FOR THE RECORD

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Distribution of D7S821, D15S642, and GATA184A08 Alleles in a Chinese Population Sample

POPULATION: Chinese

KEYWORDS: forensic science, Han in Sichuan, China, DNA typing, short tandem repeats, polymerase chain reaction, population genetics, D7S821, D15S642, GATA 184A08

TABLE 1—*Allele frequencies of three STR loci in Chinese population.*

Allele	Frequency		
	D7S821 ($N = 100$)	D15S642 ($N = 100$)	GATA184A08 ($N = 100$)
13			0.004
14		0.013	0.054
15		0.057	0.107
16		0.135	0.129
17		0.278	0.058
18		0.213	0.112
19	0.045	0.191	0.228
20	0.173	0.057	0.201
21	0.223	0.052	0.103
22	0.177	0.004	0.004
23	0.114		
24	0.114		
25	0.077		
26	0.068		
27	0.009		
Total	1.000	1.000	1.000
HWE*	$P > 0.05$	$P > 0.05$	$P > 0.05$

*Test for Hardy-Weinberg equilibrium.

TABLE 2—*Population genetics and forensic data of three STR loci.*

Locus	PIC	DP	Pm	EP	H_o	H_e
D7S821	0.83	0.957	0.043	0.502	0.745	0.859
D15S642	0.79	0.933	0.067	0.449	0.713	0.821
GATA184A08	0.83	0.955	0.045	0.657	0.830	0.859

PIC: polymorphism information content; DP: power of discrimination; Pm: probability of match; EP: power of Exclusion; H_o: observed heterozygosity; H_e: expected heterozygosity.

POWERSTATS program (3). The genotype distribution was analyzed for Hardy-Weinberg equilibrium according to Hou's method (4). No deviation from Hardy-Weinberg equilibrium was observed.

The complete data can be accessed at http://www.legalmed.org/dna/D7S821.htm.

References

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Whole blood samples were obtained from 100 selected and unrelated individuals of Chinese Han ethnic group in Chengdu of China. Genomic DNA was extracted using Chelex method (1). PCR amplification conditions can be accessed at http://www.legalmed.org/dna/D7S821.htm. The volume of PCR reaction for each locus was 37.5 μL. The amplified products were separated by horizontal non-denaturing polyacrylamide gel electrophoresis with discontinuous buffer system and visualized by silver staining (2). Data of population genetics and forensic science were analyzed using

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