, CA).

Data were analyzed by using homozygosity test, likelihood ratio test (3), exact test (4), and the Promega Software, POWERSTATS.

The dataset can be accessed at <http://www.gazi.edu.tr/~leyacik>

References

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TABLE 1—Alleles distribution in Turkish population.

Allele	Number	Frequency (%)	Genotype	Number	Frequency (%)
15	2	0.009	15-24	2	0.018
18	45	0.201	18-18	8	0.071
19	1	0.004	18-22	2	0.018
21	4	0.018	18-24	20	0.178
22	17	0.076	18-25	2	0.018
23	2	0.009	18-28	1	0.009
24	103	0.460	18-29	3	0.027
25	10	0.045	18-31	1	0.009
26	6	0.027	19-28	1	0.009
27	1	0.004	21-24	3	0.027
28	12	0.054	21-27	1	0.009
29	9	0.040	22-22	2	0.018
30	3	0.013	22-24	5	0.045
31	5	0.022	22-25	1	0.009
32	2	0.009	22-26	1	0.009
36	1	0.004	22-28	1	0.009
37	1	0.004	22-31	2	0.018
			22-36	1	0.009
			23-28	2	0.018
			24-24	24	0.214
			24-25	6	0.054
			24-26	4	0.036
			24-28	5	0.045
			24-29	5	0.045
			24-31	2	0.018
			24-32	2	0.018
			24-37	1	0.009
			25-26	1	0.009
			28-30	2	0.018
			29-30	1	0.009

Heterozygotes = 0.696, Homozygotes = 0.304, Homozygosity test ($P = 0.349$), Exact test ($P = 0.219$), Power of Discrimination (PD) = 0.902, Power of Exclusion (PE) = 0.423, Matching Probability (MP) = 0.098, Polymorphism Information Content (PIC) = 0.71, Typical Paternity Index (TPI) = 1.65.