FOR THE RECORD

Wei Wu,[1] *M.D.; Shi Jiang,*[1] *M.D.; Li Bing Yun,*[1] *M.D.; Li Liu,*[1] *M.D.; Peng Bai,*[1] *M.D.; Jing Yan,*[1] *Ph.D.;*
Ji Zhang,[1] *Ph.D.; Ying Bi Li,*[1] *M.D.; Jin Wu,*[1] *M.D.; and Yi Ping Hou,*[1] *M.D.*

Allele Frequencies for Two STR Loci D4S3251 and D8S2321 in Chinese Population

POPULATION: Chinese Han.

KEYWORDS: forensic science, Han in Sichuan, China, DNA typing, short tandem repeats, polymerase chain reaction, population genetics, D4S3251, D8S2321

Whole blood samples were obtained from unrelated individuals of Chinese Han ethnic group in Chengdu of China. Genomic DNA was extracted using Chelex method (1). PCR amplification conditions can be accessed at http://www.fayi.cn/dna/d4s3251.htm or http://www.legalmed.org/dna/d4s3251.htm or http://w1.88ko.net/vip/jiangshi/wuwei2.doc. The volume of PCR reaction for each locus was 37.5 μL. The amplified products were separated by vertical nondenaturing polyacrylamide gel electrophoresis with continuous 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 (Tables 1 and 2).

The complete data can be accessed at http://www.fayi.cn/dna/d4s3251.htm or http://www.legalmed.org/dna/d4s3251.htm or http://w1.88ko.net/vip/jiangshi/wuwei.xls

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

Locus	PIC	DP	P_m	EP	H_o	H_e
D4S3251	0.590	0.825	0.175	0.348	0.645	0.656
D8S2321	0.650	0.868	0.132	0.323	0.626	0.709

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

References

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

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

Allele	Frequency	
	D4S3251 ($N = 107$)	D8S2321 ($N = 107$)
9	0.019	
10	0.098	0.005
11	0.379	0.173
12	0.439	0.280
13	0.061	0.425
14	0.005	0.093
15		0.023
HWE*	$p > 0.05$	$p > 0.05$

*Test for Hardy–Weinberg equilibrium.

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