

FOR THE RECORD

L. B. Yun,¹ M.D.; B. W. Ying,¹ Ph.D.; Y. Q. Fang,¹ M.D.; X. M. Sun,¹ M.D.; Y. Gu,¹ M.D.;
M. S. Shi,¹ Ph.D.; J. Zhang,¹ Ph.D.; Z. H. Liang,² B.S.; Y. B. Li,¹ M.D.; J. Wu,¹ M.D.; and Y. P. Hou,¹ M.D.

Polymorphism of Three STR Loci in Chinese Population

POPULATION: Chinese

KEYWORDS: forensic science, Han in Sichuan, China, DNA typing, short tandem repeats, polymerase chain reaction, population genetics, D12S1064, D12S1301, D5S1470

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

Allele	Frequency		
	D12S1064 (N = 100)	D12S1301 (N = 100)	D5S1470 (N = 100)
4		0.020	
5		0.080	
6		0.205	
7		0.030	
8		0.115	
9		0.420	
10		0.130	0.030
11	0.020		0.030
12	0.025		0.065
13	0.035		0.215
14	0.115		0.215
15	0.235		0.275
16	0.340		0.125
17	0.195		0.020
18	0.035		0.020
19			0.005
Total	1.000	1.000	1.000
HWE*	P > 0.05	P > 0.05	P > 0.05

* Test for Hardy-Weinberg equilibrium.

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/D12S1064.htm>. The volume of PCR reaction 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

¹ Institute of Forensic Medicine, Sichuan University (West China University of Medical Sciences), Chengdu 610041, Sichuan, P. R. China.

² Public Security Bureau of Taizhou, Zhejiang, P. R. China.

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

Locus	PIC	DP	Pm	EP	H _O	H _e
D12S1064	0.74	0.915	0.085	0.493	0.740	0.782
D12S1301	0.71	0.890	0.110	0.599	0.800	0.751
D5S1470	0.78	0.937	0.063	0.476	0.730	0.818

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

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. The complete dataset can be accessed at <http://www.legalmed.org/dna/D12S1064.htm>.

References

- Walsh BS, Petzger DA, Higuchi R. Chelex-100 as medium for simple extraction of DNA for PCR-based typing from forensic material. *Biotechniques* 1991;10:506–10. [PubMed]
- Allen CR, Graves G, Budowle B. Polymerase chain reaction amplification products separated on rehydratable polyacrylamide gels and stained with silver. *Biotechniques* 1990;7:736–44.
- <http://www.promega.com>.
- Hou Y, Prinz M, Staak M. Comparison of different tests for deviation from Hardy-Weinberg equilibrium of AMPFLP population data. In: Bar W, Fiori A, Rossi U, editors. *Advances in forensic haemogenetics*. Berlin: Springer-Verlag, 1994;511–4.

Additional information and reprint requests:
Prof. Hou Yi Ping, M.D.
Institute of Forensic Medicine
Sichuan University (West China University of Medical Sciences)
Chengdu 610041, Sichuan
P. R. China
Phone: 86-28-85501549
Fax: 86-28-85501549
E-mail: rechtsme@wcums.edu.cn