

## FOR THE RECORD

*Y. Z. Gao,<sup>1</sup> M.D.; Y. P. Hou,<sup>1</sup> M.D.; B. W. Ying,<sup>1</sup> M.D.; J. Wu,<sup>1</sup> M.D.; Y. B. Li,<sup>1</sup> M.D.; and J. P. Tang,<sup>1</sup> Ph.D.*

# Haplotype Diversity of Two Y-chromosomal SNPs in Chinese Populations

**POPULATION:** Chinese

**KEYWORDS:** forensic science, Y-chromosomal SNP, population genetics, allele-specific PCR, Chinese population

Blood specimens of unrelated individuals were obtained from 101 males of Tibetan ethnic group (Lasa, Tibet, and China) and 133 males of Chinese Han ethnic group (Chengdu, Sichuan Province, China). DNA was extracted using the Chelex method (1). An allele-specific PCR assay was used for the two Y-chromosome biallelic makers (2). PCR amplification conditions can be accessed at <http://www.legalmed.org/dna/m9.htm>. The volume of PCR reaction for each locus was 37.5  $\mu$ L. PCR was performed in a GeneAmp PCR System 9600. The PCR products were analyzed by horizontal non-denaturing polyacrylamide gel electrophoresis with discontinuous buffer system and visualized by silver staining (3). Allelic frequencies were calculated through the gene counting method and gene diversity was estimated according to Hou's method (4). The allelic frequencies and haplotype distribution of the two loci in the two ethnic groups studied are given in Tables 1 and 2.

The complete data can be accessed at <http://www.legalmed.org/dna/m9.htm>.

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

## 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.
2. Su B, Xiao J, Underhill P, Deka R, Zhang W, Akey J, et al. Y-chromosome evidence for a northward migration of modern humans into Eastern Asia during the Last Ice Age. *Am J Hum Genet* 1999;65:1718–24.
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. Hou Y, Zhang J, Li Y, Wu J, Zhang S, Prize M. Allele sequence of six new Y STR loci and haplotype in the Chinese Han population. *Forensic Sci Int* 2001;118:147–52.

Additional information and reprint requests:

Professor Yi Ping Hou  
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](mailto:rechtsme@wcums.edu.cn)

TABLE 1—Allele frequency of loci M9 and M119 in two ethnic groups.

Allele	Tibetan ( <i>n</i> = 101)	Frequency	Diversity	Han ( <i>n</i> = 133)	Frequency	Diversity
M9G	61	0.6040	0.4832	16	0.1203	0.2138
M9C	40	0.3960		117	0.8797	
M119A	101	1.0000	0.0000	121	0.9097	0.1659
M119C	0	0.0000		12	0.0903	

TABLE 2—Haplotype frequency and diversity consisting of loci M9 and M119 in two ethnic groups.

Population	Haplotypes	Number	Frequency	Diversity	SE
Tibetan ( <i>n</i> = 101)	M9C/M119A	40	0.3960	0.4832	0.0141
	M9G/M119A	61	0.6040		
Han ( <i>n</i> = 133)	M9C/M119A	105	0.7895	0.3568	0.0341
	M9C/M119C	12	0.0902		
	M9G/M119A	16	0.1203		
	M9G/M119C	0	0.0000		