

FOR THE RECORD

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Allele Frequencies for 10 STR Loci in Istanbul (Turkey) Population

POPULATION: Istanbul, Turkey

KEYWORDS: forensic science, DNA typing, population genetics, short tandem repeats, polymerase chain reaction, Istanbul, Turkey, CSF1PO, F13A01, F13B, FES/FPS, TH01, TPOX, VWA, D16S539, D13S317, D7S820

Istanbul is the most densely populated city of Turkey, with approximately 16 million inhabitants. A local STR database for the population of the city of Istanbul was generated in this study. We analyzed blood samples of 311 volunteer individuals. Aiming to avoid forming a criminal subgroup, we selected from these people who had not committed any crime. DNA was extracted using Chelex 100 extraction method (1) and the typing was performed using the Gene print STR systems according to the manufacturer's instructions. The detection was done by silver staining. The statistical analysis revealed no significant deviation from Hardy Weinberg expectations. Parameters like observed and expected heterozygosity, power of exclusion and discrimination, probability of match, paternity index as well as a detailed comparison with vari-

ous populations (2) are available at <http://istanbul.edu.tr/enstituler/forensic/popgen-01.htm>.

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References

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2. Nei M, Roychoudhury AK. Evolutionary relationships of human populations on a global scale. *Mol Biol Evol* 1993;10:927-43.

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TABLE 1—Observed allele frequencies in the population of Istanbul (311 individuals).

Allele	CSF1PO	F13A01	F13B	FES/FPS	TH01	TPOX	VWA	D16S539	D13S317	D7S820
3.2		0.099								
4		0.089								
5		0.277			0.008			0.000		
6		0.299	0.121		0.235	0.007		0.000		0.008
7	0.003	0.275	0.017	0.015	0.165	0.019		0.000	0.003	0.008
8	0.006	0.019	0.282	0.012	0.150	0.492		0.063	0.018	0.199
9	0.038	0.000	0.225	0.008	0.219	0.100		0.105	0.095	0.133
9.3					0.147					
10	0.235	0.002	0.365	0.255	0.057	0.068		0.114	0.099	0.212
11	0.328	0.006	0.002	0.368	0.019	0.280		0.317	0.292	0.257
12	0.325	0.002	0.000	0.269		0.031		0.250	0.285	0.151
13	0.051	0.000		0.076		0.001	0.000	0.114	0.070	0.054
14	0.009	0.002		0.003			0.090	0.016	0.035	0.008
15	0.001	0.002					0.088	0.000	0.003	
16		0.002					0.250			
17							0.290			
18							0.190			
19							0.078			
20							0.016			
21							0.000			
χ^2	14.083	16.471	7.036	10.865	22.475	24.525	26.198	9.764	16.231	28.866