

## FOR THE RECORD

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# Population Genetics of Two STR Loci D2S1396 and D6S474 in a Chinese Population

**POPULATION:** Chinese

**KEYWORDS:** forensic science, DNA typing, short tandem repeat, population genetics, polymorphism chain reaction, Chengdu, Sichuan, China

Blood samples were collected from unrelated individuals of Chinese Han ethnic group in Chengdu of China. DNA was extracted using Chelex method (1). PCR amplification conditions can be accessed at <http://www.legalmed.org/dna/d2s1396.htm>. The PCR reaction volume for each locus was 25  $\mu$ L. The PCR products were analyzed 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 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.

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

D2S1396 (N = 107)		D6S474 (N = 113)	
Allele	Frequency	Allele	Frequency
8	0.607	15	0.341
9	0.117	16	0.367
10	0.075	17	0.159
11	0.140	18	0.093
12	0.061	19	0.031
		20	0.009
HWE	p > 0.05	HWE	p > 0.05

HWE: Test for Hardy-Weinberg equilibrium.

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

Locus	PIC	DP	Pm	EP	H <sub>o</sub>	H <sub>e</sub>
D2S1396	0.56	0.794	0.206	0.227	0.542	0.5889
D6S474	0.66	0.849	0.151	0.544	0.770	0.7141

PIC: polymorphism information content; DP: power of discrimination; Pm: probability of match; EP: power of exclusion; H<sub>o</sub>: observed heterozygosity; H<sub>e</sub>: expected heterozygosity.

The complete data can be accessed at <http://www.legalmed.org/dna/d2s1396.htm>.

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