

FOR THE RECORD

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Distributions of Allelic Frequencies of Three New STR Loci in a Chinese Han Population

POPULATION: Chinese.

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Blood samples were collected from unrelated individuals of the Chinese Han ethnic group in Chengdu, China. DNA was extracted using the Chelex method (1). PCR amplification conditions can be accessed at: <http://www.legalmed.org/dna/d2s2955.htm>. The PCR reaction volume for each locus was 37.5 μ 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 three STR loci in Chinese population.

D2S2955 (N = 114)		D2S689 (N = 119)		GATA198B05 (N = 119)	
Allele	Frequency	Allele	Frequency	Allele	Frequency
10	0.149	10	0.05	11	0.004%
11	0.259	11	0.013	12	0.021%
12	0.421	12	0.025	13	0.084%
13	0.171	13	0.113	14	0.147%
		14	0.176	15	0.076%
		15	0.361	16	0.062%
		16	0.185	17	0.101%
		17	0.055	18	0.336%
		18	0.021	19	0.109%
				20	0.059%
HWE	$p > 0.05$		$p > 0.05$		$p > 0.05$

HWE: Test for Hardy-Weinberg equilibrium.

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

Locus	PIC	DP	Pm	EP	H _o	H _e	SE
D2S2955	0.65	0.863	0.137	0.257	0.570	0.704	0.0150
D2S689	0.76	0.923	0.077	0.535	0.765	0.785	0.0155
GATA198B05	0.80	0.944	0.056	0.580	0.790	0.823	0.0106

* PIC (polymorphism information content); DP (power of discrimination); Pm (probability of match); EP (power of exclusion); H_o (observed heterozygosity); H_e (expected heterozygosity); SE (standard error).

The complete data can be accessed at: <http://www.legalmed.org/dna/d2s2955.htm>.

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