J Forensic Sci, Jan. 2004, Vol. 49, No. 1
Paper ID JFS2003225_491
Published 17 Dec. 2003
Available online at: www.astm.org

FOR THE RECORD

B. W. Ying,[1] Ph.D.; J. H. Chen,[2] B.S.; J. P. Wang,[3] M.D.; M. S. Shi,[1] Ph.D.; J. Q. Deng,[1] Ph.D.; Y. B. Li,[1] M.D.; J. Wu,[1] M.D.; J. Zhang,[1] Ph.D.; J. Yan,[1] Ph.D.; W. Lin,[4] B.S.; Y. P. Hou,[1] M.D.

Distribution of D3S1358, vWA and D13S317 Alleles in Chinese Population

POPULATION: Chinese

KEYWORDS: forensic science, Zhejiang, China, DNA typing, short tandem repeats, polymerase chain reaction, D3S1358, vWA, D13S317

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

	Frequency		
Allele	D3S1358	vWA	D13S317
8			0.329
9			0.139
10			0.111
11			0.229
12	0.004	0.007	0.146
13	0.018	0.007	0.032
14	0.079	0.293	0.011
15	0.361	0.036	0.004
16	0.336	0.143	
17	0.168	0.257	
18	0.032	0.161	
19	0.004	0.082	
20		0.014	
PE	0.474	0.586	0.535
PD	0.875	0.923	0.921
Pm	0.125	0.077	0.079
PIC	0.670	0.760	0.750
Chi ($P > 0.05$)	8.143	19.621	13.768

* Chi: (Chi square); PIC: (polymorphism information content); PD: (power of discrimination); Pm: (probability of match); PE: (Power of Exclusion).

Blood samples were collected from unrelated individuals of Chinese Han ethnic group in Hangzhou of China. DNA was extracted using Chelex method (1). Reaction condition of PCR amplification can be accessed at http://www.legalmed.org/dna/D3S1358.htm. The volume of PCR reaction for each locus was 37.5 μL. The PCR products were analyzed by horizontal non-denaturing polyacrylamide gel electrophoresis with discontinuous buffer system and visualized by silver staining (2,3). Data of population genetics and forensic science were analyzed using POWERSTATS program (4). The genotype distribution was analyzed for Hardy-Weinberg equilibrium according to Hou's method (5) and no deviation from Hardy-Weinberg equilibrium was observed. The complete dataset can be accessed at http://www.legalmed.org/dna/D3S1358.htm.

References

1. 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]
2. Hou Y, Zhang J, Li YB, Wu J, Zhong SZ, Prinz M. Allele sequences of six new Y-STR loci and haplotypes in the Chinese Han population. Forensic Sci Int 2001;118:147–52. [PubMed]
3. 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.
4. http://www.promega.com
5. 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 5. Berlin:Springer-Verlag 1994;511–4.

[1] Institute of Forensic Medicine, Sichuan University (West China University of Medical Sciences), Chengdu 610041, Sichuan, P. R. China.
[2] Public Security Bureau of Wenling, Zhejiang, P. R. China.
[3] Panzhihua Central Hospital, Sichuan, P. R. China.
[4] The People's Procuratorate of Chengdu, Chengdu 610041, Sichuan, P. R. China.

Additional information and reprint requests:
Professor Hou Yi Ping
Institute of Forensic Medicine
Sichuan University (West China University of Medical Sciences)
Chengdu 610041, Sichuan
P. R. China
E-mail: rechtsme@wcums.edu.cn