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Population Genetics of Two STR Loci D2S1322 and D2S1356 in a Chinese Han Population in Hohhot

POPULATION: Chinese

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The blood samples were collected from the unrelated and healthy individuals of Chinese Han ethnic group in Hohhot, Inner Mongolia autonomous region. Genomic DNA samples were extracted by the Chelex-100 method (1). The volume of PCR reaction for each locus was 20 μ L. The PCR products were analyzed by horizontal nondenaturing polyacrylamide gel electrophoresis with discontinuous buffer system and then visualized by silver staining (2). Data of population genetics and forensic science of the loci D2S1322 and D2S1356 were analyzed using powerstats program (Promega Corporation, Madison, WI) (3). The genotype distribution of the two loci were analyzed for Hardy–Weinberg equilibrium according

TABLE 2—Population genetics and forensic data of D2S1322 and D2S1356.

Locus	PIC	DP	Pm	EP	H _O	H _e
D2S1322	0.81	0.941	0.059	0.405	0.3150	0.6850
D2S1356	0.73	0.886	0.114	0.649	0.1730	0.8270

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

TABLE 1—Allele frequencies of D2S1322 and D2S1356 in Chinese population.

Allele	Frequency	
	D2S1322 (N = 92)	D2S1356 (N = 98)
8	0.043	
9	0.217	
10	0.005	
11	0.201	
12	0.201	0.082
13	0.060	0.245
14	0.163	0.378
15	0.103	0.082
16	0.005	0.138
17		0.036
18		0.041
Total	1.000	1.000
HWE*	$p > 0.05$	$p > 0.05$

*Test for Hardy–Weinberg equilibrium.

to Hou's method (4). No deviation from Hardy–Weinberg equilibrium was observed (Tables 1 and 2).

The complete data of this study is available to any interested researcher or group by request to the corresponding author, Dr. Ren Li Deng, at liz_drl@163.com.

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