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FOR THE RECORD

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Allele Frequencies for two STR Loci D6S1274 and D17S1299 in Chinese and Thai Populations

POPULATION: Chinese Han, Thai.

KEYWORDS: forensic science, Han in Sichuan, China, Thai, DNA typing, short tandem repeats, polymerase chain reaction, population genetics, D6S1274, D17S1299

Whole blood sample were obtained from unrelated Chinese volunteer donors and unrelated Thai volunteer donors. Genomic DNA was extracted using Chelex-100 method (1). PCR amplification conditions can be accessed at http://www.legalmed.org/dna/d6s1274.htm. The volume of PCR reaction for each locus was 20 μL. The amplified products were separated by vertical nondenaturing polyacrylamide gel electrophoresis with continuous buffer system and visualized by sliver staining (2). Data of population genetics and forensic science were analyzed using 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.

TABLE 1—*Allele frequency distributions of D6S1274 and D17S1299 in two populations.*

	D6S1274		D17S1299	
Allele	Chinese ($n = 101$)	Thai ($n = 101$)	Chinese ($n = 103$)	Thai ($n = 103$)
6	11.9%	18.8%		
7	0.5%			
8	3.0%	2.5%		
9	1.0%	2.0%		
10	9.9%	9.4%	1.5%	2.9%
11	41.1%	45.0%	10.2%	13.1%
12	24.8%	18.3%	44.2%	35.9%
13	6.4%	4.0%	25.2%	24.8%
14	1.5%		12.1%	15.5%
15			4.4%	7.8%
16			2.4%	
HWE*	$p > 0.05$	$p > 0.05$	$p > 0.05$	$p > 0.05$

*Test for Hardy–Weinberg equilibrium.

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

Locus	PIC	DP	P_m	EP	H_o	H_e
D6S1274 (Chinese)	0.71	0.879	0.121	0.514	75.2%	83.28%
D6S1274 (Thai)	0.68	0.875	0.125	0.497	74.3%	83.80%
D17S1299 (Chinese)	0.67	0.881	0.119	0.343	64.1%	83.22%
D17S1299 (Thai)	0.73	0.901	0.099	0.473	72.8%	91.38%

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

The complete data can be accessed at http://www.legalmed.org/dna/d6s1274.htm (Tables 1 and 2).

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